A STUDY OF SELF-MEDICATION PRACTICES AND ITS DETERMINANTS

Nidhi Garg, Shaima K.A, Thakur Gurjeet Singh, Sandeep Arora and Govind Arora

Chitkara College of Pharmacy, Chitkara University, Rajpura, Punjab, India.

Address for Correspondence*:

Dr. Thakur Gurjeet Singh,

Chitkara College of Pharmacy,

Chitkara University, Punjab

+91-9815951171,

Email : gurjeet.singh@chitkara.edu.in; gurjeetthakur@gmail.com

Abstract

Self-medication is a very important concern for health authorities at international level. Due to a concern of the authorities, the definition of the self-medication thus has been classified as the effective medication without prescription. It may also be violated by the resubmission of the prescription. This intends to lead the unnecessary circulation of the effective medication for example to the relatives or the social circle. In developing countries like Asian nation, self-medication could be a common follow because it provides a low price to various folks therefore; the aim of our study was to analyze the self-medication practices and its determinants among rural areas mainly in the youth population near the establishment of Chitkara University, Rajpura, India.

To investigate the self-medication practices and its determinants by short team of the students among rural areas in the youth population near the establishment of Chitkara University, Rajpura, India.

A cross sectional study was conducted by pharmacy practice professionals using a questionnaire, which consists of 17 open and closed ended questions among 400 participants from the rural areas near by Chitkara University in between March 2018-April 2018, small teams were also divided as to justify motive for the survey in near areas of the Chitkara University, Rajpura, India.

Our study demonstrates that frequency of self-medication among rural areas is approx. 3/4th. The most common factors that caused self medication among youth were value convenience (26.2%), urgency (21.8%), cost saving (20.3%) and less time consuming (17.1%). Drugs typically used for self-medication capsulate- pain killers (26.25%), anti-pyretics (17.75%), antibiotics (17.00%), decongestants (13.75%), anti- diarrheal (9.50%), anti–emetic (8.50%) and anti-allergic (7.25%). The awareness regarding the ending date and ADR were 59% and 76% respectively. Among the key supply of medication for self medication 58.75% most popular native pharmacy, 25% most well-liked from doctors from previous sickness and 16.25% from relatives and friends.

Keywords: Self-Medication, Rural areas, Determinants.

Introduction

Every day individuals throughout the globe act on their own for his or her health; they observe self-care. Self-medication is outlined as getting and overwhelming medication while not skilled management, that includes of deed medicines while not a prescription, getting medication by resubmitting/reutilizing a previous prescription, taking medicines on recommendation of relative or others, or overwhelming left-over medicines already offered reception (Filho *et al*., 2004). Studies done on self-medication reveal that it's a reasonably common observe, particularly in economically disadvantaged communities (Montastruc *et al*., 1997; Adhvcikary *et al*., 2014). It's a growing trend of self-care that has its positive and negative aspects. Recent development of the pharmaceutical business contributes to a good spread availableness of over–the counter (OTC) medications - that successively promotes self-medication (Hussain *et al*., 2008). Over the counter medicines typically include the common medications like pain killers, cough and cold remedies, critically treating cardiovascular disease, vitamins and therefore the essential supplements. It is generally thought that these all are ending into no adverse drug events. However, on alternative facet it may cause some serious clinical adverse drug events (Hussain *et al*., 2008).

Major issues as a result of self medication are wastage of resources, exaggerated resistance of pathogens and adverse drug reaction and prolonged suffering (Pagane *et al*., 2007). Worldwide antimicrobial resistance may be a major problem significantly in developing countries wherever antibiotics are simply out there while not a prescription (Kumar *et al*., 2013). Pharmacist being an integral part of the self-medication cycle in treating the illness of the patient affected by it.

The misuse of prescription drugs has become a major and serious problem among adolescents and young adults (Geissler *et al*., 2000). The youth especially exposed to the media with non-required promotion of pharmaceuticals by advertising imposes a larger risk to the young population (Kamat *et al*., 1998). As young students with low perception of the risk and more knowledge about the drugs and their use are likely to avoid seeing the physicians for their medical issues and hence tend to practice self-medication (Bennadi *et al*., 2014). There are some popular self-medicated drugs that are being commonly practised in now days amongst the youth which is primarily being circulated by the pharmacist or by the relatives or the friends. Some of the great examples of the self-medication being practiced are: Self-medication for the muscle relaxant, self-medication for the opioids, self-medication for the dexamethorphan, cough, diarrhoea etc. These self-medication OTC drugs could also be seen in the survey conducted by the survey team (Bennadi *et al*., 2014).

There is paucity of literature regarding self-medication among the youth. The present study was therefore conducted to determine the incidence of self-medication and to evaluate the impact of the same on the young diaspora.

Material and Methods

This was a cross sectional study. 400 participants were selected from the rural areas for the study in between March 2018- April 2018. A self-administered questionnaire was prepared for data collection, which consists of 17 open and closed ended questions. This questionnaire was by based on type of medication used, source of information about the drugs and reasons of self medication.

