Self-Medication Practices: A Threatening Challenge

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Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

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ABSTRACT

Background and Objectives: Self-Medication is a growing concern for the health authorities especially in Urban population. This research was aimed to find the various determinants of Self-Medication and to assess the influence of Pharmacists, Perception about doctors, Self- Knowledge gaining attitude of the patients on Self-Medication.
Methods: This study was conducted in Nagpur city with a random sample constituting house wives, students, professionals and Businessman. The sample size was 71. Descriptive analyses, correlation analyses and multiple regressions were performed using SPSS Version 21.0.
Results: The results indicated that 80% of the housewives take the medicines on the basis of previous prescription, word of mouth or on the suggestion of the pharmacist. It was alarming to find that 76% of the students took the medicines on the basis of web search. Fever (39%), headache (33%) & Abdominal pain (23%) are the prominent reasons for Self-Medication. There was a positive correlation between Advice of Pharmacist, Self-knowledge collection attitude of the patient with the Self-Medication behavior. NSAID's, anti-allergen and antibiotics are the most frequently used drugs.

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Conclusion: Self-medication is an important health issue prevalent in India. Over the counter (OTC) and Old prescriptions available with the patients leads to rise in Self-Medication. There should be a strict regulatory control on procurement of drugs from the pharmacist.

Keywords: Self- Medication; Health care; Urban.

1. INTRODUCTION

Self-Medication can be defined as the tendency of the patient to use the drugs without the prescription of the physician [1]. The concept of Self-Medication has been prevailing in India from the days when Ayurvedic medicines were largely used by the people. These medicines were then percolated in the coming generations through word of mouth [2]. India is a country where most of the population is concentrated in rural areas. The people in these areas are deprived of primary health care facilities where by there is a tendency to ignore the symptoms till the disease reaches a serious mode [3]. But this is not restricted to rural areas only. The educated and urban population also goes for Self-Medication especially the women [4]. In the present era, the Self-Medication practice has increased manifold due to large amount of information available on internet [5]. But the users are not aware that this practice can be injurious to their Health. The concept of Self-Medication also includes using the old prescription to procure medicines, sharing the medicines with friends or relatives or using the leftover medicines at home [6]. Many people also tend to take medicines by just consulting the pharmacist as well [7-10].

2. METHODOLOGY

The Primary data was collected through structured questionnaire. Random sampling method was used. Quantitative study was undertaken among 71 patients to explore the dimensions of self-medication and to ascertain determinants of the same. The Research area was restricted to North Nagpur City [11-13] [7-8].

2.1 Data Analysis

Internal consistencies of the scales were tested. Descriptive analyses, correlation analyses and multiple regressions were performed. SPSS Version 21.0 was used for data analysis. Pearson correlation analyses were carried out to determine the relationship between determinants and dimensions of self-medication as well as the interrelation among the individual determinants.

2.2 Objectives

To understand the various determinants of Self-Medication.

To study the relationship between various determinants of Self-Medication

2.3 Hypothesis

H1: There is a positive relationship between Perception regarding Doctor and self-medication among patients.
H2: There is a positive relationship between pharmacist related beliefs and self-medication in patients
H3: There is a positive relationship between information collection behavior attitude and self-medication among patients

3. RESULTS

3.1 Analysis and results of Quantitative Study

Descriptive analysis of data given in table indicates frequency counts and percentages. Frequency tabulations of the characteristics of the respondents were done in order to find out the nature of the sample and to ascertain heterogeneity among respondents.

3.2 Results of Respondents Characteristics

A total of 71 patients/persons completed the questionnaire. The average age of the respondents was 28.65 years and standard deviation 9.51. The sample comprised of 37% females. Only 9.9% of the sample had education below HSSE. 21.1% consumers were Working Professionals while 45.1% were students.

3.3 Analysis

H1: There is a positive relationship between Perception regarding Doctor and self-medication among patients.

