

Short study of Pattern of pediatric diseases admitted from emergency department of Patan Hospital

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ABSTRACT

Introduction: Pattern of diseases among admitted children may be the valuable information for any institution. This study was done to analyze the pattern of diseases admitted through emergency department of Patan Hospital.

Methods: This was a hospital based, retrospective and descriptive study, which was done in department of general practice and emergency medicine. All children admitted from emergency up to age 14 were included in study.

Results: Total 37000 patient were seen in emergency in 2014. Among them 5957 were admitted out of which 881 were children. Maximum patients were admitted in October. Majority of admitted children were on age group one to five years. Female were more than male. Maximum no of patients admitted were due to pneumonia, acute gastroenteritis and febrile convulsion

Conclusion: Pneumonia was the most common clinical diagnosis getting admitted. Any measures to prevent pneumonia in community level needs to be implemented.

Key words: common presentation, emergency visit, pediatric admission

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INTRODUCTION

Childhood illnesses comprise major portion of hospital admissions in the world with significant mortality. Sick Children get admission mainly from emergency department and outpatient department. In 2010, about 7.6 million children under-five children died, three-quarters of which are mainly due to preventable causes: neonatal conditions, pneumonia, diarrhea, malaria, and measles. In Nepal, study on disease pattern of children admitted from general Emergency department to pediatric ward is very few. And thus this study was done to analyze pattern of diseases among admitted children from emergency department to pediatric ward

METHODS

This is a retrospective hospital based descriptive study done at department of general practice and emergency medicine. Data was taken from admission book of emergency department. All the children admitted to medical pediatric ward with the age group from neonate to fourteen ages were included in this study. Children admitted to pediatric ward from outpatient department through emergency were excluded from study. Emergency department sisters do record all admitted children in this admission book and that book is used with permission.

RESULT

During one year period 39059 patients had visited emergency department and among them 5957 got admission (15%) in different wards of this hospital and among all admitted patients 887 (14.7%) patients admitted in pediatric department. Most of the admissions were in August (93) and least in the month of January (56). Males were 470 (52.9%) and female were 417 (47.1%). Children in age group up to one year were 219 (24.6%), upto five years were 320 (36.07%), five to ten year were 183 (20.06%) and in age group ten to fourteen years there were 162 (18.1%).

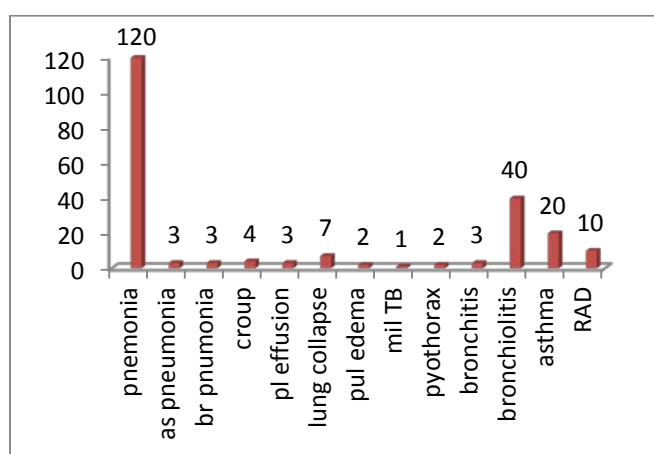


Figure 1: Respiratory problems in admitted patients (n=218)

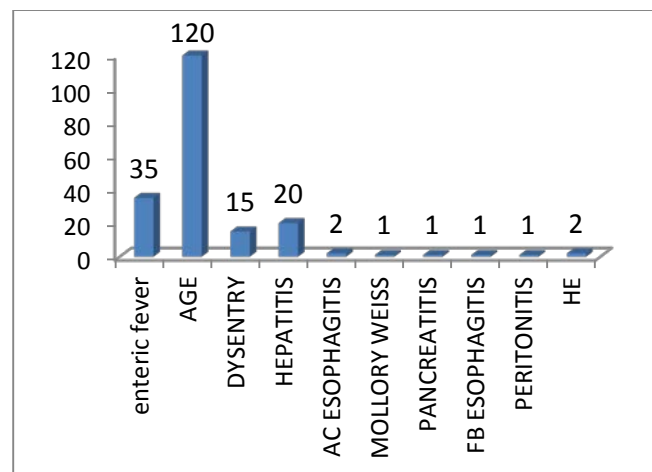


Figure 2: Gastrointestinal problem in admitted patients (n=198)

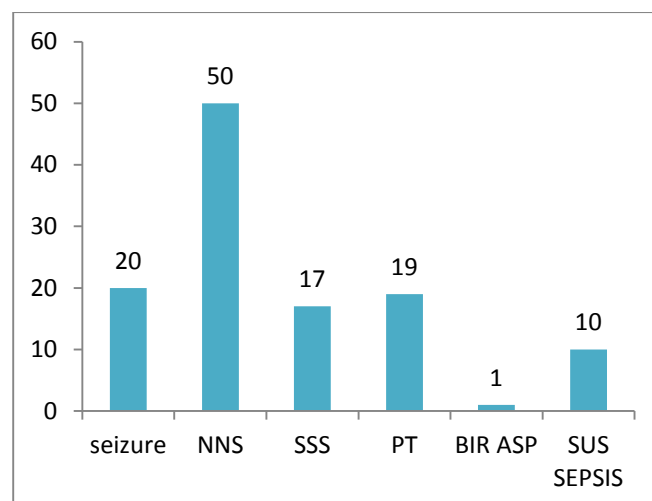


Figure 3: Neonatal conditions in admitted patients (n=117)

