



Original Research

Self-Medication Practice amongst Undergraduate Nursing Students in Government Nursing College Nanded, Maharashtra

Authors

Bhagunde LK¹, Tamboli SB¹, Chhabra RR¹, Dole B²

¹Dept of Pharmacology, Dr. Shankarrao Chavan Govt Medical College, Vishnupuri, Nanded, Maharashtra

²Dept of Planning, Dr. Shakarrao Chavan Govt Medical College, Vishnupuri, Nanded, Maharashtra

Email: laxmiklass@gmail.com

ABSTRACT

Background: Self-medication is defined as selection and use of medicines by individuals to treat self recognized or self diagnosed conditions or symptoms. Though practiced throughout the world there are limited studies regarding the prevalence of self medication practices among nursing students.

Objective: To determine the pattern of self-medication practices among nursing college students.

Materials and Methods: A cross sectional questionnaire based study was conducted on the nursing students in a government nursing college attached to a tertiary care district hospital in Nanded, Maharashtra. A questionnaire consisting of both open and close ended questions related to various aspects of self-medication were handed out to the students. The students who willingly gave consent filled up the questionnaire anonymously.

Results: Of a total of 84 students, 4 were excluded due to incomplete entries, remaining 80 students were analysed. A total of 91.25% of nursing students practiced self medication. The most common indications for self medication were fever (91.8%), headache (65.8%) and pain abdomen(47.9%). The classes of drugs used commonly for self medication were antipyretics (72.6%), analgesics (67.1%) and antibiotics (37%). Similar past experiences (54.8%), mildness of infection (30.1%) and long waiting line in the OPD (11%), were the most common reasons for self medication. Source of drug information most commonly cited by the students was from textbooks (42.5%), old prescription (27.4%) and parents or other family members (24.7%).

Conclusion: Our study shows that self medication is a very common practice amongst nursing students. The government and the health authorities need to ensure that it is done in a responsible manner.

Keywords: Self-medication, nursing students, drugs.

Introduction

Self-medication can be defined as use of medication, whether modern or traditional, for self treatment without the advice of a physician (expert in medical profession) either for diagnosis, prescription or surveillance of treatment.^[1] Self-medication as one element of self care, is the selection and use of medicines by individuals to treat self-recognised illnesses or symptoms.^[2]

WHO (2008), considers self-medication as obtaining and consuming medication without professional supervision which comprises of acquiring medicines without a prescription, purchasing drugs by resubmitting/reutilising an old prescription, taking medicine on advice of others or relatives or consuming left-over medicine already available at home.^[3,4]

Self-medication is a double edged sword where at one point responsible self-medication maybe economical, save lives in acute conditions and time spent in seeing a doctor. [5] However, occasionally it may not be completely safe, especially when it is practiced in an irresponsible manner as it requires a certain level of knowledge, otherwise it could lead to incorrect or delay of diagnosis, increased resistance among pathogens [6,7] and increase morbidity, masking of a severe disease, dangerous drug interactions, incorrect route of administration, incorrect dosage, incorrect choice of drug, risk of dependence and abuse. [8]

Self-medication is commonly practiced worldwide, [9] in general population as well as in health care professionals, as they are exposed to the knowledge of medicines. A recent study was conducted in Andhra Pradesh, India regarding assessment of self medication practices among medical, pharmacy and nursing students at a tertiary care teaching hospital which showed that 86.54% of them practiced self-medication. [10] In another study in North India it was found that 88.24% nursing students practiced self medication. [11] Knowledge from books and previous experience of the illness were the major factors for self-medication. The practice amongst nursing students is not very well explored in India. A study done would be helpful to determine the trend and mentality towards self-medication, as the nurses play a pivotal role in health care. The present study is done to determine the practice of self-medication amongst undergraduate nursing students.

Material and Methods

An initial Ethics Committee approval was obtained from the Institutional Ethics Committee prior to the commencement of the study. This was

a cross-sectional, questionnaire based study. A pre-validated questionnaire consisting of open and closed ended questions were used. The questionnaire was designed and pretested on 10 respondents and suitable modifications were done. The questionnaire sought details on demography, conditions for which self-medication was taken, class of drug used, reasons and source of drugs for self medication. The study was conducted on nursing students in government nursing college attached to a tertiary care district hospital in Nanded, Maharashtra.

This study was performed on the consenting undergraduate nursing students. The purpose of the study and the procedure of completing the questionnaire were explained to the students. The term of self-medication was explained to the students as, '*use of medicine for treating oneself, without any consultation of any health care professionals*'. Those students who gave their consent answered a printed, self-developed, pre-validated questionnaire in their classrooms and returned it for the further evaluation. Data was entered in Microsoft Excel 2007 and expressed in numbers and percentages.