Table 1. Demographics

Characteristics		Freq	Percent
Gender	Male	34	47.9%
	Female	37	52.1%
Occupation	Housewife	15	21.1%
	Student	32	45.1%
	Business	8	11.3%
	Professional	15	21.1%
Educational Qualification	Graduation	31	43.7%
	Post-graduation	28	39.4%
	HSSC	7	9.9%
	SSC	5	7.0%

Table 2. Correlations

		Self-Medication	Reliance on Doctor
Self-Medication	Pearson Correlation	1	.296[*]
	Sig. (2-tailed)		.013
	N	71	70
Perception regarding Doctor	Pearson Correlation	.296[*]	1
	Sig. (2-tailed)	.013	
	N	70	70

*. Correlation is significant at the 0.05 level (2-tailed)

Table 3. Dependent variable: Self-Medication

Variables Entered/Removed[a]			
Model	Variables Entered	Variables Removed	Method
1	23 I think that doctors previous prescription can be used. , 20.I tend not to talk to my doctor or healthcare professional about medicine related to my illness., 22 I think that going to doctors is time consuming., 13 Going to doctors in a costly affair.[b]	.	Enter

a. Dependent Variable: Self-Medication. b. All requested variables entered.

Table 4. Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.445[a]	.198	.149	.297019676925542

a. Predictors: (Constant), 23I think that doctors previous prescription can be used. , 20.I tend not to talk to my doctor or healthcare professional about medicine related to my illness., 22I think that going to doctors is time consuming., 13 Going to doctors in a costly affair

Table 5. ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1.436	4	.359	4.069	.005[b]
	Residual	5.823	66	.088		
	Total	7.258	70			

a. Dependent Variable: Self-Medication. b. Predictors: (Constant), 23I think that doctors previous prescription can be used. , 20.I tend not to talk to my doctor or healthcare professional about medicine related to my illness., 22I think that going to doctors is time consuming., 13 Going to doctors in a costly affair

Pearson's correlation is positive which indicates Positive correlation between Perception regarding Doctor and self-medication among patients. Significance is less than 0.05

3.4 Results of Regression

Regression analyses had been used to examine the impact of the dependent variables Perception regarding Doctor and Self-Medication among patients. The Coefficient of correlation is used to assess the strength of the relationship between the determinants of self-medication and the dependent variable.

3.5 Regression Analysis

Regression analyses had been used to examine the impact of the dependent variables reliance on Pharmacist and Self-medication. The Coefficient of correlation is used to assess the strength of the relationship between the determinants of self-medication and the dependent variable among patients. The Coefficient of correlation is used to assess the strength of the relationship between the determinants of self-medication and the dependent variable. Self-medication is regressed on calculated factor scores. Overall model is fit and statistically significant at F ratio of 3.382. The R square value is 0.29 indicate that 29% of the variance in self-medication is explained by information collection behavior attitude.

4. DISCUSSION AND CONCLUSION

Self-medication is an important health issue prevalent in India. Over the counter (OTC) and Old prescriptions available with the patients leads to rise in Self-Medication. There should be a strict regulatory control on procurement of drugs from the pharmacist. It was observed that 45% of the patients avoid going to doctors because of the long waiting time, fees of the doctor, tests recommended by the doctor [11-13]. 33% of the patients relied on the pharmacist by telling him the symptoms as they found it more convenient and the pharmacists give free advice. Students, Professionals are the patients who rely on the information available on the internet with respect to their symptoms and thus tend to adhere to Self-Medication. Never the less, Self-Medication may prove to be fruitful for a short duration but these practices may prove to be dangerous for the patients in the long run.

DISCLAIMER

The products used for this research are commonly and predominantly use products in our area of research and country. There is absolutely no conflict of interest between the authors and producers of the products because we do not intend to use these products as an avenue for any litigation but for the advancement of knowledge. Also, the research was not funded by the producing company rather it was funded by personal efforts of the authors.

ETHICAL APPROVAL

Ethical clearance taken from institutional ethics committee.

CONSENT

As per international standard or university standard, patient's written consent has been collected and preserved by the author(s).

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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