Results were expressed as mean and percentages. On completion of data collection, the data was reviewed, organized, tabulated and analyzed by appropriate statistical methods. Statistical analysis was done using the Graph Pad Prism 5 version for Windows 7.0.

Results

The number of participants participated in the study were 400 having mean age of 21±1. 3yrs comprised of 223 (55.75%) males and 177 (44.25%) females. The basic profile of the study population is given in table 1.

Table 1: Basic demographic characteristics of the students

Variable		Frequency	Percentage
Age group (in completed years)	19 - 21	250	62.5
	22 - 24	150	37.5
Sex	Male	223	55.75
	Female	177	44.25
Awareness of ADR	Aware	305	76.25
	Not Aware	95	23.75
Awareness of Expiry Date	Aware	236	59

The prevalence of self medication among the rural area was 80% (320/400). The commonest factors that lead to self medication among university students were convenience (26.2%), urgency (21.8%), cost saving (20.30%), less time consuming (17.10%), others (14.30%) (Figure 1).
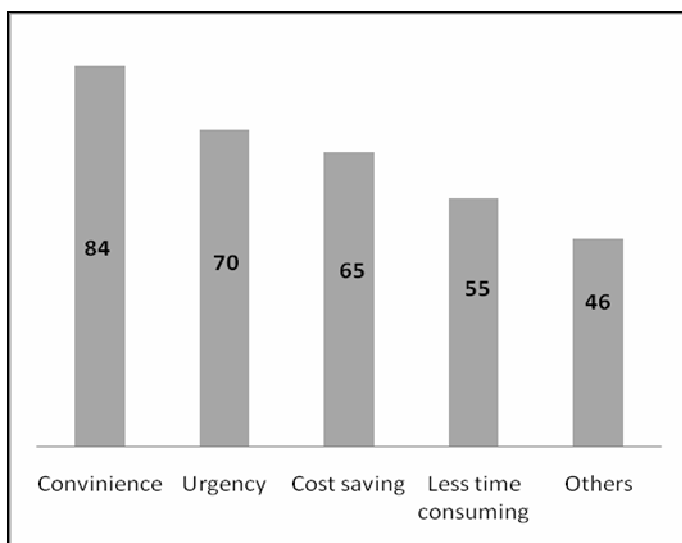

Fig. 1 : Reasons for Self Medication

The most common symptoms leading to self medication were headache (22.75%) fever (18.5), sorethroat (17.75%), diarrheoa (12.5%), runnynose (11.5%), nasal congestion (10.5%), vomiting (8.75%) (Table 3).

Table 3: Common symptoms of self medication

Symptoms	Percentage (%)
Headache	22.75
Fever	18.5
Sorethroat	17.75
Diarrhoea	12.5
Runnynose	11.5
Nasal congestion	10.5
Vomiting	8.75

Drugs mostly preferred by the students for self medicate includes pain killers (26.25%), anti-pyretics (17.75%), antibiotics (17%), decongestants (13.75%), anti- diarrheoal (9.5%), anti – emetic (8.5%), anti- allergic (7.25%) (Table 4).

Table 4: Commonest drugs used to self medicate

Medicine	Frequency	Percentage (%)
Pain killer	105	26.25
fever relieving	71	17.75
Antibiotics/cough syrup	68	17.00
Decongestants	55	13.75
Anti diarrheal	38	9.50
Anti emetic	34	8.50
Anti allergic	29	7.25

The awareness about the expiry date and ADR were 59% and 76.25% respectively. Among the major source of medicine for self medication 58.75% preferred local pharmacy,25% preferred from doctors from prior illness and 16.25% from relatives and friends.

Discussion

In the study conducted, it mainly helped to look at a broadway statically designed data against the self-medication issues emerging almost over the part of the world. So, we could summon by this study the trend of self-medication in the rural areas near the establishment of chtkara. This study was influenced by the recent study in sight of the Karachi University (Mumtaz *et al.*, 2011). So, after having a long subsequent study of the data statically we landed over the conclusion that the cough, headache, fever and throat infections were being extensively treated with help of the self-medication. After these symptoms abundance we found the other were the complication of the self-medication of above-mentioned illness which were being suffered by the people. This is the same scenario in all other parts of the world (Zafar *et al.*, 2008). Drug teams ordinarily used for self-medication enclosed pain killers (26.25%) followed by antipyretics (17.75%), antibiotics (17%), nasal decongestants (13.75%) and anti-diarrheoal (9.5%) by the population of rural areas, So, the root cause of the supply of the medication 58.75% were the inclusion of the inhouse native pharmacist. These results are in accordance with the previous study that is in conducted in city University wherever the foremost sources of the medicines are pharmacy, home cabinet (Buke *et al.*, 2005; Lau *et al.*, 1995).

