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**PREVALANCE OF SELF MEDICATION IN THE URBAN SETTINGS OF
HYDERABAD, PAKISTAN**

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ABSTRACT

One of the important aspect that should be include in our health system i.e Self medication and unfortunately still our public purchased different drugs/medicines without the consultancy of health care providers, So to highlight the above problem current study was to evaluate the self medication in a private setups that was located in different areas of Hyderabad sindh. A descriptive questionnaire based study was conducted in different private clinics of Hyderabad, Sindh. A total of 600 patients were selected by random sampling techniques and asked different questions about the self medication. Out of 600 patients, the response rate was 83.33% i.e 500 patients with both genders were included i.e 58.8% of male gender and 41.2% of female. Mostly 23.4% of the patients age were between the 49-58 years and 34.8% of the patients were illiterate and 17.8% of the patients were educated upto secondary level and their chi-square value was 41.800^a. Out of 500 patients, 65.4% were taking medicines from pharmacy without any prescription due to different co-morbidities and 8.8% were taking from home. Further 394(78.8%) of the patient were involved in self medication due to heavy rush in o.p.ds and 239(47.8%) were due to high cost of medication. Mostly patient used medication in headache 73.6%, in fever 65.2% and 55% in different types of pain. It was concluded that self medication was increasing day by day, so government authorities make the strict policies for dispensing of drugs with this it is also recommended that pharmacist was the key person in our health care

system that actively participated to reduce the self medication problem by giving awareness to patients.

Keywords: Self-Medication, Pharmacy, Hyderabad, Medicines

INTRODUCTION

The use of different medicines by the patients without the consultation of the prescriber for treatment of acute to chronic diseases is called as Self Medication [1]. However, the medicines which are used for treatment of different types of pain i.e analgesics, treatment of infections i.e antibiotics, treatment of malaria i.e. anti-malarial and cough suppressants are more prone for self medication [2]. According to William Osler, one of the main differences between the animals and humans are to take medication for fulfillment their desires [3]. There are various resources which fulfill the need of primary health care system which includes self-medication, social support in illness, non-drug self treatment and first aid, specially self-medication is one of the core part of self-care [4]. The patients which involve in self care i.e self medication can take medicines without the official prescription from the pharmacy, left over medicines present at home, refilling old prescription without the consultation, relatives and friends [5]. Nowadays the pharmaceutical companies are keenly focusing on advertisements of their different brands which in turn can prove to be

a threat towards self medication among the adult population. Moreover this practice may lead to wrong diagnosis and ultimately various drug related problems [6]. The basic reason of self medication found in young adults was paucity of knowledge about the health related problems. At the other hand media and internet are found to be the major root cause to increase the prevalence of self medication [7]. Due to availability of many brands of one drugs that leads to easy approach to the drug by the consumers globally. A study conducted in Nigeria and concluded that more prevalence of self medication problems among the health related peoples that included the dental, nursing and midwifery students [8]. Another study concluded that the self medication problem was also present in practicing prescribers [9, 10]. In Pakistan the major problem was the easy availability of non over the counter or those drugs for which prescription is mandatory, which is also a contributing factor towards the self medication [11].

METHODOLOGY

A descriptive questionnaire based study was conducted at different private clinics of

Hyderabad, Pakistan that focused on highly populated areas of city. A total of 600 patients were randomly selected from different private clinics and asked different questions that meet the objectives of study in duration of 06 months. A structured questionnaire and informed consent was approved by the expert of our faculty that includes the basic demographic detail of the patient and different questions to assess the basic reasoning of self medication. Then the data was also analyzed on SPSS version 20.

RESULTS

A total of 600 sample patients were included in this study. Overall all response rates were good i.e 500(83.33%) patients. Out of 500 respondents, 294(58.8%) were belonged to male gender and 206(41.2%) were belonged to female patients. Mostly the respondent's age were between the 39-48 years i.e 143(28.6%) and only 60(12%) were between the age of 18-28 years, while the remaining patients related with their ages were mentioned in **Table 2**, further it was also showed the status of patients literacy rate that out of 500 patients, 174(34.8%) respondents were illiterate, 93(18.6%) were went school and obtained primary education, 74(14.8%) were educated up to matriculation class called as secondary education, 89(17.8%) and 51(10.2%) were obtained higher secondary

education and graduation degrees respectively, while 19(3.8%) were those who completed their post graduation. There were different questions present in questionnaire that were replied by the patients. Out of 500 respondents, 313(62.6%) of the patients were also taking self medication in past years due to different reasons and the duration of treatment was also noted that mostly 289(57.8%) patients were taken medicine up to 7 days, 98(19.6%) were taken up to 14 days and only 44(8.8%) of the patients taken medicine as a self medication more than 30 days. Another question that was related with the source of medication, mostly 327(65.4%) of the respondents replied that they get their medication from pharmacy without prescription as a self medication, 44(8.8%) were taken medicine from already present in home, 62(12.4%) taken from their relative or friends and 67(13.4%) were taken from general stores also. In table:03, it was cleared that mostly patient were belonged to sadder i.e 162(32.4%) due to high population and minimally 67 (13.4%) of the patients were belonged to paretabad area while the other detail was also mentioned in table. In **Table 4**, the most common reasons of self medication being identified among the number of samples who were taking part in this study. Maximally 394(78.8%) respond

