



RESEARCH ARTICLE

A STUDY ON KNOWLEDGE ABOUT SELF MEDICATION AMONG COLLEGE STUDENTS IN  
KARNATAKA

\*Dr. Girish V. Patil, Dr. Shishirkumar, Dr. Apoorva D, Dr. Thejeswari, Dr. Javed Sharif,  
Dr. C. Sheshgiri and Mr. Sushanth, N. K.

Department of Anatomy, DM- Wayanad Institute of Medical Sciences, Meppadi, Wayanad, Kerala, India

ARTICLE INFO

**Article History:**

Received 14<sup>th</sup> May, 2014  
Received in revised form  
06<sup>th</sup> June, 2014  
Accepted 17<sup>th</sup> July, 2014  
Published online 31<sup>st</sup> August, 2014

**Key words:**

Drugs,  
Doctor,  
Parents,  
Pharmacists,  
Self medication.

ABSTRACT

According to WHO, self-medication is defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment. Self medication is very helpful if the suffering person is economically poor or not able to bear the expenses if he shows his illness to the concerned expert doctor. Many times self-medication gives self confidence of handling minor illnesses on their own. Self medication is the choice when there is lack of accessibility to an expert doctor due to various reasons. Out of 400 students participated in the study, Mean age of the students was 21.3(±1.32) years. 100% of the students were practicing self medication one or the other way by themselves or with the help of parents or friends. Most common reasons favoring self-medication were that problem is not serious (249, 62.25%) can be managed by themselves followed by, previous experience (142, 35.5%) and lack of time (130, 25.75%). Advice by parents and friends was the most common source of information for the participants for self-medication (273, 68.25%), followed by Doctor's previous prescription which were (242, 60%) and also by advice from Pharmacists (164, 41%). Repeated health education should be given to bring down behavioral change in practice of self-medication.

Copyright © 2014 Dr. Girish V. Patil et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

According to WHO, self-medication is defined as obtaining and consuming drugs without the advice of a physician either for diagnosis, prescription or surveillance of treatment (World Health Organization). On the first day of the minor illnesses in the people, first thought comes is the self medication. Self-medication is helpful if used with the proper knowledge of effects and side effects about the drugs which they are taking (Hughes *et al.*, 2001). Self medication is very helpful if the suffering person is economically poor or not able to bear the expenses if he shows his illness to the concerned expert doctor. Many times self-medication gives self confidence of handling minor illnesses on their own. Self medication is the choice when there is lack of accessibility to an expert doctor due to various reasons. But self-medication or parents giving medications to their siblings without the experts advise has its own disadvantages such as improper medication and inadequate dosage of the drug. Self-medication may cause adverse drug reactions due to over dosage & may lead to rise of drug resistance among microbes. Self-medication can also lead to drug addiction; example is the use of pain killers by people in the geriatric age group or sometimes for the anti anxiety

tablets. Self medication is a universal phenomenon and practiced globally with varied frequency. There are several reasons for favoring self-medication like lack of accessibility and availability of doctors in India as evidenced by doctor to patient ratio of 1:1700 against WHO recommended 1:1000, ratio is more worse in rural areas (Deo 2013). Due to easy availability of over the counter drugs and lack of regulation towards the selling of drugs combined with above stated reasons people prefer taking self-medication. Self-medication is prevalent in college students, because of lack of time to go the hospital due to their busy schedule or impatience towards going for the consultation and free access to over the counter drugs. Research showed that literate people tend to practice self medication more than illiterates (Klemenc-Ketis *et al.*, 2010; Henry James *et al.*, 2006).

MATERIALS AND METHODS

A cross sectional survey was conducted in two science degree colleges in Mangalore, Karnataka. A sample of 400 participants was taken after obtaining prior permission from concerned authorities. The subjects were selected randomly after taking all the necessary consent from the subject who is willing to participate in the present study. Students sitting in the common rooms were approached through non-probability convenience sampling. The study questionnaire was adapted

\*Corresponding author: Dr. Girish V. Patil

Department of Anatomy, DM- Wayanad Institute of Medical Sciences,  
Meppadi, Wayanad, Kerala, India.

from various similar studies conducted previously and pre tested on a sample of 10 participants. All other ethical requirements including confidentiality were insured.

## RESULTS

Out of 400 students participated in the study, Mean age of the students was 21.3( $\pm$ 1.32) years. 100% of the students were practicing self medication one or the other way (drugs or home remedies) by themselves or with the help of parents or friends. Most common reasons favoring self-medication were that problem is not serious (249, 62.25%) can be managed by themselves followed by, previous experience (142, 35.5%) and lack of time (130, 25.75%) (Table1).

**Table 1. Showing the common reasons for the self medication**

Factors	Count	Percentage %
Problem is not serious	249	62.25
Previous experience	142	35.50
Lack of time	103	25.75
Unavailability of transport	47	11.75
Cost of consultation	35	8.75
Urgency of problem	33	8.25
Crowd avoidance	29	7.25
Self confidence	19	4.25

Headache or body ache (209, 52.25%) was the most common indication for taking drugs without advice followed by fever (181, 45.25%), cold and cough (163, 40.75%) (Table 2).

