"A Study on Self Medication Practices Among Nursing and Physiotherapy Students of Dr. D.Y.Patil University"

Ms Vaishali Jagtap
Assistant Professor,
Dr.D.Y.Patil College of NursingPimpri Pune-18

Introduction

"Self medication can be defined as obtaining and consuming drugs without the advice of a physician for diagnosis, prescription or surveillance of treatment". It is a well recognized form of inappropriate drug use. The implications of self medication practices are increasingly recognized around the world. "Self medication is one of the most important causes of drug abuse and addictions.[1]

Self –medication consists of the use of manufactured or homemade drugs without a medical prescription seeking to treat symptoms or self – diagnosed health conditions. According to the World Health Organization (WHO), informed self-medication is a way to self care. Qualified professionals, preferably pharmacists, should encourage the rational use of medication, provide information on drugs and complications that may result from their indiscriminate use and refer people to medical care when necessary, promoting responsible self medication. The practice of self medication must be based on authentic medical information otherwise irrational use of drugs can cause wastage of resources, increased resistance of pathogens, and can lead to serious health hazards such as adverse drug reactions and prolonged morbidity. In developing countries like India, self medication is a common practice as it provides a low cost alternative for people. A large number of people, when they fall sick, do not consult the physician. The youth is especially exposed to the media and the increased advertising of pharmaceuticals poses a large threat to the young population.[2]

Material and Method

This descriptive survey research was conducted on 400 Nursing and Physiotherapy students of Dr D.Y.Patil University Pune Maharashtra. The students were selected by purposive sampling technique

Sample size was calculated by using single population formula (n1=z2p) (1-p)/d2with the following assumptions z=1.96 for 95% confidence interval, proportion of self medication (p) =0.5 (50%) and required margin of errors (d) 0.05. this resulted in initial sample size of 384. Anticipating non-response, incomplete data collection, the sample size has been kept as 400.

Tool was consists of Section I- Demographic variables of students such as Age, Gender, Professional qualification, Year of studying, Occupation of father Occupation of Mother and Section II which consists of structured questionnaire including 15 items to assess self medication practices among undergraduate nursing and physiotherapy students.

The data was collected after obtaining formal permission from the principal of college of Nursing and Physiotherapy. The consent was taken from samples after explanation of the purpose of the study. The data was collected through goggle form through the link which was shared through what's up group.

Results:

Table 1.1 Descriptions of Demographic Characteristics of Sample

N=400

Sr no	Demographic variable	Frequency (f)	Percentage (%)
1	**Age in Years**		
	17-19	98	24.5
	20-22	246	61.5
	23-25	44	11
	>25	12	3
2	**Gender**		
	Male	138	34.5
	Female	262	65.5
3	**Professional qualification**		
	B.Sc Nursing	240	60
	Physiotherapy (BPT)	160	40
4	**Year of studying**		
	1	104	26
	2	111	27.75
	3	103	25.75
	4	82	20.5

Above table shows that majority of Samples i.e. 61.5% are between 20 to 22 years of age group, 65.5% samples are females and 60% of them are from B.Sc Nursing Programme. Majority i.e. 27.75% samples are studying in second year of their respective course.

Table 1.2 Descriptions of Demographic Characteristics of Sample

N=400

Sr no	Demographic variable	Frequency (f)	Percentage (%)
5	**Occupation of father**		
	Business	92	23
	Service	168	42
	Laborer	20	5
	Self employed	46	11.5
	Health related profession (specify)	74	18.5
	Any other	0	0
6	**Occupation of Mother**		
	Business	35	8.75
	Service	130	32.5
	Laborer	4	1
	Self employed	10	2.5
	House maker	123	30.75
	Health related profession (specify) Any other	98	24.5

Above table shows that Fathers occupations of 42 % samples was Service and Mothers Occupation of majority of samples i.e. 32.5% was Service

Section II: This section deals with assessment of self medication practices of samples

