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STUDY ON KNOWLEDGE ATTITUDE AND PRACTICE OF SELF-MEDICATION AMONG URBAN AND RURAL AREAS – A CROSS SECTIONAL STUDY

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ABSTRACT

Self-medication is the common practice worldwide and the irrational use of the drugs is a major cause of concern. Self-medication is an issue with serious global implication. The current study based on the determination of the knowledge, attitude and behavior of self-medication in urban and rural areas. The study site urban and rural areas of Tiruchirappalli, Tamil Nadu. The study design is consisting of cross sectional study. The total study population is 100 people (respondents) in the people 50 from urban areas and the other 50 from rural areas. The total study period of 06 month. All the data will be collected by questionnaire, it is containing 35 questions. The question distributed to 50 urban and 50 rural area people for getting information regarding self-medication. It will help to conduct counselling programs about the potential risk of self-medication and also help to prevent the harms of un-prescribed medication.

Keywords: self-medication, Rural, Urban, Questionnaire, people

INTRODUCTION:

Self-medication (SM) can be defined as obtaining and consuming drugs without the advice of a physician. There is a lot of public and professional concern about the irrational use of drug in SM [1]. Self-medication is generally called non-prescription or “Over the counter” (OTC) medication and can be obtained without a physician prescription from the retail pharmacies and some from non-pharmacy retail outlets [4]. The Dangers of self-medication are many such as habituation, allergic reaction that may be severe or even fatal. Under-dosage may not cure the symptoms. Over-dosage accuracy of medication and dosage can produce collateral damage to many organ [6]. It involves taking medication without professional supervision, which comprise acquiring medicines without the prescription purchasing drugs by resubmitting/reutilizing an old prescription, using medicines prescribed for family members, taking medicines already available at home [8]. The world health organization (WHO) has defined self-medication as the use of drugs to treat self-diagnosed disorders or symptoms [3]. According to world self-medication industry, it is one of the most essential tools used by a person suffering from a common illness, which does not necessitate doctor’s visit [2]. A patient with milder illness

such as fever, cold\cough, diarrhea, indigestion or wound infection etc., may receive advice like a healthcare professional from their own friends, family members or some time from strangers regarding pharmaceuticals specially about scheduled medication like antibiotics NSAIDs etc. [4]. The pattern of utilizing OTC medication is predominant in India. Even though self-medication is certifiably not an incredible danger, it expands the odd of unlawful utilization of medications [5]. Such medicines are normally used for the treatment or prevention of minor ailments or symptoms, which do not justify medical consultation. In some chronic or recurring illnesses, after initial diagnosis and prescription, self-medication is possible with the doctor retaining an advisory role [6]. Self-medication begins in early adolescence, often during the middle school years. By the age of 16, nearly all adolescents have taken medicine independent self-care is achieved, as well as in the accuracy of medication and dosage selection [9]. Inappropriate self-medication can lead to resource waste increased microorganisms resistance, and serious health hazards include drug side effect, addiction, extended hospital stays or antibiotic resistant brought on by excessive antibiotic use [10].

SM is a global issue that can potentially contribute to various health hazards including antibiotic resistance [7]. We found only few studies done to determine SM prevalence in Trichy. The present study was carried out to estimate and characterize the overall self-medication prevalence in the urban and rural areas of Tiruchirappalli, India³. Although SM may have some advantages such as time and money savings, providing quick relief, and treating minor illnesses, it may cause adverse drug reaction, use of inappropriate medicines, wrong dosage, incorrect diagnosis, polypharmacy, drug abuse and drug-drug interaction [11]. Young generation have more positive attitude toward self-treatment, which is a serious matter of concern [12]. From 19th century onwards, medical profession has emerged as an important profession in caring human health from their scientific discoveries of diagnostics, surgeries and medicine as a result of which patients become passive in their self-care [13]. However, due to poor medical facilities, a lack of government restriction and a high population density, it is much more common in south east Asia to buy prescription drugs without a prescription [14]. Additional modification was made based on the result of pre-test. During the household survey, we also visited the site and supervised the surveyors to assure the interview quality [15].

METHODOLOGY

Study site: Rural and Urban Areas of Tiruchirappalli, Tamil Nadu.

Study design: Cross sectional study.

