AMERICAN JOURNAL OF PHARMTECH RESEARCH
Journal home page: http://www.ajptr.com/

Determinants of Self-Medication – A Study of Trends of People

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ABSTRACT

Self medication is observed as practice used to treat the diseases among the common people. The practice is used by all types of patients & for different types of diseases. So this study is designed & under taken to find out determinants responsible for self-medication. These findings will be helpful to find measures to control it. So the randomized descriptive explored questionnaire survey was performed among various stake holders of health care sector and common people.96 % of people say that self medication is responsibility of all stake holders of area. Most of the people think that pharmacists can perform important role to improve the condition. The responsible factors for self medication are like expenses, literacy, unawareness etc.

Keywords: Self medication, Disease, Patients, Questionnaire survey, Pharmacists.

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Received 23 November 2017, Accepted 11 December 2017

Please cite this article as: Patil *et al*., Determinants of Self-Medication – A Study of Trends of People . American Journal of PharmTech Research 2017.

INTRODUCTION

Self-medication is a common practice observed among the people. It is used for treatment of diseases. Self-medication is the continuous process of caring for someone's health needs. It starts with the self recognition of a health problem without consulting to healthcare professionals. The patient desires to prevent the health problem up to the adoption of interventions without consulting health care professionals like the physicians and pharmacists. [1] Scientifically the self medication may be defined as the act of procurement and consumption of pharmaceuticals without consulting medical practitioner. [2] Here the patients try to avoid diagnosis & investigation procedure of the diseases by physicians. Instead, patient their self tries to identify the diseases & obtain the medicines for treatment of it. The trends of self-medication in different regions of the world are high.[3]like in India, it is 31% [4] and 59% in Nepal [5] up to 51% in Pakistan [6] and it is alarming despite the efforts made to curb this problem[7] It increases day by day both in developing [8] and developed countries [9] It is observed in all types of individuals like male, females, literates, illiterates, health care professionals, other professionals, rural ,urban people etc. The existence is varying but still prevailed. Some researches have demonstrated that self medication is more pervasive among females victimized by either loneliness or psychological problems .It is also observed in low socio economic class female and among students[10].The abuse of medications is more common in youth and it might be due to pharmaceutical industries media advertisement strategies. This raises flawed self assessment, drug interaction and misuse of drugs[11]. There has been an increasing tendency of self medication behavior among various health sciences graduates and students including physicians, pharmacists and nurses all over the world.[12] The most commonly used drugs available over the counter (OTC) medicines are analgesics, non-steroidal anti-inflammatory drugs (NSAIDs), anti histaminic, vitamin supplements, tonics, cough and cold remedies. Although, these medications are considered safe, but their excessive use can lead to serious adverse effects. Almost all prescription only medicines are also easily available as OTC medicines in most retail pharmacies without showing the prescription. [13] No major steps have been taken by the responsible authorities to address this serious issue. [14] The activities of responsible authorities are not sufficient. Due to it, the pharmacists use to sale the drugs irrationally. In the present study, opinions of various stake holders of health care sector & common people about self medication are collected by using descriptive questionnaire study.

MATERIALS AND METHOD

Study Design

A community based survey was conducted in various places of Maharashtra. The places were randomly selected including rural places, (villages) urban & city area. The places were selected for inclusion of all types of people. The respondents were classified as physicians, pharmacists, nursing personals, patients, common individuals. The information like age, sex, educational qualification, profession, addresses of respondents were noted down. The consents of respondents were taken by explaining facts of study in detail. The permission of Ethics Committee was not essential for study.

Study Tool

A randomized descriptive explored questionnaire based survey was conducted. In this study well structured questionnaire containing 30 questions was prepared & distributed randomly across the study population to evaluate the opinions about trends of self medications. The data were collected via visits to the physicians, pharmacists, patients, nursing personals & common people to their places. The questionnaire was given & answers were obtained from them.

Study Period &Data Analysis

It was a descriptive survey study in between June 2015- Dec 2015 & data are presented as frequency.

RESULTS AND DISCUSSION

The demographic profile of respondents is presented in Table 1 & Figure 1.1, 1.2, 1.3, 1.4.

