

Knowledge, Attitude, and Practice towards Use of Over-The-Counter Medicines among Adults

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ABSTRACT

Over-the-counter (OTC) drugs are commonly used worldwide to treat minor ailments without prescriptions. As their accessibility grows, self-medication has become common among adults, offering convenient relief and easing healthcare demands, though misuse risks adverse reactions, hidden serious illnesses, and interactions.

A descriptive design assessed knowledge, attitudes, and practices (KAP) of OTC use via closed-ended self-administered questionnaires and Likert scales. The sample included 100 adults aged 21-40 from KMCT hospital, selected through non-probability convenience sampling, with tools covering demographics, knowledge (semi-structured), attitudes (Likert), and practices (self-structured). Data analysis used descriptive and inferential statistics.

Most participants demonstrated good knowledge of OTC medicines, moderate attitudes toward their use, and moderate practices. Practice levels showed significant associations with variables like age.

Key words: Knowledge, attitude, practice, OTC medication

INTRODUCTION

Over-the-counter (OTC) medications, available without prescriptions and also called nonprescription drugs, enable individuals to self-treat symptoms through pharmacy purchases. However, abuse potential exists, with addiction risks notably higher among undergraduate medical students.

OTC drugs treat common mild conditions, but the false belief they pose no harm persists despite relative safety when used moderately. Excessive intake leads to severe, potentially fatal consequences like adverse reactions.

Global studies show high self-medication rates among healthcare professionals in both developing and developed nations, driven by prior experience and mild symptom relief. While OTC drugs dominate, some misuse prescription-only medications without guidance, heightening dangers.

Healthcare students, particularly medical undergraduates, exhibit elevated self-medication due to academic pressure, convenience, and time constraints. Variations in their knowledge, attitudes, and behaviors contribute to risky practices and adverse drug events.

Problem Statement

A study to assess knowledge, attitude and practice towards the use of over the counter medicines among adults in a selected hospital, Kozhikode.

Objectives

To assess the knowledge of adults towards the use of over-the-counter medications.

To assess the attitude of adults towards the use of over-the-counter medications.

To assess the practices of adults towards the use of over-the-counter medications

To assess the association between selected demographic variables and the practice of adults towards the use of over-the-counter medicine

Hypothesis

H1: There is a significant relationship between selected demographic variables and practice of adult towards over-the-counter medicines

Conceptual Framework

The Health Belief Model (HBM), proposed by Rosenstock in 1974 (not 1794) and further developed by Becker and Maiman in 1975, underpins the theoretical framework for this study evaluating knowledge, attitudes, and practices toward over-the-counter (OTC) medicine use among adults at a selected hospital.

METHODOLOGY

Research Approach - Quantitative research approach

Research Design - A Non-experimental research design (descriptive design).

Population - The population of the study is both patients and bystanders who came on the hospital for consultation.

Sampling Technique - Convenient sampling technique

Sampling Criteria

1. Inclusion criteria

Adult between age 21-40 yrs.

Adult willing to participate

Both male and female patients

Patient and bystander who able to read

2. Exclusion criteria

Adults more than 45 years

Adult not willing to participate

Critically ill patient

Adult who are unable to complete questionnaire

Settings of the Study - KMCT Medical College Hospital

Variables

Research variables: Knowledge attitude practice towards use of OTC medication among adult

Demographic variables: age, gender, occupation, education, marital status, monthly income, area of living, source of information.

Tool

Section A- Demographic Data

It consists of 8 questions to collect demographic data (age, gender, educational status, occupation, monthly income, area of residence, marital status, source of information about OTC medication).

Section B – Semi-structured Questionnaire

It consists of 10 questions to assess knowledge of the subject about OTC medications.

Section C – Likert scale

It consists of 10 questions to assess the attitude of adults towards OTC medication.