As per some ethical approach self-medication should only arise in case of sever emergency of the illness attack. But as the study ended it showed some significant results, that why is the self-medication growing among the Asian diaspora. The result was the; 'Convenience' (26%) and the 'Cost saving' (20.5%) were the commonest. Now According to the American diaspora, the things are different a bit. It is due to a good regulative health management in their

respective country. According to them self-medication regulates the medication and economy. As we come down to the Asian diaspora the things are entirely different due to the large population to be taken care of, so here it doesn't regulate the economy it contributes to it. So, the self-medicating procedures in our diaspora are to be taken care of by the bodies responsible for it (who regulatory assessment *et al.*, 2000). If the self-medication procedures don't drop by soon then they may create large effect over the medical illness such as the ADR and ADE increase, resistance the specific medication etc. All this die the guidance of the amateur medical knowledge.

Self-medication growing so drastically over the young youth can be justified by our study, every single participant in this study is well sound financially they can easily afford a doctor visit over their illness. But still self-medication is growing like a big hurricane in our new society. It may also lead to some serious medical and health downfall also.

Conclusion

Self-medication being practised was noticed to be at an urging state. As the maximum results of the non-rural areas were of great concern in the case of the self-medication. This state occurred due to less cost-effective treatment of the illness and the knowledge regarding it. This led us to conclude that social active group activity and the village rounds or check-up for every medical and biomedical institution should be mandatory by the authorities governing it so as to control such practices. Self-medication being practised was noticed to be at an urging state. As the maximum results of the non-rural areas were of great concern in the case of the self-medication. This state occurred due to less cost-effective treatment of the illness and the knowledge regarding it. This led us to conclude that social active group activity and the village rounds or check-up for every medical and biomedical institution should be mandatory by the authorities governing it so as to control such practices. The extensive survey shows that among the selected people from rural areas, only few people knew the correct medication line for the treatment of the illness. It is very vital to know proper knowledge regarding adverse drug events as per the trending medical burden of the self-medication routine misuse. During our study we finally found that we can have a clear vision through one aid and that's is the proper holistic approach may release of some burden and electing it to possible theories: (i) awareness and education regarding the implications of self-medication (ii) strategies to prevent the supply of medicines without prescription by pharmacies (iii) strict rules regarding pharmaceutical advertising and (iv) strategies to make receiving health care much less difficult.

References

Adhikary, M.; Tiwari, P.; Singh, S. and Karoo, C. (2014). Study of self medication practices and its determinants among college students of Delhi University North Campus, New Delhi, India. Int J Med Sci Public Health, 3(4):406-409.

Bennadi, D. (2013). Self-medication: A current challenge. Journal of basic and clinical pharmacy, 5(1):19.

Buke, C.; Hosgor-Limoncu, M.; Ermertcan, S.; Ciceklioglu, M.; Tuncel, M.; Köse, T. and Eren, S. (2005). Irrational use of antibiotics among university students. Journal of infection, 51(2): 135-139.

Geissler, P.W.; Nokes, K.; Prince, R.J.; Achieng'Odhiambo, R.; Aagaard-Hansen, J. and Ouma, J.H. (2000). Children and medicines: self-treatment of common illnesses among Luo schoolchildren in western Kenya. Social science & medicine, 50(12): 1771-1783.

Hussain, A. and Khanum, A. (2008). Self medication among university students of Islamabad, Pakistan-a preliminary study. Southern Med Review, 1(1):14-16.

Kamat, V.R. and Nichter, M. (1998). Pharmacies, self-medication and pharmaceutical marketing in Bombay, India. Social science & medicine, 47(6):779-794.

Kumar, S.G.; Adithan, C.; Harish, B.N.; Sujatha, S.; Roy, G. and Malini, A. (2013). Antimicrobial resistance in India: A review. Journal of natural science, biology, and medicine, 4(2):286.

Lau, G.S.; Lee, K.K. and Luk, M.C. (1995). Self-medication among university students in Hong Kong. Asia Pacific Journal of Public Health, 8(3):153-157.

Loyola Filho, A.I.D.; Lima-Costa, M.F. and Uchôa, E. (2004). Bambuí Project: a qualitative approach to self-medication. Cadernos de saude publica, 20(6):1661-1669.

Montastruc, J.L., H. Bagheri, T. Geraud and M. Lapeyre-Mestre (1997). Pharmacovigilance of self-medication. Therapie, 52(2):105-110.

Mumtaz, Y.; Jahangeer, S.A.; Mujtaba, T.; Zafar, S. and Adnan, S. (2011). Self medication among university students of Karachi. Jlumhs, 10(03):102-5.

Pagan, J.A.; Ross, S.; Yau, J. and Polsky, D. (2006). Self-medication and health insurance coverage in Mexico. Health policy, 75(2):170-177.

Zafar, S.N.; Syed, R.; Waqar, S.; Zubairi, A.J.; Vaqar, T.; Shaikh, M.; Yousaf, W.; Shahid, S. and Saleem, S. (2008). Self-medication amongst university students of Karachi: prevalence, knowledge and attitudes. Journal of the Pakistan Medical Association, 58(4):214.