



SELF MEDICATION PRACTICES AMONG B.SC. NURSING STUDENTS IN A TERTIARY CARE HOSPITAL IN ASSAM

Dr. Manas Jyoti Kotoky¹, Dr. Gourangie Gogoi², Dr. (Prof.) Ratna Sarma³

¹ PGT, Department of Community Medicine, Assam Medical College and Hospital, Dibrugarh.

² Associate Professor, Department of Community Medicine, Assam Medical College and Hospital, Dibrugarh.

³ Professor and Head of Department, Department of Community Medicine, Assam Medical College and Hospital, Dibrugarh.

ABSTRACT

Self medication is the intake of any type of drug to treat a self diagnosed condition or illness without professional supervision. Improper self medication can lead to various health hazards like adverse drug reactions, dependency and increased pathogenic resistance, to name a few. The objectives were to find out the prevalence of self medication and to study the pattern of self medication practices among the B.Sc. nursing students of the College of Nursing, Assam Medical College and Hospital. A descriptive cross sectional study was conducted among 104 nursing students in the month of October, 2015 to assess the self medication practices of the previous three months. Sampling was done using purposive technique. A pre tested, questionnaire was used. The data was analyzed using SPSS. Majority (58.7%) of students belonged to the age group of 16-20 years. Self medication was reported by 83.7%. Fever was the most common symptom (35.2%). Most (94.3%) of the medicines were allopathic. Most of the students (32.9%) took self medication for quick relief of their condition. Of them 87.5% knew the dosing regimen while 80.6% had prior knowledge of adverse effects. Information regarding drugs were from multiple sources (22.7%). The source of information regarding the medicines was significantly associated with the respondents knowledge regarding the adverse effects of the medicines. ($P < 0.05$). Most of them (38.6%) had consulted a doctor post medication, out of this 18.1% was for verification of treatment. Major source of drug procurement was pharmacy (75%). 70.4% of the students

considered self medication as a part of self care while only 19.3% had the opinion to stop it. As self medication is practiced widely, there is a need to create awareness about the pros and cons of self medication to ensure safe usage of the drugs.

Key Words: Self Medication, Self Care, Adverse Effects, OTC Medicines, Allopathy

INTRODUCTION

Self-Medication can be defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment[1]. It is an important component of patient's behaviour in coping with illness, especially for commonly encountered health problems, which patient believes does not require the need of going to the doctor. [2]The World Health Organization has stated that, " It has become widely accepted that self-medication has an important place in the healthcare system. Recognition of the responsibility of individuals for their own health and awareness that professional care for minor ailments is often unnecessary has contributed to this view."[3].Self medication is considered to be an important component of self care. Self-care may be defined as the care taken by individuals towards their own health and well being, including the care extended to their family members and others.[4] Self medication as a broader term includes the actions taken by the individuals to maintain good physical and mental health and to prevent illness. The medicines which are available for use without the prescription of physician are called "over the counter medicines" or OTCs[5]. Such medicines have a special place in the spectrum of self care and people can use it for minor illnesses without potential major side effects and drug interactions. In some developed countries OTC medicines are even available in the supermarkets. Self medication with judicious use of OTC medicines are termed as "responsible self medication". World Health Organization (WHO) has emphasized the need of responsible self- medication for the prevention and the treatment of common illness.[6] People seek professional medical care when they perceive that the illness they are suffering from is serious enough to warrant proper diagnosis and treatment by a physician. However the scenarios are different in relation to developing or underdeveloped countries. Due to various reasons such as cost of treatment, inadequate health care facilities, absence of stern drug dispensing policies etc. has lead to a significant increase in the practice of irrational self medication in those countries. In India , according to the Drug and Cosmetics Act,1940, schedule H drugs can only be dispensed with a valid prescription. But there are instances where

