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Original Article

Pharmacology Section

Assessment of Knowledge, Attitude, and Practices Regarding Self-medication among Patients Attending the Rheumatology Outpatient Clinic at a Tertiary Care Hospital in West Bengal, India

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ABSTRACT

Introduction: Self-medication is an important health issue. The rising tendency of self-medication has been a cause for concern. Rheumatic patients, being vulnerable to various symptoms like pain and fever, may resort to self-medication. Although several studies have been conducted among different populations, there is a lack of literature focusing on rheumatic disease patients in India.

Aim: To investigate the knowledge, attitude, and practice of self-medication among patients attending the Rheumatology Outpatient clinic at a tertiary care centre in eastern India.

Materials and Methods: This descriptive cross-sectional study was conducted at the Rheumatology Outpatient Clinic in Medical College Kolkata, a tertiary hospital in West Bengal, India, from July 21, 2021, to September 20, 2021. A total of 105 patients attending the rheumatology outpatient clinic were included in the study. Data were collected by conducting interviews with the patients using prestructured and prevalidated questionnaire after obtaining informed consent. The Knowledge, Attitude, and Practice (KAP) of self-medication were assessed, and the data were statistically analysed using Chi-square tests.

Results: The mean age of the study population was 38.77 years±12.56 years. Among the 105 subjects, 61 (58.1%) were suffering from arthritis, 26 (24.8%) from Systemic Lupus Erythematosus (SLE), and 6 (5.7%) from kidney disease. A total of 75 (71.4%) study subjects reported that they knew what self-medication was. The majority of the patients (86.7%) were unaware of the common adverse effects. However, 90 (85.7%) stated that self-medication was generally not beneficial, whereas 9 (8.6%) held the opposite view. A total of 64 (61%) reported having practiced self-medication in the past year.

Conclusion: The present study reported a self-medication rate of 61%. Self-medication was found to be more frequent among the younger age group, females, and individuals with higher educational qualifications.

Keywords: Drug overuse, Prevalence, Rheumatoid arthritis, Self-treatment

INTRODUCTION

In India, self-medication is an important health issue [1]. According to the World Health Organisation (WHO), self-medication is defined as the use of medicinal products by consumers to treat self-recognised disorders or symptoms. It also includes the intermittent or continued use of medications prescribed by physicians for chronic or recurring diseases or symptoms [2]. Self-medication also involves purchasing medicines without a prescription, using old prescriptions to acquire medicines, sharing medicines with relatives or peers, or using old unused drugs left at home [3]. Self-medication is practiced worldwide in both urban and rural populations, including developing countries like India, because many drugs are dispensed over the counter without a prescription, making it a low-cost alternative for people [4].

There may be a few benefits of self-medication. It provides increased access to medication and early relief for the patient. The patient also has an active role in their own healthcare [5]. However, there are potential risks associated with self-medication practices. These include incorrect self-diagnosis, delays in treatment, uncommon but severe adverse effects of drugs, drug interactions that may severely affect health, incorrect routes of administration, wrong dosages, incorrect choice of therapy, masking of severe diseases due to temporary symptomatic relief, and risks of dependence and abuse [5].

The rising tendency of self-medication has raised concerns in society. Rheumatic patients, who are vulnerable to various symptoms like pain and fever, may resort to self-medication. Although several studies have been conducted on self-medication among different populations, there is a lack of literature on rheumatic disease patients in India [6,7]. Furthermore, the full implications of this practice are not well understood in these patients. The present study aimed to provide a statistical insight into the prevalence and patterns of self-medication among patients attending the rheumatology outpatient clinic from a neutral standpoint, with the hope of improving patient care. Hence, present study was conducted to assess the knowledge, attitude, and practice of self-medication among patients attending the Rheumatology Outpatient clinic at a tertiary care centre in eastern India.

