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Research Article

SELF-MEDICATION PRACTICES IN AN URBAN EDUCATED COMMUNITY

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Abstract

Aim: The aim of the present study was to assess the extent of self-medication practices in the sampled population and to identify the predictive factors of such self-medication.

Materials and methods: A descriptive, cross-sectional, questionnaire-based survey was conducted in 400 people, aged above 18 years, with a minimum qualification of 12th standard, in and around Bangalore city.

Results: Prevalence of self-medication was found to be 74.25% in the study group. An increased pattern of self-medication was observed in the under 45 age group – 70.35%. A proportionately larger number of females were self-medicating (n=186, 93%) than males (n=111, 55.5%). Antipyretics (74.1%) and analgesics (62.8%) were the most common class of drugs used for self-medication. The reasons for self-medication cited by majority of participants were minor illness/too trivial for consultation (47.5%), time saving/no waiting time in hospital (38.3%) and less expensive (25.9%). The commonest source of drug information was old prescriptions (49.6%), followed by information provided by friends/relatives (26.6%) and the pharmacists (17.8). 60.3% of the participants were aware of the adverse consequences of self-medicating and an alarming 72.7% were still willing to continue the practice.

Conclusion: The prevalence of self-medication is considerably high in urban community. Young individuals, especially females should be made aware about the serious implications of self-medication. Easy accessibility to health care facilities and measures to curb long waiting periods remains the cornerstone for limiting self-medication.

Keywords: educated, self-care, self-medication, urban

Introduction

Feeling unwell and suffering from illness is a common human experience. People throughout the world encounter common health problems and their symptoms are roughly the same. However, the actions or decisions that follow vary depending on the perceptions, awareness and experiences of individuals[1]. The bulk of all care in illness is self-care, which is the oldest and the most widely used behavioral form to promote or restore their health[2]. Encouraging patients in practicing self-care is viewed as a positive step in giving them responsibility and building their confidence to manage their own health[3].

People hold the view that medicine should be used in the event of any sickness or discomfort. Self-medication is a form of self-care. Self-medication is practiced by a large part of the population irrespective of their relation with field of medicines[4]. Self-medication can be defined as obtaining and consuming drugs without the advice of physician either for diagnosis, prescription or surveillance of treatment. This includes acquiring medicines without a prescription, resubmitting old prescriptions to purchase medicines, sharing medicines with relatives or members of one's social circle or using leftover medicines stored at home[3,5].

It is now accepted that self-care in the form of responsible self-medication can be beneficial for patients, healthcare providers, the pharmaceutical industry and governments. The World Health Organization (WHO) has also recognized the validity of self-medication in a variety of settings[3]. However, self-medication is far from being a completely safe practice, particularly in the case of non-responsible drug usage. Improper self-medication may delay diagnosis and facilitate the emergence of resistant microorganisms and iatrogenic illnesses. Even if the drugs are used correctly, self-use may be associated with adverse drug reactions, drug interactions, may also affect adherence to treatment and quality of life[6].

The practice of self-medication has long been in existence world-wide, and the situation is even worse in developing countries where high prevalence has been reported. Several factors contributing to the prevalent trend of self-medication in the developing world, particularly in India include inadequate health services, availability of a wide array of over the counter drugs, poor regulatory practices and the relatively higher prevalence of infectious diseases[5,7,8].

One of the documented predictors of self-medication is level of education. Studies have shown that the person's educational level is positively associated with self-medication[8,9]. Despite the growing research interest in self-

medication, adequate information is still not available about this major determinant. Therefore, the present study was carried out to assess the extent and pattern of self-medication practices in an urban community, which represents a socio-economically and educationally privileged population.

Materials and Methods

The study was a cross-sectional, descriptive, questionnaire-based survey conducted for a period of 3 months during 2013, in and around Bangalore, a metropolitan city in South India. 400 people aged above 18 years and having a qualification of more than 12^{th} standard were randomly selected. To avoid gender bias, equal numbers of male and female participants (i.e. 200 each) were included in the study. An informed consent was obtained and the purpose of the study was explained to them.