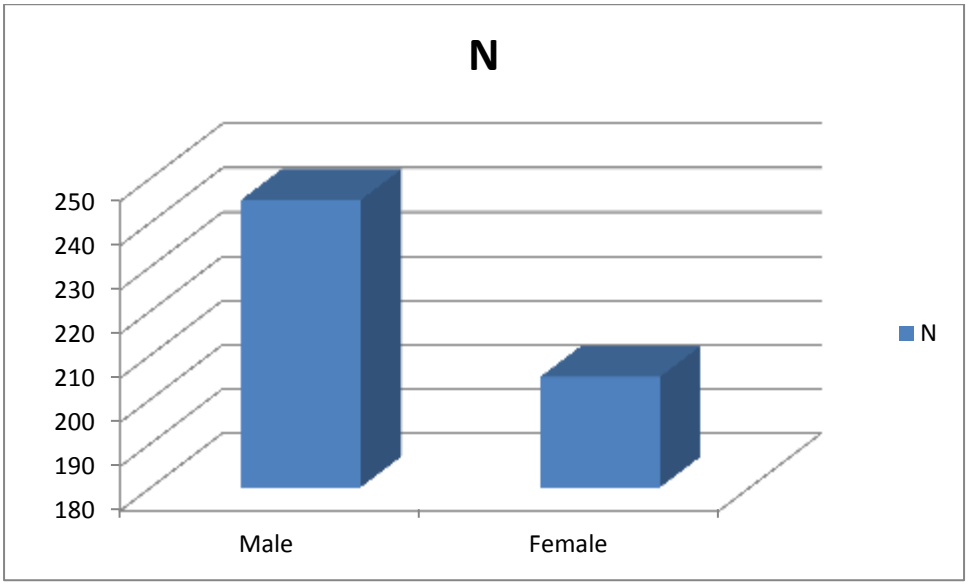

Figure 1.1: Demographic study according to gender

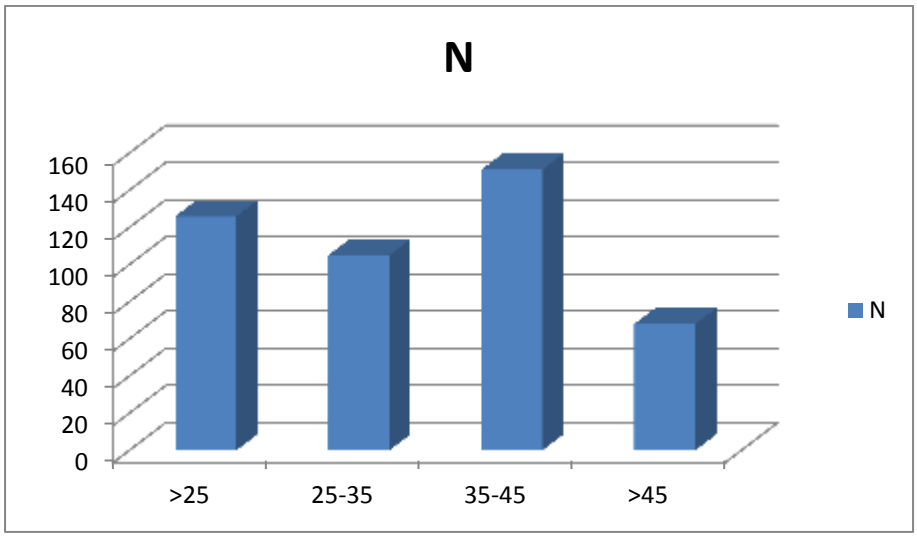

Fig.1.2 Demographic study according to age

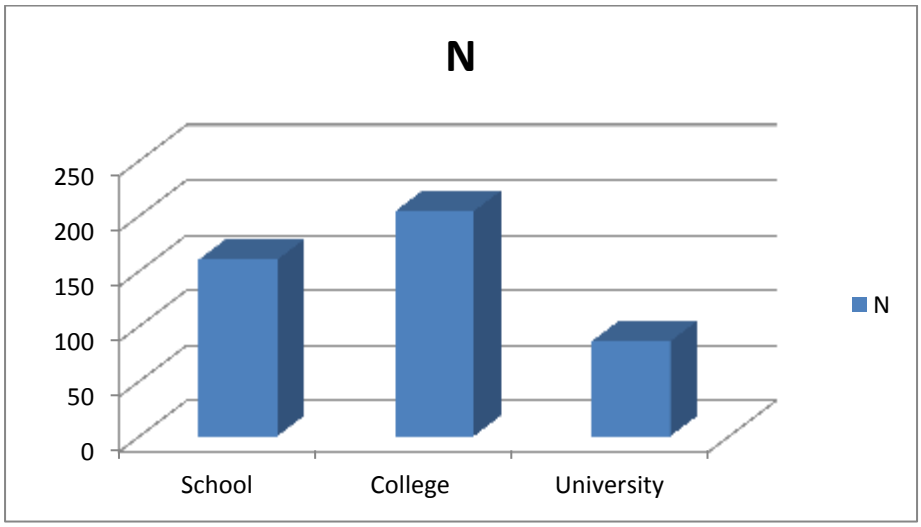

Fig.1.3 Demographic study according to qualification

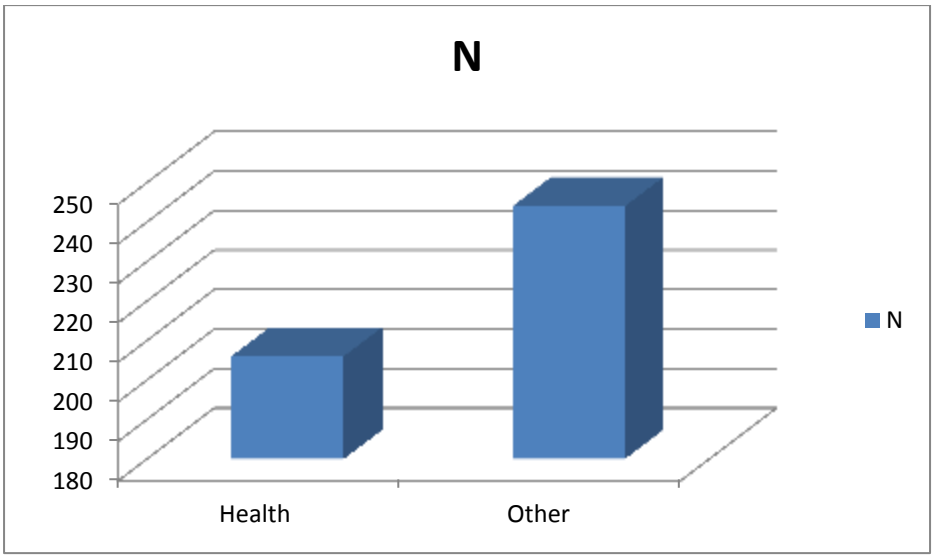

Fig. 1.4 Demographic study according to profession

The total number of respondents (M+F) was 450.Out of which 205 were female &225 were male. The age group of most of the respondents was 18-65 years. The educational qualifications of respondents were from school level to university level & of various streams. The profession of the people was also recorded. The 206 people were from health related profession. Remaining 224 people were from other professions.

Table 1 Demographics study according to gender, age, qualification, profession

Frequency	**Gender**		**Age**				**Qualification**			**Profession**	
	Male	Female	>25	25-35	35-45	>45	School	College	University	Health	Other
N	245	205	126	105	151	068	160	204	86	206	244
%	54.44	45.55	28	23.33	33.55	15.11	35.55	45.33	19.11	45.77	54.22

The economical & residential status of the respondents were also recorded which is given in table 2& fig 2.1,2.2. Out of 450 persons participated, 151 people were rich .The percentage is 33.55.142 people were medium & 157 were from poor economical status. The 151 participated people were from city area where as 142 people were from urban & 187 people from rural area.

