



SELF MEDICATION: OBSERVATIONS IN RURAL FIELD PRACTICE AREA

Community Medicine

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ABSTRACT

Background: Self-medication is defined as "Medication that is taken on patient's own plan or on advice of a pharmacist or lay person"¹. Present study focus on prevalence and attitude of self-medication practices among study participants.

Objective- To study self-medication practices in rural field practice area of a medical college and factors influencing it.

Methods- A community based cross-sectional study.

Method of sampling – By simple random sampling method by lottery method.

Methodology-400 participants from sampled families of both genders, of age 18 to 70 years. With consent, were interviewed and responses were entered in pre structured proforma. Analysis was done using Epi-info & WINPEPI

Results- 144/400 (36 %) participants practiced self-medication, which included 69(47.91%) female and 75(52.09%) male participants. Reasons for seeking self-medication were mainly lack of time to visit doctor 53(36.80%) followed by to save money 50 (34.72%). Knowledge about characteristics of drugs was not found satisfactory and correct responses about dose of drug/ medicine used were 36 (25.%), duration of treatment 22 (15.27%) and side effects of drug/medicine used 17 (11.80%) respectively out of 144 self-medication practitioners.

Source of information for self medication was prominently previous prescription by the doctor or left over medicines 90 (62.5%) followed by over the counter from pharmacist or compounder 78 (54.16%).

Conclusion- Prevalence of self medication was 36 % & It necessitates creating awareness regarding advantages and disadvantages of self-medication practice in community for the rational use of medicine.

KEYWORDS

Prevalence, Rural field practice area, Self-medication.

INTRODUCTION

There has been a growing realization that personal self-care and self-medication in the community should be the starting point of healthcare, and is in fact the foundation for people to manage life-long health¹.

Due to continuous improvement in education, general knowledge and socio-economic status of the community along with Lack of health services, poverty, ignorance, misbelieves, the urge of self-care, feeling of concern towards family members in sickness, extensive advertisement of drugs and availability of drugs in establishments other than pharmacies constitute the major factors in the growth of self-medication practice⁶.

Self-medication practices cannot be considered as entirely harmful⁵. But due to inadequate exposure and unsatisfactory knowledge of the community people, the rural people often consume drugs given by pharmacists /friends/ relatives or use leftover drugs from previous prescriptions thus giving rise to problems such as tolerance, resistance and drug interaction. In India, few studies were conducted at community level so present study was carried out to study the Prevalence of self-medication in Rural community, with the focus on Knowledge of people and Factors influencing the practice of self-medication.

MATERIAL AND METHODS

STUDY PLACE

Alandi, which is Rural field practice area of a DY Patil Medical College.

STUDY DESIGN

A community based Cross-sectional study.

STUDY/SOURCE POPULATION-

All house-holds residing in Rural field practice area which were around 40000 household.

STUDY Participants

All house-hold, aged between 18 to 70 years.

STUDY PERIOD- From 1st April 2016 to 30th September 2018.

SAMPLING TECHNIQUE

400 family folders were randomly picked by lottery method by simple random sampling technique.

DATA COLLECTION

From each family one adult (above 18 yrs of age) who was present while home visit, was interviewed with written consent. Data was collected using pretested and validated proforma.

DATA PROCESSING AND ANALYSIS

Data collected compiled and analyzed using Epi-info¹¹ and WINPEPI¹².

Appropriate statistical tests were applied. Probability (p value) < 0.05 was considered significant.

RESULTS -

(Table 1) In this study, the participants were in age range of 18 -70 years (Mean age 35.5 ± 11.73 years). Participants of age group 18-29 yrs were maximum i.e. 136 (34%) followed by 30-39 yrs group were 127 (31.75%). Gender wise participation was for Male, 201(50.25%) and Female 199 (49.75%).

It was found that out of 400 participants, 144 participants had practiced self medication. Thus prevalence of self-medication was 36%.