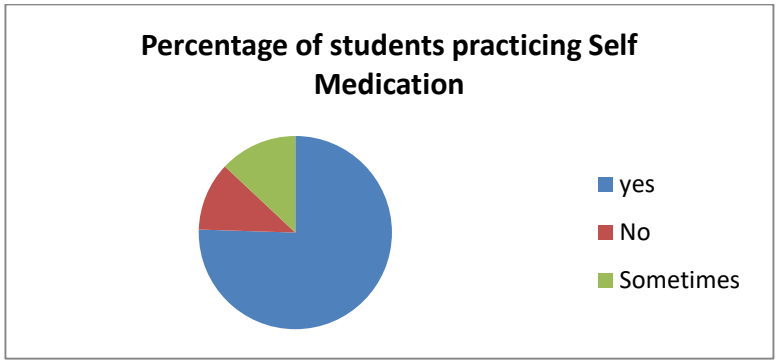

Fig No 1 Description of self medication Practice by Samples

Above figure shows that 75.5% of Sample practices self medication, 13% of sample practices it sometimes and 11.5% of sample does not practice it.

Table no 3. Description of Common Illnesses in which self medication is practiced

N=354

Sr no	Item	Frequency (f)	Percentage (%)
1	Common Cold & Cough	298	84.18
2	Diarrhea & Dehydration	324	91.52
3	Body pain , Headache	286	80.79
4	Infection	146	41.24
5	Fever	288	81.35
6	Acidity	172	48.58
7	Nausea /Vomiting	146	41.24
8	Allergy	86	24.29
9	Menstrual symptoms	174	49.15
10	Constipation	14	3.95
11	Muscular Weakness	26	7.34
12	Anorexia	10	2.82
13	Any other specify	45	12.71

The above table shows that the common illnesses for consuming self medication of majority of Samples i.e. 91.52% was Diarrhoea and Dehydration followed by Common cold and cough in 84.18%, Fever in 81.35% of sample and Body Pain and Headache in 80.79%. The illnesses for which self medication was practices with less percentage was Anorexia i.e. 2.82%, Constipation 3.95%, and Muscular weakness 7.34%.

Table no 4 Description of Common Medications consumed during Sickness

N=354

Sr no	Item	Frequency (f)	Percentage (%)
1	Analgesic	326	92.09
2	Antipyretic	267	75.42
3	Cough Suppressants	185	52.25
4	Antibiotics	148	41.80
5	Antidiarrheal	324	91.52
6	Antiemetic	143	40.39
7	Antiallergic	156	44.06
8	Antacids	188	53.10
9	Antispasmodics	34	9.60
10	Any other	22	6.21

Above table shows that majority i.e. 92.09% sample consumes Analgesics, 91.52% sample consumes Antidiarrheals and 75.42% of sample consumes Antipyretics as self medication during sickness. The less percentage of medicines which are consumed during sickness are Antispasmodics i.e. 9.60%, Antiemetic 40.39% and any other drugs are laxatives, lozenges are 6.21%

Table no 5 Description of common reasons for self-medication

N=354

Sr no	Item	Frequency (f)	Percentage (%)
1	High consultation fee	146	41.24
2	Busy schedule	240	67.79
3	Quick relief	258	72.88
4	Believe in alternative system of medicine therapies	87	24.57
5	Cost saving	278	78.53
6	Convenience	256	72.31
7	Any other	0	0

Above table shows that majority i.e. 78.53% sample consume self medication to save the cost, 72.88% for Quick relief of symptoms and 72.31% consume it as it is more convenient. 67.79% of sample practice self medication because of their busy schedule, 41.24% because of high consultation fees, and 24.57% of sample practice it because they believe in alternative system of medicine therapies.

Table no 6. Description of sources consulted before taking self-medication

N=354

Sr no	Item	Frequency (f)	Percentage (%)
1	Parents, Family members	182	51.41
2	Friends	266	75.14
3	Health care professionals	245	69.20
4	Chemist	22	6.21
5	Previous prescription letter	48	13.55
6	Any other	0	0

The above table shows that majority i.e. 75.14% of samples consult their Friend before taking self medication, 69.20% of samples consult health care Professionals and 51.41% of samples consult their Parents, Family members. 13.55% of sample preferred to use previous prescription letter and 6.21% of sample consult a Chemist before taking self medication.

The source of obtaining medication by 90.96% of students was from community Pharmacies, 18.92% of sample uses leftover medicines from previous prescription and 7.32% of sample obtains it through online shopping. 3.38% of sample obtains it from friends, relatives. The reason to stop self medication practice by 96.04% of sample was relief of the symptoms, 12.99% students stop it after the completion of course and 12.14% stop it after a few days regardless of the outcome. 7.90% of Samples stops it a few days after recovery and 1.12% of Samples stop the self medication after consulting with Pharmacist. 94.63% of sample does not use the same prescription of family member, 4.23% of sample use it and 1.12% of sample use it sometimes.