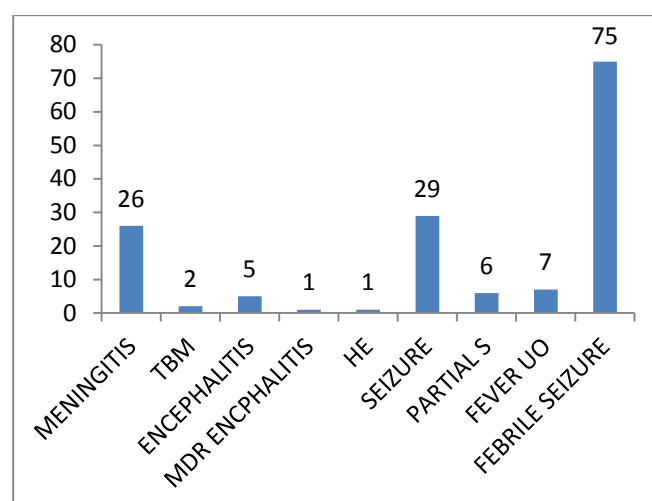
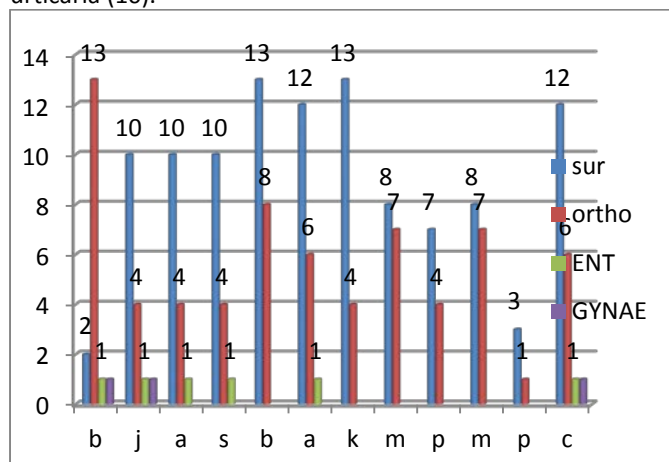


Figure 4: Neurological problem in admitted patients (n=152)

Common conditions in miscellaneous category were anaemia (15), insect bite (12), febrile urinary tract infection (10) and urticaria (10).



b to C = April to March; Sur=Surgery; Ortho=Orthopedics, Gyne=Gynecology

Figure 5: Surgical, Orthopedics, ENT and Gynecology problem in admitted patients (n=198)

DISCUSSION

The demand on inpatient services is increasing with more patients being admitted to the hospital. Increased hospital admissions either because of population reflect previously unmet need, increased parental awareness and demand or inappropriate use of inpatient resources.^{1,2} In this study, During one year period, thirty nine thousand, six hundred and fifty nine patient visited emergency department of this institution, which is less than the report published by Uzma Rahim Khan & Junaid A. Razzak & Ali Faisal Saleem & Adnan Ahmed & Sabeena Jalal from Pakistan.³

Among all patients who have visited emergency department, only 15 percent patients got admission and this admission data is less than a report from Pakistan³ and Bangladesh⁴ and our admission rate is higher than another report by Mohammad A et al from Pakistan.⁴

Among all admitted patients in our study fifteen percent patients falls on pediatric admission. This data is higher than a report by Karim Karim MZ, Hansen EL⁵ and our data is similar with the data reported from Hong Kong.⁶ Study shows, male patients were slight more than female patients in admission (male 470 and female 417, A study from Hong Kong also shows male predominance in Admission.⁶ Report from Nepal Medical College Attarkhel, Jorpati also got similar report.⁷ Most common age group among admitted patients falls on age group 1-5 yrs. Similar report has done by Poudel KM et al from Lumbini zonal hospital⁸ and from Kathmandu medical college by Bajracharya et al.⁹

Among all admitted pediatric diseases, a respiratory disease was found is 24.5 percent cases. Pneumonia, bronchiolitis,

Asthma are major diseases among all respiratory diseases. Study from Lumbini Zonal hospital found 31.6% respiratory disease among all admitted pediatric diseases these. They also found Pneumonia, Acute Bronchiolitis and Asthma as major diseases among respiratory diseases.⁸ In another study Upadhyay S et al found 43.7 percent respiratory diseases.

with pneumonia and bronchiolitis as major respiratory diseases.⁷ Another important major disease after respiratory diseases in gastrointestinal disease, our study found Gastrointestinal disease in 23.3% cases with AGE, enteric fever and hepatitis as major diseases, our report is similar with report from Nepal Medical college Jorpati.⁷ Report by Sirajudin Ahmed from Bangladesh found gastrointestinal diseases in 10.5 % cases admitted patients.¹⁰

Neonatal diseases as a cause of admission found in 13.1 percent cases and sepsis as a major diseases, A report from India has a similar report of neonatal diseases in admission.¹¹ Report from Nigeria found 40% cases of neonatal diseases among all admitted pediatric cases.¹²

CONCLUSION


Pediatric patients are one of the four major part of all admission. Pneumonia is the main components of respiratory distress, gastroenteritis is the major condition found from gastrointestinal system. This is simple observational study so, this requires a more detailed for generalization of data.

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