

# ABUSES OF OVER THE COUNTER DRUGS BY ADULTS: A SURVEY OF COMMUNITY PHARMACIES IN THE UAE

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## Abstract

"The Research Journey embarked upon to investigate the abuses of over-the-counter drugs among adults in the UAE has been both enlightening and challenging. From the inception of the idea to the completion of data collection and analysis, several key reflections emerge.

One of the initial challenges encountered was defining the scope and objectives of the study. As the topic encompasses a broad range of factors, narrowing down the research focus to specific objectives required careful consideration and refinement. However, through extensive literature review and consultation with experts in the field, a clear research framework emerged, guiding the subsequent phases of the study.

The process of data collection presented its own set of challenges, particularly in gaining access to community pharmacies and ensuring the cooperation of pharmacists. Building trust and rapport with stakeholders proved to be crucial in overcoming these barriers, highlighting the importance of establishing strong relationships within the research community.

Furthermore, the integration of comparisons with global trends and exploration of the influence of digital platforms added complexity to the research design. However, these dimensions enriched the study by providing a broader context and offering insights into emerging trends and challenges facing the field.

Throughout the research journey, flexibility and adaptability were essential virtues. Unexpected obstacles, such as changes in regulations or limitations in data availability, necessitated adjustments to the research approach. Embracing these challenges as opportunities for growth and learning fostered resilience and innovation in problem-solving.

## Objective:

Our study aims to investigate the prevalence and patterns of over-the-counter (OTC) drug abuse among adults in the UAE by conducting a comprehensive survey of community pharmacies. Specifically, we seek to identify commonly abused OTC drugs, assess the reasons behind their misuse, and explore potential interventions to mitigate this issue.

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## INTRODUCTION

More people are using prescription and over-the-counter (OTC) drugs for fun rather than for their intended purposes. This includes the recreational use of psychoactive pharmaceuticals, and a phenomenon called "pharming," where these drugs are taken recreationally to produce a psychoactive effect, either alone or with other substances.(1). In the survey looked into the frequent misuse of non-steroidal anti-inflammatory drugs (NSAIDs), which are commonly used over-the-counter pain relievers.(2).

Some ill take direct medicine from the pharmacy for variety different reasons, some of them don't have time to go to the clinic or ask the pharmacist if they are ok to take this specific medicine.(3). This problem has been a worldwide problem that many studies have addressed in the past. With the new technology of the internet, many people intended to use the medicine without referring back to any specialist, and that could affect their health, specially, not all the medicines work the same on all the people, and it could result to a severe side effect and threat their lives. Study states Self-care are important for staying healthy, and OTC drugs are a big part of that. But sometimes, people might use these drugs in the wrong way. Pharmacists can help prevent this by making sure people use OTC drugs safely. This review talks about OTC drugs and how they can be misused. It also talks about

how pharmacists can help people use these drugs the right way.(4). The review also suggests ways to make sure OTC drugs are used safely. It's important for the healthcare system to find a balance between making these drugs easy to get and making sure they're not misused. Another study aimed to investigate the frequency of pharmacist interventions on (OTC) medications susceptible to misuse and evaluate the significance of these interventions in both traditional and virtual care community pharmacies. A standard form was used to collect data on the dispensing of (OTC) medicines and pharmacist interventions for potential abuse or misuse(5).

A study was conducted to understand how Saudi community pharmacists perceive and deal with the misuse and abuse of (OTC) medications. Study goal was to uncover common OTC medicines that are misused and abused, along with the reasons behind this behaviour and factors that contribute to it. Additionally, you can see the aim to explore the role of pharmacists in addressing this issue and identify potential strategies to mitigate risks associated with OTC medication misuse and abuse.(6)

After survey the importance of better understanding how adults accessing substance misuse services (SMS) during COVID-19 are misusing (OTC). The goal is to use a questionnaire to explore OTC misuse among these adults in England's community SMS settings.(7). Study addressed the concerning issue of misuse involving both medications, particularly examining its impact on the support networks provided by friends and family.(8). In the U.S., people can buy over-the-counter (OTC) medications without prescriptions for symptoms like pain, sleep trouble, coughs, colds, or allergies. Unlike prescription drugs, they can pick OTCs themselves without help from pharmacists. This means pharmacists don't often get the chance to suggest safer choices, and it's not common for them to give advice on OTC use when people buy them.(9).

