Research Article

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Self-medication practices in rural Aligarh, Uttar Pradesh, India

Mohd Tabish Khan*, Anees Ahmad, Najam Khalique, Mohammad Athar Ansari, Mohd Maroof, Mohd Najmul Aqib Khan

Department of Community Medicine, J. N. Medical College, AMU, Aligarh, Uttar Pradesh, India

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*Correspondence: Dr. Mohd Tabish Khan, E-mail: ftm_786@yahoo.co.in

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ABSTRACT

Background: Self-medication is the use of medication by a patient on his/her own idea or on the suggestion of pharmacist on the opinion of a lay person instead of taking the advice of consulting a medical practitioner. Self-medication is the rising form of self-care and it is becoming a major problem in making the correct diagnosis. The objective was to study the prevalence of Self-Medication among rural population, to identify common aliment for Self-Medication and to find out reasons of Self-Medication.

Methods: A cross sectional descriptive study was carried out in rural field practice area of Rural Health Training Centre, Department of Community Medicine, J.N. Medical College, AMU, Aligarh, Uttar Pradesh, India. A total of 424 adults aged 18 years and above were included in the study. The sample was drawn using systematic random sampling with probability proportionate to size. Data was collected using pretested and predesigned questionnaire. Data was analysed by using SPSS 20. Chi square test was used. P value <0.05 was considered as significant.

Results: The prevalence of Self – Medication in the study population was 72% with no statistically significant gender difference. The common ailments necessitating self-medication were injury (80.3%), fever (76.5%), abdominal problems and diarrhoea (73.8%), respiratory problems (73.5%) etc. The major reasons for self- medication were found to be mild illness (52.1%), cost saving (50.3%), convenience (45.1%) etc.

Conclusions: The study concluded that Self Medication was present in approx. three- fourth of the population. Therefore, steps in the form of information, education and communication are needed to make public aware about the ill effects of self-medication.

Keywords: Practices, Rural, Self-medications

INTRODUCTION

In developing countries like India there is a wide range of disease occurrence coupled with inadequate provision of health care services. This results in increase proportion of drug usage as it reduces the load on the medical services. Self-medication can be defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, treatment or monitoring of treatment.

In several studies it has been found that inappropriate self-medication results in wastage of resources, increases resistance of pathogens and generally entails serious health hazards such as adverse drug reactions, prolonged suffering and drug dependence. On the other hand if done appropriately, self- medication can readily relieve acute medical problems, and can save time spent in waiting to see doctor, may be economical and can even save lives in acute conditions.¹

Self-medication is flourishing due to various factors like socioeconomic factors, lifestyle, previous experience of treating a similar illness, ready access to drugs and the increased potential to manage mild illness through selfcare. There are only a few studies available on the practice of self-medication in rural areas. This study was

planned with the objectives to find the prevalence of selfmedication practices in the rural population, to identify common aliment for self-medication and to find out reasons of self-medication.

METHODS

The present study was a community based cross-sectional study conducted among adults aged 18 years & above residing in the rural field practice areas of Rural Health Training Centre, Department of Community Medicine, Jawaharlal Nehru Medical College, Aligarh Muslim University, Aligarh, Uttar Pradesh for a period of one year from July 2014 to June 2015.

Sample size calculation

Sample size was determined by formula

n=
$$z^2 P (100-P) / (d)^2$$

For confidence interval= 95%, z = 1.96
n = $(1.96)^2 p (100-p)/d^2$, q= 100- p

Since, no good prior knowledge about the prevalence was available; the sample size was calculated by anticipating p to be 50%. Absolute precision (d) was taken as 5%.

Substituting the values =
$$\frac{1.962 \times 0.25}{(0.05)2} \approx 385$$

Adding a non-response rate of 10% = 385 + 38.5 = 423.5 = 424

After excluding non- co-operative adults (n=27), the remaining 397 adults were sampled using systematic random sampling with probability proportionate to size (PPS).

Inclusion criteria

• Individual's ≥18 years of age, irrespective of sex, from registered families under RHTC.

- Individual have had an episode of illness within the six months of the data collection date were recruited.
- Individuals who gave consent to be part of study.

Exclusion criteria

- Below 18 years of age.
- Individual did not have an episode of illness within the six months of the data collection date were recruited.
- Individuals who did not give consent

The data was collected using predesigned and pretested questionnaire. Informed verbal consent was taken from each individual. The nature and consequences of study were explained and confidentiality was maintained. The study was approved by Institutional Ethics committee.

