ISSN: 0975-3583,0976-2833

VOL13, ISSUE 01, 2022

ORIGINAL RESEARCH

Pattern of Self- Medication among Children

Dr. Abhishek Bansal¹, Dr. Ashish Verma²

¹Assistant professor, Department of Pediatrics, Career Institute of Medical Sciences

Lucknow, Uttar Pradesh, India

²Professor, Department of Pediatrics, Career Institute of Medical Sciences Lucknow, Uttar Pradesh, India

Corresponding author: Dr. Ashish Verma, Professor, Department of Pediatrics, Career Institute of Medical Sciences Lucknow, Uttar Pradesh, India, Email: ashish.paed81@gmail.com

ABSTRACT:

Background:Self-medication is defined as the utilization of drugs to treat self-diagnosed disorders or symptoms or the irregular or continuous use of a prescribed drug for chronic or repeated diseases or symptoms. The present study was conducted to assess pattern of self-medication among children.

Materials & Methods:80 children age ranged 12- 17 years of both genders were enrolled. Medicines used to treat illness, reasons for self-medication, duration of self-medication etc. was obtained from their parents.

Results: Out of 80 children, boys were 50 and girls were 30. The preferred therapy was allopathy seen among 45%, homoeopathy in 12%, home remedies in 8%, herbal in 20% and combination therapy in 15%. Commonly used drugs were antipyretics in 32%, analgesics in 15%, antimicrobials in 10%, antiallergy in 5%, cough & cold preparations in 18% and topical preparations in 20%. Frequency of self- medication was once a year in 56%, 1-2 times in 30% and >2 times in 14%.

Conclusion: Themost commonly preferred therapy was allopathy and herbal and antipyretic was most used drug.

Key words: Allopathy, Self- medication, Home remedies

I. INTRODUCTION

WHO recognizes self-medication as an element of self-care. Self-medication is defined as the utilization of drugs to treat self-diagnosed disorders or symptoms or the irregular or continuous use of a prescribed drug for chronic or repeated diseases or symptoms. ^{1,2} In pediatric context, self-medication implies administration of medication by the care giver without medical consultation. ³ Although over-the-counter (OTC) drugs are meant for self-medication and are of proven efficacy and safety, their improper use due to lack of knowledge of their side effects and interactions could have serious implications, especially in extremes of ages. ⁴

The prevalence of self-medication as stated by various studies done all over the world varies from a value as low as 25% to as high as 75%. Very few studies have been published regarding self-medication in Indian children. There is not enough data on the common illnesses for which self-medication is resorted to, common drugs used, number of drugs used, source of acquiring these drugs and reason for self-medicating.⁵

The practice of self-medication and the irrational use of drugs is a major public health concern. The concept of self-medication involves the use of medicines for curative purposes

ISSN: 0975-3583,0976-2833

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but without professional advice.⁶ It is an act of obtaining and consuming drugs without the advice of a health worker. Inappropriate use of self-medication can increase "drug-induced illness", death and waste of public funds, bacterial infections, hypersensitivity and withdrawal symptoms.⁷ The present study was conducted to assess pattern of self- medication among children.

II. MATERIALS & METHODS

The present study comprised of 80 children age ranged 12- 17 years of both genders. The consent was obtained from parents of all children.

Data such as name, age, gender etc. was recorded. Information regarding medicines used to treat illness and reasons for self-medication, duration of self-medication etc was obtained from their parents. Data thus obtained were subjected to statistical analysis. P value < 0.05was considered significant.

RESULTS

Table I Distribution of children

Total- 80				
Gender	Boys	Girls		
Number	50	30		

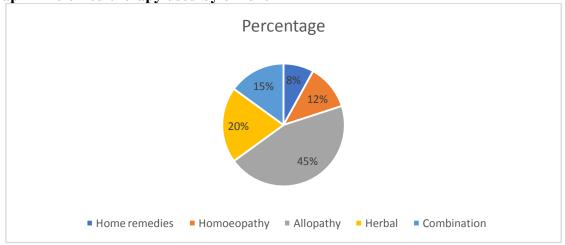
Table I shows that out of 80 children, boys were 50 and girls were 30.

Table II Preferred therapy used by children

Therapy	Percentage	P value
Home remedies	8%	0.05
Homoeopathy	12%	
Allopathy	45%	
Herbal	20%	
Combination	15%	

Table II, graph I shows that preferred therapy was allopathy seen among 45%, homoeopathy in 12%, home remedies in 8%, herbal in 20% and combination therapy in 15%. The difference was significant (P < 0.05).

Graph IPreferred therapy used by children



VOL13, ISSUE 01, 2022

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Table III Self-medicated drugs

Self-medicated drugs	Percentage	P value
Antipyretics	32%	0.05
Analgesics	15%	
Antimicrobials	10%	
Antiallergy	5%	
Cough & cold preparations	18%	
Topical preparations	20%	

Table III, graph II shows that commonly used drugs were antipyretics in 32%, analgesics in 15%, antimicrobials in 10%, antiallergy in 5%, cough & cold preparations in 18% and topical preparations in 20%. The difference was significant (P < 0.05).