MATERIALS AND METHODS

This descriptive cross-sectional study was conducted at the Rheumatology Outpatient Department of Medical College Kolkata, West Bengal, India, from July 21, 2021, to September 20, 2021. Ethical clearance was obtained from the Institutional Ethics Committee of Medical College Kolkata (Ref no- MC/KOL/IEC/NON-SPON/812/09/20, dated September 22, 2020). Informed consent was obtained from all participants.

Inclusion criteria: All patients attending the Rheumatology Outpatient clinic were included in the study.

Exclusion criteria: Critically ill patients, hospitalised patients, unstable and/or non ambulatory patients were excluded from the study.

Sample size calculation: The prevalence (p) of self-medication among patients with rheumatologic diseases was obtained as p=71.92%=0.7192 from a previous study [8]. The formula for sample size calculation was used as follows:

$$(n)=Z2pq/l2 \ (q=1-p);$$

with Z=1.96 for a 95% confidence interval and considering a precision of the study (l) as 12% of p=0.0863 (Precision of the study (l)=12% of p=12% of 0.7192=0.0863). The sample size was calculated to be 104 and rounded off to the nearest multiple of 5, resulting in a sample size of 105.

Study Procedure

For data collection, a questionnaire was devised by the researchers based on a previous study by Abay SM et al., [9]. The questionnaire consisted of four sections. The first section included demographic information, the second section included information about the disease for which the study subjects had attended the rheumatology outpatient clinic, and the third and fourth sections included information about the study subjects' knowledge, attitude, and practice of self-medication. Pre testing of the questionnaire was carried out on 20 study subjects attending the rheumatology outpatient clinic after obtaining their informed consent. After the completion of the questionnaire, the results were analysed. The questionnaire was validated to assess the degree to which the questions were properly understood or misunderstood, the effectiveness of the questions in providing accurate information, and any areas of information regarding the study that were neglected by the proposed questionnaire. Once the analysis was completed, the questions were modified, resulting in the final KAP questionnaire.

The survey questionnaire had both open-ended and closed-ended questions. Face and construct validity were conducted by peers like pharmacologists and community medicine experts. Completion time, acceptability of the survey questions, and feedback were recorded by the peers and changes were made accordingly. All study-related data were collected anonymously to ensure the strict confidentiality of the subjects' identities. The finally prepared questionnaire was then used after checking satisfactory internal consistency (Cronbach's alpha: 0.827). It contained a total of 33 questions distributed across four sections. The first section (Q1-Q6) captured demographic parameters, the second section (Q7-Q8) assessed information about the disease, the next section (Q9-Q12) gathered information about knowledge, followed by the assessment of attitude (Q13-Q16), and finally, practice was assessed (Q17-Q33).

A total of 12 questions were closed-ended, whereas the remaining 15 questions were open-ended with comments or multiple choices (excluding the demographic questions). Data for each question were recorded descriptively in terms of frequency and percentage. Socioeconomic class was determined according to the Upgraded BG Prasad scale [10]. Data were collected by interviewing the patients and asking questions from the pre-structured questionnaire after obtaining informed consent.

STATISTICAL ANALYSIS

The data from the interviews are transcribed onto an Excel database, and statistical analysis is conducted using Statistical Package for Social Sciences (SPSS) statistical software version 26.0. Data for each question are presented descriptively in the form of frequency and percentage.

RESULTS

In the present study, the mean age of the study subjects was 38.77±12.56 years, with an age range of 18-60 years. Out of 105 study subjects, 78 (74.29%) were female, 85 (81%) were married, 60 (57.14%) were homemakers, and 57 (54.29%) were from the middle-lower socioeconomic class. Among the 105 study subjects, 61 (58.1%) were suffering from arthritis, 26 (24.8%) were suffering from systemic lupus erythematosus, 6 (5.7%) were suffering from kidney disease, 4 (3.8%) were suffering from diffuse lupus erythematosus, and 8 (7.6%) were suffering from other diseases [Table/Fig-1].

