SELF-MEDICATION IN RELATION TO HEALTH LOCUS OF CONTROL

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REVIEW ARTICLE

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ABSTRACT

Present study was conducted to examine the association of self- medication and health locus of control. It was also intended to know the health problems for which people do self – medication and the medicines which are more often bought by those who do self-medication. Initially a sample of 200 persons was selected on non-random purposive sampling basis and all the people were asked whether they do self-medication? To this 56% of the respondents answered in yes and the rest said no. These one hundred and twelve participants were then administered a specially prepared checklist for self-medication and multidimensional health locus of control scale. Data were analyzed using the descriptive statistics. Multiple regressions were also used to identify the role of health locus of control in self-medication. Results revealed that health locus of control have a significant role in predicting self- medication.

Keywords: Self- medication, health locus of control.

INTRODUCTION

The concept of health has undergone several changes but the pace of change has been variable. The traditional view of Western medicine defined health as the absence of disease, (1) but now the widely accepted model of health, the biopsychosocial model emphasized the role of biological, psychological and social factors. This model has advantages over the other models as it recognizes the role of biological and psycho-social factors and views health as a positive state. (2)

The activities/actions performed by individuals to keep themselves healthy are called the health behaviors. There are two types of health behaviors viz. health promoting behaviors such as exercising, taking nutritious food and health endangering behaviors like smoking, drinking too much and too often etc. One such behaviour is the tendency for self- medication. Self-medication is a human behaviour in which an individual uses a substance or any other exogenous influence to self-administer treatment for often unmanaged, undiagnosed physical or psychological ailments. Ruiz (2010) (3) defined self- medication as the selection and use of medicines by individuals (or members of the individual's family) to treat self-recognized or self-diagnosed conditions or symptoms. Self-medication has been viewed both negatively as well as positively. In positive perspective several benefits have been seen to be associated with it. (3)

These is increased access to medication, relief to the patient, the active role of the patient in his or her health care, better use of physician and pharmacists skills and reduced (or at least optimized) burden on governments due to health expenditure linked to treatment of minor health conditions. Tough benefits of self- medication are often mentioned by self- medicators yet it is risky also. The risks associated with self-medication practice include incorrect self-diagnosis, delays in seeking medical advice when needed, dangerous drug interactions, infrequent but severe adverse reactions, masking of severe disease and incorrect manner of administration, dosage and choice of therapy. It is also found to be associated with risk dependence and abuse. (3)

While scanning the literature it was observed that though self- medication is a serious issue affecting a large segment of population, yet there is a dearth of studies relating to its

dynamics and underlying mechanisms. It is the researcher's view that there may be several factors associated with it as in case on Non-adherence to medical regimen. These may include age, sex, emotional factors, personal beliefs, economic and environmental factors etc. These may also include social support, cultural norms and personality. (2) Though the precise role of these factors may be delineated by studies to be conducted in times to come yet the available studies highlighted several important issues. One of them is that self- medication is a universal phenomenon and is being practiced everywhere may be less or more. The factors which have been found to be associated with self-medication includes- age, sex, education etc. (4) The prevalence of self-medication has also been found to be variable and different in different studies e.g. in one study on undergraduate medical students in West Bengal it was found to be fifty seven percent. Jain et al. (2012) on the basis of a comprehensive study, taking sample from Haryana (N 1403) reported that around 28.2% of the sample did self-medication. As to which type of medicines are more/less often self-prescribed, studies have highlighted that antibiotics, analgesics, antipyretics, antiulcerics and cough suppressants' and multivitamins are self-medicated. (4) Thus the issue of self-medication is an important issue and need the immediate attention of policy planners, health professionals, educationists, researchers alike.

Though personality has been found to be significantly associated with non-compliance/adherence yet it is not recognized as a global personality trait and it is specific to given situation so is the case seems to be with self- medication, (2) yet there is a need to understand the role of personality in self medication. One important personality factor that affects people's ability to cope with stressful events and is associated with one's health and health promotion is the feeling of personal control that is the confidence that they have some control over the events that shape their lives. The benefits associated with sense of control are reflected in both the classic and current approaches. (2) The classical approach is represented by Rotter's (1966) concept of locus of control, a continuum that captures the extent to which people believe that they are in control of important events in their lives. (5) As per Rotter (1966) the people who believe that they control their own lives have an internal locus of control, where as those who believe that luck, fate or the acts of others determine their lives have external locus of control. (5) Later on the concept was extended and Wallston *et al.*, (1978) had proposed that it is the health locus of control which matter most in the context of health or illness and developed a scale to measure the health locus of control. (6) Studies have reported that the health benefit of internal locus of control is to be seen as to how the health locus of control is associated with self-medication. (7) Therefore the present study was planned to examine the role of health locus self-medication. The objectives of the study were to examine the prevalence of self- medication in the criterion group; to find out the sex differences in self- medication; to know about the most commonly self- medicated medicines; to know about the health people for which people do self- medication and to identify the role of health locus of control in self-medication.

METHOD

Design

Keeping the objectives of the study in mind the survey method was used for collecting data. For the fifth objective a correlation study design was used.