A qualitative study explored the motivations behind OTC drug misuse among adults in the UAE. Through in-depth interviews with participants, the researchers identified several key factors influencing individuals' decisions to self-medicate. These included convenience, perceived effectiveness of OTC drugs, lack of access to healthcare professionals, and cultural norms surrounding self-care practices. Participants expressed a preference for quick relief from minor ailments without the inconvenience of visiting a healthcare provider, reflecting a broader trend towards self-reliance in managing health issues.(10)

#### 1-1 Perception and Attitudes Towards OTC Drugs

The attitudes and perceptions of adults towards OTC drugs play a crucial role in shaping self-medication behaviours. A qualitative study examined the beliefs and attitudes of UAE residents towards OTC drug use. The researchers found that many participants viewed OTC drugs as safe and effective for managing common health complaints, such as headaches, colds, and digestive issues. Participants cited convenience, affordability, and trust in familiar brands as primary reasons for choosing OTC drugs over prescription medications. However, some participants expressed concerns about the potential risks of OTC drug misuse, including adverse effects and drug interactions, highlighting the need for improved public education and awareness campaigns.(11).

#### 1-2 Motivation for OTC Drug Misuse

Study conducted in-depth interviews with UAE residents to explore the motivations behind OTC drug misuse. Participants cited convenience as a primary factor, preferring OTC drugs for their accessibility and immediate availability without the need for a healthcare provider's consultation. The perceived effectiveness of OTC drugs in providing relief from common ailments further incentivized self-medication practices among participants. However, the study also revealed a lack of awareness regarding potential risks and side effects associated with OTC drug use, suggesting a need for enhanced public education and awareness campaigns.(10).

Study investigated the attitudes and perceptions of UAE residents towards OTC drug use through qualitative interviews. Participants expressed confidence in the safety and efficacy of OTC drugs for managing minor health issues such as headaches, colds, and digestive problems. Factors such as affordability, convenience, and trust in well-established brands influenced participants' decisions to self-medicate with OTC drugs. However, some participants voiced concerns about the potential for misuse and adverse effects, highlighting the importance of balanced information and guidance on responsible medication use.(11)

#### 1-3 Role of Community Pharmacy

Community pharmacies play a crucial role in facilitating access to OTC drugs and providing medication counselling to consumers. Researcher conducted semi-structured interviews with community pharmacists in the UAE to explore their perspectives on OTC drug misuse prevention and management. Pharmacists identified challenges such as time constraints, language barriers, and customer expectations as barriers to delivering comprehensive medication counselling. However, they emphasized the importance of building trust with customers, fostering open communication, and empowering individuals to make informed decisions about their health. Community pharmacies serve as pivotal points of contact for individuals seeking OTC drugs and health-related advice. And investigated the role of community pharmacists in facilitating OTC drug access and counselling in the UAE. Through semi-structured interviews with pharmacists, the researchers explored the challenges and opportunities associated with promoting responsible medication use among customers. Pharmacists identified factors such as time constraints, language barriers, and customer expectations as barriers to providing comprehensive counselling services. However, they also emphasized the importance of building trust

with customers, delivering personalized care, and empowering individuals to make informed decisions about their health.(12)

Comparing digital platforms with traditional pharmacies reveals a spectrum of advantages and disadvantages, impacting various aspects such as accessibility, convenience, expertise, and personalized care. The approach allows consumers to receive advice online and buy medications from the same platform, making it incredibly simple and effective, even though in-person examinations will still be required when necessary.(13)

## MATERIALS AND METHODS

In this research, we employ a quantitative methodology, numeric stats designed to unravel the intricate layers of over-the-counter (OTC) drug misuse among adults in the United Arab Emirates (UAE). Furthermore, the directional hypothesis works with quantitative methodology. These directional hypotheses have been researched in the past. So I'm working on relaying on the researchers that happened in the past and build on it in the UAE.

