

Knowledge and Attitude Regarding Self Medication among the People Residing in the Urban Field Practice Area of a Medical College, Mysuru, Karnataka

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Abstract: ***Introduction:** Self - medication involves acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one's social circle or using leftover medicines stored at home. **Objectives:** To assess the Knowledge and Attitude related to self - medication among the people residing in urban field practice area of Medical College, Mysuru. **Methodology:** It is a cross - sectional study done among the urban field practice areas of the department of Community Medicine, JSS Medical College, Mysuru, Karnataka, India. Sample size was calculated to 383 and Systematic Random Sampling technique was used to collect the data. **Results:** The overall usage of self - medication was found to be 73.3%. In this study majority of the participants knew about self - medication and they were aware of side effects caused due to self - medication. Most of the participants has known about the prescription required before purchasing any medicine. In the current study participants had a negative attitude towards self - medication. The main reasons for practicing self - medication are the perception that there is no need to visit the doctor for minor illness, followed by quick relief upon the usage of self - medication and Economic constraints. **Conclusion:** Nearly 2/3rd of the study participants practiced self - medication. Even though people had good knowledge and negative attitude regarding self - medication, practice was high. There is a strong need to implement health education through IEC and BCC activities to the public regarding the consequences of self - medication and antibiotics to prevent antimicrobial resistance and rational usage of drugs.*

Keywords: Attitude, knowledge, Practices, Prescription drug misuse, Self – care

1. Introduction

Self - medication involves obtaining drugs without a proper prescription, using old prescriptions to buy drugs, exchanging medicines with relatives and friends, or utilizing unused medicines stored at home (1). Even, World Health Organization is encouraging self - medication as a means of reducing medical consultations and the pressure on healthcare facilities (2).

Globally, the prevalence of Self - medication practice is inconsistent ranging from 32.5 to 81.5%. (3) Globally, self - medication has been reported as being on the rise and has become a public health concern. In India the prevalence of self - medication was 47% according to a study done by Pranav V et. al in Karnataka. (4)

Several factors have been associated with predisposal to self - medication. Patterns vary among different populations and are influenced by various factors, such as age, gender, expenditure, self - care orientation and socioeconomic status. But approachability to drugs and health care facilities, medical knowledge, satisfaction, and attitude are also predisposing factors. High illiteracy rates and poor exposure to medical information in most developing countries are some of the contributing factors to the high prevalence of self - medication (5). Due to the ongoing covid19 pandemic in India, rates of self - medication are likely to be amplified because of several reasons and moreover, because of fear

and desperation of self - protection, people started using self - medication. Individuals are consuming medications on their own without any prior knowledge of medicines making the situation challenging and increasing the risk of adverse events. The common drugs used as self - medication for treating covid19 were Azithromycin, Hydroxychloroquine, NSAIDs, Anti - retroviral like Favipavir, lopinavir, remdesivir. (6) Incidence of self - medication in covid19 in India is not known.

In this context, the current study was carried out to assess the Knowledge and Attitudes related to self - medication among people residing in the urban field practice areas of a medical college in Mysuru. This could provide valuable inputs to the policymakers and regulating authorities to plan and implement the strategies for the control of self - medication.

2. Materials and Methods

A community - based cross - sectional study was conducted among the people residing in the urban field practice area of JSS Medical College, Mysuru of Karnataka state in India from January to June 2021. The sample size was calculated by a prevalence of 47% from a study done by Pranav et al. (4) For a proportion of 47% (P) with an absolute precision of 5% and CI of 95% a sample size of 383 will be required for the study. Ethical clearance has been obtained from Institutional Ethics Committee, and permission from the

Medical Officer of JSS Urban Health Center, Bamboo bazaar, Mysuru has been obtained. Data were obtained using a predesigned questionnaire during a house - to - house visit. Information was collected regarding socio - demographic variables (age, gender, education, occupation, religion, socioeconomic status) and also about self - medication usage. Data were entered in Microsoft excel 2019 and statistical analysis was done using SPSS version 25 (licensed to JSS Academy of Higher Education and Research). Descriptive statistical measures were expressed in frequencies, percentages, mean and standard deviation. Data was represented in tables and graphs as relevant.

3. Results

3.1 Sociodemographic characteristics of study participants

55.4% of the study participants are females, have a mean age of 39.5years, were currently married (88.3%), and belonged to the Hindu religion (91.9%).38.9% of the participants had diplomas/degrees as their education status.59.3% of the study participants are semi - skilled laborers and 43.3% of the study participants belong to socioeconomic class II with a per capita income of Rs 3504- 7007 according to BG prasad socioeconomic scale (figure - 1).84.3% of the participants belonged to a nuclear family.

