

## Original Research

### Assessment of pattern of self- medication among children

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#### ABSTRACT:

**Background:** The practice of self-medication and the irrational use of drugs is a major public health concern. The present study was conducted to assess pattern of self- medication among children. **Materials & Methods:** 120 children age ranged 12- 16 years were included. Duration of self-medication, recovery related question and general perception of participants about child self-medication was recorded. **Results:** Out of 120 children, boys were 70 and girls were 50. Preferred therapy was allopathy in 55, homoeopathy in 20, home remedies in 15, herbal in 18 and combination therapy in 12. The difference was significant ( $P < 0.05$ ). Commonly used drugs were antipyretics in 32, cough & cold preparations in 28, analgesics in 27, antimicrobials in 15, anti-allergy in 10 and topical preparations in 8 cases. The difference was significant ( $P < 0.05$ ). **Conclusion:** The most commonly preferred therapy was allopathy and self-used drug was antipyretic.

**Key words:** Allopathy, Children, Self- medication.

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#### INTRODUCTION

Drug utilization in children is of great concern worldwide. Many drugs for this group of population are used in outpatient settings. Parents generally give drugs to treat their child sickness.<sup>1</sup> The trend of using drugs on their own that is self-medication has been increasing in developing countries as well as in developed countries in recent years. Drugs use without consulting any physician or health care provider for treating or preventing the ailments is self-medication.<sup>2</sup>

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 but without professional advice.<sup>3</sup> 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.<sup>4</sup>

Children are given medications by their parents. When children become sick the first response by most of the parents is to self-medicate them. Majority of the

parents in both developed and developing countries prefer to treat their child's common ailments like fever, cough/ cold and diarrhoea without consulting a physician. Analgesics, antipyretics, anti-inflammatory agents, cough and cold preparations are amongst the commonly practiced self-medications.<sup>5</sup> The present study was conducted to assess pattern of self-medication among children.

#### MATERIALS & METHODS

The present study comprised of 120 children age ranged 12- 16 years of both genders. The consent was obtained from parents of all children.

Data pertaining to children such as name, age, gender etc. was recorded. The questionnaire was prepared which comprised of information such as medicines used to treat illness and reasons for self-medication, duration of self-medication, recovery related question and general perception of participants about child self-medication either they considered it safe or not. Data thus obtained were assessed statistically. P value less than 0.05 was considered significant.

**RESULTS**

**Table I Distribution of subjects**

Total- 120		
Gender	Boys	Girls
Number	70	50

Table I shows that out of 120 children, boys were 70 and girls were 50.

**Table II Preferred therapy among subjects**

Therapy	Number	P value
Allopathy	55	0.01
Homoeopathy	20	
Home remedies	15	
Herbal	18	
Combination	12	

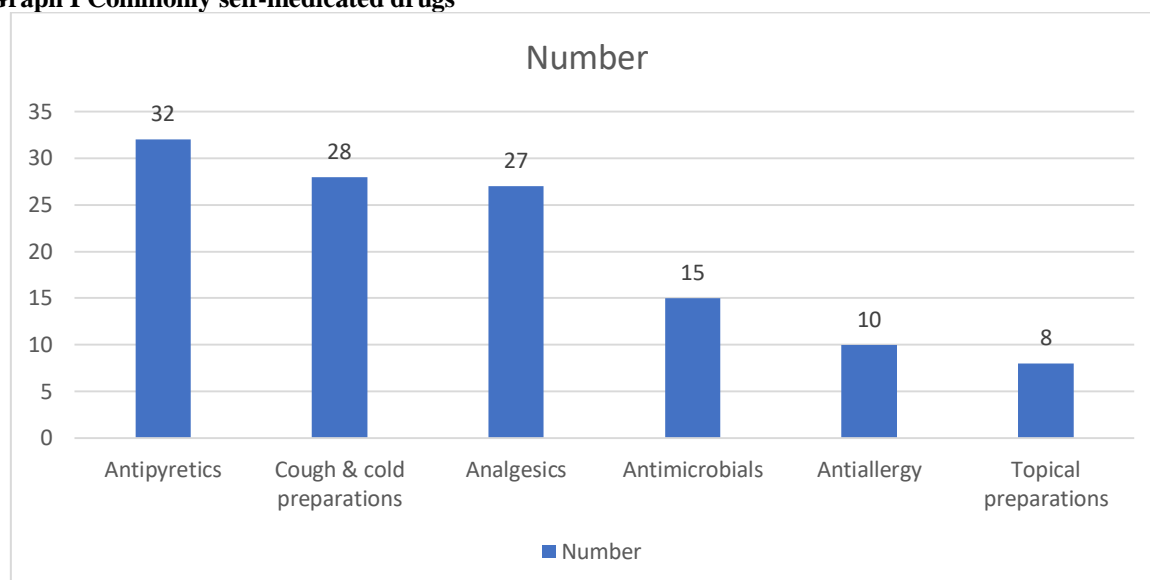
Table II shows that preferred therapy was allopathy in 55, homoeopathy in 20, home remedies in 15, herbal in 18 and combination therapy in 12. The difference was significant (P< 0.05).