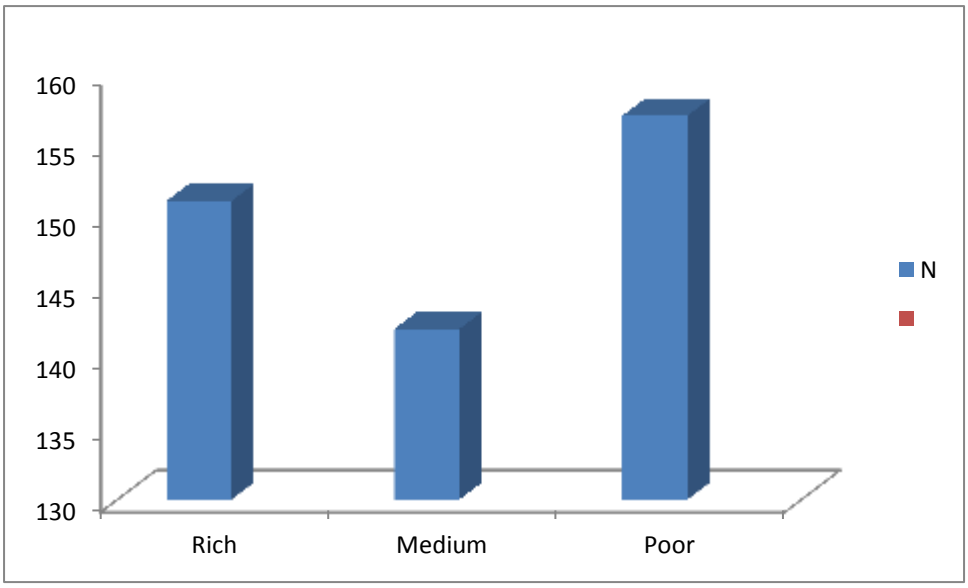

Fig.2.1 Study according to economical status

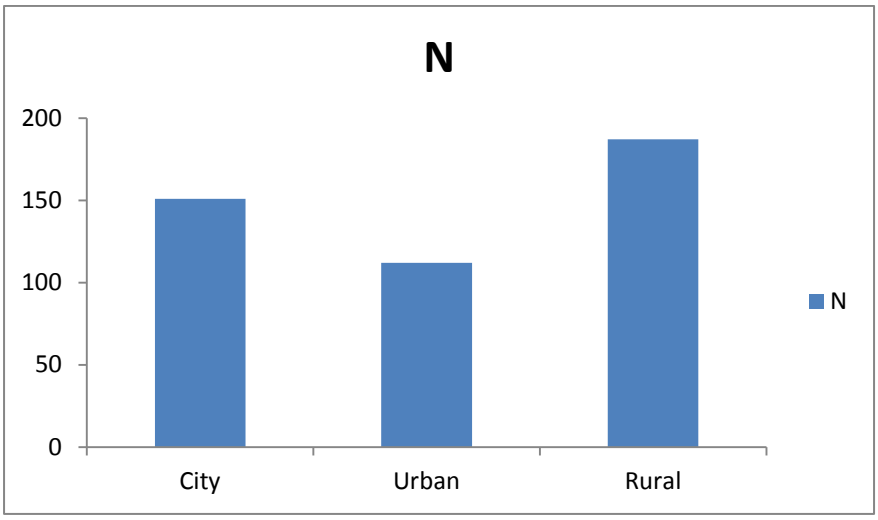

Fig. 2.2 Study according to residential status

Table 2 Study according to economical / residential Status

Frequency	Economic Status			Residential status		
	Rich	Medium	Poor	City	Urban	Rural
N	151	142	157	151	112	187
%	33.55	31.55	34.88	33.56	24.89	41.54

The responses obtained within the survey has prevailed various facts about concept of self medications among the people. The data is presented in Table 3 & fig 3. Many of them have ambiguousness in understanding self medication. This information proposes need of awareness about medication.

