

A Study on Awareness Regarding Risk of Self-Medication among Community Pharmacies in Rural India

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ABSTRACT

Introduction: Self-medication can potentially do well and also harm people. The benefits of using self-medication include a reduction in the frequency of visit to a physician and reduction of cost. Improper practice of self-medication due to deficiency in knowledge can lead to side effects.

Objectives:

- To assess the awareness regarding risk of self-medication among people visiting community pharmacies.

Methods: It is a cross-sectional study designed to be carried out in pharmacies in rural India. A study conducted between March to August 2021, a total 1200 individual involved in study. Structured questionnaires were used to assess the risks and knowledge about self-medication of the study participants.

Results: A total 1200 participants are involved in the study among 67.8% were male and 32.3% were female. Based on age groups 2% are below 20 years, 25.4% are between 21-30 years, 15.9% are between 31-40 years, 12.9% are between 41-50 years, 13.3% are between 51-60 years and 30.4% are above 60 years. Among 39.8% are illiterate, 98.8% are take self-medication during last 3 months without proper prescription, 77% are believe that self-medication is safe. Only 23.6% and 24.8% participants are buying medication after consulting pharmacist and know about the certain medication or supplements may cause side effects respectively. Among them 62.8% of people are checking the expiry date of medication.

Conclusion: The study concluded that more than half the population had a good knowledge regarding risk of self-medication and remaining had less knowledge regarding risk of self-medication.

Keywords: Self-Medication, Error, Risk, Expiry.

I. INTRODUCTION:

The idea of self-medication has been widely accepted since it enables people to cure minor illnesses with efficient and straightforward treatments. Even the belief in preventive, curative, and rehabilitative care is encouraged. The self-medication industry claims that it is one of the most important instruments used by someone with a common ailment that doesn't require a trip to the doctor. It is typically regarded as the first line of treatment for early illness symptoms and is used by patients as part of their medical regimen.^[1]

Self-care is something that plenty of people do to stay healthy and deal with minor ailments. Over-the-Counter (OTC) medications are those that are "safe and effective for use by the general population without seeking treatment from a health professional," according to the US Food and Drug Authority.^[2]

OTC self-medication is referred to as responsible self-medication and is accepted globally, however purchasing prescription drugs without a prescription from a doctor is risky and is seen as unsafe self-medication. Reducing the number of doctor visits and saving money are two advantages of utilising OTC drugs. Adverse reactions, drug interactions, overdose, and other

medication-related issues can occur when OTC drugs are misused.^[3]

Self-medication has the capacity to both help and hurt people. This is especially important in nations where there is a lack of enforcement of regulations, resulting in the availability of prescription medications over-the-counter (OTC). Self-medication is always associated with an increased risk of pathology worsening from pre-existing conditions as well as a risk of interactions between prescription drugs and occult OTC active ingredients. Side effects can result from improper self-medication due to ignorance, especially in physiological conditions like lactation and pregnancy and in people of extreme ages, such as children and the elderly.^[4]

It is advised that the public be informed about using OTC medications in order to raise their knowledge and awareness and promote responsible self-care. When prescribed medications are used on a doctor's instructions after a proper diagnosis, they can be effective in treating ailments. Self-medication is reportedly a frequent practise among consumers in poor nations, and prescription drugs can be bought without a prescription.^[5]

It was suggested that communities should be taught about safer practises through additional health education initiatives, with a focus on self-medication as a key element of healthcare. Information on the pattern and incidence of self-medication among Malaysian consumers is currently lacking. Patients are now more likely to self-medicate without the direct supervision of a clinician due to the increased accessibility of medications. Pharmacists will be able to identify the needs of the consumer and set professional standards in terms of structured training to support their needs if they are aware of the prevalence of self-medication and the factors driving it among consumers. To guarantee the quality and appropriate use of medications, it may also be beneficial to educate and raise consumer knowledge.^[6]

II. METHOD:

A cross-sectional awareness survey was conducted from March to August 2021 among people visiting the community pharmacies of Mandya, Karnataka. Out of a total of 12 community pharmacies in Mandya, three pharmacies were randomly selected. Total sample size (n=1200) was equally divided on selected pharmacies. The required number of participants aged 18 years or above visiting the selected

pharmacies was conveniently included in the study, while those who refused to give written informed consent were excluded from the study. After checking eligibility, We took the Scio-demographic details of participates and give 16-items questionnaires to participates, based on that we assessing the risks and knowledge about self-medication of participants.

III. STATISTICAL ANALYSIS

Data were entered and analysed on statistical package for social sciences (SPSS) version 20. Descriptive analysis was performed by calculating frequencies and percentages for categorical variables and means and standard deviations for continuous variables. The total duration of the study was six months.