pharmacist dispense such drugs even without prescription. Increasingly, people are managing a large proportion of their ailments without consulting either a doctor or pharmacist. Yet pharmacists can play a key role in helping people to make informed self-care choices. There are very few legal restraints in OTC drugs and the danger comes in the form of unethical pharmaceutical dispensing who would rather content their monetary desires than to think of the patients' health. Undoubtedly, nursing students are among the health care personnel with the greatest access to medications. Like doctors, they possess an impressive knowledge of prescription drugs and their use in the treatment of various ailments because they have pharmacology as one of their subjects in their curriculum. In one study in India, self-medication was reported among 92% of the medical students in contrast to 59% of the non-medical students.[7]. Easy access to drugs and knowledge of drugs use may have a significant contribution in the prevalence of self medication in health care personnel. There is always a risk of interaction between active ingredients of hidden preparations of OTC drugs and prescription medicines, as well as increased risk of worsening of existing disease pathology or the development of drug resistance. A number of studies have been conducted to study the self-medication among students but a very few on the nursing students. This study was undertaken with the objectives to find out the prevalence of self medication and to study the pattern of self medication practices among the B.Sc nursing students of the College of Nursing, Assam Medical College and Hospital.

MATERIALS AND METHODS:

A cross sectional study was undertaken in the College of Nursing, Assam Medical College and Hospital, a tertiary care hospital in upper Assam, India , in the month of October ,2015. Predesigned pretested questionnaire was used to assess the pattern of self medication amongst 104 nursing students. Sample size was calculated using appropriate formula with a prevalence rate of 43.24% [8] , 95% confidence level, 10% absolute error and a non response rate of 5%. Sample was taken using purposive sampling technique from the nursing students belonging to the 2nd and the 3rd year of the nursing curriculum. A brief introduction about the topic was given to them and the objective behind the study was explained. The procedure for completing the questionnaire was also explained in detail. Informed consent was taken before administering the questionnaire. The students completed the questionnaire in the classroom and returned it back for evaluation. The confidentiality was ensured to the students. Although the students were told to

fill the questionnaire on their own but mutual influences cannot be ruled out. The practice of self medication in the last 3 months was evaluated. The data was analyzed using spss16.

RESULTS:

A total of 104 questionnaires were distributed and were responded. : Majority (58.7%) of students belonged to the age group of 16-20 years. Self medication in the last 3 months was reported by 83.7% of the students. Fever was the most common symptom (35.2%) followed by gastritis(18.3%) alone for which self medication was practiced. 33.3% of the respondents practiced self medication for more than one single symptom. (table-1).

Table:1.

Symptoms	Frequency	Percentage
Fever	31	35.2
Multiple	29	33.3
Pain	3	3.4
Gastritis	16	18.3
Diarrhea	2	2.3
Sore throat	1	1.1
Pain Abdomen	1	1.1
Menorrhagia	1	1.1
Others	4	3.8
Total	104	100

Most of them (31.8%) used multiple drugs and 94.3% of the drugs were allopathic. Most of the students (32.9%) took self medication for quick relief of their condition and 25% due to ease of administration(Figure:1). The most common drug group used was antipyretics (29.54%).(Figure:2)

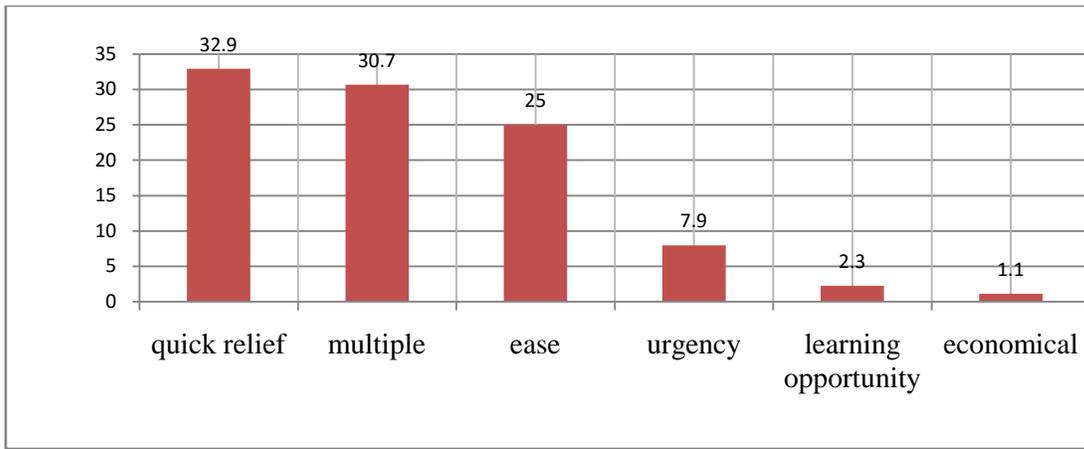


Figure.1.Reasons for self medication (%)