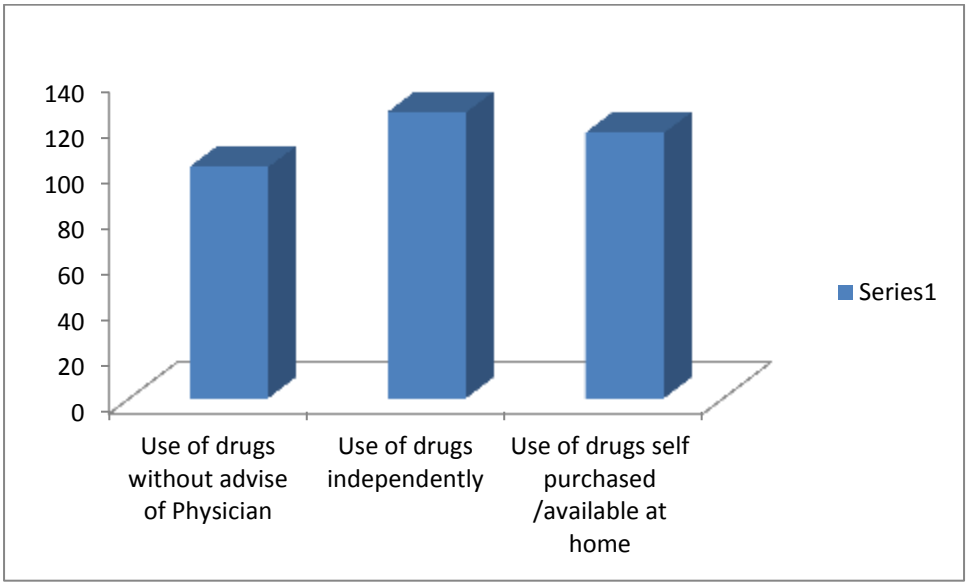

Figure 3: Study of self medication

17 % of people say self medication is not any issue & if it is not irrelevant. 22% people say that self medication is not a proper way of treating the diseases. 61 percent people say that self

medication is chosen at initial stages of diseases later on visits to clinical advices. The information related to choice of self medication is presented in table 3.

Table 3 Study of self medication

Particulars	Frequency	%
Understanding of self medication	342	76
Use of drugs without advise of Physician	101	29
Use of drugs independently	125	36
Use of drugs self purchased /available at home	116	33

Table 4 Study of response of self medication in patient

Responses	No of persons	%
No issue of self medication	76	17
Self medication is not proper	99	22
Self medication at initial stage later visits physicians	105	61

Most of the people say illiterate as well as literate people choose self medication. 104 people says that the practice of self medication is chosen by people due to expensive disease treatment, 81 people says self medication is due to lack of time & 68 people says it is due to negligence of physicians. The data is represented in Table 5.

Table .5 .Study of reason for self medication

Particulars Reasons for Self medications	Responses Expenses		Time		Negligence of Physicians		Previous Experience	
	No of persons	%	No of persons	%	No of persons	%	No of persons	%
	104	23	81	18	68	15	79	17

The people say various sources for information of drugs like paramedical personal, medicos, friends, internet & advertisements. The data is given as Table 6.

Table 6 Study based on source of information

Source of Information	Paramedical persons	Medical persons	Familian	Friends	Internet	Advertisements
No of persons	102	45	96	111	56	40
%	23	10	21	24	12	9

The self medication involves various practices. The data is presented as below Table 7.Out of total 450 people ,231 people said that they use self medication practice where as 124 people said that they don't use self medication practice where as 95 persons didn't give answer.186 people consult to physician where as 206 people didn't consult to physicians.58 people said that they didn't take any action. The people who take self medication take medicine as per the situation for temporary time period. 71 people keep medicine always with them. 30 people takes medicine as per the need.

The symptoms used for self medication are Headache ,Cough ,Cold ,Fever, Chills, Abdomen pain, Acidity ,Allergy, Diarrhoea, Constipation, Pain ,Itching, M.C./Pregnancy related problems ,Malnutrition, etc. The drugs used are Analgesics Anti-inflammatory Anti-pyretics Anti-histamines Antacids Laxatives Oral contraceptives Antibiotics Corticosteroids Nasal/Ear/Eye drops Topical applications (antifungal/analgesics etc) Nutritional supplements Energy supplements (Vitamins/Minerals etc) Traditional medicines etc.

Table.7. Study based on use of medication

Practice of self medication	No of persons	%
Response		
Yes	231	51.34
No	124	27.56
No answer	95	21.12
Action		
Consult to Physician	186	41.34
Non consult to Physician	206	45.78
No action	58	12.19
Form of obtaining medication		
Instaneous –temporary	124	27.56
Regular – keeps always	71	15.78
As per need	30	6.67
Indications of SM		
Headache	71	15.78
Cough Cold	68	15.12
Fever Chills	58	12.89
Abdomen pain	61	13.56
Acidity	94	20.89
Allergy	25	05.56
Diarrhoea	72	16
Constipation	65	14.45
Pain	54	12
Itching	31	6.89
M.C./Pregnancy related problems	72	16
Malnutrition	84	18.67
Others	62	13.78
Medicines used for Self Medication		
Analgesics	95	21.12
Anti-inflammatory	75	16.67
Anti-pyretics	61	13.56
Anti-histamines	61	13.56
Antacids	93	20.66
Laxatives	52	11.54
Oral contraceptives	76	16.89
Antibiotics	56	12.45