Results

Out of the 84 nursing students included in the study, 80 students returned the questionnaires completely and correctly filled. Hence, 4 were excluded for having incompletely filled entries. The number of female students outnumbered the male students i.e. of 80 students, 77 participants were females (96.3%) and 3 were males (3.7%). The average age of the participants was 20.73±2.81SD. A total of 73 (91.3%) students reported to practice self medication, of which 2 (2.7%) were males and 71 (97.3%) females. (Table 1)

Table 1. Demographic characteristics of the participants

	Yes – Self-medication	No – Self-medication	Total
Males	2(2.5%)	1(1.25%)	3(3.75%)
Females	71(88.75%)	6(7.5%)	77(96.25%)
Total	73 (91.25%)	7 (8.75%)	80 (100%)

In the present study out of 73 students who practiced self medication the most common conditions for which they sought self-medication

were fever 67(91.8%), headache 48(65.8%), pain in abdomen 35(47.9%) and cough/cold (42.5%).(Table2)

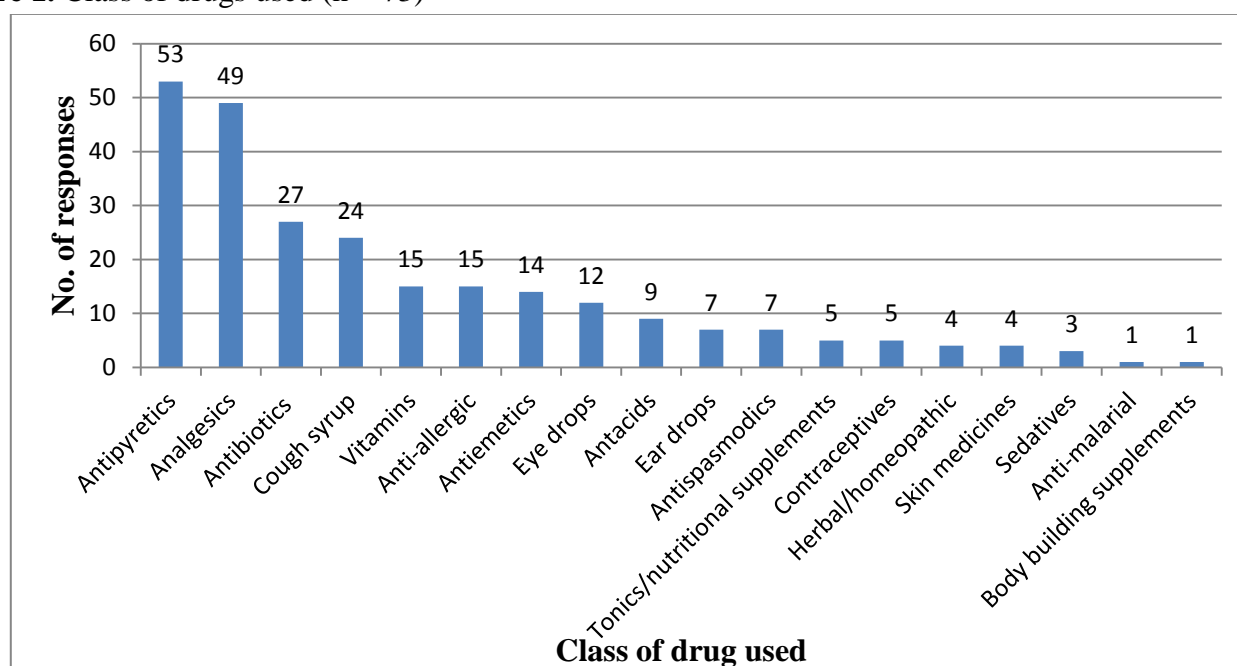
Table 2. Conditions for which self-medication were taken (n = 73)

Conditions for which SM was taken	No. of responses
Fever	67 (91.8%)
Headache	48 (65.8%)
Pain abdomen	35 (47.9%)
Cough/cold	31 (42.5%)
Allergy	26 (35.6%)
Vomiting	26 (35.6%)
Diarrhoea	20 (27.4%)
Body ache`	18 (24.7%)
Eye discharge/problem	13 (17.8%)
Muscular pain	12 (16.4%)
Oral/dental problems	12 (16.4%)
Constipation	9 (12.3%)
Skin problems	8 (10.9%)
Dysmenorrhoea	6 (8.2%)
Sore throat	6 (8.2%)
Wound	5 (6.9%)
Dyspepsia/gastritis	4 (5.5%)
Ear Discharge/pain	4 (5.5%)
Urinary problem	2 (2.7%)
Insomnia	1 (1.4%)

