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# ASSESSMENT OF AWARENESS AND ATTITUDE TOWARDS OVER THE COUNTER (OTC) DRUGS AMONG URBAN POPULATION, CHIDAMBARAM, TAMILNADU

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# ABSTRACT

In recent years there has been an increasing trend in self medication with over the counter (OTC) drugs available in pharmacies and retail outlets. In parallel, more products have been deregulated for purchase without prescription. In India, the Drugs and Cosmetics Act (DCA), the Drugs and Cosmetics Rules, 1945 (DCR) regulates the import, manufacture, distribution and sale of drugs and cosmetics. The "OTC Drugs" has no legal implications in India. To assess the awareness and attitude towards over the counter (OTC) drugs amongst urban population Chidambaram. This is cross-sectional study was carried out in urban Chidambaram. 64% of the primary respondents felt that OTC medication can be taken and 4% stated that OTC can be taken during emergencies only and 32% were of the opinion that OTC shouldn't be taken. 32% participants reported that they never took, 66.4% of the respondents reported they seldom take OTC medication and 1.6% of the participants reported that they always take OTC medication. Over the counter (OTC) drugs are widely used and so it is very difficult to restrict them. Education programmes for the public and the professionals will be very much necessary and compulsory.

Key words: Over the counter drugs, Awareness and attitude.

# INTRODUCTION

Over the counter drugs are also known as Non prescription drugs. These are safe drugs and can be sold over the counter, by the pharmacist without the prescription of a doctor [1].

In recent years there has been an increasing trend in self medication with over the counter (OTC) drugs available in pharmacies and retail outlets. In parallel, more products have been deregulated for purchase without prescription [2]. The deregulation process has been championed by the pharmaceutical industry, the pharmacy profession and government health policy makers and is supported by the view that patients wish to have a greater role in their treatment choice [3]. Increasing availability of non-prescription medicines may encourage patients to believe that there is a drugs treatment for every ailment. Furthermore, the use of such products may delays the diagnosis of illness, [4] with increased risks of interactions and adverse reactions [5,6]. There is also the potential for misuse/abuse of such products [7]. It is growing trend of 'self care" which has its positive and negative aspects [8].

In India, the Drugs and Cosmetics Act (DCA), the Drugs and Cosmetics Rules, 1945 (DCR) regulates the import, manufacture, distribution and sale of drugs and cosmetics. The "OTC Drugs" has no legal implications in India [9]. Hence OTC drugs means drugs legally allowed to be sold "over the counter". Prescription only drugs are listed schedules H and X of the Drug and Cosmetic Rules. Drug listed in Schedule G (mostly antihistamines) do not need prescription to purchase but require the following mandatory text on the label: "caution: It is dangerous to take this preparation except under medical supervision [10].

Very few studies have been published regarding self-medication in our community therefore, the present study was undertaken to assess the awareness and attitude towards over the counter (OTC) drugs amongst urban population Chidambaram.

MATERIALS METHODS

s [8]. This descriptive cross sectional study was carried

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out in the field practice area of the urban health care centre under the department of preventive and social medicine of Rajah Muthiah Medical College of Annamalai University, Chidambaram.

The above urban health centre had 5 field practice areas, from each area 25 households were selected in random leading to a total of 125 households. A simple semi structured questionnaire was prepared and each family was interviewed only once in the local language. From each family one informant (mostly mother) was interviewed, after obtaining their consent. The questionnaire was filled by the interviewer. The questionnaire contained the quests pertaining to identification data (name of the head of the family, no of children, adults, address, education, occupation, income), practice of self-medication by the family. All the information was collected as per the recall period of last one month.

#### Statistical analysis:

All the data was entered and analysed using spss 21 version. Descriptive statistics was applied to describe the demographic and compiled data on awareness and attitude. Chi-square test was applied to find out the association between awareness, attitude and education.

### RESULTS

A total of 125 primary respondents from households were included in the final analysis. All the primary respondents were above 20 years age. Majority of the participants belonged to 31 to 40 years (30.4%) and 41 to 50 years (36.8%) age groups. Females constituted 95.2 % of study population and 98.4% of the participants were married. (table.1)

Out of 125 participants, majority (45.6%) of them educated up to middle school or high school. There were 48(38.4%) graduates and 11(8.85%) post graduates or professionals. Only 9 participants were either illiterates or completed less than primary schooling. Majority of the participants were either skilled or unskilled workers. Majority of participants (80.8%) belonged to socio economic class 1, according to modified kuppuswamy scale. The proportion of participants, who belonged to class 2,3,4 SES was 12.8%,4.8% and 1.6% respectively (table.2).

# Knowledge of the primary participants regarding OTC medication (N= 125)

All the participants are aware of OTC medication. 80(64%) of the primary respondents felt that OTC medication can be taken, only during emergency 5(4%) and 40 (32%) felt that OTC shouldn't be taken (fig.1).