The participants were first asked if they had ever practiced self-medication in their lifetime. Those who replied in the affirmative were further interviewed using a structured questionnaire which was prepared after an extensive literature search. The questionnaire consisted of two parts: first part consisted of demography while the second part included questions regarding the practice of self-medication. The questionnaires were assessed for their completeness and the data collected was analyzed using SPSS (Statistical Package for Social Sciences) software version 11.5. The results obtained were presented using descriptive statistics (i.e. numbers and percentages).

Results

Basic demographic details:

A total of 297 participants replied affirmatively regarding usage of self-medication, which amounts to a prevalence of 74.25% among the study participants. A proportionately larger number of females were self-medicating (n=186, 93%) than males (n=111, 55.5%). An increased pattern of self-medication was observed in the under 45 years age group – 70.3%. Undergraduates (76.1%) constituted a majority of the respondents. The demographic characteristics of the study participants indulged in self-medication is shown in Table 1.

Findings related to usage of self-medication: Conditions which were treated by self-medication include fever (71%), cough and cold (68.2%), headache and bodyache (64%). Figure1 shows the common drug categories used for self-medication. Antipyretics (74.1%) and analgesics (62.8%) were the most common drug groups used by the participants.

Most of the participants preferred allopathic medicines (79.1%). A trend towards use of homeopathy (11.1%) and ayurvedic medicines (8%) was also observed.

Table 2 shows that 47.5% of the total respondents self-medicated as they did not feel a need to consult a doctor for minor illness. 38.3% respondents said that they prefer self medication to avoid long waiting periods at clinics and hospitals and to save time.

Table 1: Demographic details of respondents practicing self-medication.

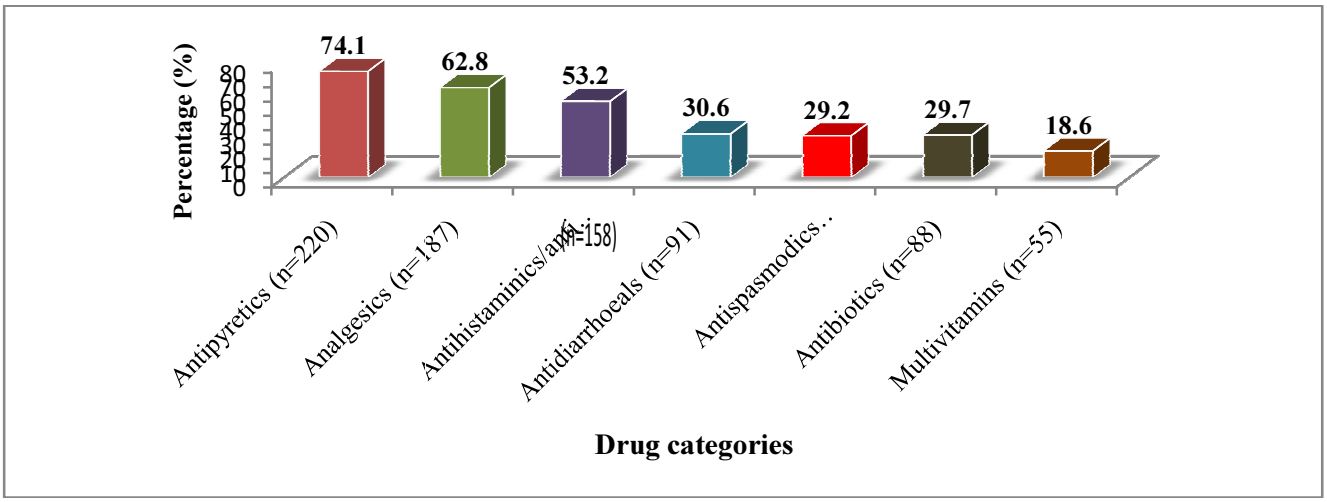
Parameter		Number(n)	Percentage (%)
Gender	Male	111	55.5
	Female	186	93
Age (in years)	18-30	97	32.6
	31-45	112	37.7
	>45	88	29.7
Level of education	Undergraduate	226	76.1
	Postgraduate	71	23.9

Table 2: Reasons for practicing self medication.