**Table III Commonly self-medicated drugs**

Self-medicated drugs	Number	P value
Antipyretics	32	0.04
Cough & cold preparations	28	
Analgesics	27	
Antimicrobials	15	
Antiallergy	10	
Topical preparations	8	

Table III, graph I shows that commonly used drugs were antipyretics in 32, cough & cold preparations in 28, analgesics in 27, antimicrobials in 15, antiallergy in 10 and topical preparations in 8 cases. The difference was significant (P< 0.05).

**Graph I Commonly self-medicated drugs**



**DISCUSSION**

According to World Health Organization self-medication is the use and selection of medicines by individuals to treat self-recognized illnesses or symptoms. The International Pharmaceutical

Federation (IPF) has defined self-medication as non-prescription drugs use by individuals on their own initiative.<sup>6</sup> Drugs purchase and use without an authorized prescription or using previous prescription also comes under self-medication. It also included the

use of leftover medicines which are stored at home and medicines advised by family members or friends.<sup>7</sup> Primary responsibility for the use of self-medication products comes not only to the individual but also on all people involved in self-medication.<sup>8</sup> Therefore, all people must be aware of the benefits and risks associated with the self-use of medicines. Self-medication associated risks include inappropriate diagnosis, drug interactions, drug resistance and adverse drug reactions, inappropriate drug choice and augmented polypharmacy.<sup>9</sup> Risk of drug dependency and abuse are also associated with self-medication. Others may also include inadequate dosage, excessive prolonged drug use and double medication as individuals could not be able to identify that same drug has already been taken with another brand name which may lead to serious consequences. Unjustified and absurd self-medication consequence is the wastage of healthcare resources and may also lead to hospital admissions.<sup>10</sup> The present study was conducted to assess pattern of self- medication among children.

In present study, out of 120 children, boys were 70 and girls were 50. The preferred therapy was allopathy in 55, homoeopathy in 20, home remedies in 15, herbal in 18 and combination therapy in 12. Gohar et al<sup>11</sup> in their study 400 parents were randomly selected and interviewed. It was observed that self-medication 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 of age 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 reasons behind this practice were perception of illness, previous experience, lack of time, financial constraint and leftover medicines. 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% of parents informed physician about self-medication in their children and 18% reported that their child became sicker after self-medication. Out of total 56% participants were agreed that self-medication is unsafe for their children.

We found that commonly used drugs were antipyretics in 32, cough & cold preparations in 28, analgesics in 27, antimicrobials in 15, antiallergy in 10 and topical preparations in 8 cases. Katumbo et al<sup>12</sup> assessed frequency of self-medication and the secondary purposes were to describe habits,

dangerous behaviors and common mistakes. The results speak for themselves: 96% of the mothers self-medicate their children; 95.7% do not know the exact dosage of the drug used; 97.17% do not check the expiry date; over 91% of the mothers use antimalarials, 41.3% antipyretics/analgesics and 26.3% antibiotics. Healthcare practitioners should involve household members in focused awareness on self-medication and its negative implications in order to encourage them to serve as change agents against the practice by mothers.

## CONCLUSION

Authors observed that most preferred therapy was allopathy and antipyretics were self-used drug.

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