



PRESCRIPTION ANALYSIS IN PEDIATRICS: A CLINICAL SURVEY REPORT

Mayank Kulshreshtha¹, Anuradha Maheshwari², Mradul Goswami³, Sachdev Yadav⁴

¹ National and Botanical Research Institute, Lucknow- 226001, India.

² Paediatrician, Maheshwari Hospital, Mathura (U.P.), India.

³ National and Botanical Research Institute, Lucknow- 226001, India.

⁴ Banasthali University, Rajasthan-304022, India.

*Corresponding author's E-mail: mayankk74@gmail.com

Accepted on: 16-05-2011; Finalized on: 25-08-2011.

ABSTRACT

Prescription Analysis off all pediatrics is important during treatment. In the present study "Prescription Analysis in Pediatric" was conducted under the guidance of Dr. Anuradha Maheshwari, Pediatrices in Maheshwari Hospital, mathura. Total 224 patients satisfy the inclusion criteria for study were enrolled into the study. Potential study subjects were thoroughly interrogated for history in local dialect with parents/gaurdians and questioned for detailed information pertaining to the disease. A thorough clinical examination was done for both In-patients and Out-patients by Pediatrician. Prescription Analysis off all pediatrics is important during treatment In the present study "Prescription Analysis in Pediatric" 31.6% Subjects suffered with cough and cold, 29.91% with other disease, 16.07% with fever, 9.82 % with diarrhea, 6.69% with pain in abdomen, 4.46 % with asthma. 58.92% Baby Boys were suffered in comparison to 41.07% of Baby Girls. Syrups were prescribed in maximum numbers in comparison to other dosage forms.

Keywords: Prescription analysis, Pediatric treatment, Clinical survey.



INTRODUCTION

Different types of clinical research are associated with different degrees of risk and with varying utility. Usually classified as therapeutic or non-therapeutic, clinical research involving children necessitates a balance between the conflicts of intrusion into a group of vulnerable subjects, and the obvious advantages which such intrusion engenders. To understand better the potential ethical dilemmas of paediatric research the author has expanded the classification of such clinical research involving children. Five types of such research – preventive research, curative research, research to alleviate symptoms, studies to establish norms and baselines, and curiosity research – are discussed in the context of their ethical constraints, and the different ethical questions which confront workers operating in each of these different themes. Clinical research involving children is necessary for the continued betterment of children welfare. Doctors who work with the children have a duty to investigate possibility of cure or to decrease the symptoms¹.

Pediatrics is the branch of medicine that deals with the medical care of infants, children, and adolescents. A medical practitioner who specializes in this area is known as a pediatrician. The word *pediatrics* and its cognates mean *healer of children*; they derive from two Greek words: (*pais* = child) and (*iatros* = doctor or healer). In Commonwealth countries, the respective spellings paediatrics and paediatrician are usually preferred. There may be a slight semantic difference: in the USA, a *pediatrician* (US spelling) is often a primary care physician who specializes in children, whereas in the Commonwealth a *paediatrician* (British spelling) generally is a medical specialist not in primary general practice. For further detail, see discussion on the broad and narrow meanings. Pediatrics is a relatively new medical specialty, developing only in the mid-19th. Parm (1830–1919) is known as the father of pediatrics because of his many contributions to the field².

Pediatrics is concerned with the health of infants, children and adolescents, their growth and development, and their opportunity to achieve full potential as adult. As a physicians who assumes a responsibility for children's physical, mental, and emotional progress from conception to maturity, pediatricians must be concerned with social or environmental influences, which have a major impact on the health and well being of children and their families, as well as with particular organ system and biologic processes. The young are often among the most vulnerable or disadvantaged in society, and thus their needs require special attention³. Over a century ago, pediatrics emerged as a medical specialty in response to an increasing awareness that the health problems of children differ from those of adults and that the child's



response to illness and stress varies with age. The emphasis and scope of pediatrics continue to change, but these basic observations remain valid⁴.

SUBJECTS AND METHOD

The study was carried out in the Pediatrics department of Maheshwari Hospital, Pvt. Ltd. Mathura. Total 225 patients satisfy the inclusion criteria for study were enrolled into the study. Potential study subjects were thoroughly interrogated for history in local dialect and questioned for detailed information pertaining to the disease. A thorough clinical examination was done for both In-patients and Out-patients by Pediatrician.

The some main problems are --

- Diarrhea.
- Bronchial asthma.
- Cough, Cold, Fever.
- High grade fever, vomiting.
- Pain in abdomen.
- Malaria.

All subjects received standard antibiotic for a particular time to minimize the chance of diagnostic error before confirming for the disease. The patients were followed a weekly basis during the period of treatment.