The class of drugs most commonly used for self-medication were antipyretics 53(72.6%),

analgesics 49(67.1%), antibiotics 27(37%) and cough syrup 24(32.9%). (Figure 1)

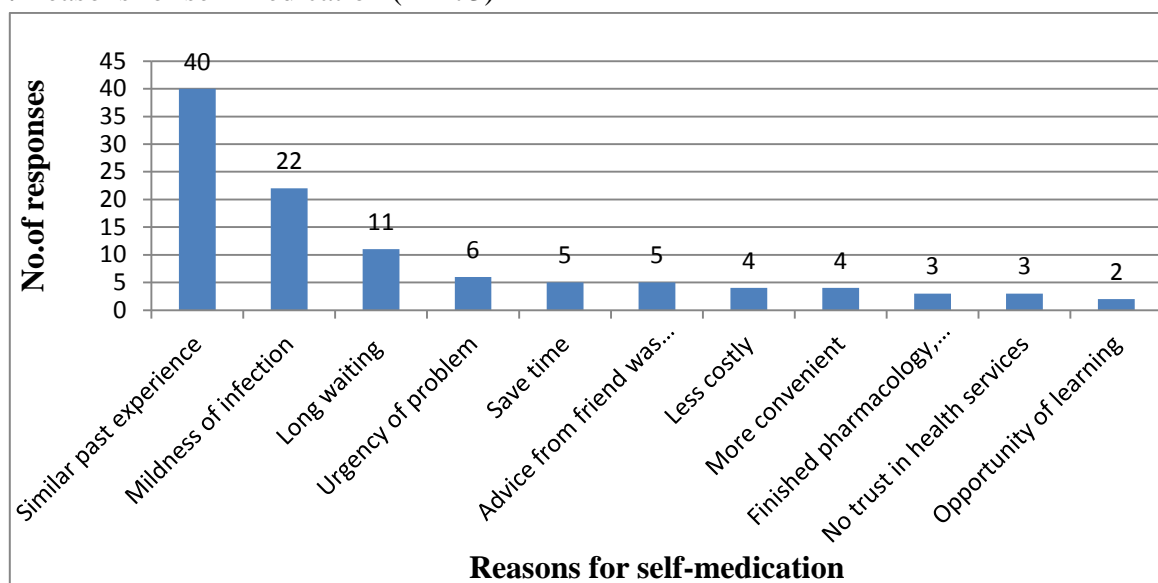
Figure 1. Class of drugs used (n = 73)



With regard to the common reasons prevailing for which self medication was taken are similar past experience 40 (54.8%), mildness of infection 22

(30.1%), long waiting line in OPD 11 (15.1%) and urgency of problem 6 (8.2%). (Figure 2)

Figure 2. Reasons for self-medication (n = 73)



Among the study subjects the common sources of drug information were from textbooks 31 (42.5%), old prescriptions 20 (27.4%), parents or other

family members 18 (24.7%) and seniors or classmates 16 (21.9%). Table 5

Table 3. Source of drug information(n = 73)

Source of drug information	No. of responses
Textbooks	31 (42.5%)
Old prescription	20 (27.4%)
Parents or other family members	18 (24.7%)
Seniors or classmates	16 (21.9%)
Pharmacist	8 (11%)
Drug advertisement	2 (2.7%)
Internet	2 (2.7%)

Discussion

Self-medication is becoming an increasingly important issue with concerns to healthcare and this study too has shown that it is highly prevalent amongst healthcare professionals, like undergraduate nursing students. In India certain drugs, like antibiotics can be procured from the druggist without prescription,^[11] this practice could be a factor associated with increased resistance to microorganisms. In the present study, self medication was widely practiced by the nursing students of this college. Of 80 students that were included in the study, 73 students practiced self-medication, i.e. 91.25%. Though not

much data and studies are available about self-medication of nursing students in India; but in a study done in North India, it was found to be 88.24%.^[11] In similar study done in Mandya, Karnataka the prevalence was 65.18%.^[12] In another study done in Ethiopia, 82 (38.5%) practiced self-medication.^[13] Prevalence of self-medication was 41.6% in a study done in two Brazilian Universities.^[14] It is also noted that a high level of education and professional status are predictive factors for self-medication.^[15]

In our study it was found that the most common indications for self-medication were fever 67(91.8%) and headache 48(65.8%), which is in

concordance with the other studies that too reported headache (42.86%) and fever (32.38%) in North India^[11] and similar findings in a study in Mandya, Karnataka.^[12]

