# **Over The Counter Drugs**

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# **ABSTRACT**

A cross sectional survey was undertaken to assess the knowledge on practice of using Over the Counter(OTC) drugs among the study participants age group of 40-80 years in selected community area, Uttrakhand. 100 participants were selected by convenient sampling method and required data were collected from them by using structured opinionnaire. The mean knowledge score of participants regarding knowledge on practice is 13.43  $\pm$ 2.90 which is 55. 90% mean percentage. Among each area, the highest 88.50 mean percentage was obtained in the area "Duration of using OTC drugs" and lowest 33.80 mean percentage was obtained in the area "Ill effects and opinion". Majority (79%) of the of the participants taking advices before consuming OTC drug and in that most (75.9%) of the participants take advices from pharmacist for taking an OTC drug. No statistical significant association was found when knowledge score is compared with age, gender, educational status, occupation and monthly per capita income but a statistical significant association was found in the item how long they are using OTC drugs in daily life.

**Keywords**: Knowledge on practice, opinionnaire, Over the Counter Drugs, Community area.

# Introduction

Medications have become an integral part of life for many people. Medicine serves to help people when they are sick, allowing them to live longer and healthier lives. With rapidly growing research and technology, medications are more beneficial, and new ones continue to be discovered. All medications, whether prescribed by a doctor or bought over-the-counter, are capable of harmful side effects Over-the-counter [1]. (Nonprescription) drugs play an increasingly vital role in Indian health care system. Today, six out of every ten medications bought by consumers are OTC drugs [2].Over-the-Counter (OTC) drugs are non-prescription drugs sold to consumers at pharmacies, convenience and grocery stores.

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These drugs include pain relievers, cough and cold remedies, sleeping aids, antifungal, and other products approved for use as a self-medication product[3]. A number of reasons could be enumerated for the rise of self medication. One of the reasons being the increase in chronic diseases and their incidence as raise from 30% to 80%. Other reasons which are responsible for self medications in developing countries are urge of self care, feeling of sympathy towards family members in sickness, lack of health services, poverty, ignorance, misbelieves, extensive advertisement, use of drugs from informal sectors such as open markets and quacks, illegal purveyors of drugs[4]. Inappropriate self medication results in irrational use of drugs, wastage of recourses, increased resistance of pathogens, entails serious health hazards such as adverse reaction and prolonged suffering[5].Researchers are stating that self medication can be practiced and they consider it appropriate for short term relief of symptoms where accurate diagnosis is unnecessary, uncomplicated cases of some chronic and recurrent diseases. However, people should be properly educated about the practice of self medication in order to prevent harmful effects caused by the practice. The increasing self medications will require more and better

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education of both the public and health professionals to avoid the complications arising from the practice[6].

# **Objectives:**

- 1. To assess the level of knowledge on practice and opinion of using OTC drugs among participants in age group of 40 80 years.
- To find out the association with their knowledge level and socio- demographic data among participants in age group 40 – 80 years.

# Methodology

Cross sectional survey design was used. A total 100 participants with age group 40-80 years were included in

the study by convenient sampling from a rural area of Uttrakhand. A Structured Interview schedule of 24 items constructed to assess the knowledge and opinion on practice of using an OTC drugs. The content validity of the opinionaire was established from various field of experts. Informed consent was taken from the study participants and ethically the study was approved by the HIHT ethical committee and also administrative permission was taken from the Principal, Himalayan college of Nursing. Confidentiality of the respondent's identity was maintained by using codes instead of names of the subject.

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#### Results

Table 1: The percentage distribution of Social-demographic variables of participants

S.NO	Social-Demographic Variables	Variables	Percentage (%)
1	Age in Years	40-50	44%
		50-60	33%
		60-70	13%
		70-80	10%
2	Gender	Male	51%
		Female	49%
3	Educational level	Illiterate	26%
		Primary	25%
		Secondary	35%
		Graduate	14%
4	Occupation	Skilled	28%
		Unskilled	32%
		Unemployed	40%
5	Monthly Income	5000	58%
		5001-10000	15%
		10001-15000	10%
		15001 and above	17%
6	Used in Years	5 years	25%
		10years	18%
		15years	9%
		Unknown	48%

- ➤ 44 percent of participants were in the age group of 40-50 years.
- > 51 percent participants were males & 49% of participants were females.
- > 35 percent of participants had secondary education, 26% of people were not having formal education.
- ➤ 40 percent of participants were unemployed.
- > 58 percent belongs to the income group of Rs. 5000.

Table 2: Area wise distribution of mean, standard deviation, mean percentage of people using OTC drugs

S. No.	Area	Max.	Data	
		Scores	Mean ± SD	Mean %
1.	Health Conscious	5	$3.74 \pm 1.49$	77.80 %
2.	Situations	6	$2.35 \pm 1.37$	39.10 %
3.	Factors influence use of OTC drugs	5	$3.54 \pm 1.21$	70.80 %
4.	Usage of OTC drugs	2	$1.77 \pm 0.42$	88.50 %
5.	Ill effects and opinion	6	$2.03 \pm 0.99$	33.80 %
	Overall Score	24	$13.43 \pm 2.90$	55.90%

Overall area wise mean, SD and mean percentage of knowledge scores of participants regarding knowledge on practice shows that 13.43  $\pm$  2.90. Among each area, the highest mean score (1.77  $\pm$ 0.42) which is 88.50 mean

percentage was obtained in the area of "Usage of OTC drugs" and lowest mean score (2.03  $\,\pm\,$  0.99 ) which is 33.80 mean percentage was obtained in the area of "Ill effects and opinion" regarding using a OTC drugs.