that due to heavy rush of patients at out-door patient setups, they direct go to purchase medicine without prescription, then 381(76.2%) said that the reason of self medication was easy accessibility of antibiotics without prescription with different ratio of male and female gender that was mentioned in table. Further 352(70.4%) were due to minor illness, 336(67.2%) of respondents used self medication was due to quick relief of their symptoms, 239(47.8%) were used due to the high cost medication prescribing and minimally 85(17%) and 83(16.6%) were self medicated due to sufficient knowledge and non accessibility of clinics respectively. In **Table 4**, it was also

cleared that mostly male gender were more prone for using the self medication as compared to female gender like in old prescription of same illness 136(60.2%) were belong to male gender and 90(39.8%) were belonged to female gender, while other bifurcation among male and female was also mentioned in table. In table: 05 the most common problem for self medication among the patients were mostly due to headache i.e 368(73.6%), while 326(65.2%) were self medicated due to fever and minimally 47(9.4%) of the patients were taking medication for the treatment of insomnia while other problems were also mentioned in table.

Table 1: Patients Response rate

Rate of Patients Responded	Number of Respondents	%(Percentage)
Patients Responded	500	83%
Patients did not responded	100	17%
Total	600	100%

Table 2: Characteristics distribution of Samples

CHARACTERISTICS	FREQUENCY	%(PERCENTAGE)
GENDER		
Male	294	58.8
Female	206	41.2
AGE(YEARS)		
18-28	60	12
29-38	101	20.2
39-48	143	28.6
49-58	117	23.4
>59	79	15.8
LEVEL OF EDUCATION		
Illiterate	174	34.8
Primary Education	93	18.6
Secondary Education	74	14.8
Higher Secondary Education	89	17.8
Graduation	51	10.2
Post Graduation	19	3.8
Test Statistics of Age		
	what is your age	
Chi-Square	41.800 ^a	
Df	4	
Asymp. Sig.	.000	
a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 100.0.		
Test Statistics of Education		

	what is your age
Chi-Square	163.408 ^a
Df	5
Asymp. Sig.	.000
a. 0 cells (.0%) have expected frequencies less than 5. The minimum expected cell frequency is 83.3.	

Table 3: Area wise enrollments of patients from different Clinics

Area	Frequency	Percent	Cumulative Percent
Saddar	162	32.4	32.4
Latifabad	107	21.4	53.8
Qasimabad	91	18.2	72
Hussainabad	73	14.6	86.6
Paretabad	67	13.4	100
Total	500	100	

Table 4: Reasons of self-medication

Reasons	Male	Female	Total(N=500)
Sufficient pharmacological knowledge	47(55.3%)	38(44.7%)	85(17%)
To save time	139(67.1%)	68(32.9%)	207(41.4%)
Avoid crowd at OPD	259(65.7%)	135(34.3%)	394(78.8%)
Privacy	76(55.1%)	62(44.9%)	138(27.6%)
Old prescription for same illness	136(60.2%)	90(39.8%)	226(45.2%)
High cost	165(69%)	74(31%)	239(47.8%)
Antibiotics are easily obtained	244(64%)	137(36%)	381(76.2%)
Clinics not accessible	46(55.4%)	37(44.6%)	83(16.6%)
Illness is minor	239(67.9%)	113(32.1%)	352(70.4%)
Quick relief	209(62.2%)	127(37.8%)	336(67.2%)

Table 5: Signs of Self Medication

Signs	Frequency(N=500)	% (PERCENTAGE)
Headache	368	73.6%
Fever	326	65.2%
Pain	275	55%
Sore throat	246	49.2%
Flu/Cough	234	46.8%
Diarrhea	139	27.8%
Vomiting	102	20.4%
Mouth Ulcer	72	14.4%
Skin Rashes	63	12.6%
Insomnia	47	9.4%