TABLE 1- DEMOGRAPHIC PROFILE OF STUDY SUBJECTS

Demographic characteristics	Number (%)
	(n=400)
Age (yrs)	
18-29	136 (34)
30-39	127 (31.75)
40-49	80 (20)
>50	57(14.25)
Gender	
Male	201 (50.25)
Female	199 (49.75)
Educational status	
Illiterate	87 (21.75)

Primary	104 (26)
Secondary	145 (36.25)
Graduate /postgraduate	64 (16)
Occupational status	
Worker Unskilled	116 (29)
Worker semiskilled	170 (42.50)
Worker skilled	47 (11.75)
Professional	17 (4.25)
Student	11 (2.75)
Retired	17 (4.25)
Unemployed	12 (3)
Housewife	10 (2.5)
Socioeconomic status	
I	68 (17)
II	154 (38.5)
III	127 (31.75)
IV	64 (16)
V	5 (1.25)
Type of family	
Nuclear	308 (77)
Joint	92 (23)
Systems of medication	
Allopathic	106 (73.61)
Ayurvedic	22 (15.27)
Homeopathic	17 (11.80)
House-Hold	20 (13.88)
Other	5 (3.47)

(Table 2) reveals significant association was observed between self medication with educational status, occupation, socioeconomic status and participants staying with whom. No association was observed between self medication and age, gender or type of family.

Respondents characteristics	Self-medication n=144 (%)		x ²	p value		
	Yes	No				
Age (yrs)						
18-29	57 (41.91)	79 (58.09)	x ² LT 3.35	0.3		
30-39	44 (34.64)	83 (65.36)				
40-49	26 (32.50)	54 (67.50)				
>50	17 (29.82)	40 (70.18)				
Gender						
Male	75 (37.31)	126 (62.39)	0.49	0.78		
Female	69 (34.67)	130 (63.33)				
Educational status						
Illiterate	22 (25.28)	65 (74.72)	x ² LT 7.59	0.04		
Primary	35 (33.65)	69 (66.35)				
Secondary	58 (40)	87 (60)				
Graduate /postgraduate	29 (45.31)	35 (54.69)				
Occupational status						
Worker Unskilled	30 (25.86)	86 (74.14)	0.513	0.47		
Worker semiskilled	69 (40.58)	101 (59.42)				
Worker skilled	22 (46.80)	25 (53.20)				
Professional	8 (47.05)	9 (52.95)				
Student	3 (27.27)	8 (72.73)				
Retired	3 (17.64)	14 (82.36)				
Unemployed	3 (25)	9 (75)				
Housewife	6 (60)	4 (40)				
Socioeconomic status						
I	30 (44.11)	38 (55.89)			14.98	0.05
II	60 (38.96)	94 (61.04)				
III	38 (29.92)	89 (70.08)				
IV	21 (45.65)	25 (54.34)				
V	2 (40)	3 (60)				
Type of family						
Nuclear	116 (37.66)	192 (62.34)	3.59	0.46		
Joint	33 (35.86)	64 (64.14)				
Staying with whom						
Family	131 (34.93)	244 (47.50)	11.2	0.02		
Friends	11 (23.80)	10 (70.20)				
Alone	2 (50)	2 (50)				

(Table 3) Out of the 144 self-medication practitioners, maximum influencing factor for self-medication was found as to lack of time to visit the doctor 53(36.80%) followed by to save money 50(34.72%). Source of information for self-medication practice was commonly over the counter from pharmacists/compounder and previous prescription by the doctor or left over medicines.

Factors influencing self-medication Practices	Total n= 144*	Percentage
To save money	50	34.72
Apprehension of doctor	40	27.77
Embarrassment issue	23	15.97
Lack of time to visit Doctor	53	36.80
Non-availability of doctor	15	10.41
Long queue at doctors clinic	19	13.19
Left over medicine from once used earlier	40	27.77
Doctor's advice is not needed for common illnesses	41	28.47
Any other (Quacks/ traditions/ beliefs)	03	2.08
Sources of information	Total	Percentage
Previous prescription by a Doctor for similar condition	45	31.25
Over the counter from pharmacist / compounder	78	54.16
Advised from friends or relative or neighbors	33	22.91
Advertisement on TV/Radio / News paper / Banner / Internet	19	13.19
Total	144	100

(Table 4) It was found that irrespective of gender, knowledge was not satisfactory, about dose of drug/medicine used 36 (25.%), duration of treatment 22 (15.27%) and side effects of drug /medicine used 17 (11.80%) respectively out of 144 self-medication users.

Respondents characteristics	Knowledge about characteristics of drugs	
	Correct n (%)	Incorrect n (%)
All self medicating participants (n=144)		
Dose of Drug/ Medicine	36 (25)	108 (75)
Duration of Treatment	22 (15.27)	122 (84.73)
Side effects of drug / medicine	17 (11.80)	127 (88.20)
Male (n=75)		
Dose of Drug/ Medicine	17 (22.66)	58 (77.34)
Duration of Treatment	9 (12)	66 (88)
Side effects of drug / medicine	5 (6.66)	70 (93.34)
Female (n=69)		
Dose of Drug/ Medicine	19 (27.53)	50 (72.47)
Duration of Treatment	13 (18.84)	56 (81.16)
Side effects of drug / medicine	12 (17.39)	57 (82.61)

DISCUSSION-

Thus Prevalence of self- medication in the study conducted was found 36% (CI 95 % 31.45% - 40.82 %). Findings of our study were similar to studies of Pandve et al (2009)¹⁴ where prevalence of self-medication was 32.77 %. Deshpande and Tiwari et al (1997)¹⁶, Durgawale et al.(1998)¹⁵, stated the prevalence of self-medication 31%,34.5 % respectively.