Study population: Totally 100 People (respondents) 50 People from Urban Areas of Tiruchirappalli and 50 people from rural areas of Tiruchirappalli.

Study period: Six months.

Study procedure: All the data were collected by questionnaire. The questionnaire containing 30 questions. The questions were distributed to 50 urban people and 50 rural people for getting information regarding self-medication. The collected data were systematically analyzed and tabulated. The basic statistics were performed by using MS excel

INCLUSION CRITERIA:

- All people who are giving consent for the study.
- All people are above 18 years of age.

EXCLUSION CRITERIA:

- Not giving consent.
- People taking any medication for allergy or any anti convulsants drugs such as phenobarbiturates etc...
- People who are all taking regular medicines.
- Medical students.

RESULTS:

Table 1: Respondents socio-demographic character n=100

Variables	Frequency	Percentage
AGE		
18-28	6	6%
29-38	37	37%
39-48	13	13%
49-58	24	24%
59-68	11	11%
More than 68	9	9%
SEX		
Male	50	50%
Female	50	50%
Transgender	0	0
LOCALITY		
Urban	50	50%
Rural	50	50%
RELATIONSHIP STATUS		
Married	63	63%
Unmarried	37%	37%

Table 2: Common questions asked for Respondents

Questions related to knowledge attitude and practice of self-medication	Urban people		Rural people	
	Yes	No	Yes	No
Do you practice self-Medication in last 6 months	30%	42%	70%	58%
Do you know the side effects of drugs you self-medicated	14%	86%	24%	76%
Have you experienced any negative side effects	4%	96%	4%	96%
Do you feel confident with the use of Self-Medication	28%	72%	14%	86%
Are you taking self-medication at the moment	28%	72%	14%	86%
If your family members get same disease will you purchase same medicine	52%	48%	54%	46%
Have you ever taken self medication over a long period of time	14%	86%	6%	94%
Do you ever give your prescription medicines to others	14%	86%	0%	100%
Have you ever found out that you had taken the same medicine at different time with different names at the same time	6%	94%	26%	74%
Do you know what are the medicine which comes under OTC	50%	50%	34%	66%