Reasons cited for self-medication*	Number	Percentage (%)
Minor illness/too trivial for consultation	141	47.5
Time saving/No waiting time	114	38.3
Less expensive	77	25.9
Privacy issues	20	6.8
Emergency/Odd hours	14	4.7

a)* Multiple responses-Total does not add up to 100%.

Figure 1: Drug categories commonly used for self-medication*

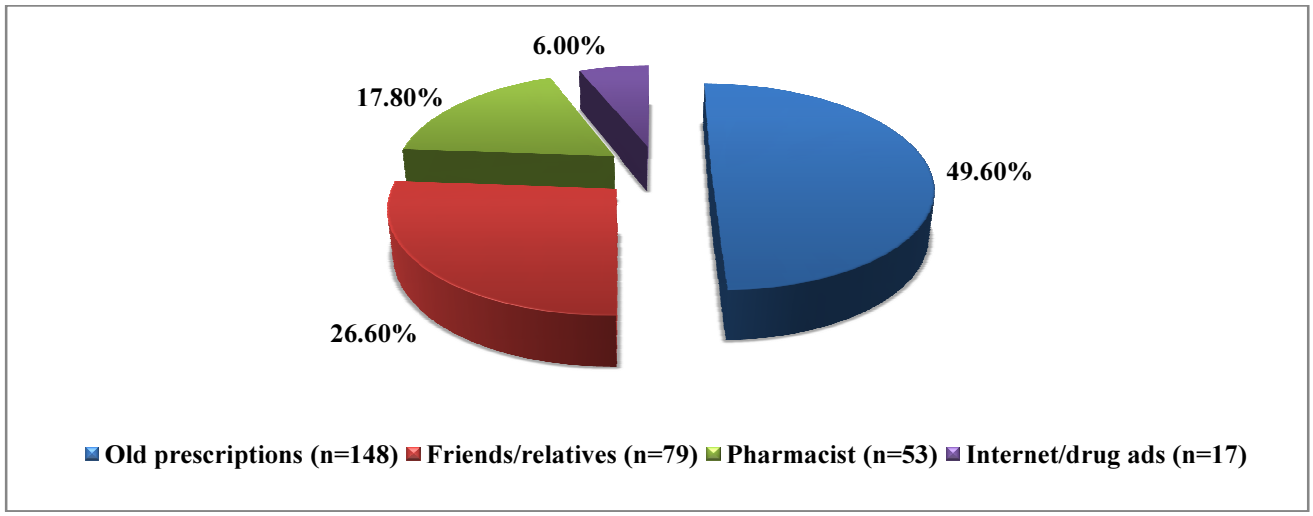


a)* Multiple responses-Total does not add up to 100%

b) Antipyretics and analgesics – Most commonly used drugs

A total of 49.6% of the respondents confirmed to receive information for self medication from old prescriptions provided during their prior illness. Information from friends/relatives, pharmacists and drug advertisements/internet comprised 26.6%, 17.8% and 6% respectively as shown in Figure 2.

Figure 2: Source of drug information.



a) The most common source of drug information – Old prescriptions

Nearly two-thirds of the study population (60.3%) was aware of the adverse consequences of improper self-medication. However 72.7% of respondents expressed their willingness to continue with self-medication practice.

Discussion

Self-medication, as form of self-care is a global trend that is encouraged when it deals with minor illness[10]. The WHO has emphasized that self-medication must be correctly taught and controlled[11]. Self-medication is one of the rapidly growing areas of concern to medical professionals, government and the general public. Self-medication, though initially results in rapid distress reduction, in the long run however, may cause serious health problems[7]. A rise in self-medicating trends is visualized in the developing world. Growing empowerment resulting from improved educational levels, greater access to health information and increased individual interest about one's own health are a few factors worth mentioning[3].