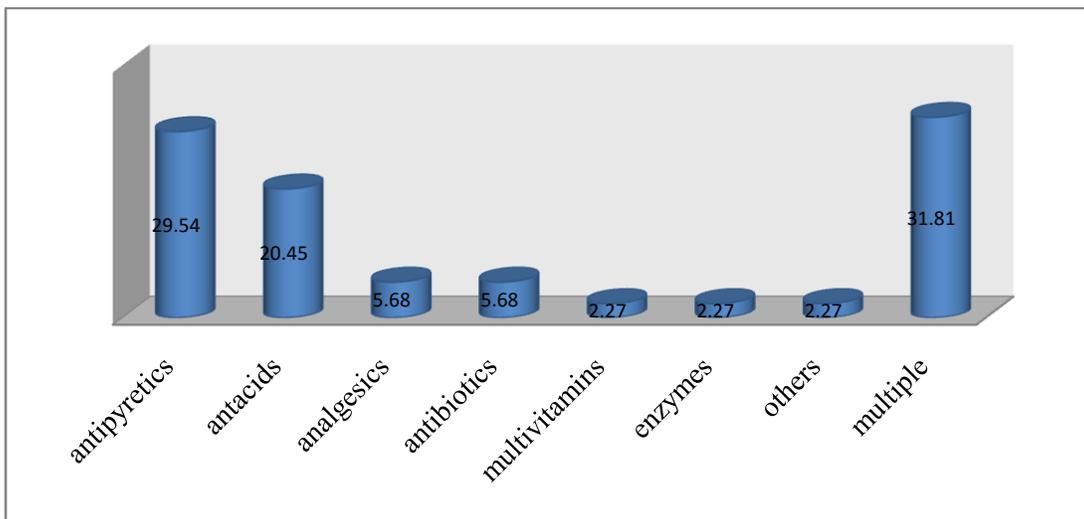


Figure:2. Drug groups used.

Majority of the respondents (80.6%) had prior knowledge of the adverse effects of the medications they used(Figure:3) while 87.5% knew the dosing regimen.(Figure:4) Most of the respondents' information regarding drugs were from multiple sources (22.7%) while 20.5% learned about the medications from prior prescription and another 20.5% from books. (Figure:5). The source of information regarding the medicines for self medication was significantly associated with the respondents knowledge regarding the adverse effects of the medicines.($P < 0.05$)

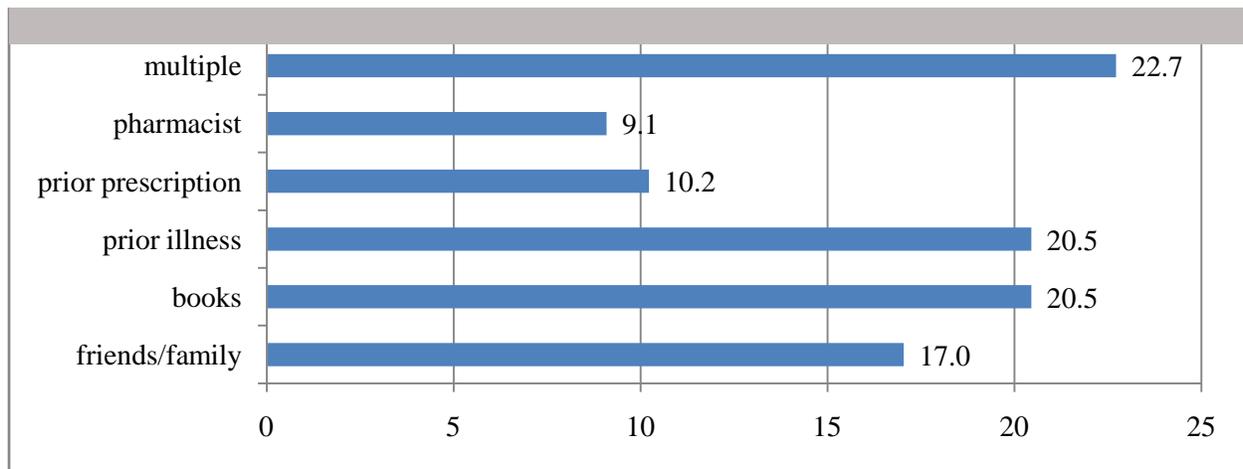
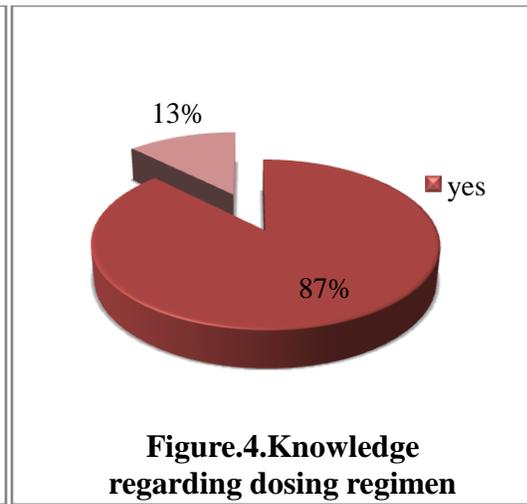
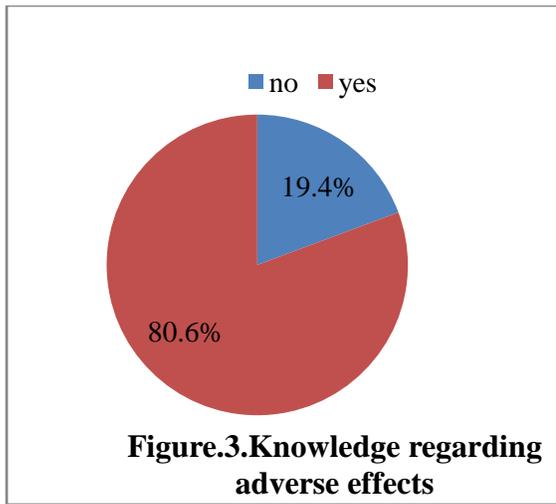