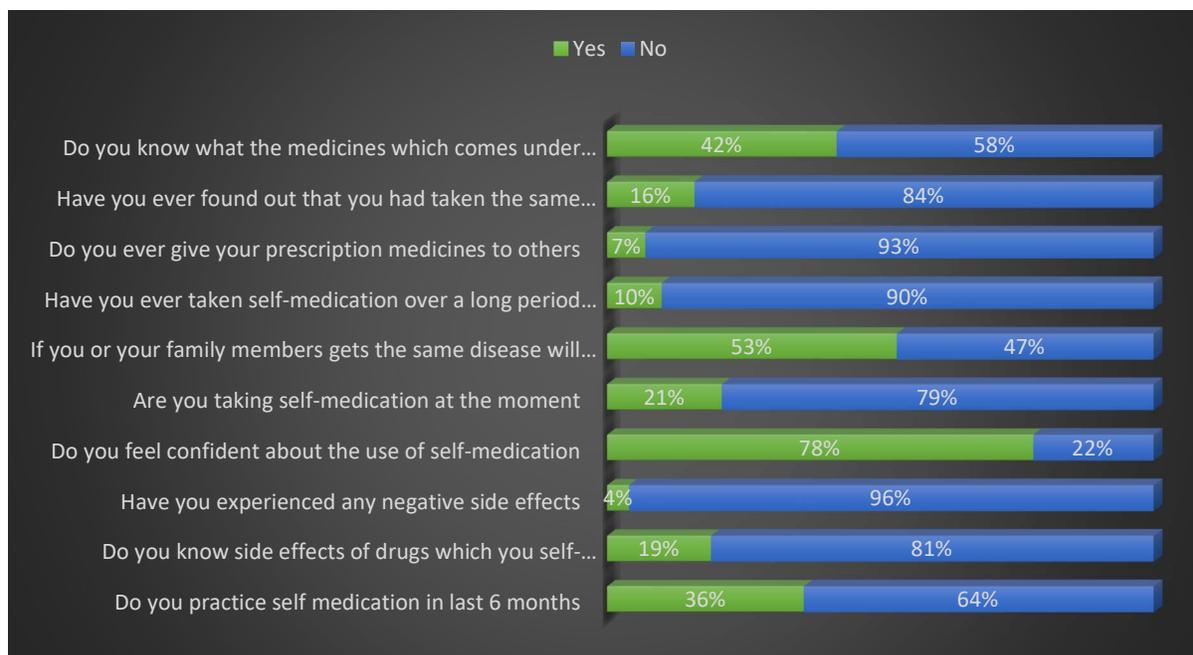


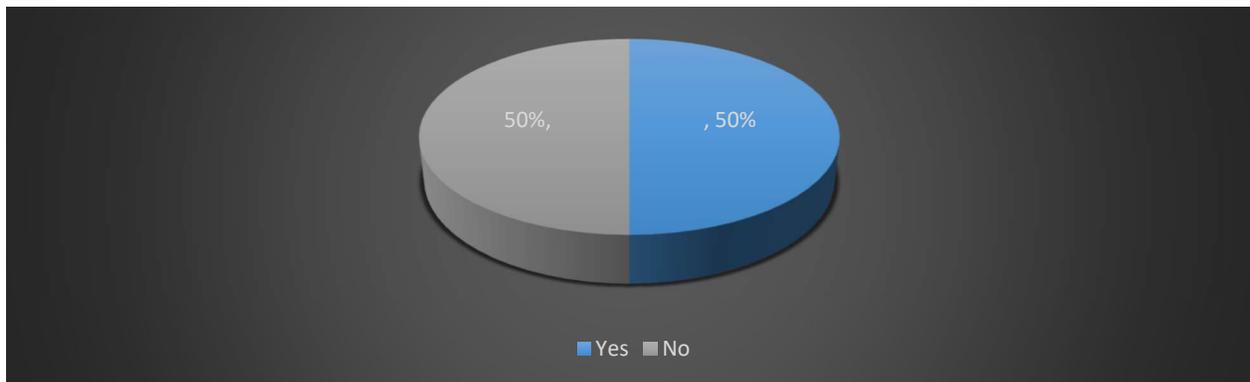
Figure 1

Table 3: Have you experienced negative side effects

Respondents	Types of response			
	Yes		No	
	No of people	Percentage	No of people	Percentage
Urban people	2	4%	48	96%
Rural people	2	4%	48	96%

According to **Table 3** it is found that. It is found that 4% of both urban and rural people have experienced negative side effects. 96%

of both urban and rural people respectively do not experienced any negative side effects.

**Figure 2: Do you inform pharmacist or physician about side effects of drugs you have experienced****Table 4: What do you think about self-medication for self-health care?**

Self-medication for self-heath care	Types of respondents			
	Urban people		Rural people	
	No of people	percentage	No of people	percentage
Good practice	21	42%	12	24%
Acceptable practice	6	12%	11	22%
Not acceptable practice	23	46%	27	54%

According to **Table 4** it is understood that 42% and 24% of urban and rural people respectively consider self-medication as a good practice. 12% and 22% of urban and rural people respectively consider self-medication as an acceptable practice. 46% and 54% percentage of urban and rural people consider self-medication as a non-acceptable practice.

DISCUSSION:

This study consists of 100 respondents in Rural and Urban people. The mean knowledge

score of Rural people 50 % and Urban people 50% (maximum score being 100) indicating a good knowledge scores.

The data was collected from 100 numbers of people from urban and rural areas of Tiruchirappalli, Tamil Nadu. The collected data was analyzed by using descriptive statistic in term of frequency and present in different tables. Out of 100 respondents, concerning age 6% were between the age group of 18-28. 37% were between age group of 29-38years. 13% were between the age

group of 39-48 years. 24% were between the age group of 49-58 years. 11% were between the age group of 59-68 years. 9% were more than 68 years. Regarding sex respondents, 50(50%) were male, and 50 (50%) were female. With regard to their locality, 50 respondents are selected from urban areas and 50 respondents from rural areas. Regarding relationship status 63 (63) were married 37 (37%) were unmarried.

The people frequency at 100 in particularly Urban and Rural areas of Tiruchirappalli. 50 were rural people and 50 were urban people. Out of which 25 respondents were male and 25 female respondents of each category (urban and rural)

We recommend that modification in prevalence and practice of self-medication among rural and urban people. It also increase the level of idea and concept of self-medication among rural and urban people. Regarding self-medication to rural and urban The effective public health strategy should address these by promoting awareness about safe self-medication practices and improving access to medical care across all regions.