Inclusion criteria

- Patients admitted to the ward or visiting Medicine OPD of Maheshwari Hospital at-least once a day.
- Patients should not more than 15 years.
- Patients of either sex.
- Oral informed consent by parents.
- Patients diagnosed with disease based on the various clinical features and laboratory investigations.

Exclusion criteria

- Patients more than 15 years.
- Pregnant / lactating females

Study design

This was an open, non comparative study to analyze the drug as well as disease in both in-patients and out-patients at Maheshwari Hospital, Pvt. Ltd. Mathura.

Study schedule and plan

- The patients were enrolled after oral informed consent as per inclusion and exclusion criteria.
- Follow up by was done at weekly intervals during the treatment.

Assessment of prescription analysis

The assessment of prescription analysis was one by formal methods.

- **Timing:** the time relation between the prescribed of drug and the occurrence of the reaction was assessed.
- **Dosage forms:** how many types of dosage forms are prescribed.
- **Laboratory tests:** how many types of tests are performed?

RESULTS

Data was recorded from 264 patients. Out of 264 patients enrolled at the beginning 40 patients dropped out and were not include in the analysis. Ultimately a total of 224 patients were included for analysis.

- In case of disease analysis, the Cough and Cold was found to be more prevalent to other diseases. (Graph 1)

The sequence is "Cough & Cold >Fever > Diarrhea > Pain abdomen > Asthma >Malaria".

- In case of sex, the overall analysis of prescription with sex was the no. of males are more than females. (Graph 2).

The sequence is "male > female"

- In case of a specific group of age the number of patients were more which have between 0 to 5 year old (Graph 3).

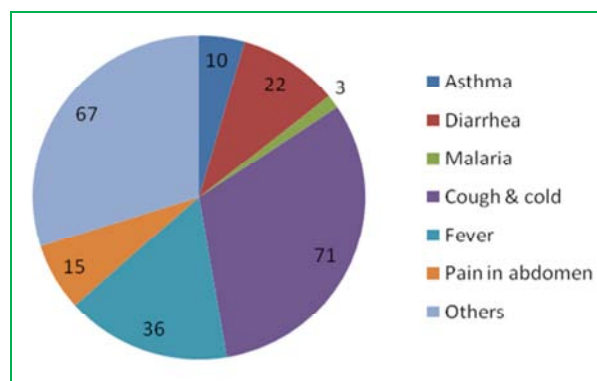
The sequence is" 0 to 5> 6 to 10> 11 to 15"

- Condition of cough & cold in a specific group, patients were more suffered with cough and cold which have between 0 to 5 year old (Graph 4).

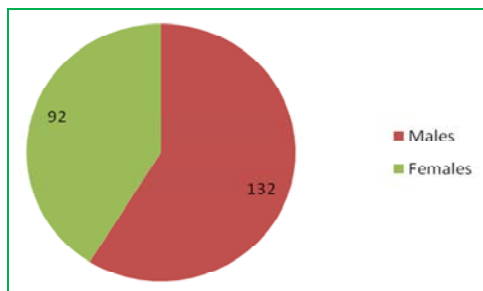
The sequence is" 0 to 5> 6 to 10> 11 to 15"

- Analysis with antibiotic syrups, Cefpodoxime was prescribed more times compare to other antibiotics.

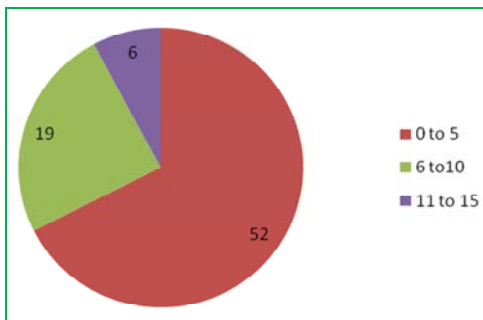
The sequence is "Cefpodoxime> Cefixime> Ofloxacin> Azthromycin> Amoxycillin"



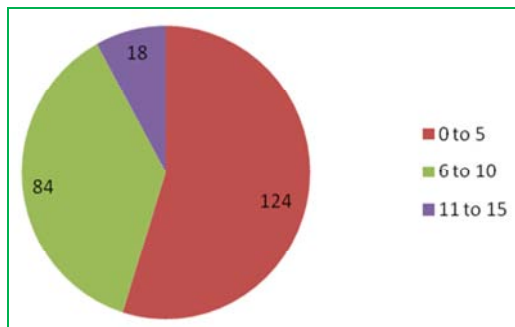
Graph 1: The condition of diseases in pediatrics.