Graph II Self-medicated drugs

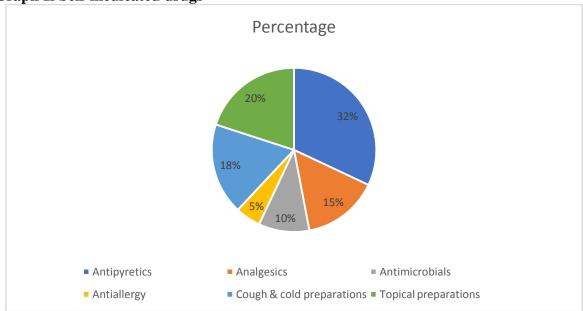


Table IV Frequency of self- medication

Frequency	Percentage	Number
1	56%	0.01
1-2	30%	
>2	14%	

Table IV shows that frequency of self-medication was once a year in 56%, 1-2 times in 30% and >2 times in 14%. The difference was significant (P< 0.05).

III. **DISCUSSION**

Drug utilization in children is of great concern worldwide. Many drugs for this group of population are used in outpatient settings.⁸ Parents generally give drugs to treat their child sickness. The trendof using drugs on their own that is self-medication has been increasingin developing countries as well as in developed countries in recentyears. Drugs use without consulting any physician or health careprovider for treating or preventing the ailments is selfmedication. 10 The joint statement by International Pharmaceutical Federation and the World Self-Medication Industry encourages responsible Self-medication by listing responsibilities

ISSN: 0975-3583,0976-2833

VOL13, ISSUE 01, 2022

of pharmacists and manufacturers of non-prescription medicines.¹¹ Responsible self-medication is where the patient is provided all necessary information about the medicine and uses only non-prescription drugs for self-medication. Only when responsible self-medication is practiced it will not be a menace to the society.¹²The present study was conducted to assess pattern of self- medication among children.

In present study, out of 80 children, boys were 50 and girls were 30. A study by Naaraayan et al¹³ was performed in the outpatient department of Institute of child health and hospital for children. All children between 1 month and 12 years of age who attended the outpatient department during a particular time of the day on particular days of week were included in the study. After noting down the demographic characteristics, history of self-medication was elicited. For children who self-medicated, inciting illness, name of drug, source, reason and adverse events were noted down. Prevalence of self-medication was expressed as proportion with 95% confidence interval. Prevalence of self-medication was 32%. Common illnesses leading to self-medication were fever, cough and cold. Commonly used drugs were paracetamol, anticold medications and antibiotics. Most of them used previous prescription to procure the drugs and previous experience on efficacy was the most common reason cited. Older children were more commonly self-medicated than the younger (p = 0.001). Self-medication was encountered in 32% of children attending the outpatient department of the hospital and is more common in older children.

We observed that preferred therapy was allopathy seen among 45%, homoeopathy in 12%, home remedies in 8%, herbal in 20% and combination therapy in 15%. Gohar et al¹⁴ in their study 400 parents were randomly selected and interviewed. It was observed that selfmedication prevalence in children by their parents was 77.25% with male and female ratio 49% and 51%. Self-medication awareness was 66% among total parents and this practice was more in children ofage 1-5 years i.e., 47%. Most common conditions for self-medication were fever, cough, flu, vomiting, diarrhoea and allergies. Frequently used drug groups include antipyretics, cough and cold preparation, antimicrobials, antiemetics and antiallergy. It was also observed that 45% of parents practiced self-medication 3-4 times per year and the main reasonsbehind this practice were perception of illness, previous experience, lack of time, financial constraint and leftovermedicines. Old prescriptions, family members, friends and medical stores were common source of self-medication. This study also revealed that 57% of parents reported recovery after self-medication. It was also observed that 63% ofparents informed physician about self-medication in their children and 18% reported that their child became sicker afterself-medication. Out of total 56% participants were agreed that selfmedication is unsafe for their children.

We found that commonly used drugs were antipyretics in 32%, analgesics

in15%,antimicrobials in 10%, antiallergy in 5%, cough & cold preparations in 18% and topical preparations in 20%. The frequency of self- medication was once a year in 56%, 1-2 times in 30% and >2 times in 14%. Banerjee et al¹⁵ found that among 200 students of 5th semester, 184 students gave the written consent for the study and submitted the given questionnaire. Fourteen questionnaires were incomplete and so the remaining 170 were analysed. Results showed that 126 (74%) respondents practiced self-medication. The main health issues for seeking self-medication were found to be upper respiratory tract infection as reported by 39 students (31%) followed by diarrhea (32 students) (25%), fever (23 students) (18%). Drugs commonly used were analgesics (32%) followed by antibiotics (24%). The reasons for practicing self-medication were mild illness for 66 students (52%) and time-saving for 35 students (28%). Though the self-medication practice is inevitable, drug authorities and health professionals need to educate students about the pros and cons of practicing self-medication.

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IV. CONCLUSION

Authors found that most commonly preferred therapy was allopathyand herbal and antipyretic was most used drug.

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