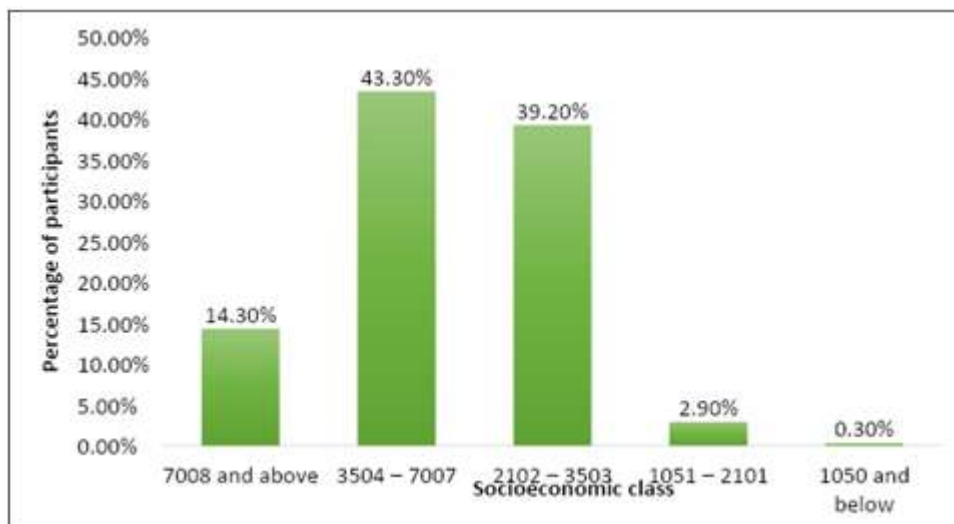


Figure 1: Socioeconomic status of the study participants

3.2 Prevalence of self - medication

The study was conducted among 383 participants in the Urban field practice area of medical college, Mysuru. And the prevalence of self - medication among the study participants was found to be 73.36%.

3.3 Knowledge regarding self - medication

Table - 1 shows knowledge of self - medication among study participants.94.3% of the participants knew about self - medication, 76% of the participants were aware of the requirement of a prescription for purchasing medicines, and 59.3% of participants were aware of side effects caused by drugs used for self - medication. And 49.1% of the study participants reported vomiting as an adverse drug reaction due to self - medication and very few i.e., 0.5% reported that self - medication causes difficulty in recovery from illness.94% of the participants opined that they used self - medication (figure - 2) for Headache and least i.e., 28.25% for cough.59.3% of participants were aware of side effects

caused by drugs. And some of the adverse effects known by the participants are Interestingly 59.3% (n=227) of people were aware of side effects caused by self - medication and main side effects mentioned by the participants are Vomiting (n=188), Diarrhoea (n=127), headache (n=112), skin rashes (n=103), Renal problems (n=14), liver problems (n=7).

Table 1: Knowledge of self - medication among the study participants

Knowledge Regarding Self Medication		
Questions	Yes	No
Knowledge about self - medication	361 (94.3%)	229 (5.7%)
Requirement of a doctor's prescription for the purchase of medicines.	291 (76%)	92 (24%)
Knowledge about the side effects of self - medication	227 (59.3%)	156 (40.7%)

Note: Figures within brackets indicates the percentage

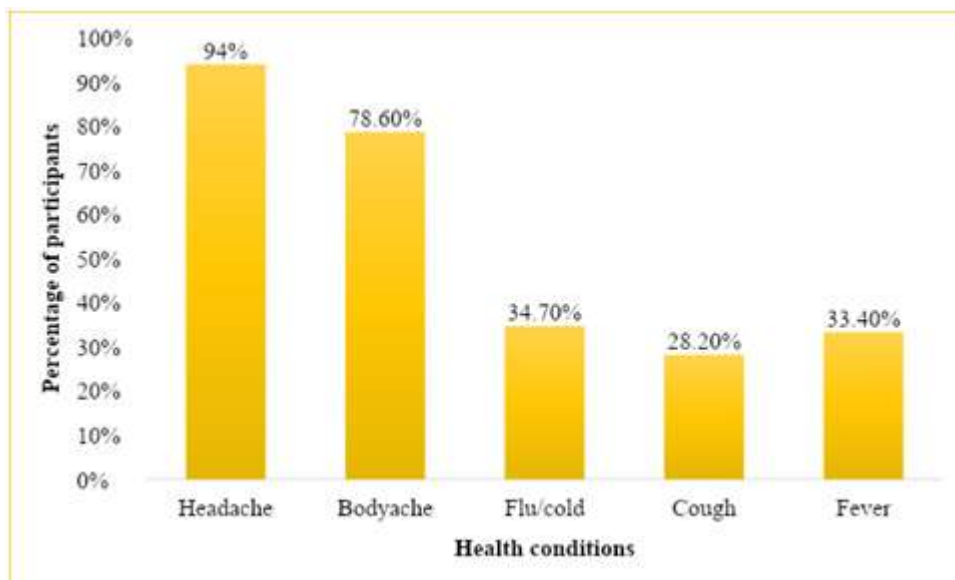


Figure 2: Knowledge of study participants about the conditions in which self-medication is practiced