Data analysis was done using SPSS 20. Chi- Square test was used to find association of prevalence of Self-Medication with gender. P value <0.05 was considered as significant.

RESULTS

The prevalence of Self-Medication was 72% among the study population. The prevalence of Self-Medication was not significantly associated with gender (Table 1).

Table 1: Prevalence of self-medication among study population (N=397).

Male N (%)	Female N (%)	Total N (%)
95 (72.51)	191 (71.8)	286 (72)
36 (27.49)	75 (28.2)	111 (28)
131 (100)	266 (100)	397 (100)
	N (%) 95 (72.51) 36 (27.49)	N (%) N (%) 95 (72.51) 191 (71.8) 36 (27.49) 75 (28.2)

 χ 2 = 0.022, df = 1, p= 0.881.

Table 2: Common ailments for self-medication (N=397).

Illness/Symptoms	Rural		
	Self N (%)	Prescribed N (%)	Total N (%)
General problems	174 (62.6)	104 (37.4)	278 (100)
Abdominal problem & diarrhoea	138 (73.8)	49 (26.2)	187 (100)
Other head & neck manifestations	108 (59)	75 (41)	183 (100)
Eye manifestations	90 (58.4)	64 (41.6)	154 (100)
Urogenital manifestations	108 (73)	40 (27)	148 (100)
Respiratory problems	191 (73.5)	69 (26.5)	260 (100)
Fever	182 (76.5)	56 (23.5)	238 (100)
Skin lesions	72 (61)	46 (39)	118 (100)
Injury	61 (80.3)	15 (19.7)	76 (100)

The common ailments necessitating self-medication were injury (80.3%), fever (76.5%), abdominal problems and diarrhoea (73.8%), respiratory problems (73.5%) urogenital manifestations (73%), general problems (62.6%), skin lesions (61%), other head and neck manifestations (59%), and eye manifestations (58.4%) (Table 2).

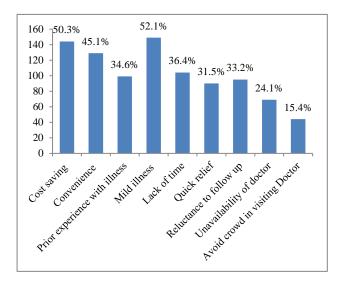


Figure 1: Reasons for self-medication (N=397).

The major reasons for self- medication were found to be mild illness (52.1%), cost saving (50.3%), convenience (45.1%), lack of time (36.4%), prior experience with illness (34.6%) followed by reluctance to follow up (33.2%), quick relief (31.5%), unavailability of doctors (24.1%).

These findings constitute some of the major concerns of this study and they have implications for health human resource managers in particular as they relate the health and welfare of the caregiver (Figure 1).

DISCUSSION

Wide variations in the prevalence of self-medication were reported by many researches across the world. Researchers from various parts of India reported similar prevalence of self-medication as compared to this study. A cross sectional study done in rural Kolar found that 76% were practicing self-medication.³

Another cross sectional study in rural area of Barabanki found that 69.6% of individual were practicing self-medication. There is no sex difference observed for self-medication use in this study.⁴

Other scholars presented a higher prevalence of self-medication as compared to this study in rural area of Karad taluka in Western Maharashtra found that prevalence of self-medication was found to be 81.5%.⁵ While other researchers reported a much lower prevalence of self-medication 54.7% of rural population

were found to be self-medicating in compared to this study.⁶

Other researchers also reported similar aliments like fever (72.6%), pain (64.3%) and respiratory symptoms (57.1%), followed by infections, headache and diarrhoea, etc. for self- medication as compared to this study. Similar aliments for self- medication was shown in study conducted by Ahmad et al were headache and other pain, fever, urinary tract infection, cough and cold. 7

Keshari et al reported that the most common reasons for self-medication are Time saving (45.2), High cost of consultation (42.3%), minor illness (Doctor's advice not needed) (39.9%), convenience (25.0%).⁴

In an another study conducted by Kaushal et al in Rohtak found that the most common reasons for self-medication were financial restraints and lack of time to go to the medical practitioner.⁸

CONCLUSION

The study concluded that self-medication was present in approx. three- fourth of the population. Therefore, steps in the form of information, education and communication are needed to make public aware about the ill effects of self-medication.

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Ethical approval: obtained from the Ethical Committee of the J.N. Medical College, AMU, Aligarh which reviewed the proposal, questionnaire, and consent form before providing clearance.

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