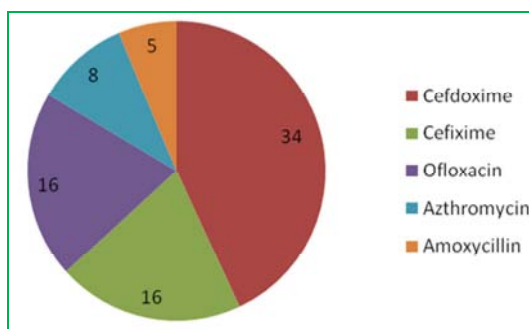
Graph 2: The number of males and females.



Graph 3: The number of patients



Graph 4: Age groups



Graph 5: Number of prescribe of different antibiotics

DISCUSSION

The agenda for pediatric encounters has two potential sources the clinical & the parent⁵. In present study we analyzed the drugs and disease in pediatric patients. pediatrics, branch of medicine dedicated to the attainment of the best physical, emotional, and social health for infants, children, and young people generally. Pediatrics became a specialty in 1930 when the American Academy of Pediatrics was founded with the idea that children have special developmental and health-care needs. Pediatricians devote much of their time to regular health examinations, as well as to preventive medicine

and health practices. They routinely immunize children against such infectious diseases as influenza, meningitis, measles, mumps, and chicken pox. In addition to their immediate health-care duties, pediatricians act as advocates for children in endorsing public education, access to health care, and services to children. These measures have led to better development and health of young people as well as a dwindling of morbidity and mortality rates. The American Academy of Pediatrics maintains 41 sections consisting of members who have interests in specialized areas of pediatrics such as immunology, adolescent health, cardiology, emergency medicine, surgery and diseases of special organs and systems. A number of surgeons specialize in pediatric surgery, and pediatricians known as neonatologists specialize in the care of premature babies, critically ill children, and those with congenital malformations⁶. The No. of Baby Boys was more in comparison to Baby Girls because the people of India are very careful and attentive for Baby Boys in comparison to Baby Girls. (Especially in case of village and illiterate peoples), the ceftriaxime syrup was prescribed in more numbers. Capsules are prescribed in very minimum numbers. Injections are prescribed moderately. The cough and cold was found to be prevalent in maximum numbers of subjects of low age group. Over all low age group have suffered in maximum.

Being sick is a normal part of childhood, and being seriously ill or a patient is the unfortunate lot of many children. Every child in the United States has some contact with the health care system at some time, and it is estimated that one out of every two children or adolescents is hospitalized as a result of illness or injury. In other words, routine well-child care and medical visits for minor illnesses, injuries, and the like are common experiences in the lives of most children, and many children must face even more serious medical issues. Being injured, undergoing routine medical procedures, getting sick, or being hospitalized all confront children with challenges on many levels -- physical, mental, emotional, and social⁷. Parents are not purely altruistic and self-sacrificing, nor are their sole function the provision of their child's primary goods. For many adults, rearing a child in an environment in which their values and beliefs flourish is a principal reason for becoming parents. In a liberal society, parents are free to inculcate their children with their own values. They are free to shape and guide their child's future lifestyle and life plans. Of course, parents are not totally free: for example, parents cannot deprive their daughters of a primary education, although they are free to select the type of school that their daughters attend. As such, parents have great influence on the values to which their children are exposed, even in institutions outside of the family. As a result, most individuals hold values and beliefs that are strongly influenced by their parents. Although parents have no guarantee that their child will accept their values and beliefs, it takes great motivation and self-reflection to do otherwise⁸.



REFERENCES

1. John pearn, "a classification of clinical paediatric research", journal of medical ethics, 1987, 13, 26-30.
2. Nancy T Hatfeild, "broadribb's introductory, pediatric nursing", 7th edition, 2007, printed in china, 28-30.
3. Ghai OP, essential pediatrics, printed at Mehta of set works, newdelhi, reprint- 1989, 8th edition 89.
4. Behrman kliegman Arvin, text book of paediatrics, india, 1996, 8th edition, 76.
5. Martin t stein, the pediatric clinical interview, printed in united state of America, 1st edition, volume 1, 2005, 3.
6. S. Halpern," The Columbia Electronic Encyclopedia, 6th ed., 1988, Columbia University Press.
7. Marc H. Bornstein, Janice L. Genevro, "child development and behavioral pediatrics" lawrence Erlbaum associates, publishers , Mahwah, New Jersey, Printed in the United States of America, 1996.
8. Lainie fried manross, "Children, Families, and Health Care Decision Making" clarendon press oxford, 1998, 6.

About Corresponding Author: Mr. Mayank Kulshreshtha

Mr. Mayank Kulshreshtha, completed D.Pharm from Luqman college of pharmacy, gulberga, Karnataka; B.Pharm from Rajiv academy for pharmacy, mathura, U.P; M.Pharm project from National Botanical Research Institute Lucknow (U.P.) and his project work is based on anti ulcerogenic potential of *ficus bengalensis* leaf under the guildens of Dr. Ch. V. Rao.