

Pneumonia a major pediatric disease admitted from emergency department of Patan Hospital

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ABSTRACT

Introduction: In Nepal, annual incidence of pneumonia in under- five years children is 90/1000. So, this study is done to see the pediatric admission from emergency with the diagnosis of pneumonia in comparison to other admitting diagnosis.

Method: This is a hospital based retrospective and descriptive study seeing the pediatric admission through emergency from April 2017 to March 2018. This study was conducted at department of general practice and emergency medicine department of Patan Academy of Health Sciences.

Result: During one year period 39349 patients had visited emergency department and among them 5951(15%) got admission in different wards of this hospital and among all admitted patients, 887 got admitted to pediatric department, which is 2.2% of the total patients visiting emergency and 14.9% of admitted patients. Respiratory problem was the most common cause of admission 257(28.9%) amongst all pediatric admission

Conclusion: Pneumonia was the most common cause of hospital admission in this study.

Keywords: admission, pediatric admission, pneumonia

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INTRODUCTION

Five respiratory condition that dominate globally are acute respiratory infections, chronic obstructive pulmonary disease, asthma, tuberculosis, and lung cancer. Pneumonia remains the predominant cause of childhood mortality, causing nearly 1.3 million deaths each year, most of which are preventable.¹ Of the 156 million yearly new cases of childhood pneumonia worldwide, 61 million cases occur in the south-east Asia region (SEAR). Of the estimated 3.1 million annual deaths among the under-five population in SEAR countries, 19% are attributable to pneumonia and this does not take into account the pneumonia cases among neonatal infections/sepsis.² In Nepal, annual incidence of pneumonia in under- five years children is 90/1000.³ So, this study is done to see the pediatric admission from emergency with the diagnosis of pneumonia in comparison to other admitting diagnosis.

METHOD

This is a hospital based retrospective and descriptive study seeing the pediatric admission through emergency from April 2017 to March 2018. This study was conducted at department of general practice and emergency medicine department of Patan Academy of Health Sciences. All pediatric patients admitted from emergency department less than 14 years were taken in study and those admitted from outpatient department were excluded from the study. Data were taken from admission register of emergency

department. Data were analyzed manually and with the help of computer.

RESULTS

During one year period 39349 patients had visited emergency department and among them 5951(15%) got admission in different wards of this hospital and among all admitted patients, 887 got admitted to pediatric department, which is 2.2% of the total patients visiting emergency and 14.9% of admitted patients (Figure 1). Out of total pediatric admission 787 (88.7%) were admitted to pediatric ward and rest were admitted to other wards like Gynecology, Orthopedic and Surgery. There were 493 (55.5%) male and 394 (44.5%) female child (Figure 2). There were 228 (25.7%) children in age group 0-1 year; 315 (35.5%) in the 1-5 year age group; 182 (20.5%) in 5-10 year age group; 162 (18.3%) in 10-14 year age group (Figure 3).

Respiratory problem was the most common cause of admission 257(28.9%) amongst all pediatric admission (Figure 4). Anemia 15(13.1%), insect bite 12(10.4%) and urticarial 10(8.6%) were the most common diagnosis in miscellaneous disease; neonatal sepsis 50(40.6%) was the common in neonatal infection, febrile seizure 79(49.3%) was common in neurology Acute gastro enteritis 120(57.1%) was the most common gastrointestinal symptom. In respiratory disease, pneumonia 126(57.7%) was the most common diagnosis (Figure 5).