Characteristics (N=105)	n (%)
Age (years) Mean±SD	38.77±12.56
Range (years) n	
18 to <38	54
>/=38 to 60	51
Gender n (%)	
Male	27 (25.71)
Female	78 (74.29)
Occupation n (%)	
Homemaker	60 (57.14)
Skilled worker	25 (23.8)
Unskilled worker	10 (9.52)
Student	5 (4.76)
Farmer	5 (4.76)
Socioeconomic class n (%)	
Upper	17 (16.19)
Upper middle	11 (10.47)
Middle	13 (12.38)
Lower middle	57 (54.29)
Lower	7 (6.67)
Education n (%)	
Primary	24 (22.86)
Secondary	52 (49.52)
Higher secondary	19 (18.1)
Graduation and above	10 (9.52)
Marital status	
Married	85 (80.95)
Widowed	13 (12.38)
Divorced	2 (1.9)
Unmarried	5 (4.7)
No. of family members	
<5	62 (59.04)
≥5	43 (40.96)
Duration of treatment	
<6 months	24 (22.86)
≥6 months	81 (77.14)
Distribution of subjects according to the type of disease	
Arthritis	61 (58.1)
Systemic lupus erythematosus	26 (24.8)
Kidney disease	6 (5.7)
Discoid lupus erythematosus	4 (3.8)
Others (Gout, low back pain, ankylosing spondylitis)	8 (7.6)

[Table/Fig-1]: Demographic profile of enrolled subjects.

A total of 75 (71.4%) study subjects said that they knew what self-medication is, while 30 (28.6%) didn't know what self-medication is. On the contrary, 33 (31.4%) mentioned that early treatment and early relief are the benefits of self-medication. The majority of the patients, 91 (86.7%), were unaware of the common side-effects that may occur after self-medication [Table/Fig-2].

Knowledge of self-medication is more prevalent in the age group less than 38 years, homemakers, married individuals, and those

S. No.	Parameters	Category	n (%)
1.	Do you know what self-medication is	Yes	75 (71.4)
		No	30 (28.6)
2.	What is the potentital risk in self-medication	Uncommon but severe adverse effects	11 (10.5)
		Delay in treatment	9 (8.6)
		Not so common but severe adverse effects and drug interactions	23 (21.9)
		Delay in treatment and not so common but severe adverse effects	20 (19)
		Delay in treatment, not so common but severe adverse and drug interactions	7 (6.7)
		Incorrect self-diagnosis and delay in treatment	5 (4.8)
		Delay in treatment and wrong dosage	4 (3.8)
		Incorrect self-diagnosis, delay in treatment and not so common but severe adverse effects	4 (3.8)
		Incorrect self-diagnosis and drug interactions	3 (2.9)
		Don't know	19 (18)
3.	What are the benefits of self-medication	Early treatment and early relief	33 (31.43)
		Others	42 (40)
		Don't know	30 (28.57)
4.	Do you know the side-effect of the drug, you use most	Yes	14 (13.33)
		No	91 (86.67)

[Table/Fig-2]: Distribution of study subjects according to their response regarding various aspects of knowledge of self-medication.

with secondary education (mean age of the study population was 38.77±12.56 years) with a female preponderance. Age is significantly associated with knowledge of self-medication (p-value <0.00001) [Table/Fig-3]. In the present study, most of the study subjects, 90 (85.71%), considered self-medication to be overall not beneficial, mostly due to rare but severe drug reactions and delays in treatment. However, 40 (38.1%) study subjects thought that they can treat common diseases through self-medication [Table/Fig-4].

