

Prevalence, Knowledge and Attitude of Self Medication among Allied Health Students

AROUBAH IQBAL¹, ABEERA ISHAQ BUTT², MUHAMMAD ABBAS KHOKHAR³, RIDA SHUJAAT⁴

ABSTRACT

Aim: To ascertain the prevalence, knowledge and attitude of self medication among allied health students.

Design: Cross Sectional Survey

Period: October to December 2017

Setting: King Edward Medical University, Lahore, Pakistan.

Method: A self-administered questionnaire having questions about the prevalence, knowledge and attitude of self medication was used to collect data from students of Allied Health Sciences. It was analyzed using SPSS version 20.

Results: 300 students took part in the study, majority (80%) being males. Self medication's prevalence was high (86%). Reasons leading to it were minor illness (39.3%) & previous experience (31.5%). The major ailments for which it was done were headache (41%), fever (23%) & cold and cough (10.9%). Commonly sought out drugs were analgesics (68%), antibiotics (13.2%) & anti-pyretic (9.8%), with the most common sources of information being previous doctor's prescription (42.8%), friends & family (21.4%) & physician (16.3%). Dosage selection was based on consult from a doctor/pharmacist (39.3%), previous experience (35%) and senior/friend's opinion (20.2%). More than half (54.5%) participants had knowledge about the benefits & risks of the drugs and 60.3% showed a positive attitude about its usage.

Conclusion: We concluded that self medication is highly prevalent in this part of the population, knowledge about its merits and demerits was adequate and a positive attitude towards its practice exists.

Keywords: Self medication, prevalence, knowledge, attitude.

INTRODUCTION

"Self-medication involves the use of medicinal products by the consumer to treat self-recognized disorders or symptoms, or the intermittent or continued use of a medication prescribed by a physician for chronic or recurring diseases or symptoms. In practice, it also includes use of the medication of family members, especially where the treatment of children or the elderly is involved, as defined by WHO."¹

Self medication is a kind of self care, with merits as well as demerits. When judiciously used, it offers the benefits such as convenience, an active participation in one's health, economic stability and self reliance to the patient and cost effectiveness in the form of community based health care initiatives².

However, it also poses a lot of risks especially wrong self-diagnosis, incorrect choice and dose of therapy, failure to recognize and report side effects, allergic reactions, drug interactions, prolonged use leading to drug resistance³, potential for dependency & abuse⁴ and organ damage, such as long term analgesic use leading to renal failure⁵.

The common reasons reported for increasing prevalence of self medication have been manifold, such as family, easier availability of drugs, exposure through advertisements, social norms and education about drugs & peer pressure⁶. The drugs most frequently used were analgesics, antibiotics & multivitamins⁷. A study conducted at Arabian Gulf University, Manama, Bahrain showed

increased prevalence, poor knowledge regarding appropriate drugs, adequate knowledge about risks and benefits of drugs, positive attitude about it, and the practice being very common⁸.

Self medication is a major concern and efforts need to be done at a larger scale by the government as well as the healthcare and pharmaceutical sector to ensure its responsible use^{1,8}.

The rising practice of self medication, among students worldwide is worrisome, because they are more knowledgeable about drugs and various disorders than the general population. The studies on whether the same trend is being followed in Pakistan are few & far between. We conducted this study to judge the prevalence, knowledge & attitude about self medication in the allied health students of King Edward Medical University, Lahore, Pakistan.

METHODOLOGY

It was a Questionnaire based cross-sectional study that was carried out in King Edward Medical University, in October 2017, over 3 months. It was approved by the Institutional Board Review. Purposive sampling technique was used to select 300 subjects for the study. Students of both genders from Allied Health Sciences were included and students from BDS and MBBS were excluded. A semi structured questionnaire was used as a research instrument which had two parts, Part I: Questions related to demographics. Part II: Open & close ended questions to check the prevalence, knowledge and attitude regarding self medication among them. The researchers themselves collected the data after obtaining written informed consent from each participant and it was daily reviewed for its

¹⁻²HO, Mayo Hospital, Lahore.