But Phalke et al.revealed the high prevalence to be 81.51 %¹³. Kalaiselvi et al(2014)⁶ stated 11.9% prevalence.

Wide range of prevalence may be because of knowledge, accessibility and different geographical area of study population ,different socio-demographic population, cultural practices, seasonal variation of illnesses, health seeking behavior of the people and considered recall period, region selected.

Common factor influencing self-medication was found to be Lack of time to visit Doctor 36.80 %, followed by the factor to save money were 31.25%. The factor of Non-availability of doctor was uncommon10.41%.

Similar findings were shown by (Kalaiselvi et al.2014)⁶,Pandve et al (2009)¹⁴, Durgawale et al(1998)¹⁵, Phalke et al.(2006)¹³,Shankar et al(2002)⁵

It was observed that, out of total 144 self-medication users, correct knowledge was found 25 %,15.27% and 11.80 % participants, about Dose of Drug/Medicine, Duration of Treatment and Side effects of drug /medicine respectively. Similar findings were shown by Pandve et al.(2009)¹⁴ Phalke et al.(2006)¹³.

STRENGTH-

This study may be considered one of the very few studies to assess self medication practices in the Rural community of Alandi town

LIMITATIONS -

1. Only one year prevalence of self medication was assessed.

CONCLUSION-

1. The prevalence of the self-medication practice was 36 %.
2. Association observed between education status and self-medication practice was significant.
3. Knowledge of participants regarding characteristics of drugs used, like dose, side effects and duration of treatment was not satisfactory.
4. Influencing factor for self medication was observed as time and money constraints.

Recommendations -

Health education is required about the disadvantages of self-medication and misuse of drugs.

CONFLICT OF INTEREST - No

REFERENCES -

1. World Health Organization (WHO). Contribution to updating the WHO Guideline for Developing National Drug Policies. Report of a WHO Expert committee meeting, 1995.
2. WHO Drug Information General Policy Issues Vol. 14, No. 1, 2000
3. The Role of the Pharmacist in Self-Care and Self Medication. World Health Organization 1998. Report of the 4th WHO Consultive Group on the Role of the Pharmacist. The Hague, The Netherlands 26-28 August 1998
4. World Self -Medication Industry 2005 (WSIM), The Story of Self-Care and Self Medication. 40 years of progress, 1970-2010. <http://www.wsmi.org/wp>
5. Shankar PR, Partha P, Shenoy N. Self-medication and non-doctor prescription practices in Pokhara valley, Western Nepal: a questionnaire-based study. BMC Family practice. 2002;3(1):17
6. Kalaiselvi Selvaraj, S. Ganesh Kumar, and Archana Ramalingam. Prevalence of self-medication practices and its associated factors in Urban Puducherry, India. Perspectives in Clinical Research 2014;5(1): 32-36
7. Akram Ahmad, Muhammad Umair Khan et al Evaluation of Knowledge, Attitude and Practice about Self-medication among Rural and Urban North Indian Population International Journal of Pharmaceutical and Clinical Research 2015; 7(5): 326-332
8. Jain P, Sachan A, Singla RK, Agrawal P. Statistical study on self medication pattern in Haryana, India. Indo Global J Pharm Sci. 2012;2(1):21-35.
9. Weebly online Prasad's Social Classification for 2017
10. Epi info 2002, software package; CDC Atlanta, 2002
11. WINPEPI software the latest update (version 3.85) Aug. 23, 2016 WinPepiSetup.exe.
12. Phalke VD, Phalke DB, Durgawale PM. Self-medication practices in rural Maharashtra. Indian journal of community medicine. 2006;31(1):34.
14. Pandve H.T. et al Self Medication Practices in an Urban community, Maharashtra, 2009;2-30
15. Durgawale PM. Practice of self medication among slum dwellers. Indian J Public Health 1998;42: 53-55.
16. Deshpande SG, Tiwari R. Self medication: A growing concern. Indian J Med Sci, 1997;51(3):93-97