Variables	Category	Knowledge of self-medication	
		Yes	No
Age (in years)	18 to <38	50 (92.6%)	4 (7.4%)
	≥38 to 60	25 (49%)	26 (51%)
Gender	Male	18 (66.7%)	9 (33.3%)
	Female	57 (73.1%)	21 (26.9%)
Occupation	Home maker	46 (76.7%)	14 (23.3%)
	Student	5 (100%)	0
	Farmer	0	5 (100%)
	Skilled worker	22 (88%)	3 (12%)
	Unskilled worker	2 (20%)	8 (80%)
Education	Primary	6 (25%)	18 (75%)
	Secondary	40 (76.9%)	12 (23.1%)
	Higher secondary	19 (100%)	0
	Graduation and above	10 (100%)	0
Socioeconomic status	I	11 (64.7%)	6 (35.3%)
	II	11 (100%)	0
	III	6 (46.2%)	7 (53.8%)
	IV	43 (75.4%)	14 (24.6%)
	V	4 (57.1%)	3 (42.9%)
Marital status	Married	59 (69.4%)	26 (30.6%)
	Widowed	9 (69.2%)	4 (30.8%)
	Divorced	2 (100%)	0
	Unmarried	5 (100%)	0
Duration of treatment	<6 months	20 (83.3%)	4 (26.7%)
	≥6 months	55 (67.9%)	26 (32.1%)

[Table/Fig-3]: Table showing categorical distribution of study subjects according to knowledge towards self-medication.

S. No.	Parameters	Category	n (%)
1.	Do you think that self-medication is overall beneficial? (N=105)	Yes	9 (8.57)
		No	90 (85.71)
		Don't know	6 (5.71)
2.	Why do you think that self-medication is beneficial? (N=9)	Risks are less common	0
		Usually there is no severe problem	4 (44.4)
		Others	5 (55.6)
3.	Why do you think that self-medication is not beneficial? (N=90)	Delay in treatment worsening the condition	26 (28.9)
		Rare but severe drug reactions	27 (30)
		Others	14 (15.6)
		Delay in treatment worsening the condition and rare but severe drug reactions	19 (21.1)
		Delay in treatment worsening the condition and others	2 (2.2)
		Rare but severe drug reactions and others	2 (2.2)
4.	Do you think that you can treat common diseases by self-medication	Yes	40 (38.1)
	(N=105)	No	51 (48.6)
		Don't know	14 (13.3)

[Table/Fig-4]: Distribution of study subjects according to their response regarding various aspects of attitude of self-medication.

Variables	Category	Attitude towards self-medication		
		Yes	No	Don't know
Age (in years)	<38	0	53 (98.1%)	1 (1.9%)
	≥38	9 (17.6%)	37 (72.6%)	5 (9.8%)
Gender	Male	5 (18.5%)	22 (81.5%)	0
	Female	4 (5.1%)	68 (87.2%)	6 (7.7%)
Occupation	Homemaker	0	54 (90%)	6 (10%)
	Student	0	5 (100%)	0
	Farmer	5 (100%)	0	0
	Skilled worker	0	25 (100%)	0
	Unskilled worker	4 (40%)	6 (60%)	0
Education	Primary	9 (37.5%)	10 (41.7%)	5 (20.8%)
	Secondary	0	51 (98.1%)	1 (1.9%)
	Higher secondary	0	19 (100%)	0
	Graduation and above	0	10 (100%)	0
Socioeconomic status	I	3 (17.6%)	13 (76.5%)	1 (5.9%)
	II	0	11 (100%)	0
	III	0	11 (84.6%)	2 (15.4%)
	IV	5(8.8%)	50 (87.7%)	2 (3.5%)
	V	1(14.3%)	5 (71.4%)	1 (14.3%)

A positive attitude toward self-medication is more common in the age group above or equal to 38 years, males, farmers, study subjects with the highest educational qualification as primary school, and those with socioeconomic status Class-I, which is the upper class [Table/Fig-5].