65.81% of sample use Branded medicine, 32.76% use Generic medicine and 1.41% of sample use both type of medicine. 65.25% of samples consume Allopathic medicines, 19.20% consumes Homeopathy medicines and 15.53% of sample consumes Ayurvedic medicines as self medication during sickness. 96.04% of sample checks the expiry date of medicine, 2.82% of sample does not check it and 1.12% of sample checks it sometimes before consuming the medication. 11.58% of sample had experience of adverse drug reaction and 88.41% of Sample did not have experience of adverse drug reaction. 44.73% of sample stopped the medication after experience of adverse drug reaction, 39.47% consulted the doctor and 15.78% of sample consulted family members for its management. There was no association between self medication practices with selected demographic variables like age, gender, and professional qualification, occupation of father and occupation of mother. But there is association between self medication practice and year of studying (0.03693443 <0.05)

Discussion

The findings of the study revealed that the prevalence of self medication among undergraduate Nursing and Physiotherapy students was 302 (75.5%). The most commonest illness for which self medication was consumed were Diarrhoea and Dehydration 324 (91.52%) followed by common Cold and Cough 298 (84.18), fever 288 (81.35%) and body pain and Headache 286 (80.79%). The drugs commonly consumed were analgesics 326 (92%.09%), followed by antidiarrheals 324 (91.52%) antipyretics 267 (75.42%), and antacids 188 (53.10%). The most common reasons for which self medication was consumed were cost saving 278 (78.53%), followed by convenience 256 (72.31%), quick relief 258 (72.88%) and busy schedule 240 (67.79%).

The findings of this is study is comparable with the study conducted by Pratiti Haldar et al on self medication practices among nursing students which shows that 66.7% of nursing students consume medication which is also supported by study done by Ali S which shows the prevalence of self medication as 84.50%. in this it was found that the most commonly consumed self medication were The drugs commonly consumed were analgesics 326 (92%.09%), followed by antidiarrheals 324 (91.52%) antipyretics 267 (75.42%), and antacids 188 (53.10%). This findings are similar to the findings of the study done by Deborah Tolupe Esan among undergraduate students of university which is 71% students use analgesics, 75.1% use antipyretic. The findings of this study also shows that the common illness for which self medication is consumed were common Cold and Cough 298 (84.18), fever 288 (81.35%) and body pain and Headache 286 (80.79%). These findings are similar to the study done by Subhashini etal on self medication practice among people attending oral health outreach programme which shows that the common illness for which self medication were headache (59.6%), Fever (60%), cough (51%).

Conclusion

Self-medication is one of the components of self-care adopted by the WHO. Though significant number of students self medicated in this study, few of them did not support self medication practices. Thus, drug regulatory and health authorities have to dedicate some resources used to raise awareness of the students and the general public on the pros and cons of responsible self-medications to eventually improve their attitudes towards the practices of self-medication. Moreover, it might be helpful if the concepts and principles of self-medication could be reflected in the formal curricula of health care professionals.

Acknowledgements

The author would like to thank Physiotherapy and Nursing students for participating in the study.

Conflict of Interest

The author declares that there is no conflict of interest with respect to the authorship and publication of this paper.

Funding

Dr D.Y.Patil Vidyapeeth Pimpri Pune-18 Maharashtra

References

1. Shankar PR, Partha P, Shenoy N, etal 'self medication and non doctor prescription practices in Pokhara vally, Western Nepal: a questionnaire – based study BMC Fam pract. 2002; 3:17.

2. World Health Organization Guidelines for the regulatory assessment of medicinal products for use in self –medication. Geneva:WHO; 2000.

3.Kalaiselvi Selvaraj, S Ganesh Kumar etal perspective 'Prevalance of self –Medication practices and its associated factors in Urban Puducherry' India in clinical research Jan-March 2014, 5 (1) pg 32-36

4. Ayodeji Akinwande Fasoro, Opeoluwa Esther Odesanya etal 'Assessment of self –MedicationPractices and its Associated Factors among Undergraduates of a private University in Nigeria' Journal of Environmental and Public Health Dec 2018 pg 1-8

5. Aster Desalew Kassie, Berhanu Boru Bifftu and Habtamu Sewunet Mekonnen 'self medication practice and associated factors among adult household members in Meket district, Northeast Ethiopia, BMC pharmacology and Toxicology 2018 19:15

6. Subhashini, Bharath Kumar Garla, Muthu Karuppaiah and taranath "Prevalance of Self-Medication Practice among People attending Oral Health Outreach Programmes In Madurai East, Tamilnadu" Journal of Advanced Oral Research 8 (1&2) 14-20.