³Assistant Prof. of Oncology, KEMU, Lahore

⁴Student, Allied Health Sciences, King Edward Medical University, Lahore.

Correspondence to Dr. Aroobah Iqbal,
Email: arubarana@yahoo.com Tel : +92-3234411842

completeness. It was recorded into SPSS, version 20, and analysis done in term of descriptive statistics (mean, percentages). Association between demographic variables and responses was calculated by chi-square test. P value < 0.05 was decided to be significant.

RESULTS

The data was gathered from 300 students. Of these, 240 (80%) were males and females were 60 (20%), with mean age being 20.76 ± 1.6 years (SD), ranging from 16 to 25 years. 279 (93%) participants were single and 21 (7%) were married.

Prevalence: In this study, 257 students (85.7%) practiced self medication. The most common symptoms that lead to use of self medication were Headache (41%), Fever (23%) and Cold, Cough (17.5%), others being Pain (10.9%), GI Disturbance (3.9%), Allergy (2.3%) and Inability to sleep (1.2%). The study revealed the common sources of information to be, previous doctor prescription (42.8%), Friends & family (21.4%), Physician (16.3%), Pharmacist (14.4%), Internet (3.5%) and Media (1.6%). The dosage selection was based chiefly on the basis of consulting doctor/pharmacist (39.3%), previous experience (35%) and Senior/Friend's opinion (20.2%). In 3.5% of students

dosage wasn't seen and rest (2.3%) used the internet to consult. The oral route was preferred (96%) among the respondents.

Drugs used in Self Medication

Factors leading to Self Medication

Knowledge: Knowledge about the safety and hazards of self medication was:

Attitude: The attitude regarding self medication was determined by devising a criterion. Those who less than 36 fall in the positive group and those scoring more than 37 fell in the negative group.

60.3% showed a positive attitude towards self medication. 79% of the respondents suffered no complications due to self medication, among the rest (21%), the common adverse effects were Allergic reaction (24.5%), Nausea/Vomiting (21%), Fever (19.2%) and Diarrhea/Abdominal Pain (18%) and others (17.3%). Of the subjects, 52% were recovered completely and 47% recovered partially, 1% had little or no effect.

There was no association between gender and practice of self medication ($p=0.381$), also no relationship between age and self medication ($p=0.09$) was found in the sample population.

Table 1: Participants Attitude Regarding Self Medication

Statement	Responses (%age)				
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Self medication is cheap & easily available.	23	59.9	10.5	6.2	0.4
It could interfere with your healing process.	14	48.2	19.5	16.7	1.6
With continuous use, it loses effectiveness.	31.1	49	8.9	7.8	3.2
It is better option than obtaining prescription from your doctor.	6.6	13.6	11.3	55.3	13.2
Continuous use results in adverse effects.	24.1	49	12.5	10.1	4.3
Self medication can be dangerous.	23.7	42.4	25.7	5.8	2.4
Continuous use may cause dependency and addiction	33.8	45.9	11.7	7.4	1.2
You're confident that you can cure yourself.	8.6	28.4	30.4	30.7	1.9
More pain, more drugs should be taken.	7.4	16.3	13.2	51	12.1
It's necessary to consult a doctor before taking prescription.	49	40.9	4.7	3.1	2.3

Table 2: Attitude Score Regarding Self Medication

Level of Attitude	Percentage
Positive (<36)	60.3%
Negative (>37)	39.7%

Table 3: Knowledge about Self Medication

Knowledge	% Population
Yes	54.5%
Partly	28.4%
No	17.1%

Table 4: Drugs used for Self Medication

Drugs	Percentage of Participants
Pain Killers	68%
Antibiotics	13.2%
Anti-pyretic	9.8%
Anti-allergic	7%
Vitamins	1.6%
Sleeping Pills	1.2%
Pills of Indigestion	0.4%

Table 5: Factors leading to Self Medication

Factors	Percentage of Participants
Minor Illness	39.3%
Previous Experience	31.5%
Urgency of the problem	13.6%
Lack of time	7.8%
Lack of transport availability	3.5%
Advice of friends	3.5%
Cost of consultation	1.9%

DISCUSSION

This study revealed that self medication is remarkably prevalent (86%) among the Allied Health Students. The prevalence is comparable to other researches that showed prevalence to be as high as 98% in Kuwait¹⁰ and 80% in West Bengal¹². Headache and Fever were reportedly the most frequent maladies for which self medication was sought, with previous experience and family and friends being the preferred sources of information, and painkillers

as the most frequented drug. Similar findings have been reported in other researches². There were no gender or age based difference in its practice. Other studies have reported a difference as well¹³.

