



A PROSPECTIVE STUDY ON PATIENTS USING SELF DRUGS IN TERTIARY CARE HOSPITALS

General Medicine

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ABSTRACT

Objectives:The objective was to assess the self-medication patterns and drug use behaviour in patients attending medical op in a tertiary care hospitals in Tamil Nadu, South India,

Materials and Methods: A detailed questionnaire designed to assess the self-medication patterns and drug use behaviour and interview technique was used to elicit the requisite information. Five hundred patients were studied,

Results:Most of the patients were in the habit of keeping the medicines (88%) though only 66% of them were in the habit of using it without any prescription.

Also it was seen that those patients who were taking self-medication were better educated than those not indulged in self-medication.

Suggestions from friends, advertisement on the television, and newspapers. For most of them the reasons for self-medication were financial restraints and lack of time to go to the medical practitioner.

Conclusions;The results emphasize the need for comprehensive measures for intervention strategies to promote rational drug therapy by improving prescribing patterns and influencing self-medication.

KEYWORDS

Drug use behaviour, rational therapy, self-medication

Introduction

Self-medication is defined as the consumption of medicinal products with the purpose of treating diseases or symptoms, or even promoting health, without a prescription provided by a medical professional.

The prevalence of the practice of self-medication depends on many factors like nature of the disease, educational qualification of the person, nonavailability of the specialized person (during travelling or such conditions), etc.

Many part of south India they follow traditional methods first before going for self medication, They try fasting, not providing any diet, then give holy ash and prasadam from temples, then they try house hold remedies, example they take turmeric boiled with milk for cough with expectoration but hot water itself is enough. they prepare varieties of teas with ginger ,or dry ginger, coriander seeds ,pepper, thulasi ,mint leaves, in house itself called grandma or pattivaiththiyam or house hold remedies.

Steam inhalation with plain water , for sinusitis or upper respiratory tract infections, applying lukewarm water in the forehead for fever as tepid sponging .Putting lemon in the fingers or applying mehanthi leaves for paronychia, Applying coconut oil or lime for insect bites,.,Applying coconut oil with camphor for pain in the joints, hot fomentation, Applying turmeric powder, powdered tablets of anything (antibiotic or analgesic) or lime for bleeding wounds, Many of them may not be scientifically proven relives but they are very cheap, easily available, 24 x7 in the house and preparation does not require any expertise

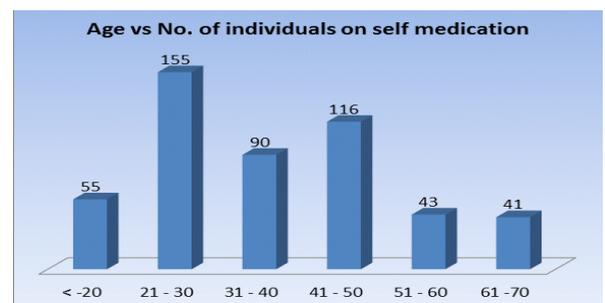
For outdoor injuries applying mud, kerosene, powder, sugar, coffee powder cow dung, leaf extracts from nearby plants will make the attending surgeons work very tough to clean, to suture or to do dressing which will ultimately results in infection tissue necrosis or non healing of ulcers ,even results in amputation if the patient is diabetic or immuno compromised.

On the other hand not getting treatment for herpes zoster, chickenpox

and other viral exanthemas, and fever with rash may cause the patient to increase the morbidity and mortality and prolonged illness spread the illness to others, and various complications at times death.

Medical shops in India

There are many medical shops in India not managed by pharmacists Many medical shop owners starts their carrier as assistant to a shop keeper their main work is to clean the shop ,they promote after two month to two years as purchase in charge to bring medicines from whole sale stockiest to medical shop they learn the art of counter selling by pattern recognition of drug names and from dr's prescription pattern.

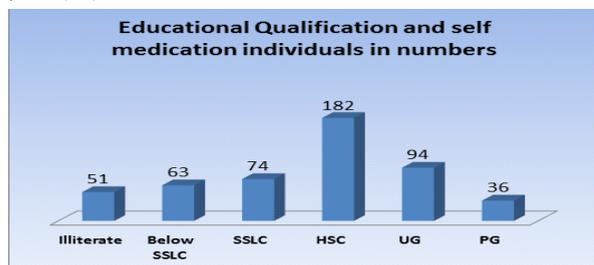


In one study it was seen that 87% of the patients with cough and cold initiated medication on their own for getting relief and this percentage was significantly more in urban people (93.9%) compared to rural subjects (80.6%).(2) In another survey conducted in Hong Kong, 97% of the patients practiced self-medication to a variable extent.(3) Self-medication was found to be significantly low in breast-feeding mothers (3.2%).(4)

Inappropriate self-medication results in irrational use of drugs, wastage of resources, increased resistance of pathogens, entails serious health hazards such as adverse reactions and prolonged suffering.(5)

If action is not taken, the danger of drug interactions and side effects could increase. Safety in self-medication depends on four factors – drug itself (inherent properties of the drug, dose and its duration), formulation, information available with all purchases, and patient compliance.(6)

A number of reasons could be enumerated for the rise of self-medication. One of the reasons being the increase in chronic diseases and their incidence has raised from 30% to 80% in the last 40 years.(5,7)



Other reasons which are responsible for self-medication in developing countries are urge of self-care, feeling of sympathy toward family members in sickness, lack of health services, poverty, ignorance, mis-beliefs, extensive advertisement in t.v., use of drugs from informal sectors such as open markets and quacks , herbal ? natural product? Organic, ?slimming diets , drugs for incurable diseases, dm, impotence, Some authors are of the view that self-medication can be practiced and they consider it appropriate for short-term relief of symptoms where accurate diagnosis is unnecessary, uncomplicated cases of some chronic and recurrent disease (medical diagnosis having been made and advice given).(6)

However, people should be properly educated about the practice of self-medication in order to prevent the harmful effects caused by the practice. The increasing self-medication will require more and better education of both the public and health professionals to avoid the complications arising from this practice.(8,9)

There has not yet been any systematic research conducted to assess the prevalence of self-medication in the community. Thus self-medication in modern pharmaceuticals seems to be a field in which information is scarce.(7)

To the best of our knowledge there is no research conducted to reveal the extent of this problem in India. Therefore we believe that this research may show the magnitude of problem in India so as to initiate intervention by the concerned authorities and the community as well.