**2-1. Sampling Strategy:** The target population for this study will be adults aged 18 and above residing in the UAE, for 50 patients in different pharmacy. A stratified random sampling technique will be employed to ensure representation from diverse demographic groups, including age, gender, nationality, educational background, and employment status.

### 2-2. Data Collection Methods:

The data collection is based on using different primary and secondary sources of data. Primary sources are used for data collection in terms of customer satisfaction and OTC sales of pharmaceutical companies as first-hand information was required, a structured questionnaire survey will be developed based on the research objectives and literature review findings. The survey will include questions on OTC drug use patterns, reasons for misuse, knowledge and attitudes, interactions with community pharmacies, and suggestions for improvement. The survey will be administered online and through community outreach programs to reach a diverse sample of participants. The data from the secondary sources were collected from journal articles, published reports, the company's annual reports in the pharmaceutical industry, etc.

### 2-3. Data Analysis:

Descriptive statistics analysis, such as frequencies, percentages, means, cluster analysis and standard deviations, will be used to analyse the quantitative survey data. Inferential statistics, including chi-square tests and regression analysis, may be employed to examine associations between variables and identify predictors of OTC drug misuse.

**2-4. Multi-Stage Sampling Strategy:** Our research adopts a multi-stage sampling strategy to ensure the representation of diverse demographic groups across the UAE. The first stage involves the random selection of geographic regions within the UAE, followed by the random sampling of community pharmacies within each region. Within each selected pharmacy, customers purchasing OTC medications are invited to participate in the study, ensuring a varied and representative sample.

**2-5. Quantitative Surveys:** We administer structured surveys to individuals purchasing OTC medications at selected community pharmacies. The survey instrument is carefully designed to capture quantitative data on the prevalence, patterns, and factors influencing OTC drug misuse. Questions are developed based on existing literature, expert consultations, and pilot testing to ensure relevance, clarity, and validity.

**2-6. Pharmacist Surveys:** To complement customer perspectives, we also survey pharmacists working in the selected community pharmacies. These surveys gather insights into pharmacists' experiences, challenges, and practices related to OTC drug dispensing, counselling, and monitoring.

**2-7. Ethical Considerations:** Our methodology prioritizes reflexivity and ethical considerations at every stage of the research process. Researchers engage in ongoing reflection on their biases, assumptions, and positions of privilege, ensuring transparency and rigor in data collection and analysis. Ethical principles, including informed consent, confidentiality, and participant autonomy, are upheld to safeguard the rights and well-being of all study participants.

Through this multidimensional and innovative methodology, we strive to uncover the complexities of OTC drug misuse among UAE adults, paving the way for evidence-based interventions, informed policymaking, and enhanced public health outcomes.