Regarding knowledge the participants had a fair idea of the advantages as well as disadvantages of self medication, and a positive favorable attitude towards self medication was found, as also reported in a study done on medical students in Nepal¹¹.

This study is about a small segment of the population, but the alarmingly high prevalence rates and the trend to favor self medication are a cause of concern. Policies should be made to spread awareness regarding their use and misuse so as to prevent students as well as other people from damaging their health, as advised by WHO & Hughes too^{8,9,10}.

CONCLUSION

Our study ascertained that self medication is a common practice midst the students of allied health sciences, their knowledge is adequate & attitude is positive towards the drug usage. However, no significant association between age or gender of students and practice of self medication was found.

REFERENCES

1. Guidelines for the Regulatory Assessment of Medicinal Products for use in Self-Medication. WHO (2000) Guidelines for the Regulatory Assessment of Medicinal Products for Use in Self-Medication., Geneva. Available: <http://apps.who.int/medicinedocs/pdf/s2218e/s2218e.pdf>. (Definition of Self Medication) (accessed 20 May 2018)
2. Hughes CM, McElnay JC, Fleming GC. Benefits and Risks of Self Medication. *Drug Saf.* 2001;24(14): 1027-37.
3. Bennadi D. Self-medication: A current challenge. *Journal of Basic and Clinical Pharmacy.* 2013;5(1): 19-23.
4. Apa hall P, Schwartz bloom RD, McConnell ES. The Current State of Teenage Drug Abuse: Trend toward Prescription Drugs. *The Journal of School Nursing.* 2008;24(3): S1-15.
5. Blantz RC. Acetaminophen: Acute and chronic effects on renal function. *Am J Kidney Dis.* 1996;28(1): S3-6.
6. Abbas A, Ahmed FR, Yousuf R, Khan, N Nisa ZU. Prevalence of Self-Medication of Psychoactive Stimulants and Antidepressants among Undergraduate Pharmacy Students in Twelve Pakistani Cities. *Tropical Journal of Pharmaceutical Research.* 2015;14(3): 527-32.
7. Keche Y, Yegnanarayan R, Bhojar S, Agrawal R, Chavan R, Mahendrakar P. Self medication pattern in rural areas in Pune, India. *International Journal of Medicine and Public Health.* 2012;2(4): 7-11.
8. World health organisation. The Role of the Pharmacist in Self-Care and Self-Medication. [Online]. Available from: <http://apps.who.int/medicinedocs/pdf/whozip32e/whozip32e.pdf> [Accessed 20 May 2018].
9. Hughes, C.M. Monitoring self-medication. *Expert Opinion on Drug Safety.* 2003;2(1): 1-5.
10. Al-Hussaini M, Mustafa S, Ali S. Self-medication among undergraduate medical students in Kuwait with reference to the role of the pharmacist. *Journal of Research in Pharmacy Practice.* 2014;3(1): 23-7.
11. Gyawali S, Shankar PR, Poudel PP, Saha, A. Knowledge, Attitude and Practice of Self-Medication Among Basic Science Undergraduate Medical Students in a Medical School in Western Nepal. *Journal of Clinical and Diagnostic Research.* 2015;9(12): 17-22.
12. Banerjee I, Bhadury T. Self-medication practice among undergraduate medical students in a tertiary care medical college, West Bengal. *Journal of Postgraduate Medicine.* 2012;58(2): 127-31.
13. Abahussain E, Matowe LK, Nicholls PJ. Self-reported medication use among adolescents in Kuwait. Medical principles and practice: *International Journal of the Kuwait University, Health Science Centre.* 2005;14(3): 161-4.