40(32%) participants reported that they never took, majority 83(66.4%) of the respondents reported they seldom take OTC medication, only 2 (1.6%) of the

participants reported that they always take OTC medication. (figure.2).Those who had decreased awareness towards OTC had an increased chance of practicing it and is found to be statistically significant with p-value 0f <0.001. As the education status increases the intake of OTC decreases and is found to be statistically significant with  $X^2$ -value of 19.5 and p-value <0.05.

## DISCUSSION

The findings from this study highlights, socio demographic data shows, majority of the participants are females (95.2%) between the age group of 41 to 50 years (36.8%) followed by 31 to 40 years (36.8%), similar to the study by Amutha ganesh, [11] shows 59.6% of the participant s are females and their age group 18 to 25 years were 33.7%, another study by pavan kumar, [12] shows majority are females are between the age group of 26 to 35 years (61%), another study by Nagalingam et al, [13] reported that majority of the participants were male (58.5%) ,age group 15 to 30 years(36.2%) followed by 31 to 45 years (31.5%) which contradictory to our study, another study by P.O.U Adogu et al, [14] shows majority of the participants are females 53.1%, age group between 20 to 30 years were 44.8% followed by 31 to 40 years (33.9%), in our study education wise 45.6% are high and middle school followed by graduates 38.4%, study by pavan kumar,12 shows majority are illiterate 33.3%, followed by secondary school was 27.7%, another study from China 2004, [15] Shankar et al 2002, [16] confirmed that self-medication of over the counter drugs increases with education and more generally that self-care improves with general health awareness this reveals opposite to our study, in his study reported graduates 43.8% followed by secondary school 38.5%, another study by P.O.U.Adogu reported poet secondary qualifier lower than et al. bachelor degree 39.2% followed by bachelor degree 38.7%, socio economic status in our study shows majority are class I 80.8%, similar report from Nagalingam [13] class I, occupation in our study shows 50.5% are majority are skilled 81.6% ,similar report from Nagalingam [13] study shows 76.8% are skilled workers.

In our study awareness on over the counter drugs is 100%, that means they aware of over the counter drugs available as twin tablets in pharmacy, but they are lack of knowledge in dosage, duration and side effects of over the counter drugs, study by Kavya H.G, [17] shows 65.9% were aware of untoward consequences of taking selfmedication on their own, another study by P.O.U.Adogu *et al*, reported awareness and knowledge of over the counter drugs is 56.4%.

In our study over the counter drugs consumption was 68%, study conducted by Amutha ganesh, [11] shows 69% of them consume without regular prescription, another study by pavan kumar, [12] shows 30.5%, higher prevalence of 75% between the age group of 26 to 35 years was consistent with result [15-17] study,13 shows 58% of the study participants use analgesics and antipyretics without prescription, similar study by Aqueeb

*et al*, [18] shows prevalence of 61.2% in Islamabad, Pakistan population.

Parameter	Frequency (n)	Percentage (%)	
Age groups			
21-30 years	18	14.4	
31-40 years	38	30.4	
41-50 years	46	36.8	
51-60 years	17	13.6	
61 years and above	06	4.8	
Gender			
Male	06	4.8	
Female	119	95.2	
Marital Status			
Married	123	98.4	
Un married	2	1.6	

# Table 2. Education and socioeconomic status of primary participant (N= 125)

Parameter	Frequency (n)	Percentage (%)
Education		
Primary school & illiterate	09	7.2
High school, middle school	57	45.6
Graduate	48	38.4
Post graduate & professionals	11	8.8
Occupation		
Skilled	102	81.6
Un skilled	16	12.8
Students	04	3.2
Retired	02	1.6
Professionals	01	0.8
Socio Economic Status		
1	101	80.8
2	16	12.8
3	06	4.8
4	02	1.6

#### Table 3. Association between Opinion on consumption and How often do take OTC.

Opinion	How Often			
	Never	seldom	Always	
Can	3(4.2%)	75(93.0%)	2(2.8%)	
Shouldn't	37(97.4%)	3(2.6%)	0(0.0%)	
In emergency	0(0.0%)	5(100.0%)	0(0.0%)	

McNemar's chi-square test value 19.8, P<0.001

### Table 4. Association between attitude about OTC and education

	Do you take OTC?			
Education	Yes		No	
	N	%	N	%
Professional	6	54.5	5	45.5
Graduate	23	47.9	25	52.1
High and middle school	47	82.5	10	17.5
Primary and illiterate	9	100	0	0

 $X^2 - 19.5$  p-value < 0.05



# CONCLUSION

Over the counter (OTC) drugs are widely used and so it is very difficult to restrict them. Measures should be directed towards their safer use. Self management of acute, intermittent and long term condition is likely to become more extensive in the near future. Greater patient and public involvement in formulating both policy and practice against the over the counter drugs will be needed. Education programmes for the public and the professionals will be very much necessary and compulsory. Also as the main factor found to influence the people to use over the counter drugs was pharmacist sale, recommendations, pharmacists need to be more proactive in the management of inappropriate over the counter drugs use. It may be recommended that by monitoring usage of certain over the counter drug products in addition to data recording, education, safe and effective use of such medicines can be promoted.

# CONFLICT OF INTEREST

No Conflict of interest

#### ACKNOWLEDGEMENT None

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