Table 3: Frequency and percentage distribution of participants using OTC drugs

S. No	Area	FREQUENCY (F)	PERCENTAGE (%)				
Reasons to use OTC drugs							
1	Economical	62	62%				
2	Effective than prescribed medications	35	35%				
3	Hospital is far	83	83%				
Frequency of usage							
	a) Weekly once	82	85.41%				
	b) Twice a week	12	12.5%				
	c) Thrice a week	1	1.04%				
	d) Everyday	1	1.04%				
1	Relieving the problem	87	87%				

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<sup>➤ 48</sup> percent of participants were unaware how long their using the OTC drugs in daily routine life and 25 percent of participants were using OTC drugs since 5 years, 18 percent were using OTC drugs since 10 years. Whereas, 9 percent of participants were using OTC drugs since 15 years.

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2	Abrupt stoppage	88	88%				
3	Considering the Diet	55	55%				
	Advices taken from						
	Neighbor	7	8.8%				
	friends	4	5.06%				
	pharmacist	60	75.9%				
	nurse	9	10.24%				
1	Checking Expiry Date	79	79%				
2	Checking Ill effects	59	59%				
3	Feeling Injurious	85	85%				
4	Ill effect experience	26	26%				
5	Increasing Dosages	24	24%				
6	Combined with prescribed medicines	16	16%				
7	Addiction	73	73%				
	Need to be Banned & why	67	67%				
	a)they are harmful	30	44.77%				
	b)can lead to side effects	15	22.38%				
	c)cause of addiction	18	26.86%				
	d) mislead consumers	4	5.97%				

Table shows frequency and percentage wise distribution of participants using OTC drugs the highest frequency and percentage (96%) which was on usage of OTC drugs. It also shows that majority of the of the participants taking advice before consuming OTC drug and in that most (75.9%) of the participants take advise from pharmacist for taking an OTC drug. There was statistically no significant association between the socio – demographic variables and knowledge score on practice of OTC drugs. When compared to age, gender, educational status, occupation and monthly per capita income but a significant statistical association was found in usage of OTC drugs( p=3.95) in daily life and socio demographic variables.

#### Discussion

The total mean percentage of knowledge scores was  $13.43 \pm 2.9$ . The results were supported with another study by Chih Wen Shi et al (2004) on Consumer Knowledge on over the counter Phenazopyridine in Los Angeles. The response rate was 58%. Only 29% correctly characterized the likely cause of their symptoms, and only 57% correctly characterized the action of the drug. Worse consumer knowledge was associated with nonwhite race, first-time use, and less contact with health providers.(7) The mean, SD and mean percentage of opinion scores on practice shows that 88.5 % of total score was obtained on the areas of "duration of usage". Whereas 33.8 % of the total score was obtained on the area of "affectivity and opinion". However the overall percentage 55.9 % of total score reveals that the people of general population have good

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knowledge regarding OTC drugs. This results were one more study by A E M Brabers et al (2013) on A crosssectional survey investigating consumers' confidence in over-the-counter (OTC) skills and their attitudes towards the availability of OTC painkillers in Dutch Health Care Consumer Panel. The response rate was 68% (n=972). Consumers feel confident about their own OTC skills (mean 3.74; 95%), but have less confidence in OTC skills of others (mean 2.92; 95%). Consumers are conservative in their attitudes towards the availability of OTC painkillers. Most consumers prefer painkillers to be available exclusively in pharmacies (41-71% per profile indicated pharmacy only). Moreover, there is an association between confidence in OTC skills and attitudes (p=0.005;  $\beta$ =-0.114). Consumers who are more confident about their own OTC skills prefer OTC painkillers to be more generally available.

Thus, the hypothesis was to some extent acceptable in statistical way in usage of OTC drug in daily routine life.

#### Conclusion

From the findings it can be concluded that most of people were in age group of 40-50 years. Majority of (51%) people were male. Highest percentage (35%) of people had secondary education, 40% percentage of people were unemployed. Highest percentage (58%) belongs to the income group of Rs. 5000 and about 48% of people were unaware of the duration of usage of OTC drugs in daily routine. The general population have good knowledge regarding OTC drugs but their usage also high.

# Recommendations

Based on findings of the study and conclusion withdrawn the following recommendation was suggested for further study.

- A similar study should be held on large scale sample to draw generalization to a larger population.
- A comparative study should be conducted to asses knowledge of men and women related to OTC drugs.

3. A study may also be done to assess the knowledge level of youth and middle age group between 18 – 40 years.

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