Data Collection

Data collection was started after obtaining ethics committee clearance and permission from ethical authorities at KMCT Hospital. The subjects were selected by convenience sampling. Informed consent was obtained from all participants. The tool was administered using a printed form, and sufficient time was provided to answer all questions.

Ethical Considerations

The research proposal was presented to the research committee of KMCT College of Nursing and approval was obtained. Ethical clearance for the study was obtained from KMCT ethics committee. Informed consent was obtained from the subjects.

Result

The demographic profile of the participants included age, gender, education, occupation, monthly income, area of living, marital status, and source of information about OTC medications. Majority of the sample (37%) were in the age group of 21-25 were as 25% were in the age group of 36-40 & age groups of 26-30 & 31-35 are 19% respectively. 57% of the sample were male and 43% were female. Majority of sample (55%) were graduate, were as 30% were having higher secondary education, 15% were having primary education. Majority of the sample (35%) were having private job, other (35%) unemployed, (23%) were self-employed and (5%) were government employees. Income of majority of sample (35%) were <10,000 (23%) of sample had between 10,000 - 20,000, (17%) had income between 20,000. -30,000 and 6% of sample had income >30,000. 64% of sample reside in rural area which is the majority 30% were in the urban area and 6% of sample are foreigners. Majority (57%) of sample were married (42%) were unmarried (2%) of sample were divorced and 1% was widow. The major source of information (39%) in the sample was from health professionals (36%) from internet (18%) of information among the sample is from family and (7%) information about OTC drugs is from media.

DEMOGRAPHIC VARIABLES	FREQUENCY (f)	PERCENTAGE
Age		
21-25	37	37%
26-30	19	19%
31-35	19	19%

35-40	25	25%
Gender		
Male	43	43%
Female	57	57%
Education		
Elementary	15	15%
Higher secondary	30	30%
Graduate	55	55%
Occupation		
Unemployed	35	35%
Private	37	37%
Government job	5	5%
Self employed	23	23%
Monthly income		
<10000	36	36%
10000-20000	23	23%
20000-30000	17	17%
A roadside	6	6%
Area of living		
Urban	30	30%
Rural	64	64%
Marital Status		
unmarried	42	42%
married	57	57%
divorced	2	2%
Widow	1	1%
Source of info about OTC		
Health expert	39	39%

internet	36	36%
Media	7	7%
Famly	18	18%

Table 1: Frequency and Percentage distribution of demographic variables

The study shows that 64% of adults had good knowledge, 34% had moderate knowledge, and only 2% had poor knowledge.

