Conditions leading to Self-medication practices among outpatients of a private tertiary care Hospital in Karachi

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ABSTRACT

This cross-sectional observational study was conducted to determine the conditions leading to practices of self-medication among outpatients at tertiary care hospital, Karachi, from 10th July 2019 to 25th October 2019. A total of 238 patients were included using systematic random sampling technique while data were collected by means of interview using the study questionnaire. The study results showed that the most common condition leading to self-medication was fever or headache (57.0%), the most common medicine types used for self-medication were antipyretics or analgesics (61.8%) whereas the most common reason leading to self-medication was prolonged waiting in hospital/convenience (26.7%). It was concluded that fever or headache was the most common factor resulting in the practice of self-medication that was done mostly with antipyretics or analgesics.

Keywords: Self Medication, Patients, Attitude, Drugs

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INTRODUCTION

Self-medication is defined as "the taking of drugs, herbs or home remedies on one's own initiative, or on the advice of another person, without consulting a doctor[1]." Globally, the prevalence of self-medication has been reported to vary greatly[2]. As per the World Health Organization estimates, half of all patients don't take the prescribed medicines correctly[3]. Irrational use of medicines includes, but is not limited to, inappropriate self-medication and non-adherence to dosing regimens[3]. Such practices may results in inappropriate, incorrect, or undue therapy, pathogen resistance and increased morbidity[4]. In a world with ever increasing disease burdens and shortages of already scarce resources, such practices are uncalled for. Rational self-medication practices based on medical and scientific data have been considered favorable though[5], particularly in settings with overburdened healthcare systems. Certain interventions have been suggested by the World Health Organization in order to ensure rational use of medicines and to curb self-medication practices; these include establishment of a multidisciplinary national body to coordinate policies on medicine use, development and use of national essential medicines list, establishment of drug and therapeutics committees in districts and hospitals, educating masses about medicines and sufficient government expenditure to ensure availability of medicines and staff[3]. Although self-medication practices have been explored earlier by numerous studies in the international literature, there aren't many recent studies conducted locally in this regard[6]. This study was therefore conducted with an objective to determine the conditions leading to practices of self-medication among outpatients visiting a private tertiary care hospital of Karachi.

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METHODOLOGY

This observational cross-sectional study was carried out at the outpatient department of Fatima Hospital, Baqai Medical University, Karachi, from 10th July 2019 to 25th October 2019. Keeping the prevalence of self-medication at 50%, with 95% confidence level and 6.5% precision, the sample size was calculated to be 228 participants. The inclusion criterion of the study was being aged 18 years or above of either gender whereas the exclusion criterion of the study was refusal to give verbal informed consent. A total of 238 patients were included in the study using systematic random sampling technique. The patients were interviewed using the study questionnaire that was tested both for face validity and reliability. It contained questions about socio-demographic characteristics of the study

participants as well as their self-medication practices. The questions about self-medication practices were asked only from those participants who practiced self-medication (n=165). The data were entered and analyzed on statistical package for social sciences version 21. Descriptive analysis was performed by calculating frequencies and percentages for categorical variables and means and standard deviations for continuous variables.

RESULTS

A total of 238 patients were included in the study with a response rate of 100%. The mean age of the study participants was 34.34±11.97 years, 56.3% (n=134) of them were males, 26.1% (n=62) were illiterate while 19.3% (n=46) were able to read and write, 70.2% (n=167) had monthly household income <25000 Rs., 33.6% (n=80) were Sindhi speaking while 18.5% (n=44) were Pushto speaking, 73.1% (n=174) were currently married, 67.6% (n=161) lived in joint family system whereas 43.3% (n=103) were employed/self-employed. Moreover, 69.3% (n=165) of the patients did self-medication.

Table-I: Common conditions, medicine types and reasons for self-medication (N=165)

Variables (n=165)	Count (%)
Most common condition leading to self-medication	
Fever/Headache	94 (57.0)
Cough and Common Cold	23 (13.9)
Muscle and Joint Pain	20 (12.1)
Hyperacidity and GIT Problems	9 (5.5)
Throat and Chest Infections	5 (3.0)
Insomnia	4 (2.4)
Gynecological Problems	4 (2.4)
Dermatological Problems	2 (1.2)
Urinary Tract Infections	2 (1.2)
Ophthalmic Problems	1 (0.6)
Others	1 (0.6)
Most commonly used medicine type for self-medication	
Antipyretics/Analgesics	102 (61.8)
Antibiotics	12 (7.3)
Antitussives	11 (6.7)
Antihistamines	9 (5.5)
Homeopathic Medicines	9 (5.5)
Anxiolytic/Antidepressants	6 (3.6)
Antacids	6 (3.6)
Antiemetics/Antidiarrheals	4 (2.4)
Vitamins/Tonic	3 (1.8)
Herbal Medicines	2 (1.2)
Other	1 (0.6)
Most common reason leading to self-medication	
Prolong Waiting in Hospital/Convenience	44 (26.7)
Mildness of Illness	38 (23.0)
Economic Reason/Cost of Physician's Service	36 (21.8)
Familiarity with the Disease/ Previous Experience with Treatment	34 (20.6)
Non Availability of a Doctor/ Lack of a Trustworthy Physician	5 (3.0)
Lack of Healthcare Facilities	6 (3.6)
Privacy	2 (1.2)

While assessing the common conditions, medicine types and reasons for self-medication, out of 165 participants that self-medicated, 57.0% (n=94) participants reported the most common condition leading to self-medication to be fever or headache whereas 61.8% (n=102) participants reported the most common medicine type used for self-medication to be antipyretics or analgesics. Furthermore, 26.7% (n=44) participants reported the most common reason leading to self-medication to be prolong waiting in hospital/convenience, 23.0% (n=38) reported mildness of illness, 21.8% (n=36) reported economic reason/cost of physician's service while 20.6% (n=34) reported familiarity with the disease/previous experience with treatment (Table-I).