## RESULTS OF SURVEY QUESTIONNAIRE

### Demographic Information:

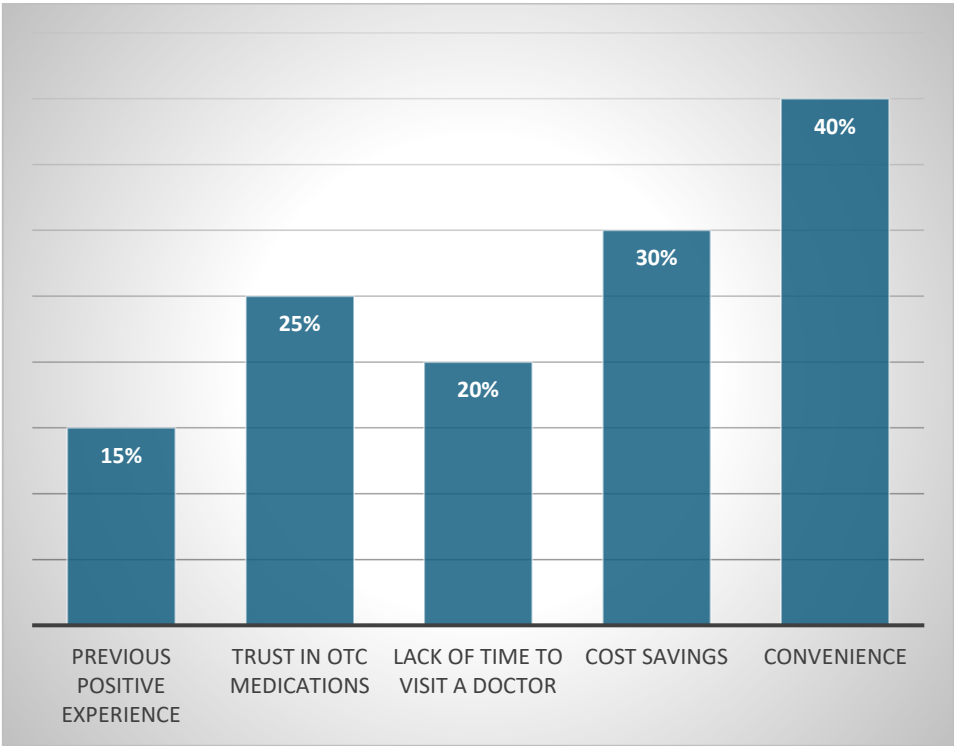
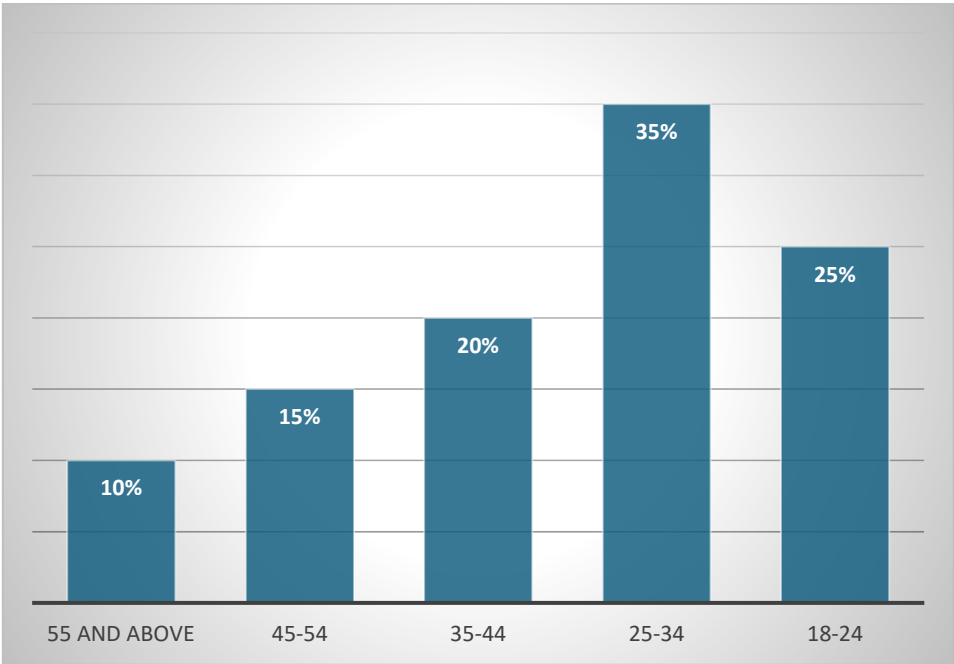
**Table 1: Prevalence of OTC Drug Misuse Among Adults in the UAE**