ETHICS APPROVAL: Prior to the start of the trial, the Institutional Ethics Committee of Adichunchanagiri Hospital and Research Centre, B.G. Nagara, gave their approval.(I.D – IEC/AH&RC/AC/006/2021)

IV. RESULTS

Among 1200 participants, 67.8% were males and 32.3% were females,43.3% were below 40 years of age, 26.3% were between 41-60 years of age and 30.4% were above 60 years of age. 39.8% were under category of illiterate, 29.2% were under category of degree, 19.2% were under category of SSLC and 11.8% were under category of PUC. 55.7% were under category of self-employed, 17.9% were under category of other sector, 15.8% were under category of private sector, 7.5% were under category of unemployed and 3.1% were under category of government sector. 78.8% were under category of married and 21.2% were under category of unmarried. (Table 1)

77.0% were believe that OTC medication are safe and 23.0% were believe that OTC medication is not safe.76.4% were not consult a pharmacist before buying any medication from the pharmacy and 23.6% were consult a pharmacist before buying any medication from the pharmacy.75.2%were not aware that certain medication or supplement may cause side effects and 24.8% were aware that certain medication or supplement may cause side effects.62.8%were check the expiry date of medication before and after purchasing and 37.3% were not check the expiry date of medication before and after purchasing.94.7%were store the prescribed medication and 5.3% were not store the prescribed medication.80.9%were keep the left-over

medication and 19.1% were not keep the left-over medication. Only 57.7% of participants have a good knowledge regarding risk of self-medication

and remaining 42.3% are having less knowledge regarding risk of self-medication. (Figure 1)

Table 1: General characteristics of respondents (n=1200)

Parameter	n (%)
Age (in years)	
18-40	520(43.3%)
41-60	315(26.3%)
>60	365(30.4%)
Gender	
Male	813(67.8%)
Females	387(32.3%)
Level of education	
SSLC	230(19.2%)
PUC	142(11.8%)
DEGREE	350(29.2%)
ILLITERATE	478(39.8%)
Occupation	
Unemployed	90(7.5%)
Self-employed	668(55.7%)
Government sector	37(3.1%)
Private sector	190(15.8%)
Other	215(17.9%)
Marital status	
Single	946(78.8%)
Married	254(21.2%)

V. DISCUSSION

A study was conducted by Aljadhey H in central Saudi Arabia, 392 (72.9%) were females and 146 (27.1%) were males, 75 (13.9%) belonged to more than or equal to 20 years of age 188 (34.9%) belonged to 22-33 years of age. 24 (4.5%) were not educated, 227 (42.2%) were degree graduates. 77(44.5%) of the participants say that they do not consult pharmacist before taking OTC medication, 96 (55.5%) them tell they consult pharmacist. Where as in our study 76.4% of the study participants say that they do not consult a pharmacist before buying the medications from the

pharmacy and only 18.6% of them say that they would consult a pharmacist.^[7]

A study showed, 166 (43.7%) of them check for the expiry date on the medication and in our study 62.8% says that they check the expiry date on the medication before and after the purchase.^[7]

A study showed, 29.2% of them believe that the OTC medication is not safe, 6.2% of them tell it is safe to take the OTC medication whereas in our study 77% of the participants say that the OTC medications are safe and 23% of them say it is not safe to take the OTC medication.^[7]

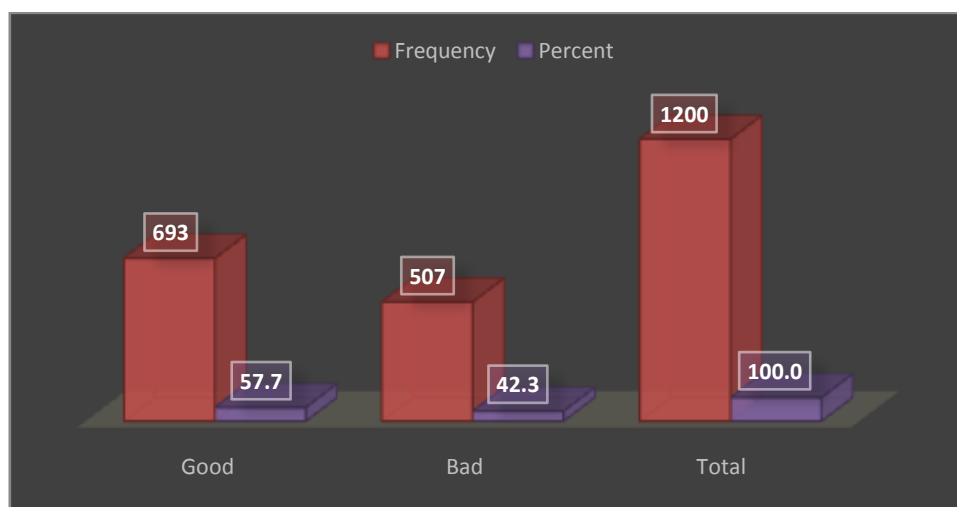


Figure 1: Knowledge of self-medication

VI. CONCLUSION

Our study concluded that only 57.7% of people have a good knowledge regarding risk of self-medication and remaining 42.3% are having less knowledge regarding risk of self-medication. To improve the effectiveness, doctors and pharmacists must be more pro-active in monitoring self-medication and in providing advice to patients. Finally, patient-physician-pharmacist collaborations must be reinforced with the ultimate goal of minimizing risk and enhancing benefit.

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CONFLICT OF INTEREST:

The authors have no conflicts of interest regarding this investigation.

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