Corticosteroids	54	12
Nasal/Ear/Eye drops	55	12.22
Topical applications (antifungal/analgesics etc)	51	11.34
Nutritional supplements	66	14.65
Energy supplements (Vitamins/Minerals etc)	37	08.23
Traditional medicines	103	22.9
Others	90	20

Table.8. Study of responsible person to stop self medication

Major Responsibility	**Pharmacist**	**Physicians**	**Health care service**
No of persons	191	145	111
%	42.44	32.22	24.66

Major responsible person for self medication is pharmacist.42 % of people says that pharmacist can become proper health care provider. 32 % people say that physicians can stop self medication.24 % people say that proper healthcare service can prevent self medication practice.

DISCUSSION

Self-medication is practiced in all people of society, despite knowing the harmful effects of medicines. Various people from different genders, age, education, profession, locations, economical status performs self medication practice. Most of the people are not aware about concept of self medication. They use self medication practice at various stages of diseases. Previous experience was one of the major reason for self medication besides non availability of doctors , better knowledge. Lack of time and cost of treatment were the other contributing factors. Self-medication is widely practiced throughout the world , this practice should be based on proper medical information, otherwise irrationally use of drugs may lead to serious health hazards, adverse drug reaction and increase resistance to pathogens in infectious diseases. For this purpose, prescription system should be more strengthened by the government. Drugs such as antibiotics should not be available to the patients without prescription. The drugs coming under schedule H, G, X should not be sold without prescription. These practices may lead to drug abuses and addiction in some cases. The irrationally taken drugs may alter the effects of other drugs. They may also affect on food consumption. Such consequences may be seriously studied. All stake holders of health care service like pharmacist, physicians & other persons may contribute to stop the practice of self medication.

CONCLUSION

From present study of the trends of survey questioner, it is concluded that self medication is a major issue in health care practice. Most of the people try to use self medication practice. The

literate people practices self medication than illiterates. Pharmacists are majorly responsible for self medication practice. The advertisements, internet are also some responsible factors. Expensive health care service also contributes self medication practice. Pharmacist can play important role in prevention of self medication. The pharmacist can be a Better Health care provider by performing fair practice. All other stake holders must perform fair practice in health care service. The patients must be provided with affordable healthy care service.

It is also concluded that majorly used drug categories are analgesics, anti inflammatory, antipyretics, antacids, anti emetics, anti diarrheal, anti spasmodic, anti helmentics , antiseptics & antibiotic also. The drugs dispensed include drugs under category of schedule G, H of Drugs & Cosmetics Act 1940.