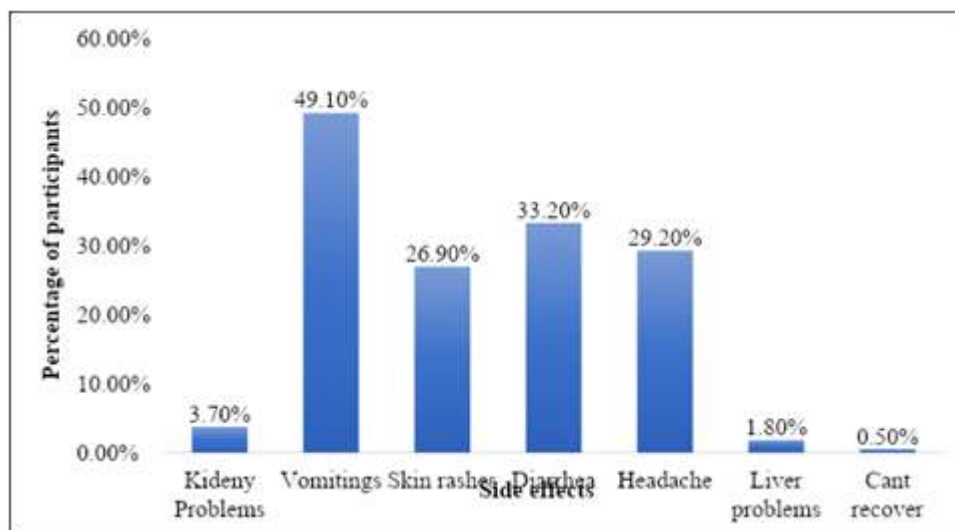


Figure 3: Different health conditions mentioned by study participants in which self-medication can be used

3.4 Attitudes of participants

Table - 2 showing the attitudes of the participants towards self-medication. 57.2% and 20.4% of participants disagreed and strongly disagreed with the use of drugs without prescription. 57% of the participants agree for using self-medication and 29.7% mentioned that they were not sure if they would use self-medication or not in case required and

74.9% opined that they agreed that consulting healthcare providers is required before taking drugs. Participants were also mentioned the reasons for not taking self-medication (figure - 5) and 68.9% of them were given the reasons are lack of knowledge about medicines (n=264) and 34.2% risk of using wrong drugs (n=131).

Table 2: Attitude of Study Participants in relation to self-medication

Questions	Responses				
	Strongly disagree	Disagree	Not sure	Agree	Strongly agree
Using drugs without prescription	7 (20.4%)	219 (57.2%)	34 (8.9%)	50 (13.1%)	2 (0.5%)
Using self-medication when required	16 (4.2%)	419 (10.7%)	110 (29.7%)	203 (57%)	13 (3.3%)
Consulting a healthcare provider before taking a drug	3 (0.8%)	2 (0.5%)	19 (5%)	287 (74.9%)	72 (18.8%)

Note: Figures within brackets indicates the percentage

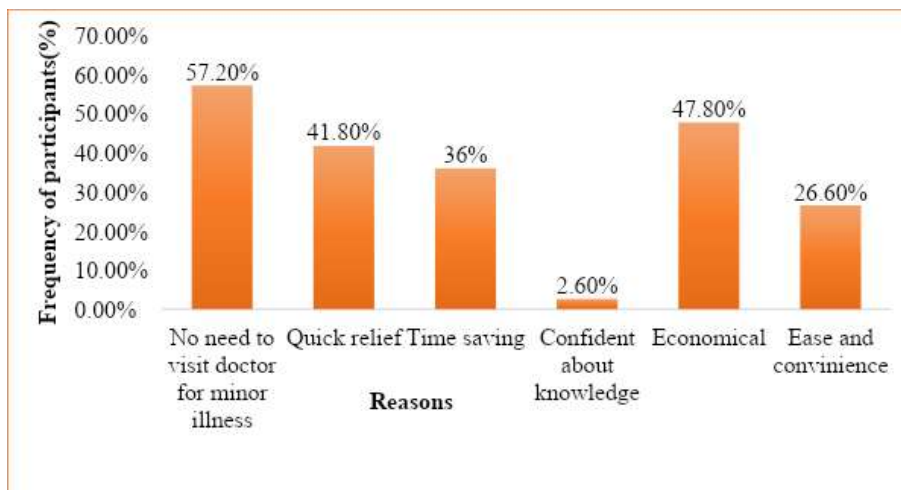


Figure 4: Responses of study participants towards reasons for the practice of self – medication