Material and Methods

The population of Tamil nadu has very good access to health facilities. There are 7656 health sub centres more than 1649 PHC s (reach with in 7 kms), 23 medical colleges, 30 govt head quarter hospitals 241 taluk and non taluk hospitals, 100 urban phcs, 206 eidispensaries, and lot of charity hospitals , private medical colleges and corporate hospitals , and a lot of ayushcenters , but even in petty shops analgesics, anti cold , and alot of carminative mixutres ,cough syrup, in sachets, are available.

A structured and pretested questionnaire was used to collect the information. self-medication was practiced, cautions taken during self-administration of the drugs, and use of other type of medications other than Allopathy.

Results

A total patients surveyed, out of which proformas were filled by 78 percent were found to be having drugs in their house but only 63% practiced self-medication.

Mis used drugs

analgesics – 91% (paracetamol 46%) (diclo/aceclo18%)(brufen 21) antacids – 64%,antibiotics – 13%nutritional supplements – 23%, cough syrups – 31%, antispasmodics – 14%,topical applications – 34%others –28%

The correct indications of the stored drugs were known to 28% and partial indications to 53%. However 19% of them had wrong impression about the indication of the stored drugs. Many of them stored on the top of the refrigerator which is hot and destroy the drug

immediately

The instructions by the physicians regarding dose, frequency, and duration of treatment were strictly adhered to by 41% patients Only 49% were aware of the fact that the drugs can cause adverse effects if taken without medical advice. Many of them get the (?)knowledge about the the drug from face book and whatsapp unread, un analysed, just forwarded messages almost all are wrong .

Only 44% used proper measures for liquid preparations. Seventy-one percent of the patients were of the opinion that self-medication is not justified but felt that it had to be continued because of financial constraints. (.paying fees to doctors)

Discussion

Self-medication is a significant problem in relation to the rational use of drugs and unwanted adverse effects caused by the drugs. The prevalence of self-medication in this study was found to be 63% compared to that of 27.6% in a study done in Jimma Town,(10) 30% in a study done in Mexico,(9) and 97% in a study conducted in Hong Kong.(3) It was also found that prevalence of self-medication was Self-Medication Patterns and Drug Use Behaviour in found to be higher in well-educated patients compared to the illiterate or people with low education. One of the studies published by an Indonesian journal also highlighted the fact that education level is the dominant factor for the practice of self-medication.(11) A majority of the patients practiced self-medication based on their previous prescription. Another reason for this wide practice was advertisements on the television. In addition to this, friends also constituted 17% of the proportion who guided this irrational practice.

Similar results were also seen in the studies done in Brazil and France. In one of the studies conducted in the Hong Kong the reasons for self-medication included the conditions like musculoskeletal pain, minor burns or bruises, gastrointestinal upset, headache, sore throat, skin problems, cough, and dyspepsia.(3)

Also it was seen in this study that a large number of people were not aware of the potential damaging nature of the different medications self-administered by them

There is an alarming deficiency in the patients' knowledge of the possible side-effects of selfmedication; they should therefore be warned about the danger.”(3)

However some authors consider that self-medication is appropriate.(6) Also World Health Organization is nowadays promoting the self-medication for trivial diseases to save the time and resource wasted in treating the minor diseases.(7)

1	Do you use any medications without medical advice?	212	388
2	What is the motivation/Information Source for Self-Medication?	163	337
3	What are the cautions you observe regarding Self-Medication?	111	389
4	Have you got knowledge regarding the patient information leaflet?	241	259
5	Have you got knowledge regarding prescribing information, e.g., dose, duration of treatment, interaction with food or other drugs?	289	211
6	Do you use any other type of medicines other than allopathic medicines?	56	444
7	How do you decide the dose, frequency and duration of the drug use undertaken by you?	245	255
8	Do you check the expiry date on drug preparations used by you?	401	99
9	Do you feel that self-medication is not justified and you should not take it	446	54
10	Are you aware of the adverse effects of drugs used without doctor's advice?	411	89
11	Which measures do you use for liquid preparations?	265	235
12	Do you keep medications in your house?	289	211
13	Do you have a different place for keeping medications? Where?	312	188
14	Is your medicine closet out of reach of children?	242	258
15	Do you keep medications in a classified manner, e.g., pain relievers, Antidiarrheal?	234	266

In this study along with studying the self-medication some guidelines were also given for the proper use of medicines and their storage and these guidelines are provided

Conclusion:

This study shows that self-medication is quite prevalent among the patients belonging to the middle income group and that most of them are educated too. A majority of patients are not aware of the fact that adverse effects can occur if medication is taken without doctor's advice and it is necessary to check the expiry date of medicine.

So more and better education of both the public and health professionals is required to avoid complications arising from this practice.

Source of Support: Nil

Conflict of Interest: nil

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