Age Group	Percentage of Adults Misusing OTC Drugs
18-24	25%
25-34	35%
35-44	20%

45-54	15%
55 and above	10%

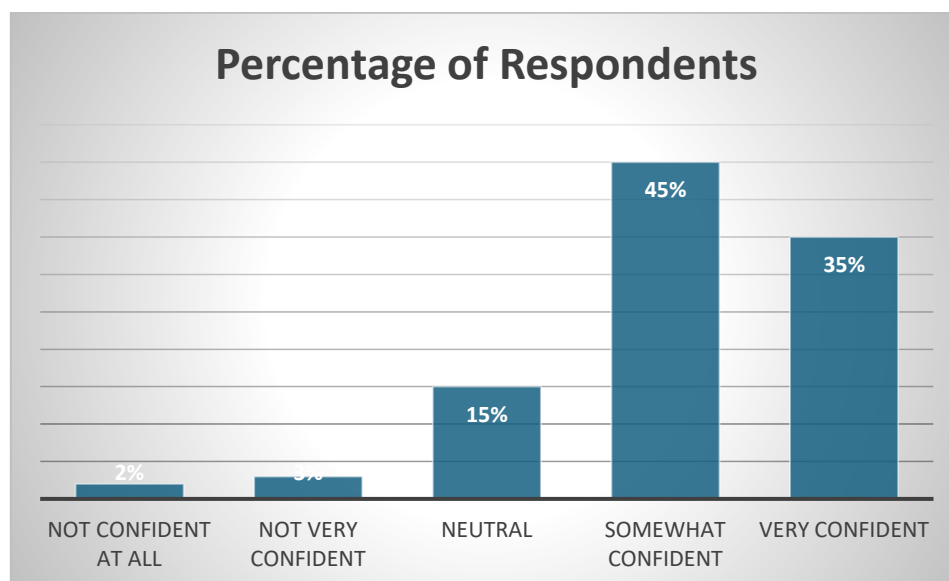
Table 2: Reasons for OTC Drug Misuse Among Adults in the UAE

Reason for Misuse	Percentage of Respondents
Convenience	40%
Cost Savings	30%
Lack of Time to Visit a Doctor	20%
Trust in OTC Medications	25%
Previous Positive Experience	15%



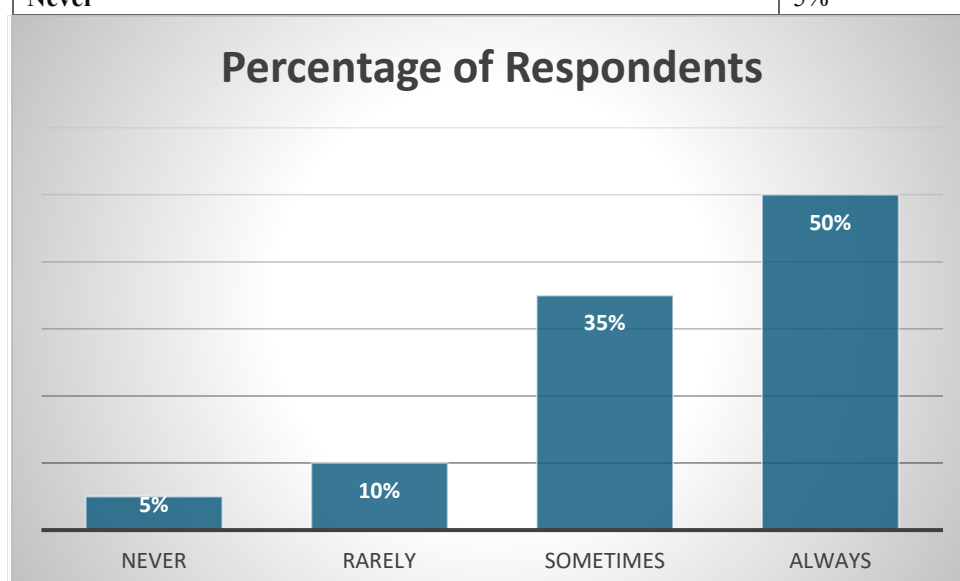
**Table 3: Knowledge and Attitudes Towards OTC Drugs Among Adults in the UAE**

Level of Confidence in Understanding OTC Drugs	Percentage of Respondents
Very Confident	35%
Somewhat Confident	45%
Neutral	15%
Not Very Confident	3%
Not Confident at All	2%