Our study noticed that antipyretics 53(72.6%), analgesics 49(67.1%) and antibiotics 27(37%) were the classes of drugs most commonly used. This is similar to studies done earlier, which showed antipyretics 59.05%, analgesics 39.05% and antibiotics 26.67%^[11] as the most common classes of drugs used. In another study done in Ethiopia, of 82 respondents, antipyretics 46.3% and analgesics 24.4% were again the most common drugs used in self-care.^[13]

In our study it was found out that the most common reasons for self-medication were similar past experience 40(54.8%), mildness of infection 22(30.1%) and long waiting line in the OPD 11(15.1%). This is similar to a previous study which also shows previous experience 32.7% and minor nature of the illness 23.2%^[16] as the common reasons for self-medication. Though our reasons differ from a previous study done on nursing students where ease 35(33.33%), learning opportunity 24(22.86%) and time-saving 22 (20.95%) were the most common reasons for self-medication.^[11]

The study group cited their source of information for self-medication in most cases as textbooks 31(42.5%), old prescription 20(27.4%) and parents or other family members 18(24.7%), which differs from another study in which pharmacist 51.43%^[11] was the common source of information.

Conclusion

Our study shows that self-medication is widely practiced amongst nursing students. Since inappropriate self-medication could be a causal factor as a hazard to the students but also whom they advice as health care professionals. The level of inappropriate drug use indicates self-medication as an unhealthy option and it should be taken care of.

References

1. Montastruc JL, Bagheri H, Geraud T, Lapeyre-Mestre M. Pharmacovigilance of self-medication. *Therapie* 1997;52:105-10.
2. The Role of the Pharmacist in Self-care and Self-medication. Available from <http://apps.who.int/medicinedocs/pdf/whozip32e/whozip32e.pdf> (Last accessed 21st August, 2015).
3. Hussain A, Khanum A. Self medication among university students of Islamabad, Pakistan- a preliminary study. *Southern Med Review* 2008; 1(1):14-16.
4. Emmanuel A, Daniel G, Achema G, Afoi B, Onyejekwe g, Gimba S M. Self-medication practice among undergraduate nursing students of the university of Jos, Nigeria. *Nig. Journ. Pharm. Sci* 2011; 10(2): 22-26.
5. Alano GM, Galafassil LM, Galato D, Trauthman SC. Responsible self-medication: review of the process of pharmaceutical attendance. *BJPS* 2009; 45(4): 626-633.
6. Ferris DG, Nyirjesy P, Sobel JD, Soper D, Pavletic A, Litaker MS. Over the counter Antifungal Drug misuse associated With Patient Diagnosed Vulvovaginal Candidiasis. *Obstet Gynecol* 2002; 99(3): 419-25.
7. Bauchner H, Wise P. Antibiotics without prescription: "bacterial or medical resistance" *Lancet* 2000; 355: 1480-84.
8. Gholap M C, Mohite V R. Assess the self-medication practices among staff nurses. *Indian J.sci.Res* 2013; 4(1): 81-84.
9. Hughes CM, McElnay JC, Fleming GF. Benefits and risks of self-medication. *Drug Saf* 2001; 24: 1027-1037.
10. Gaddam Damoder. Assessment of self-medication practices among medical, pharmacy students at a tertiary care hospital. Andhra Pradesh. *The Indian journal of hospital pharmacy* 2012; 49: 79-83.
11. Goel D, Gupta S. Self-medication patterns among nursing students in North India.

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2013;11(4):14-17.
12. Sheethal M P, Shanthi M, Vishma B K. A cross-sectional study on self-medication among nursing students in Mandya. *Int J Health Sci Res* 2014; 4(12): 79-83.
 13. Abay SM, Amelo W. Assessment of self-medication practices among medical, pharmacy, and health Science Students in Gondar University. Ethiopia. *Journal of Young Pharmacists* 2010; 2(3): 306-310.
 14. Periera C M *et al.* Self-medication in health students from two Brazilian students. *RSBO* 2012; 9(4): 361-67.
 15. James H, Handu SS, Al Khaja KAJ, Sequeira RP. Evaluation of the knowledge, attitude and practice of self-medication among first year medical students. *Med Princ Pract* 2006; 15: 270-275.
 16. Ehigiator O, Azodo CC, Ehizele AO, Ezeja EB, Ehigiator L, Madukwe IU. Self-medication practices among dental, midwifery and nursing students. *Eur J Gen Dent* 2013;2:54-7.