Marital status	Married	9 (10.5%)	74 (87.1%)	2 (2.4%)
	Widowed	0	13 (100%)	0
	Divorced	0	2 (100%)	0
	Unmarried	0	1 (20%)	4 (80%)
Treatment duration	<6 months	4 (16.7%)	20 (83.3%)	0
	≥6 months	5 (6.2%)	70 (86.4%)	6 (7.4%)

[Table/Fig-5]: Table showing categorical distribution of study subjects according to attitude towards self-medication.

Among the 64 subjects practicing self-medication, 34 (53.1%) selected brands based on the recommendation of pharmacists, 17 (26.6%) selected brands based on previous doctor's prescriptions, and 4 (6.2%) selected based on their own experience. Among the 64 subjects practicing self-medication, 59 (92.2%) never checked the instructions that came with the package insert, while 4 (6.2%) checked them always. Total 59 (92.2%) never deliberately changed the dosage of the drug during the course of self-treatment, while the remaining 5 (7.8%) changed the dose sometimes [Table/Fig-6].

S. No.	Parameters	Category	n (%)
1.	Have you self-medicated your self-in past one year? (N=105)	Yes	64 (61)
		No	41 (39)
2.	How often did you self-medicate yourself-in past one year? (n=64)	Often	30 (46.9)
		Sometimes	32 (50)
		Rarely	2 (3.1)
3.	Why do you self-medicate yourself? (n=64)	Time saving	27 (42.2)
		Doctor or clinic being far from home	13 (20.3)
		High fees	5 (7.8)
		Absence of trust on doctor	5 (7.8)
		Doctor or clinic being far from home and time saving	5 (7.8)
		Doctor or clinic being far from home and absence of trust on doctor	5 (7.8)
		High fees and time saving	4 (6.2)
4.	*What was the disease for which you self-medicated yourself? (n=64)	Fever	35 (54.7)
		Arthralgia	19 (29.7)
		Acidity	19 (29.7)
		Headache	9 (14.1)
		Sore throat	8 (12.5)
		Running nose	6 (9.4)
		Dysentery	6 (9.4)
		Bodily pain	5 (7.8)
		Cough	3 (4.7)
		Muscle pain	2 (3.1)
		Diarrhoea	2 (3.1)
		Others	5 (7.8)
5.	What do you consider when selecting the drug for self-medication? (n=64)	Indications	29 (45.3)
		Brand	24 (37.5)
		Others	3 (4.7)
		Indications and brands	5 (7.8)
		Indications and others	3 (4.7)
6.	If you select the drug, your selection for the brand is based on? (n=64)	Recommendation by pharmacists	34 (53.1)
		Previous prescription	17 (26.6)
		Own experience	4 (6.2)
		Opinion of friends and family members	2 (3.1)
		Others	5 (7.8)
		Own experience and previous prescription	2 (3.1)
7.	Where from you obtain your drug for self-medication? (n=64)	Pharmacy shop	60 (93.8)
		Pharmacy shop and old unused drugs	4 (6.2)
8.	Did you ever check the instruction come with the package of the drug? (n=64)	Yes always	4 (6.2)
		Yes sometimes	1 (1.6)
		Never	59 (92.2)
	If response is never for Q8, please go to Q10		
9.	How much did you understand the instructions? (n=5)	Fully understood	4 (80)
		Partially understood	1 (20)
		Did not understand at all	0
	How do you know the dosage of drugs? (n=64)	Consulting pharmacists	38 (59.4)
		Previous experience	9 (14.1)
		Checking package inserts	4 (6.3)
		Others	10 (15.6)
		Consulting pharmacists and previous experience	3 (4.7)
11.	Did you ever change the drug dosage during the course of the treatment? (n=64)	Often	0
		Sometimes	5 (7.8)
		Never	59 (92.2)
If the answer is never, please go to Q13, otherwise continue to Q12			
12.	Why did you change the dose of the drugs? (n=5)	Improving condition	5 (100)
		Condition worsening	0
		To reduce adverse reaction	0
		Others	0
	When do you normally stop taking drugs? (n=64)	After symptoms disappeared	42 (65.6)
		After drugs ran out	4 (6.25)
		After a few days regardless of outcome	3 (4.7)
		Others	3 (4.7)
		After symptoms disappeared and after drugs ran out	9 (14.1)
		After a few days regardless of outcome and after symptoms disappeared	3 (4.7)
14.	Have you ever experience adverse effect while self-medicating? (n=64)	Yes	3 (4.7)
		No	61 (95.3)
If, answer is no, please go to Q16 otherwise continue to Q15			