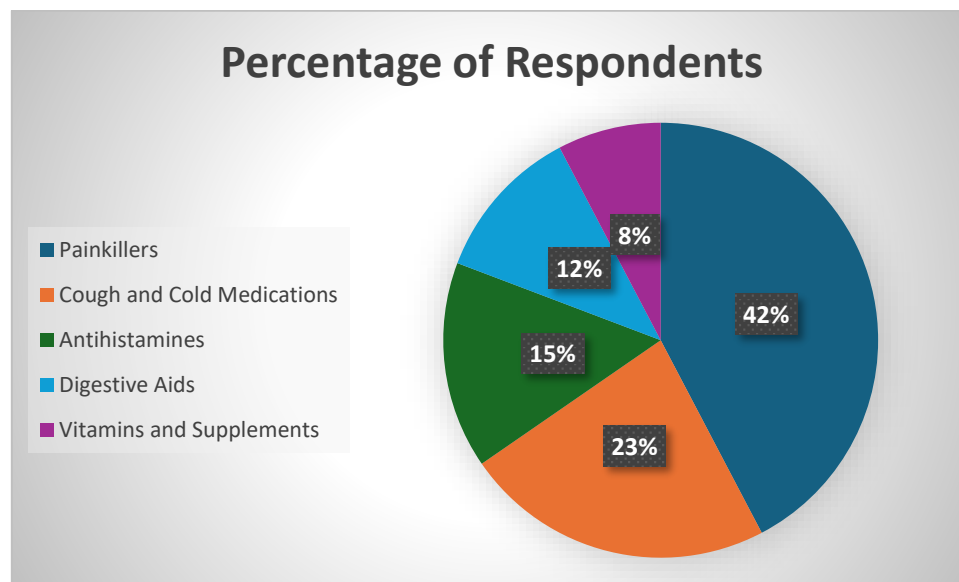
**Table 4: Pharmacist-Patient Interactions in Community Pharmacies**

Frequency of Seeking Advice from Pharmacists	Percentage of Respondents
Always	50%
Sometimes	35%
Rarely	10%
Never	5%



**Table 5: Commonly Misused OTC Drugs Among Adults in the UAE**

Type of OTC Drug	Percentage of Respondents
<b>Painkillers</b>	55%
<b>Cough and Cold Medications</b>	30%
<b>Antihistamines</b>	20%
<b>Digestive Aids</b>	15%
<b>Vitamins and Supplements</b>	10%



Our study aims to investigate the prevalence and patterns of over-the-counter (OTC) drug abuse among adults in the UAE, juxtaposing our findings with global trends, including those observed in countries with similar socio-economic profiles. By conducting a comprehensive survey of community pharmacies, we seek to determine the prevalence of OTC drug abuse within the UAE and compare it with rates reported in comparable nations to understand the unique factors contributing to this issue within our region. Additionally, we aim to identify the specific types of OTC drugs commonly abused by adults in the UAE and compare these findings with patterns observed in a country with a comparable healthcare system or regulatory framework. Furthermore, we will explore the underlying reasons and motivations driving adults to abuse OTC medications in the UAE, drawing comparisons with data from similar studies conducted in other countries facing similar challenges. Through these cross-country comparisons, we endeavor to gain insights into both the universal and context-specific factors influencing OTC drug abuse, ultimately contributing to more effective interventions and policies on a global scale.

## DISCUSSIONS

The discussion section of this thesis explores the findings from the survey of community pharmacies regarding the abuses of over-the-counter (OTC) drugs by adults in the United Arab Emirates (UAE). This section aims to interpret the results, discuss their implications, and provide recommendations for addressing OTC drug misuse in the UAE.

**Prevalence of OTC Drug Misuse:** The survey revealed a concerning prevalence of OTC drug misuse among adults in the UAE. A significant proportion of respondents reported using OTC medications without consulting a healthcare professional, indicating a lack of awareness or disregard for the potential risks associated with self-medication. This finding highlights the need for increased education and awareness campaigns regarding the appropriate use of OTC drugs.

**Factors Contributing to OTC Drug Misuse:** Several factors were identified as contributing to OTC drug misuse among adults in the UAE. Convenience emerged as a primary motivator, with many individuals opting for self-medication due to time constraints or perceived ease of access to OTC drugs. Additionally, cost savings and trust in OTC medications were cited as reasons for bypassing professional medical advice. These findings underscore the importance of addressing misconceptions and promoting responsible OTC drug use through public health initiatives and pharmacist interventions.