Figure.5: Source of information regarding drugs.

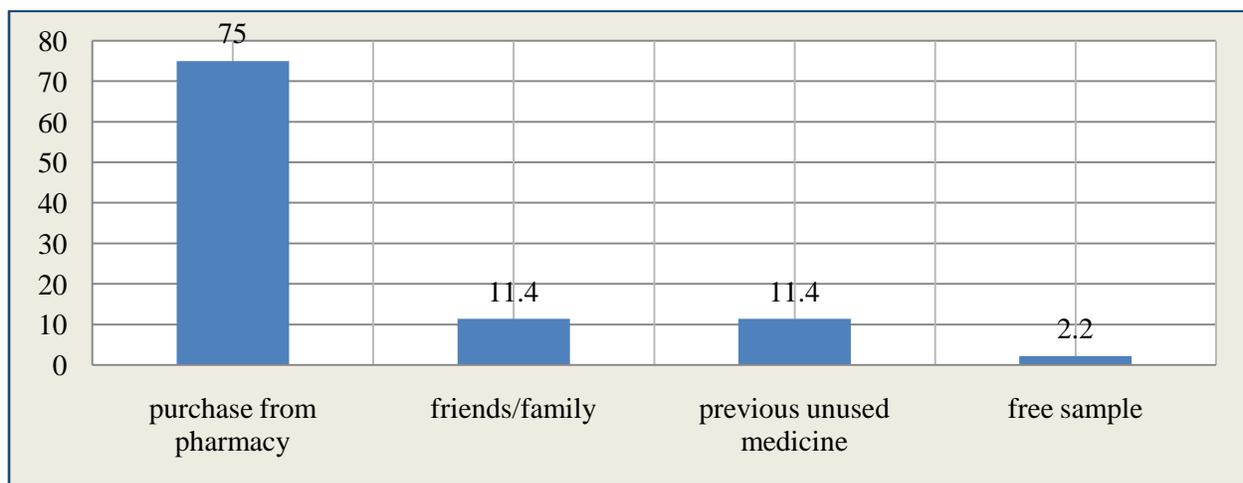


Figure.6: Various sources of drugs.

Major source of drug procurement was from pharmacy (75%). (Figure:6).Most of them (38.6%) had consulted a doctor post medication.(Figure:7) The two major reasons for the post self medication consultation with a physician were either due for verification of treatment(18.1%) or due to no improvement in their symptoms(17%). (Figure:8) .70.4% of the students considered self medication as a part of self care while only 19.3% had the opinion to stop it.