CONCLUSION:

Self-medication can be a double-edged sword. On one hand, it offers convenience and immediate relief for minor ailments and chronic conditions. On the other hand, it poses

significant risks, including incorrect diagnosis, inappropriate drug use, and potential for harmful interactions and side effects. Majority of the self-medication users consider self-medication is harmless. Most of the people in rural areas are aware that they should not share their prescription to others. Majority of the people don't have sufficient knowledge about OTC drugs. Most of the people avoid going to hospital due to financial issue. Urban people knows more about OTC, they too doesn't have knowledge on medicines which comes under OTC. Although many patients consider OTC as a harmless practice it always involves some degree of danger. In the case of those patients who do not follow the instructions given by the label of package it possess high risk. There is a need to launch educational campaigns to bridge the gap of knowledge of self-medication especially in rural population. Medical shops should be encouraged to adhere to laws and policies regarding good dispensing practice to limit the misuse and irrational use of medicine. Although it is difficult to eradicate SM altogether, various measures can be taken to discourage such practices. We hope that the findings of the study will not only help further research but also help health care professionals to understand the targets of future interventions and to come out with

integrated strategies to control the practice of self-medication.

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REFERENCE

- [1] Balamurugan *et al*, prevalence and pattern of self-medication use in coastal regions of south India British journal of medical practioners, September 2011, volume 4, number 3.
- [2] Aqeel *et al*, prevalence of self-medication among urban and rural population of Islamabad, Pakistan. Tropical journal of pharmaceutical research April 2014; 13 (4): 627-633
- [3] Limaye D, Limaye V, Fortwengel G, Krause G. Self-medication practices in urban and rural areas of western India: a cross sectional study. Int j community med public health 2018;5:2672-85
- [4] Akram ahmad *et al*, evaluation of knowledge, attitude and practice about self-medication among rural and urban north Indian population. Ijpcr, September 2015 - October 2015, volume 7, issue 5
- [5] C. Cecyli *et al.*, assessment of knowledge and practice of self-medication among urban and rural population drug invention today | vol 13 • issue 6 • 2020
- [6] Arunkumar j *et al.* Knowledge, attitude and practice of self-medication in college students. Int. Res. J. Pharm. 2019; 10(5):136-140.
- [7] Awad Mohammed al-qahtani *et al.*, Self-medication related knowledge, attitudes, and practices among residents of Riyadh, Saudi Arabia: a community-based cross-sectional study. Healthcare 2023, 11, 3040.
- [8] Hazarika K, Bharali K, Kumar N, Lahon J. Evaluation of self-medication practices among undergraduate medical students in a medical institute of north India. Natl j physiol pharm pharmacol 2021;11(08):890-894
- [9] Gabriel DC, Balakrishna BB. Knowledge and practices of self-medication among adolescents. Int j contempt podiatry 2021;8:1557-65
- [10] Borkar P, Kasulkar AA, Gupta M. Knowledge, attitude and practice of self-medication in general population of central India. Panacea j med sci 2023;13(2):538-542

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- [11] Walid al-qerem *et al.*, Information sources, attitudes, and practices of self-medication by Jordanian patients: a cross-sectional study. Saudi pharmaceutical journal 31 (2023) 482–491
- [12] Kalyani V, Bisht M, Thapliyal S, Rohilla KK. Comparison of practice and attitude of self-treatment in rural and urban population in uttarakhand, India: a comparative study. Natl j physiol pharm pharmacol 2020;10(12):1052-1059
- [13] Patil SB, Nagaiah BH, Raikar SR, Rao V. Self-medication practices among 2nd year medical students in a rural medical college of Telangana state. Natl j physiol pharm pharmacol 2018;8(4):501-506
- [14] Adhikari p *et al.*, Perceptions and practices of self-medication among the residents of western, Nepal. Issn: 2091-1041 \ volume 8 \ issue 2 \ 2023
- [15] Junko Okumura *et al.*, Drug utilization and self-medication in rural communities in Vietnam. Social science & medicine 54 (2002) 1875–1886