Sample

Initially a sample of one hundred twenty persons from all walks of life from Rohtak (Haryana) was selected on the basis of availability and convenience and these were asked a simple question i.e. Do you practice self- medication? To this 56 persons answered yes and the rest (88) said number in the second phase fifty participants (as six did not turn up) were given a specially designed checklist for self – medication and health locus of control scale. Further, ten medical store were also asked about the no. of people buy medicines at their own and the problems for which they buy medicines at their own. The age of the respondents ranged from 18 to 65 years. There were equal number of male and female participants in the sample

and their educational qualification ranged from 10th to Ph.D.

TOOLS

Self- Medication: The investigator prepared a checklist/ interview schedule for recording the self- medication of the participants. The first question was, "How often you take medicine at your own without doctor's prescription?" It was to be endorsed on four point scale ranging from, "Never (scored as 1)", "Sometime (Scored as 2)", "Often (scored as 3)" and Always (scored as 4)". The second item was, " For what kind of problems you take medicines at your own?" and the respondents were to check on , headache, acidity, stomach upset, body ache, sleep disturbance, temperature, cough and cold. The option of giving any other type of health problem was also given. The third question was, "Name the medicines you usually buy from medical stores at your own without prescription?"

The second part of this checklist was for the medical stores. The first question in it was - Usually how many people on a particular day come to buy medicine at their own without doctor's prescription? The second question was - which are the medicines which people buy at their own? The third question was - which are the problems for which people buy medicines at their own?

Health Locus of Control: For measuring health locus of control of the participants was used. (6) It measures one internal and two external dimensions (Chance and powerful others). Participants were required to mark their responses on a six point scale ranging from , "*strongly disagree*" to , "*strongly agree*" and a scoring weight of 1 (one) and 6 (six) was given respectively. There were six items each for the 'internal', 'chance' and 'powerful others' dimensions of the scale and thus on each the score may range from 6 to 36. It is a standardized scale with strong technical properties. (8)

RESULTS AND DISCUSSION

The obtained data were analyzed using Pearson Coefficient of correlation and stepwise multiple regression and the results are described and discussed in this section. Out of the one hundred and twenty participants in the first phase fifty six reported doing self medication. Thus, about 46.66% of the sample was doing self medication. It is a quit high percent and is more than reported in other studies and near to that reported in a sample of medical undergraduate students. (4) Six participants were not available for the second phase of testing and thus only fifty participants were administered the checklist prepared for self-medication and the health locus of control scale.

With regard to age and sex the data of male and female participants and those of less and more (with respect to age) were compared using t test. It was found that the male and female participants did not differ ($t = 1.23$, $p > 0.05$) in their self – medication behavior. Similarly, age also was not found to make a significant variation ($t = 0.97$, $p > 0.05$) in self- medication behavior of participants. Thus, it was found that the male and female participants differing in age were doing self- medication equally often.

As there was no variation in the self- medication behavior of male and female participants of different age, the self- medication scores of all the participants were taken together and Pearson Coefficients of correlation were calculated to examine its association with age, education and health locus of control(internal, chance and powerful others). To identify the role of education and health locus of control (internal, Chance and powerful others), stepwise multiple regression was done. The results are given in Table 1.

Table 1: Coefficient of correlation and multiple correlation coefficients

COEFFICIENT OF CORRELATION	
Variable	r
Age	0.04
Education	-0.04
Health Locus of control	

Internal	0.66
Chance	0.13
Powerful others	0.06
STEPWISE MULTIPLE REGRESSION	
R	0.657
R^2	0.431
F	36.40, $p<0.01$
β	0.089

Constant=0.10; Predictors = age, education, health locus of control (internal, chance and powerful others); Criterion= self-medication.

Results (Table 1) revealed that the internal health locus of control had significant association (r = 0.66, p <0.01) with self-medication whereas, the age, education, and chance and powerful others dimensions of health locus of control were not found to have significant association with self- medication.

To identify the role of age, education, and health locus of control dimensions (internal, chance and powerful others) in predicting self-medication stepwise multiple regression was done and the results (Table 1) revealed that only the internal health locus of control dimension was found to be the significant predictor. It accounted for 43 percent of variance in self-medication (R=0.657, R2=0.43, F=36.40, p<0.01, β=0.089). All other factors were turned out to be non-significant and were excluded.

Findings of the study thus indicate that only the internal health locus of control dimension of health locus of control was significant predictor of self- medication in the criterion group. It is surprising that the internals have been reported to have a greater degree of control over their health and take a good care of their health and at the same time they are also involved in health endangering behavior(self- medication) at least in case of the participants of the study. (9,10)

As regard to the medicines which are more often self-prescribed by people it was observed that the participants of the study reported to have purchased at their own medicines like Crocin, Seredon, paracetamol, Ibuprofen, avil, D'Cold, Meftal Spas, etc. In addition, ten medical stores were also asked about the commonly self-prescribed medicine. On condition of anonymity the chemist/medical store owners informed that on an average about fifteen to twenty people buy medicines per day at their own. When asked about the kind of problems for which people buy medicines at their own, it was found that the common problems are like, headache, body ache, acidity, fever, pain, cough and cold, stomach upset etc. It was further corroborated by the medical store owners. The self-medication of addictive drugs was neither the aim of the study nor is included in the results.

On the basis of the findings of the study it is concluded that self-medication is done on large scale at least in the sample of the study and it is a very serious threat to their health. Surprisingly, internal health locus of control was a significant positive predictor of self-medication. However, owing to the small sample the findings of the study need to be generalized cautiously and need to be validated.

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CONFLICT OF INTEREST

Authors declare that there are no conflict of interest.

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