Level Of Knowledge

CATEGORY	NUMBER OF ADULTS	PERCENTAGE
POOR KNOWLEDGE	2	2%
MODERATE KNOWLEDGE	34	34%
GOOD KNOWLEDGE	64	64%

Table 2: Distribution of sample according to knowledge experienced by adults

Level Of Knowledge

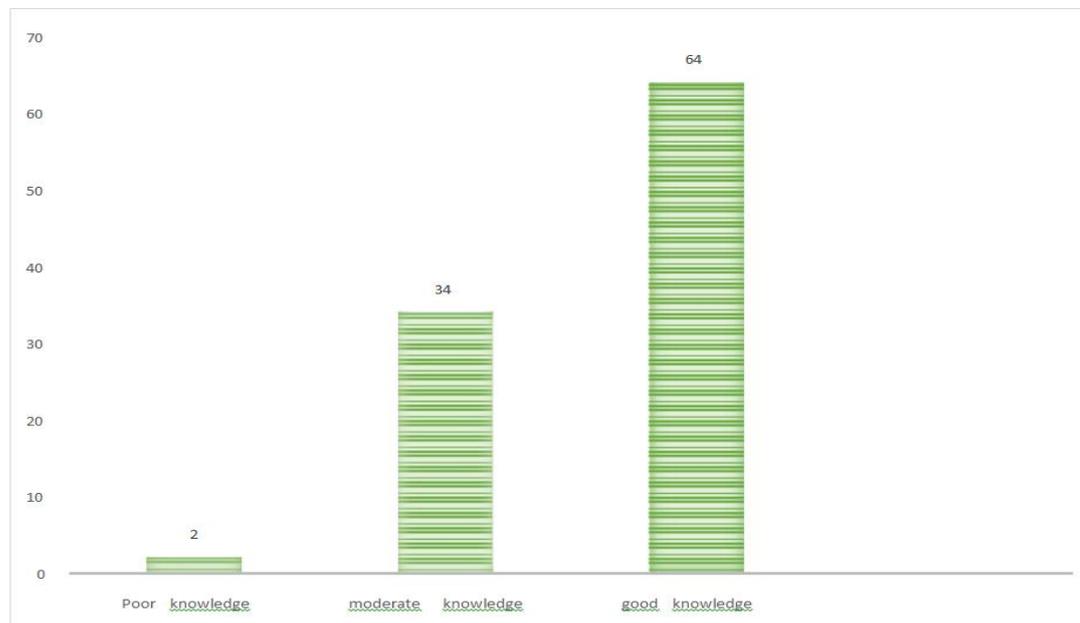


Figure 1: Column chart showing distribution of sample according to knowledge experienced by adult

The study shows that 52% of the adults had a neutral attitude, 43% had a positive attitude, and 5% had a negative attitude.

Level Of Attitude

CATEGORY	NUMBER OF ADULTS	PERCENTAGE
NEGATIVE ATTITUDE	5	5%

NEUTRAL ATTITUDE	52	52%
POSITIVE ATTITUDE	43	43%

Table 3: Distribution of sample according to attitude of adult

Level Of Attitude

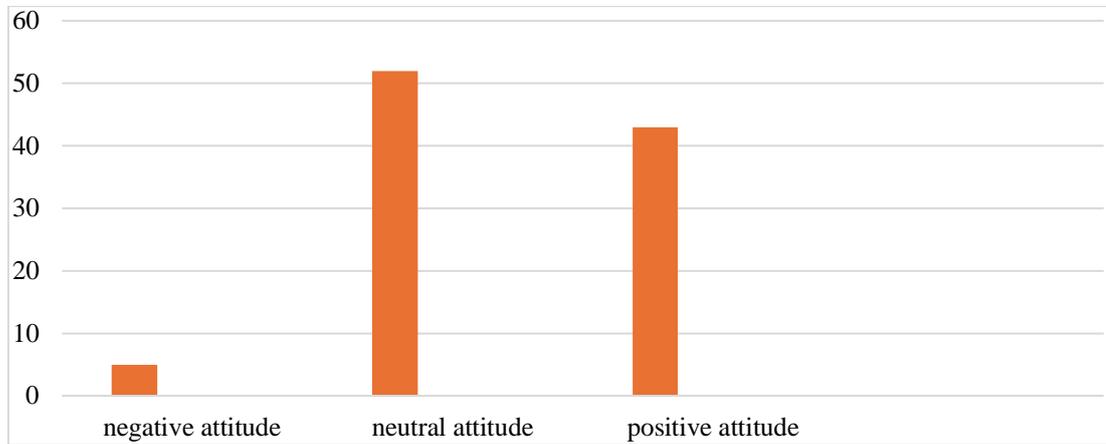


Fig 2: Column chart showing distribution of sample according to the attitude experienced by adult

The study shows that 46% of adults exhibited good practice, 35% showed moderate practice, and 19% demonstrated poor practice.

Level Of Practice

CATEGORY	NUMBER OF ADULTS	PERCENTAGE
POOR PRACTICE	19	19%
MODERATE PRACTICE	35	35%
GOOD PRACTICE	46	46%

Table 4: distribution of sample according to practice of adult.