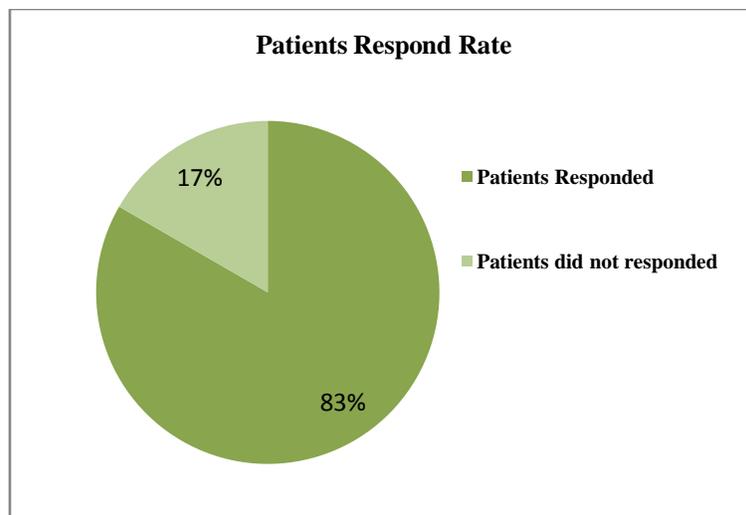


Figure 1: Pie Chart of Patient response rate

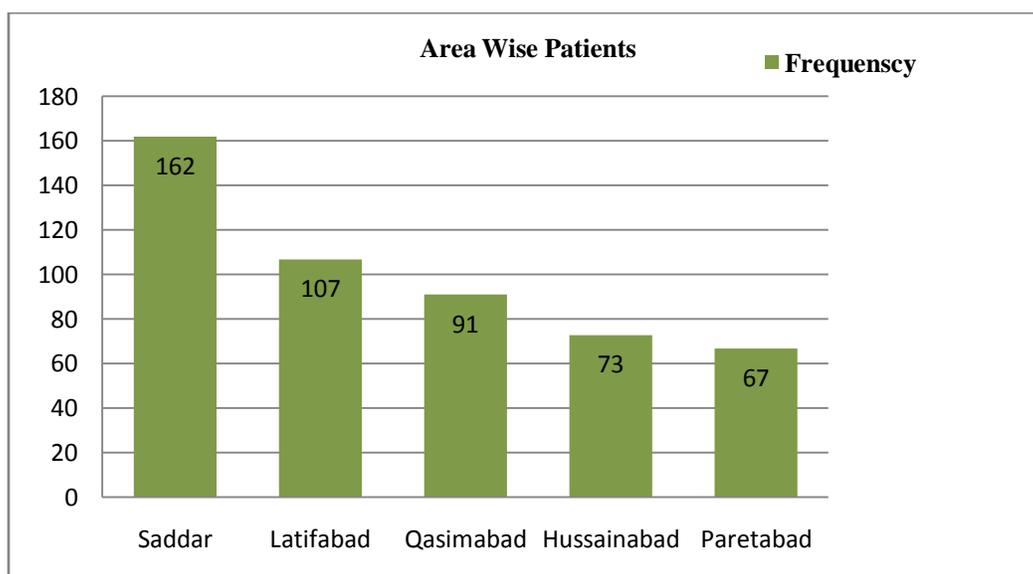


Figure 2: Graphical representations of area wise enrollments of patients from different Clinics

DISCUSSION

The present study highlights the perception of the patient about the self medication and their reasons. The response rate of above study was 83.33% with male gender (58.8%) is more enrolled as compared to female gender(41.2%), while another study conducted in United Arab Emirates [12] and

their response rate was 80% that was less than the current study but more female ratio (57%) as compared to male (43%) that was opposite in current study. A study conducted by Osemene & Lamikanra in Nigeria [13] on self medication practice, in this study mostly patient’s age was between 25-34 years. While in current study mostly the patients age was

between the 39-48 years. Same study also concluded that self medication ratio is more present in females as compared to male, while in current study the males were dominant as compared to females. The educational background was also assessed in current study and concluded that mostly patients were uneducated and only about 10% of the patients were graduated while the comparison of the results in other countries it was found that in Egypt the patients graduation ratio was 52.5%, in india (26%) and in srilanka (83.3%) [14]. In current study, 65.4% of the patients were self medicated without prescription while a study conducted in Pakistan [15] and concluded that self medication was about 70% that is slightly higher than this study. Another study conducted in Pakistan [16] concluded about the factors associated with self medication that 88% of the patients were self medicated due to cost effectiveness, 82% were due to non serious illness and 43% was due to easily availability of the drugs while in current study 47.8% was due to high cost, 70.4 % was due to minor illness that is less than the compared study and 76.2% was due to easy availability of drugs that was higher than the compared study.

CONCLUSION

The current study revealed the realistic facts regarding prevalence and the hazards of self

medication. However it also highlighted all causative factors for the drug misuse, i.e social, economical and other factors including the easy availability of the medications from pharmacies etc at Hyderabad, Pakistan. However it is the utmost responsibility of the healthcare leaders to look ahead keenly to curb this life threatening issue and to resolve this matter by implementing the clear policies in the healthcare system, organize different health & awareness events related to the misuse and abuse of medications etc, in order to save the precious lives of the community.

Competing Interests

The authors declare that they have no competing interests.

Authors' Contributions

All authors read and approved the final manuscript.

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