Table-II: Self-medication practices of the patients (N=165)

Variables (n=165)	Count (%)
Most common source of information about the medicine used for self-medication	
Previous Prescriptions/Pharmacist	93 (56.4)
Friends/Relatives	59 (35.8)
Drug Advertisement/Internet	10 (6.1)
Others	3 (1.8)
Most common method of getting medicines from a pharmacy	
Showing any Previous Prescription	68 (41.2)
Telling the Name of the Drug	59 (35.8)
Telling the Sign and Symptoms of Illness	38 (23.0)
Check the expiry date of any medicine before self-medication	
Yes	65 (39.4)
No	100 (60.6)
Read the instruction for use of any medicine before self-medication	
Yes	22 (13.3)
No	143 (86.7)
Check the potential adverse effects of any medicine before self-medication	
Yes	20 (12.1)
No	145 (87.9)
Ever adjusted the dose of any medicine prescribed by a doctor	
Yes	81 (49.1)
No	84 (50.9)
Ever advised someone else to self-medicate	
Yes	83 (50.3)
No	82 (49.7)

While assessing the self-medication practices of the patients, 56.4% (n=93) participants reported the most common source of information about self-medication to be previous prescriptions or pharmacists whereas 41.2% (n=68) participants reported the most common method of getting medicines from a pharmacy to be by showing any previous prescription. Moreover, 60.6% (n=100) of them did not check the expiry date of any medicine before self-medication, 86.7% (n=143) of them did not read the instruction for use of any medicine before self-medication whereas 87.9% (n=145) of them did not check the potential adverse effects of any medicine before self-medication.

Furthermore, 49.1% (n=81) participants adjusted the dose of any medicine prescribed by a doctor whereas 50.3% (n=83) participants advised someone else to self-medicate (Table-II).

DISCUSSION

The study results revealed that the most common conditions leading to self-medication were fever or headache (57.0%), cough or common cold (13.9%) and muscle or joint pain (12.1%), a finding well in line with published literature. Selvaraj et al[7] in 2014 reported fever (31%), headache (19%) and abdominal pain (16.7%) to be the most common illnesses leading to self-medication. Similarly, Sridhar et al[8] in 2018 reported headache (37.5%) to be the most common condition treated through self-medication. Likewise, Bhavsar[9] has also reported cough, headache and muscle/joint pain to be most common symptoms for self-medication. This finding was not un-expected, as all these conditions are among the commonest illnesses experienced by an individual which, due to repeated exposure, lead to increased awareness among people about their treatment. The study results also showed that the most common medicine types used for self-medication were antipyretics or analgesics including non-steroidal anti-inflammatory drugs (61.8%). Likewise, Aziz et al[6] in 2018 reported analgesics and antipyretics (39.4%) to be the most common drugs used for self-medication. Similarly findings were reported by Bhavsar et al[9]. The easy availability of both antipyretics and analgesics over the counter in most instances, combined with their use in treating the above mentioned common illnesses, may potentially be the reason for them being the commonest self-medication drugs. Moreover, the most common reason leading to self-medication was prolonged waiting in hospital/convenience (26.7%). In line with the study results, Bhavsar et al[9] has found convenience to be the most common reason behind self-medication. In a resource limited healthcare setting, which is usually burdened due to the need for catering a large population, patients frequently experience prolonged waiting in hospitals. This may persuade them to take matters into their own hands and do self-medication to avoid inconvenience of prolonged waiting. Furthermore, the most common sources of information about self-medication were reported to be previous prescriptions or pharmacists. Joseph et al[10] also reported previous prescriptions (34.2%) to be the most common source of information for self-medication. Similarly, its reported that the pharmacist/chemists to be the most common source of information for self-medication[9]. In case of unaffordability or difficulty of access to healthcare, people often turn to pharmacists as a trusted source of information to seek advice on the treatment of their illness. It was further seen that only 39.4% of the respondents checked the expiry date of any medicine before self-medication. Likewise, Jember et al[11] in 2019 reported 43.2% of the respondents to check expiry date before self-medication. The study results also showed that a majority of the participants (50.3%) advised someone else to self-medicate. Likewise, Selvaraj et al[7] has reported that a majority of the respondents (73.8%) were intending to advice others about self-medication. Overall, the study findings were mostly in agreement with the relevant international literature, lending credibility to the results. They also supplement the available local evidence, thereby enabling better comparisons in the future.

CONCLUSION

It was concluded that fever or headache was the most common factor resulting in the practice of self-medication of patients which in most cases was done with antipyretics or analgesics.

AUTHOR'S CONTRIBUTION

Naqvi SMZH: Conceived idea, Designed methodology, Data analysis, Data interpretation, Manuscript writing
Jafry SIA: Manuscript writing, Literature review, Final Proofreading
Shaikh MA: Manuscript writing

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