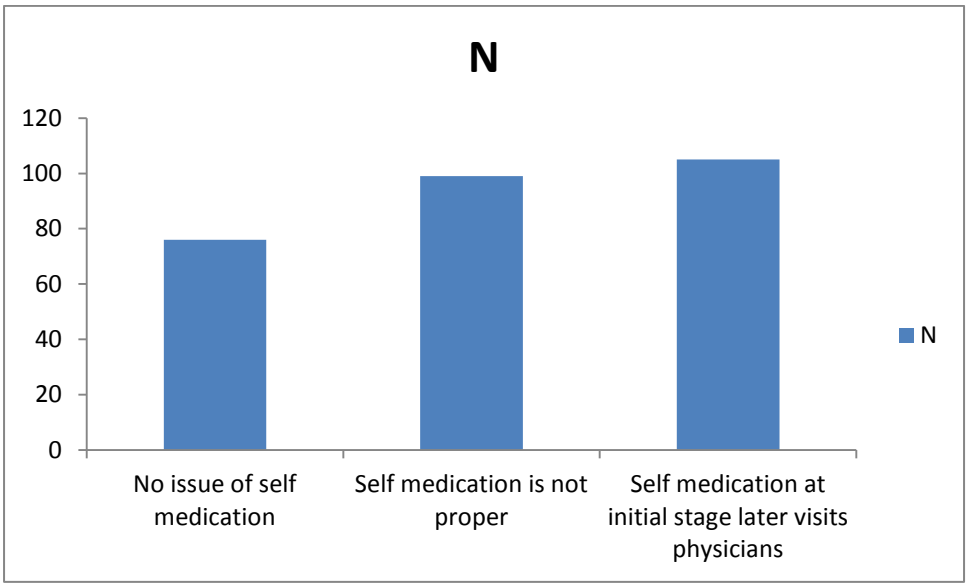

Figure 4: Study of Response of self medication in patient

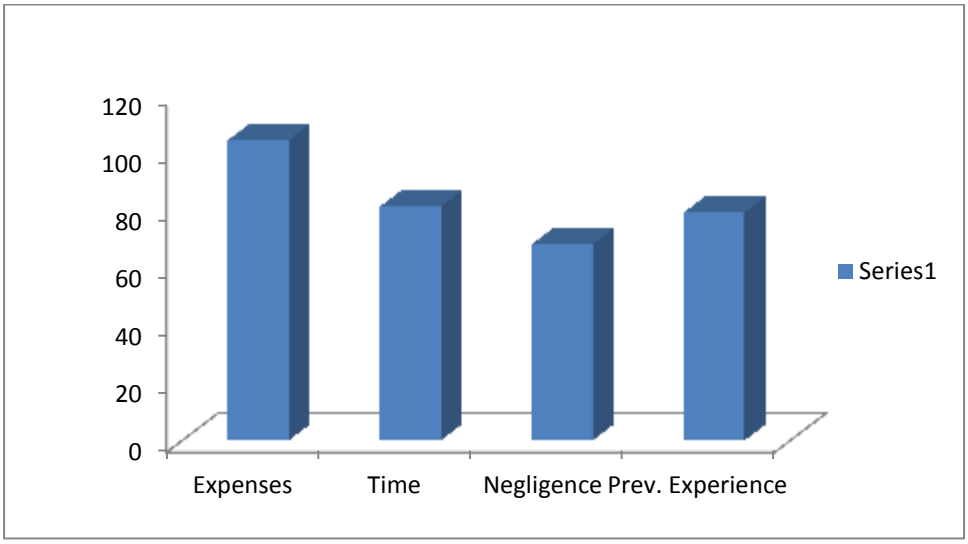

Figure 5: Study of reason for self medication

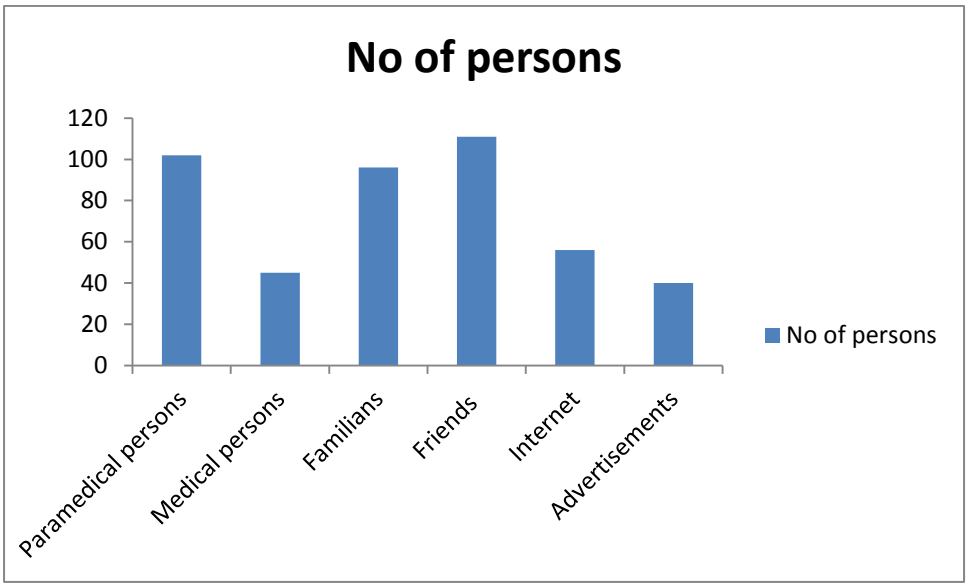

Figure 6: Study based based on source of information

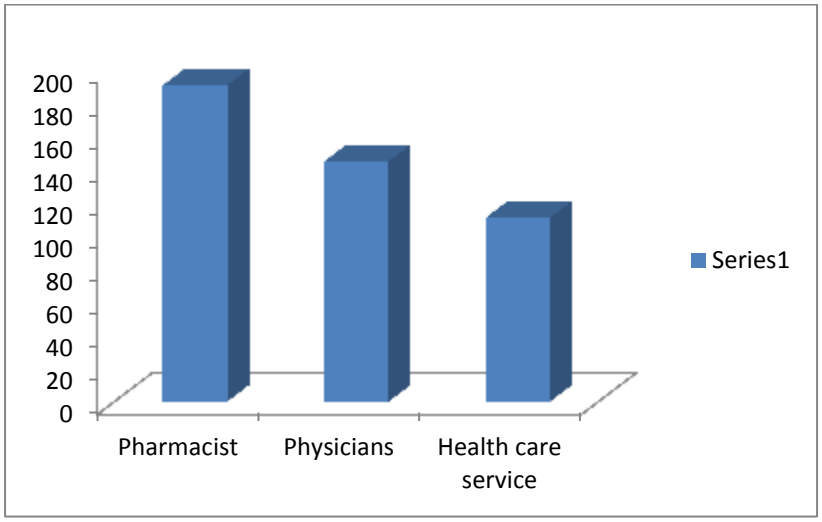

Figure 7 Responsible person to stop self medication

ACKNOWLEDGMENT

The authors are thankful to Hon. Deepak Paigude, President, Lokseva Pratishthan Lokseva College of Pharmacy, Phulgaon Tal Haveli Dist Pune for providing facility for this work. The authors also acknowledge involvement of student volunteers, various individuals for their active participation in the study.

REFERENCES

1. Waweru L.M.,Kabiru E.W.,Mbithi J.N., Some health status and health seeking behavior of the elderly persons in Dagoretti division, Nairobi, East African Medical Journal ,Vol.80, No.2, February 2003

2. Antonio I. de Loyola Filho, Maria Fernanda Lima-Costa, Elizabeth Uchoa, Bambuí Project: a qualitative approach to self-medication, Cad. Saúde Pública, vol.20 no.6 Nov./Dec. 2004
3. Blenkinsopp A, Bradley C, Patients, society, and the increase in self medication.*British Medical Journal* 1996 ,Mar 9;312(7031):629-32.
4. Deshpande S.G. ,Tiwari R., Self medication-a growing concern, Indian Journal of Medical Sciences.1997 Mar;51(3):93-6.
5. Shankar P R, Partha P, Shenoy N. Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study. BMC Fam Pract. 2002 Sep 17;3:17.
6. Abdul Haseeb , Muhammad Bilal, Prevalence of using non prescribed medications in economically deprived rural population of Pakistan, Arch Public Health. 2014.74: 1.