Level Of Practice

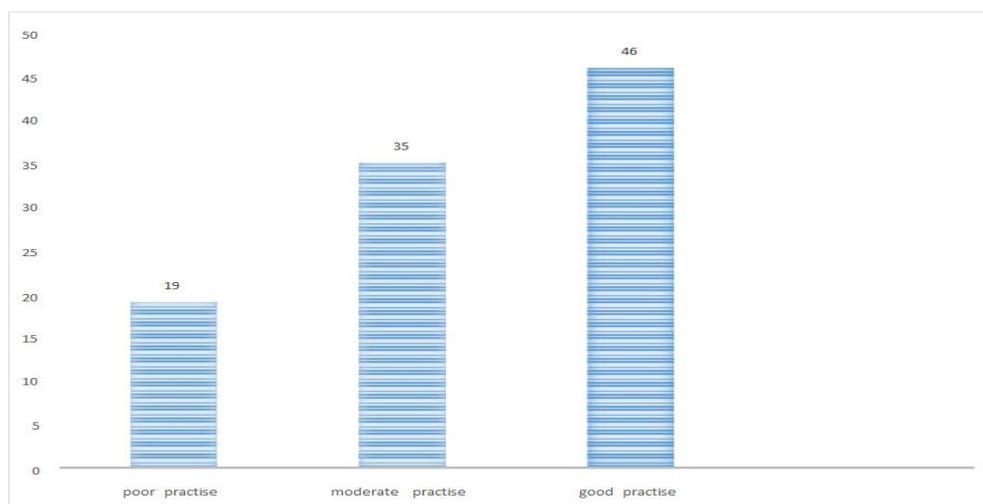


Figure 3: Bar diagram showing the distribution of sample according to the practice experienced by the adult

The result shows that there is a significant association between practice and age.

Association between demographic variables and practice level

Demographic variable	Chi-square value	Degree of freedom	Table value	Level of significance
Age	17.867	6	12.592	Significant
Gender	2.427	4	9.488	Not significant
Education	2.084	6	12.592	Not significant
Occupation	11.602	6	12.592	Not significant
Monthly income	8.608	6	12.592	Not significant
Area of living	11.064	6	12.592	Not significant
Marital status	1.831	4	9.488	Not significant
Source of information about OTC	4.521	6	12.592	Not significant

The data shows that there is a significant association between the level of practice regarding OTC medication and age. There is no association between level of practice and variable such as gender, education, occupation, monthly income, area of living, marital status, source of information about OTC.

DISCUSSION

Ola A. Mirdad, Ghada E. Esheba Ahmed H. Mousa conducted a cross-sectional study on Over- the-Counter Medication use among Parents in Jeddah Saudi Arabia. An electronic questionnaire was randomly sent to parents over four months, from 1 January to 30 April 2022. We included parents above 18 years of age who were using OTC medications for their children and live in the Jeddah region, Saudi Arabia. sample size includes population of 109 participants from Qassim region, Saudi Arabia. The result of this study shows that Parents (70%) in Jeddah, Saudi Arabia have higher educational levels and better health knowledge about diseases and medications. 65% of parents with higher education were more confident and having a positive attitude towards OTC drugs. 75% of educated parents were more likely to use OTC medication, which indicates a positive practice towards OTC medication. Our study significantly shows a relationship with this study, as the adult population is having adequate knowledge (64%) on OTC medication. Moderate attitude (52%) and good practice (46%) towards OTC medication. It also shows a significant relationship between age and practice towards OTC medication.

RECOMMENDATIONS

1. Similar study can be replicated as a large sample and in other setting.
2. The follow up study can be done to assess the effectiveness of structured teaching program regarding the use of over the counter medicines.

CONCLUSION

The present study assessed the knowledge, attitude, and practice (KAP) regarding over-the-counter (OTC) medications among adults aged 21–40 years, revealing that 64% demonstrated good knowledge, 34% had moderate knowledge, and only 2% possessed poor knowledge; attitudes were predominantly positive (52%),

with 43% neutral and 5% negative; and practices varied, with 46% exhibiting good practices, 35% moderate, and 19% poor practices. A significant association was found between age and practice.

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