15.	What did you do for adverse effect? (n=3)		
		Stopped taking drug	0
		Consulted pharmacist	0
		Consulted doctor	0
		Consulted family member/ friend	0
		Nothing	3 (100)
		Other	0
16.	Are you taking self-medication for a chronic condition?	Yes	24 (37.5)
		No	40 (62.5)

[Table/Fig-6]: Distribution of study subjects according to their response regarding various aspects of practice of self-medication.

The practice of self-medication is more prevalent in the age group less than 38 years. Self-medication practice is more prevalent in females. Among different occupations, maximum self-medication prevalence is seen in students and farmers. Study subjects with the highest educational qualification (graduation and above) show the maximum prevalence. According to socioeconomic status, Class-V socioeconomic class, which is the upper class, shows the maximum self-medication prevalence [Table/Fig-7].

Variables	Category	Practice of self-medication	
		Yes	No
Age(in years)	<38	37 (68.5%)	17 (31.5%)
	≥38	27 (52.9%)	24 (47.1%)
Gender	Male	15 (55.6%)	12 (44.4%)
	Female	49 (62.8%)	29 (37.2%)
Occupation	Home maker	31 (51.7%)	29 (48.3%)
	Student	5 (100%)	0
	Farmer	5 (100%)	0
	Skilled worker	16 (64%)	9 (36%)
	Unskilled worker	7 (70%)	3 (30%)
Education	Primary	19 (79.2%)	5 (20.8%)
	Secondary	22 (42.3%)	30 (57.7%)
	Higher secondary	13 (68.4%)	6 (31.5%)
	Graduation and above	10 (100%)	0
Socioeconomic status	I	12 (70.6%)	5 (29.4%)
	II	6 (54.5%)	5 (45.5%)
	III	7 (53.8%)	6 (46.2%)
	IV	33 (57.9%)	24 (42.1%)
	V	6 (85.7%)	1 (14.3%)
Marital status	Married	46 (54.1%)	39 (45.9%)
	Widowed	13 (100%)	0
	Divorced	2 (100%)	0
	Unmarried	2 (50%)	2 (50%)
Duration of treatment	<6 months	18 (75%)	6 (25%)
	≥6 months	46 (56.8%)	35 (43.2%)

[Table/Fig-7]: Practice of self-medication according to different demographic variable.

DISCUSSION

The prevalence of self-medication among patients attending the rheumatology outpatient clinic was reported to be as high as 61% in the present study. In a study conducted in Africa, 71.92% of patients suffering from rheumatic diseases were found to practice self-medication [8]. Another study showed a prevalence of 65% for self-medication practice [11]. The prevalence of self-medication in the general population of India has been reported to be 53.57% [12].

However, the scarcity of data regarding the prevalence of self-medication in patients suffering from rheumatic diseases in India made it difficult to compare the extent of self-medication among patients with rheumatic diseases on a national scale. Additionally, the prevalence was observed to be higher among females than males in present study, which is consistent with other studies [13,14]. Self-medication was also found to be more prevalent in younger age groups (below 38 years of age).

In the present study, self-medication practice was found to be most prevalent among students and farmers, participants with the highest educational qualification (graduation and above), and participants from socioeconomic Class-V, which is the lower class. In a study conducted among the elderly population in urban areas of Mexico, self-medication was reported to be statistically associated with lower educational qualifications, while another study showed that self-medication is very common in educated populations [15]. Another study in South India showed that no significant association was found between educational qualifications (p=0.080) and the use of self-medication [16]. A study conducted on rheumatic patients suggested that self-medication seems to be a complex phenomenon that likely integrates socio-cultural habits of patients with a tendency to self-support for health problems that they believe to be minor [8].