7. Deborah Tolulope Esan, Ayodeji Akinwande Fasoro, Opeoluwa Esther Odesanya etal 'Assessment of self medication practices and its associated factors among Undergraduates of private University in Nigeria'Journal of Environmental and Public Health vol 2018, article ID 5439079,1-7

8. Sara Mamo, Yohanes Ayele, Mesay Dechasa 'Self –Medication practices among Community of Harar city and its surrounding, eastern Ethiopia'Hindawi journal of Pharmaceutics vol 2018, Article ID 2757108

9. M.Shanmuga Priyan, B.Maharani etal "Self –Medication practices among residents of Puduchery-Across sectional questionnaire based survey" Indian Journal of Pharmacy and pharmacology, October-December 2017; 4(4); 168-171

10. Luca Garofalo, Gabriella Di Giuseppe, and Italo F Angelillo "Self –Medication Practices among Parents in Italy Hindawi Publishing Corporation BioMed Research International Volume 2015, Article ID 580650, http://dx.doi.org/10, 1155/2015/580650

11. Hajira Saba I., Shivananda K. S., Mini Jayan, C. Althaf Hussain "Prevalence of self-medication practices and its associated factors in rural Bengaluru, Karnataka, India" International Journal of Community Medicine and Public Health 2016 Jun;3(6):1481-1486

12. Shilpa Patrick, Dinesh Badyal Self-medication Practices in Patients Attending a Tertiary Care Teaching Hospital in Urban North-West India" Acta Medical International Janauary- June 2018 issue 1 volume 5 page 44-47

13. Kshitiza Sharma, Suresh Sharma, Rakhi Gaur etal 'Self medication practices with antibiotics among nursing students: A cross sectional descriptive survey at tertiary care teaching hospital in Uttarakhand' clinical Epidemiology and Global Health 8 (2020) 1384-1389.

14. Vineeta Sawhney, Mohammad Younis Btat, Zorawar Singh "A descriptive study of prevalence, pattern and attitude of self medication among second professional medical students in a tertiary care center" International Journal of Basic & Clinical Pharmacology May-June 2015 vol 4 issue 3 page 542-546.

15. Soni S, Dheeraj Kumar Singh and Mukesh Kumar 'Á study on pattern and prevalence of self medication among second year medical students' international journal of drug development and research 2019 vol 11(1) 9-11.

16. Zenawi Zeramarium Araia, NahomKiros Gebregziabher and Araia Berhane Mesfun "self medication Practice and associated factors among students of Asmara College of Health Sciences, Eritrea: Across sectional Study"Journal of Pharmacaceutical policy and practice https://doi.org/10.1186/s40545-019-0165-2

17. Osama B Albasheer, Mohammed Salih Mahfouz, etal 'self medication practice among undergraduate medical students of a Saudi tertiary institution'tropical journal of pharmaceutical Research oct 2016; 15 (10):2253-2259

18. Arti A Kasulkar and M Gupta "self medication practices among medical students of a private institute" Indian J Pharm Sci 2015; 77 (2): 178-182

19. Fekadu G, Dugassa D etal "Self- Medication Practices and Associated Factors Among Health –Care Professionals in selected Hospitals of Western Ethiopia" Patient preference and Adherence volume 14, 2020 page 353-361

20. Sanjeev Badiger, Rashmi Kundapur etal 'self medication patterns among medical students in South India'Australasian Medical Journal 2012, 5 4, pg 217-220

21. Basavanthappa B.T. Nursing Research, 2nd edi New Delhi: Jaypee brothers medical publishers (p) ltd 2010 pg 118,119

22. Polite DF, Beck CT. Nursing Research: principle and methods. 7th edi Philadelphia: Lippincott Willkings; 2007

23. Polit SF, Hungler BP. Essentials of Nursing Research methods appraisal and utilizations. 6th edi New York: J.B.Lippincott Company 1999.