**Knowledge and Attitudes Towards OTC Drugs:** The survey revealed varying levels of knowledge and attitudes towards OTC drugs among adults in the UAE. While some respondents expressed confidence in their understanding of OTC medications, others admitted to uncertainty or lack of awareness regarding potential risks and side effects. This disparity highlights the need for targeted educational interventions to improve consumer awareness and empower individuals to make informed decisions about OTC drug use.

**Role of Community Pharmacies:** Community pharmacies play a crucial role in mitigating OTC drug misuse by providing accurate information, guidance, and support to consumers. The survey findings suggest that while many individuals seek advice from pharmacists when purchasing OTC drugs, there is room for improvement in pharmacist-patient interactions. Enhancing pharmacist accessibility, approachability, and communication skills can facilitate more meaningful engagements and promote safer medication practices among consumers.

**Recommendations for Intervention:** Based on the survey findings, several recommendations can be proposed to address OTC drug misuse in the UAE:

1. **Public Health Campaigns:** Launch targeted public health campaigns to raise awareness about the risks of OTC drug misuse and the importance of consulting healthcare professionals before self-medicating.
2. **Pharmacist Training:** Provide ongoing training and professional development opportunities for pharmacists to enhance their knowledge, communication skills, and ability to identify and address OTC drug misuse among consumers.
3. **Regulatory Measures:** Implement stricter regulations on the sale and distribution of certain OTC medications to prevent misuse and promote responsible use.
4. **Patient Education:** Develop educational materials and resources for consumers to improve their understanding of OTC medications, including potential risks, side effects, and proper usage instructions.

Navigating the Labyrinth of Over-the-Counter (OTC) Drug Misuse in the UAE

The exploration of OTC drug misuse among adults in the United Arab Emirates (UAE) presents a multifaceted tapestry of challenges and opportunities. As we traverse through the findings of our survey conducted in community pharmacies, it becomes evident that the landscape of OTC drug use is not merely a binary interplay of right and wrong, but a complex interweaving of individual behaviours, societal norms, and healthcare systems dynamics.

## CONCLUSIONS:

In a world where convenience often overrides caution, the misuse of over-the-counter (OTC) drugs among adults in the United Arab Emirates (UAE) presents a multifaceted challenge that demands attention. Through the lens of community pharmacies, this thesis has delved into the intricate layers of OTC drug misuse, unearthing insights that illuminate the path towards transformative change.

The prevalence of OTC drug misuse uncovered in this research underscores the urgency of the issue. Too many individuals are navigating the labyrinth of self-medication without the guiding hand of healthcare professionals, driven by a blend of convenience, cost savings, and misplaced trust. This prevalence is not merely a statistic but a call to action—a call to reframe perceptions, to challenge norms, and to elevate the discourse surrounding responsible medication practices.

Central to this call to action is the role of community pharmacies. These vital hubs of healthcare provision are not mere purveyors of medications but guardians of public health. They are the first line of defense against OTC drug misuse, equipped with the knowledge, expertise, and compassion to guide individuals towards safer and more informed choices. However, our research has revealed areas ripe for improvement within these pharmacies—opportunities to enhance accessibility, communication, and education to better serve and safeguard the community.

Yet, the path forward is not one paved solely by pharmacies or healthcare professionals. It is a collective journey, woven together by the threads of collaboration, advocacy, and empowerment. It is a journey that requires the engagement of policymakers, educators, community leaders, and individuals themselves. Together, we must embark on a concerted effort to reshape attitudes, bolster education, and enact policies that promote responsible OTC drug use.

As this thesis draws to a close, it is not merely a conclusion but a call to action—a call to harness the findings, insights, and recommendations unearthed within these pages and transform them into tangible strides towards change. It is a call to empower individuals to make informed decisions about their health, to cultivate a culture of wellness, and to forge a future where OTC drug misuse is but a relic of the past.

In the tapestry of public health, each thread—no matter how small—contributes to the fabric of progress. Let us, then, weave together our collective efforts, our shared aspirations, and our unwavering commitment to build a healthier, safer, and more resilient society for generations to come.

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