In the present study, 71.4% of the study subjects stated that they know what self-medication is, while only 13.3% of subjects knew the most common side-effects of the drugs they use the most. Thus, it is clear that there is a lack of appropriate knowledge about various aspects of self-medication in the population. The lack of appropriate knowledge about side-effects in patients with rheumatic diseases is supported by a previous study [17]. The prevalence of knowledge was 71.4%, which is a finding similar to other studies where 64% (299 out of 466 respondents) of the subjects were found to have good knowledge [18]. Knowledge was more frequently present in subjects under the age of 38 years. Age was significantly associated with knowledge of self-medication (p-value <0.00001). Knowledge was also more commonly observed in younger age groups (below 38 years old), females, students, and subjects with the highest educational qualification, such as higher secondary, graduation, and above, as well as subjects from the upper-middle socioeconomic status.

In the present study, although 85.7% of the study subjects believed that self-medication is overall not beneficial, 38.1% believed that they can treat common minor diseases through self-medication. Hence, the overall attitude of the study respondents was negative towards self-medication, which contrasts with another study showing a positive attitude [3]. Time constraint was the most common reason (42.2% of subjects practicing self-medication) for self-medication, which is supported by another study showing quick relief as the most important cause [3].

The most common indication for self-medication was fever (54.7% of subjects practicing self-medication), followed by arthralgia (29.7% of subjects practicing self-medication), which is an important symptom of rheumatic diseases. A study by Kumar N supported this result, showing that antipyretics are the most common class of drugs used by the participants of the study, followed by analgesics and antibiotics [19].

The prevalence of self-medication due to fever is reported to be 55.3% in a study conducted in the United Arab Emirates (UAE) [20]. In present study, 45.3% of participants selected drugs based on indication only, while 37.5% selected drugs based on the brand. The selection of a brand was mostly influenced by pharmacist consultation (53.1% of participants practicing self-medication), followed by previous prescriptions (26.6% of participants practicing self-medication). The dosage of drugs was mostly decided after consulting pharmacists (59.4% of participants practicing self-medication). This high reliance on pharmacists can be attributed to the decision-making process of the study participants.

The main source of drugs was found to be pharmacy stores, which was the only source for 93.8% of respondents and one of the sources for others. This finding is similar to another study that showed pharmacies as the main source of drugs used for self-medication in 97% of cases [6]. In the majority of cases (65.6% of participants practicing self-medication), drugs were stopped after the disappearance of symptoms. However, if this practice leads to irrational use of medicines like antibiotics, it may contribute to antibiotic resistance [21]. The most common chronic condition causing self-medication was found to be acidity. Another study also showed that acidity is a common indication for self-medication [22].

Limitation(s)

The present study has some limitations also. It is primarily conducted in urban settings and relies on self-reported data, which may introduce recall bias. A larger sample size with a longer time frame could help mitigate these limitations.

CONCLUSION(S)

A study conducted in a rheumatology OPD revealed that 61% of the patients were found to be practicing self-medication. It was observed to be more common among females and individuals below 38 years of age, particularly those with higher educational qualifications. While the majority of them demonstrated adequate knowledge (71.4%) regarding self-medication, only a few (13.34%) were aware of the potential side effects associated with the drugs they were using. Furthermore, most of them exhibited a negative attitude towards the overall benefits of self-medication. The primary reason for self-medication was fever, and the pharmacist's recommendation played a decisive role in determining the choice of drug brand and dosage. This high prevalence of self-medication, without proper awareness of the associated side effects, is a significant concern. To address this issue, it is recommended to conduct training programs and future studies aimed at increasing patient awareness.

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