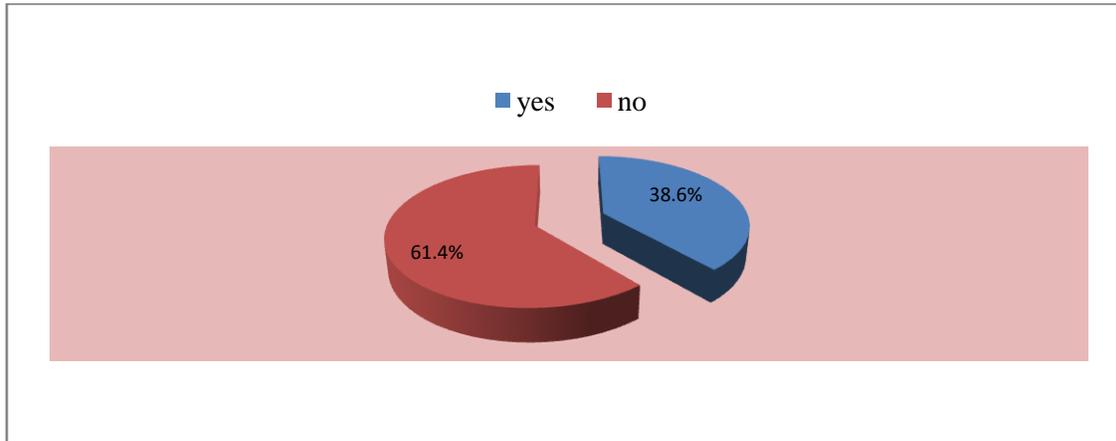


Figure.7: Consultation with doctor after self medication.

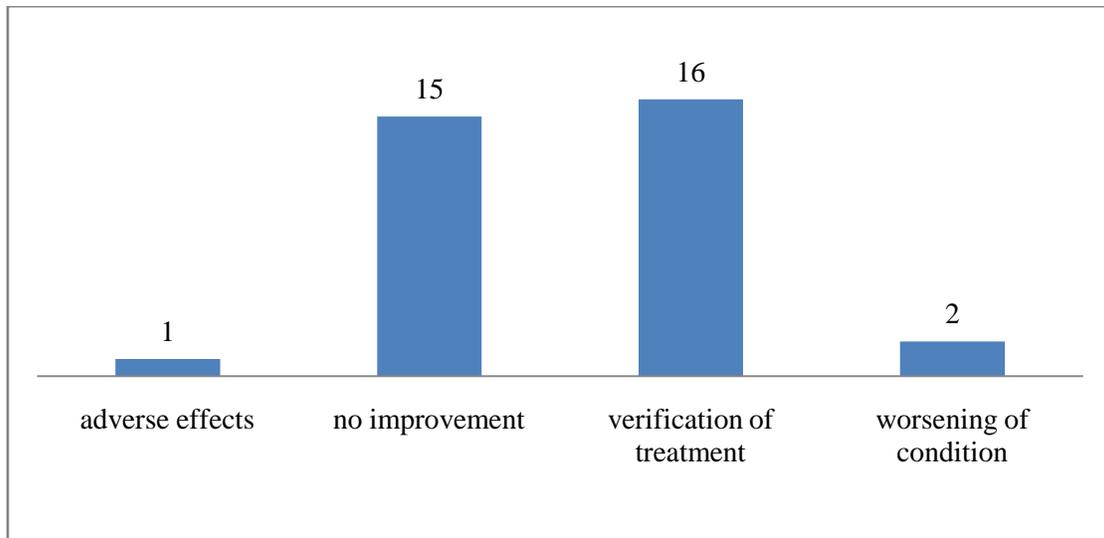


Figure. 8: Reasons for consultation post self medication.