7. Fei-Yuan Hsiao, MS Jen-Ai Lee, Weng-Foung Huang,Shih-Ming Chen, Hsiang-Yin Chen, Survey of Medication Knowledge and Behaviors Among College Students in Taiwan, American Journal of Pharmaceutical Education 2006; 70 (2) Article 30.
8. *Geissler* PW, Nokes K, Prince RJ, Achieng RO, Aagaard-Hansen J, Ouma JH. Assessment of Self-Medication Practices Among Medical, Pharmacy, and Health Science Students in Gondar University, Ethiopia, Journal of Young Pharmacy. 2010 Jul-Sep; 2(3): 306–310.
9. Greenhalgh, Drug prescription and self-medication in India: an exploratory survey.Social Science & Medicine. 1987;25(3):307-18.
10. Figueiras. A., Caamano. F. Sociodemographic factors related to self-medication in Spain. Europian Journal of Epidemiology.16:2000,19-26.
11. Burak L.J, Damico A , College students' use of widely advertised medications, The *Journal* of American *College Health,* 49 (3), 2000,118–21.
12. Nalini G , Self-medication among allopathic medical doctors in Karnataka, India. British Journal of Medical Practitioners. 3(2) (2010):325.
13. Chang F.R , TrivediP.K., Economics of self-medication: theory and evidence , Health economics. 2003 Sep;12(9):721-39.
14. Muhammad Harris Shoaib, Rabia Ismail Yousuf, Fakhsheena Anjum, Lubna Saeed, Sana Ghayas, Tariq Ali, Saeed Ahmed Siddiqui, Shazia Alam, Mehwish Rizvi, Sadia Zafar, Maqsood Ahmed and Zaib-un-Nisa , Survey based study on the use of non-prescription

drugs among pharmacists and non-pharmacists, African Journal of Pharmacy and Pharmacology ,Vol. 7(38), , October, 2013 pp.2652-2656