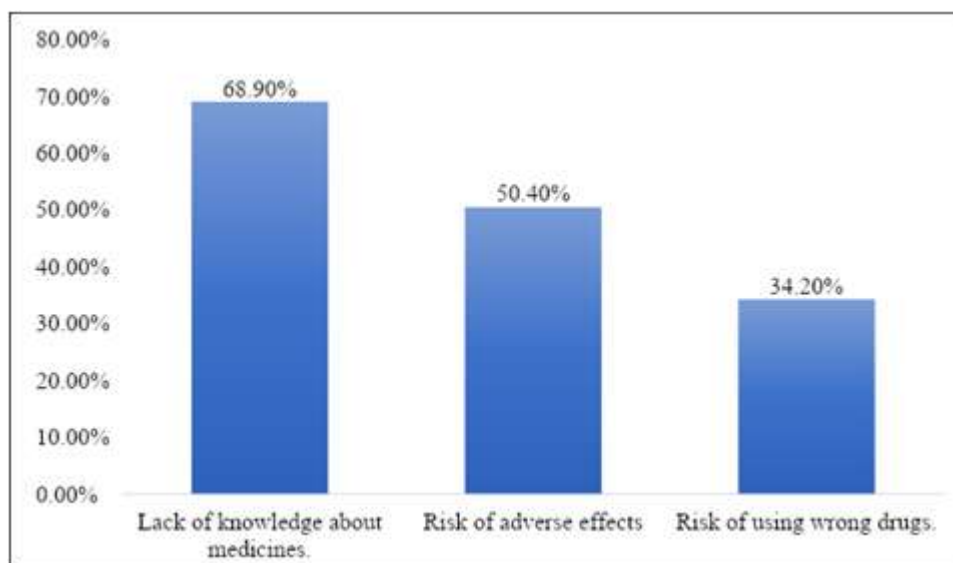


Figure 5: Reasons for not taking self - medication

4. Discussion

4.1 Prevalence of self - medication:

In the current study total sample size was 383 and the prevalence of self - medication in the urban field practice area of a medical college, Mysuru, Karnataka state in India estimated through this study was 73.36%. Studies in India regarding self - medication prevalence in Karnataka was 47% (4) and in Tamilnadu was 71% (7) and in Uttar Pradesh was 80% (8).

Gender pattern is also an important consideration for people using self - medication. A higher proportion of females are practicing self - medication compared to males. Similar findings were found in a study done by Pranav. V. et al., at Udupi in 300 urban slum dwellers. (4)

In this study majority of the participants knew about self - medication and they were aware of side effects caused due to self - medication. Most of the participants has known about the prescription required before purchasing any medicine. Participants had good knowledge regarding self - medication usage. Similar results have also found in other studies like Susheela et al., in her study done in 403

pharmacy students in Anantapur, Andhra Pradesh shows that participants have good knowledge towards self - medication and that includes knowledge about drug indication, safe use of antibiotics, knowledge about the discontinuation of therapy, knowledge about dosage and dosage schedule and knowledge about side effects of drugs. (9)

In our study participants had a negative attitude towards self - medication as most of the participants have disagreed with the phrases "It is right to use drugs without prescription", "Do you agree that you should consult a physician before taking medicine" and reasons for not taking self - medication were given are reasons given are lack of knowledge about medicines, Risk of adverse effects and risk of using wrong drugs. Similar results were also found in a study done by Ajitha sharma et. al., in 700 healthcare and non - healthcare students in south India shows the reasons for practicing Self - medication mentioned are mild nature of the illness, prior experience of disease and a busy schedule. (5) But this negative attitude towards self - medication is being masked by the reasons for practicing Self - medication are mainly no need to visit the doctor for minor illness, followed by quick relief upon the usage of self - medication, time - saving, economical, easy and convenient and confident about knowledge on medicines.

Due to the ongoing pandemic, data has been collected through phone calls and probably one of the limitations of the study.

5. Conclusion

The current study reveals the prevalence of self - medication in the urban field practice area of medical college was 73.36%. Participants in the current study had good knowledge and a negative attitude towards inadvertent use of medications, though the prevalence was very high. This may be due to the majority of the participants in the current study were practicing self - medication for conditions like headache, body ache, flu, cough and sore throat, fever, diarrhea, and immunity boosters.

6. Acknowledgment

I would like to thank all my colleagues and respected staff of Dept of Community Medicine, JSS Medical College for their constant support and encouragement.

Funding: Nil

Conflicts of interest: None declared

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