The current study examined the self-medicating trends in an urban setup, particularly in the educated population. The prevalence of self-medication in our study participants was found to be 74.25%. A similar prevalence rate has been

demonstrated by two other studies conducted in South India[12,13]. Self-medication is high in the urban population and the same has been supported by a study which compared self-medication practices in urban and rural population[14]. Grover et al, reported a prevalence rate of 93.9% in urban people[15].

Health seeking is a dynamic process determined by certain socio-demographical factors and the level of education is one of the major determinants in the analysis of self-medication. People who are highly educated are exposed to a wider scope of information on health matters[9,15]. The high prevalence rate in our study may be attributed to the education status of the respondents who had a minimum qualification of 12th standard. These findings are consistent with the study conducted by Sharma R et al, who reported a significantly higher knowledge related to dose, duration and adverse drug reactions in the group who were educated more than 12th standard[16].

The present study reported a higher rate of self-medication in the age group below 45 years, a finding reported by two more studies[3,7]. Easy access to a surplus of drugs available over the counter coupled with the care-free and risk prone attitude of the youth may be attributed to the high rate of self-medication in this age group. Gender is considered an important factor in self-medication practice[12]. In our study a higher percentage of females were self-medicating than males. Similar observations were made in studies from India and abroad[12,13,17]. Evidence suggests that women have more symptoms from acute and chronic conditions than men do, although these conditions are less life-threatening. The more frequent symptoms among women lead to more drug use (WHO 1993)[11].

Majority of our study participants followed allopathic system of medicine, a finding supported by other Indian studies[12,18]. The commonest illness that led to self-medication includes fever, headache and respiratory conditions, reported similarly in other studies[5,12]. The trend of increased use of drugs for self-limiting conditions is noteworthy. Antipyretics and analgesics were the most common class of drugs self-medicated by majority of the study participants. Similar observations were made in studies from India (Kumar N, et al and Shveta S, et al) and abroad (Lawan et al and Zafar SN, et al)[12,5,7,19].

The main reason for self-medication among the respondents was a common notion of not consulting the doctor for minor illness. This finding is consistent with the observation made by Kumar et al[12]. However, economic reasons and quick relief from illness were the common reasons cited by respondents in other studies from India and abroad

respectively[3,18,14]. Previous prescriptions for the same illness was reported as the most common source of drug information, which was similar to the observations made by two other studies[12,20].

A large number of our respondents were willing to continue with self-medication despite majority being aware of its harmful effects. Zafar et al, too reported similar findings in educated youth[19]. The awareness level about adverse effects was quite high in our study group which is in sharp contrast to two other Indian studies (Phalke et al-19.5% and Balamurugan – 6.5%)[18,13]. This may be attributable to the higher level of education in our study participants.

Conclusion

Self-medication seems to be the expression of self-reliance and is more common among people in urban community, with higher levels of education and greater health care awareness. Prevalence of self-medication is high in the educated youth, despite majority being aware of the harmful effects. A holistic approach should be taken to address this issue so as to ensure safe practices. Young individuals and females in particular should be made aware about the serious implications of self-medication. The concerned health departments and regulatory authorities should strengthen efforts towards educating general public about the dangers of indiscriminate and inappropriate drug use and enforcing strict policies in drug marketing and sales. Improving access of the general public to qualitative and affordable medical care and measures to curb long waiting periods, safeguards them from the dangers of self-medication.

Limitations of the study

A questionnaire-based study mainly depends on the information provided by the respondents. Hence the chances of recall bias needs to be considered. The study findings are based in a subset of urban population and the observations cannot be generalized per se. Further multicentric studies on the knowledge, attitude and practices of self-medication may give insight in to the changing patterns of drug use in communities.

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