**Table 2. Showing common problems faced for taking self medication**

Problems	Count	Percentage %
Headache or body ache	209	52.25
Fever	181	45.25
Cold and cough	163	40.75
Acidity	39	9.75
Diarrhoea	17	4.25
Small wounds	15	3.75

Commonly used drugs are Analgesics (285, 71.25%) followed by Anti-pyretic (260, 65.5%) and Anti histaminics (168, 42%) (Table 3).

**Table 3. Showing drugs used for self medication**

Drugs	Count	Percentage %
Analgesics	285	71.25
Anti-pyretics	262	65.5
Anti-histaminics	168	42
Vitamins	95	23.75
Indigestion drugs	62	15.5
Antibiotics	26	6.5

Advice by parents and friends was the most common source of information for the participants for self-medication (273, 68.25%), followed by Doctor's previous prescription which were (242, 60%) and also by advice from Pharmacists (164, 41%) (Table 4).

**Table 4. Showing who helped for taking self medication**

Received help from	Count	Percentage %
Parents and friends	273	68.25
Doctor's previous prescription	242	60.5
Pharmacists	164	41
Internet	53	13.25

In our study we found that 80% of the students were unaware about the dose, time of administration (before food or after food) and duration of treatment. 95% of the respondents were unaware about the side effects of the drugs they are taking. Majority of the students (62%) said that they know self-medication is harmful. 60% of the students felt that the main harmful effects of self-medication were risk of adverse drug reactions, followed by 28% of students felt that self medication may be ineffective.

## DISCUSSION

Self-medication is defined as consuming drugs without the advice of a physician (Banerjee and Bhadury 2012). In our study, it was found that 100% of study group practiced self-medication one or the other way, it was more compared to study done by James *et al.* (2006) who found that 44.8 % of the respondents practiced self-medication in their study (James *et al.*, 2006). Sontakke *et al.* (2012) in their study on university students was also in the same opinion that many number of students not aware of the dosage and duration of the drug which they are taking (Sontakke and Bajait 2011). In our study the main reasons for favoring self medication by the students were the nature of the disease (minor illnesses), previous experience, time saving and transportation problems. Yasmin Mumtaz *et al.* (2011) also found similar results in their study on university students in Karachi (Sontakke and Bajait 2011). Antipyretics were the commonly used by the students in our study; James *et al.* (2006), Mumtaz *et al.* (2011) found that analgesics were commonly group of drugs used by the students in their study (James *et al.*, 2006; Yasmin Mumtaz 2011).

Frequency of self reported medication is highly variable in different parts of the world; as low as 45% in Turkey to as high as 94% in Hong Kong (Aljinović-Vucić *et al.*, 2005). This contrasting variation to report of self medication may be due to the differences in study subjects, working definition of self medication and tool used to collect the response of the participants. World Health Organization considers self medication as part of the self care that helps efficient use of the burdened health care system (World Health Organization) with guidelines for the regulatory assessment of medicinal products for use in self-medication. However inflating the list of over the counter drugs is questionable especially in less educated society with weak health systems where most of the medical care cost is out of the pocket of the patients. Also it is understandable that higher rate of self medication is associated with less control and easy availability of drugs.

## Conclusion

The frequency of self medication practices is alarmingly high in the educated youth of Karnataka, though majority knows

that it is incorrect. Repeated health education should be given to bring down behavioral change in practice of self-medication.

## REFERENCES

- Aljinović-Vučić V, Trkulja V, Lacković Z. 2005. Content of home pharmacies and self-medication practices in households of pharmacy and medical students in Zagreb, Croatia: findings in 2001 with a reference to 1977. *Croat Med J. Feb*; 46(1):74-80.
- Banerjee, I., and T. Bhadury. 2012. "Self-medication practice among undergraduate medical students in a tertiary care medical college, West Bengal." *Journal of Postgraduate Medicine* 58.2; 127.
- Deo, M. G. 2013 "Doctor Population ratio for India-The reality." *The Indian journal of medical research* 137.4; 632.
- Henry James, Shailendra S. Handu, Khalid A.J. Al Khaja, Sameer Ootom, Reginald P. Sequeira. 2006. Evaluation of the Knowledge, Attitude and Practice of Self-Medication among first-Year Medical Students. *Med Princ Pract*; 15:270-275.
- Hughes CM, McElnay JC, Fleming GF. 2001. Benefits and risks of self-medication. *Drug Saf*; 24: 1027-1037.
- James, Henry, *et al.* 2006. "Evaluation of the knowledge, attitude and practice of self-medication among first-year medical students." *Medical principles and practice* 15.4: 270-275.
- Klemenc-Ketiš Z, Hladnik Z, Kersnik J. 2010. Self-Medication among Healthcare and Non-Healthcare Students at University of Ljubljana, Slovenia. *Med Princ Pract*. 19(5):395-401. Epub 2010 Jul 14.
- Sontakke SD, Bajait CS. 2011. Comparative study of evaluation of self-medication practices in first and third year medical students. *International Journal of Biological and Medical Research*, 2:561-64.
- World Health Organization (WHO). Guidelines for the regulatory assessment of Medicinal Products for use in self-medication. <http://apps.who.int/medicinedocs/en/d/Js2218e/>
- Yasmin Mumtaz, S. M. Ashraf Jahangeer, Tahira Mujtaba, Shahla Zafar, Sara Adnan. 2011. Self Medication among University Students of Karachi. *JLUMHS* september-december, Vol 10: No. 03. pp 102-105.

\*\*\*\*\*