Discussion :

In the present study self medication was found to be widely prevalent among the students of nursing college of the institute. This finding is similar to the findings in the study done in North India [2] ,where the prevalence of self medication was found to be 88.24%. In another study done in north India among professional students the prevalence of self medication was found to be 87% [9] which is similar to the present study. In our study fever was the most common symptom (29.8%) which is similar to the findings in the study done in south India where it was found that the conditions prompting self- medication were common cold and fever.[3] In another study done in Barabanki the major symptom leading to self medication was fever. [10] Whereas in another study from north India Cough and cold (60.6%) were the commonest indication for self medication, followed by headache, fever (38.4%)[11] . In our study the majority i.e. 94.3% of the respondents used allopathic drug for the purpose of self medication . This finding is more than that found in the study done among urban dwellers where also the major type was allopathy (77.77%), [1]. Most of the respondents' information regarding drugs were from multiple sources (22.7%) while 20.5% learned about the medications from prior prescription . This was similar to the findings in the study done Barabanki where the important sources of information for self-medication were previous prescription of doctors (72.6%).[12]. The major source of procurement of medicines for self medication was from the pharmacy (75%). It corresponds to the findings in another study done on Mekelle where majority (40.63%), of the respondents obtained the drugs for self-medication from drug retail outlet.[8]. This was probably due to the fact that the medicines were easily available in the pharmacies without prescription. 70.4% of the students considered self medication as a part of self care in our study and they did not have any intention to stop self medication which is in accordance to study done in respondents in Bahrain where 76.90 % patients had positive attitude towards self medication[12] , and also to another study with 85% of respondents in India with positive attitude towards self medication.[13]. Some of the limitations of the study were the small sample size. Moreover, since the respondents were asked to fill up the questionnaire at the classrooms the mutual influences of responses to the questions could not be denied. The data were based on recall of the previous three months which was prone to recall bias. Also the study did not have any intervention like imparting knowledge regarding hazards of irresponsible self medication.

Conclusion:

Although, over the counter drugs (OTC drugs) are meant for management of self recognized ailments and are of proven efficacy and safety, their improper use due to lack of knowledge of their side effects and interactions could have serious implications. Drug resistance, drug dependency, worsening of condition, drug interactions and drug adverse effects are few of the complications of irresponsible self medication which can be mitigated by proper and responsible self medication. As self medication is practiced widely, there is a need to create awareness about the pros and cons of self medication to ensure safe usage of the drugs. There is also a responsibility on the part of the pharmacist and the drug dispensing agencies which can contribute significantly to reduce the availability of drugs, which are not over the counter drugs , to be available without valid prescription. The administration also has a major role to play in curbing the uncontrolled use of certain drugs which should be taken only under medical supervision by enacting strict laws against the sources which make such drugs available in open market.

References:

1. Dr.Pavan kumar kulkarni . Self medication practices among urban slum dwellers in South Indian city, Int J Pharm Bio Sci., 2012 july; 3(3)(ISSN 0975-6299).
2. Dr Divya Goel. Self-medication patterns among nursing students in North India. IOSR Journal of Dental and Medical Sciences. 2013 Nov-dec; 11(4).
3. Stimmy Stephe. Self medication practices among undergraduate nursing students in South India: a cross sectional study. American International Journal of Research in science,technology,engineering and mathematics. 2013;(ISSN (Print): 2328-3491, ISSN (Online): 2328-3580, ISSN (CD-ROM): 2328-3629).
4. Responsible self care and self medication. The World Self-Medication Industry, A Worldwide Review of Consumer Surveys.
5. Pwar NV . Self medication: how safe: Ask to your pharmacist. the pharma review. 2009; 7(47).
6. surveys. <http://www.wsmi.org/pdf/wsmibro3.pdf>.. [Online].accessed on 15.4.2016
7. Badiger S . Self-medication patterns among medical students in South India. AMJ. 2012; 5.
8. Girma Belachew Gutema . Self-Medication Practices among Health Sciences. Journal of Applied Pharmaceutical Science. 2011;(ISSN: 2231-3354).
9. Rohit K Verma . Evaluation of self medication among professional students in North India: proper

- statutory drug control must be implemented. Asian Journal of Pharmaceutical and Clinical Research. 2010 january-march; 3(1).
10. Shyam Sunder Keshari. prevalence and pattern of self medication practices in rural area of barabanki. Indian Journal of Clinical Practice. 2014 december; 25(7).
 11. Pahuja Ritu . An online exploratory study of self medication among pharmacy graduates in India. International Journal of Drug Development & Research. 2011 october-december; 3(4).
 12. Al Khaja K. Evaluation of the anowledge, attitude and practice of self-medication among first-year medical students. Medical principles and practice. 2006;(15): p. 270-275.
 13. Kayalvizhi S SR. Evaluation of the perception, attitude and practice of self-medication Among business students in three selected cities, south India. International Journal of Enterprise and Innovation Management Studies. 2010; 1(3).