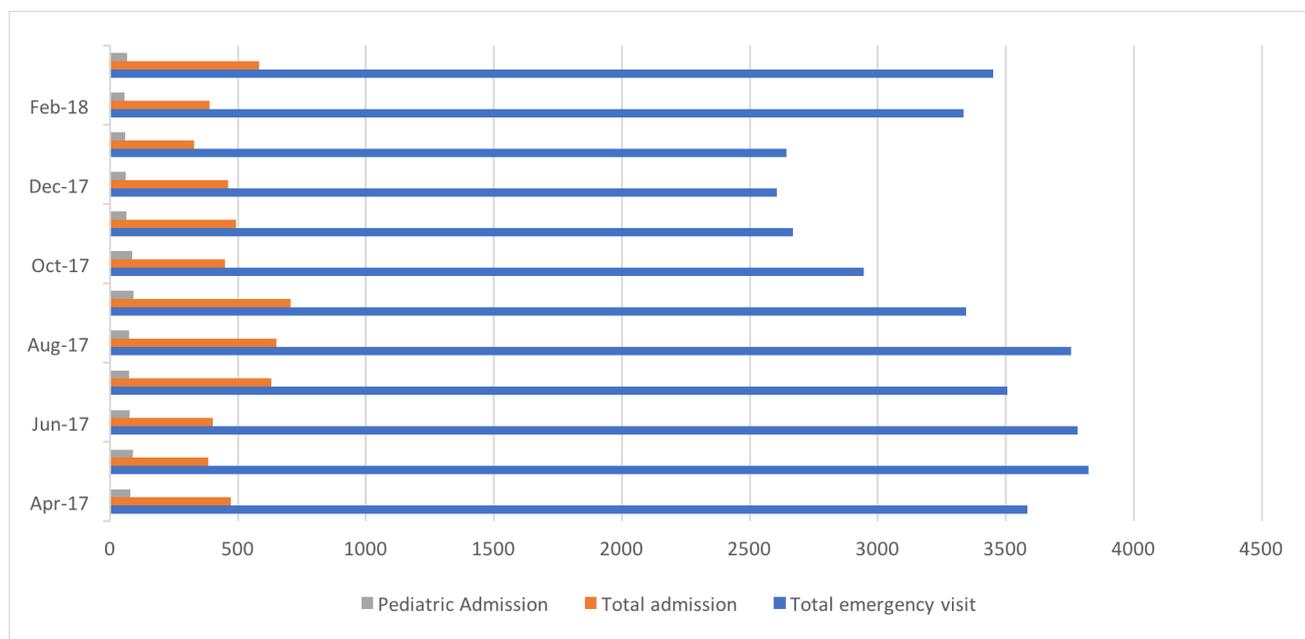


Figure 1: Ratio of total emergency visit (N1=5951), total admission (N2=5951) and pediatric admission (N3=887) during a year (April 2017 to March 2018).

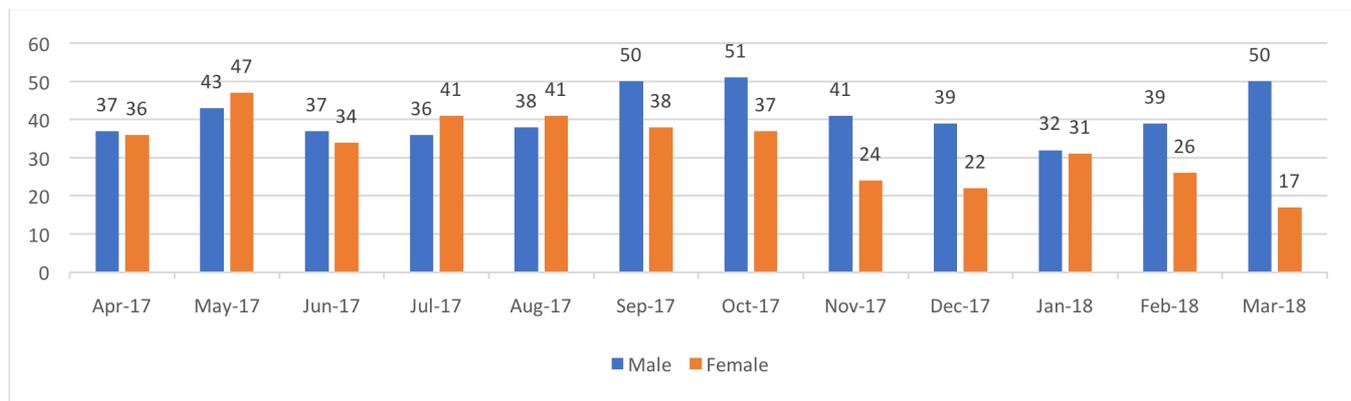


Figure 2: Male and female children admitted to pediatric ward every month (April 2017 to March 2018)

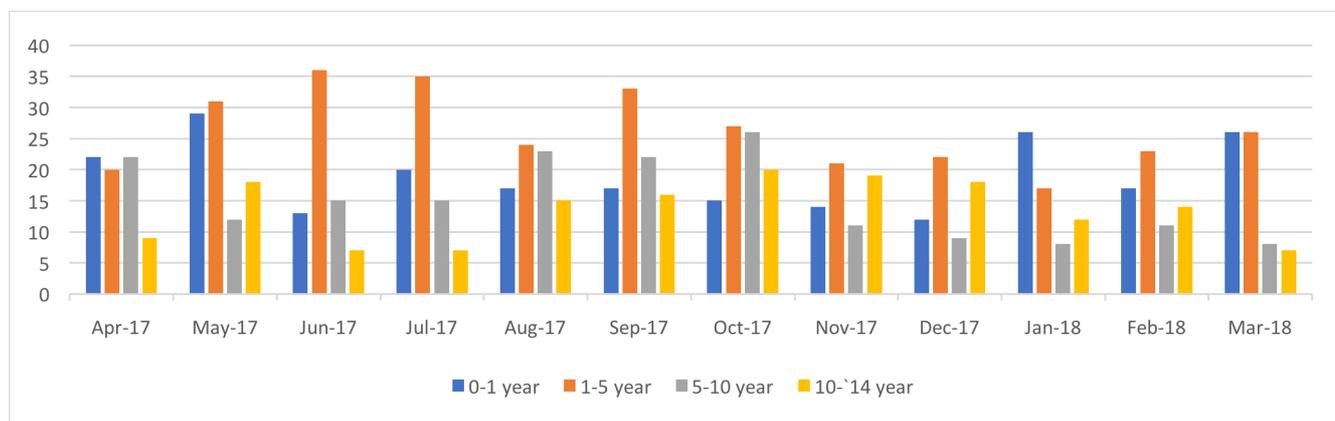


Figure 3: Age wise children admitted to pediatric ward every month (April 2017 to March 2018)

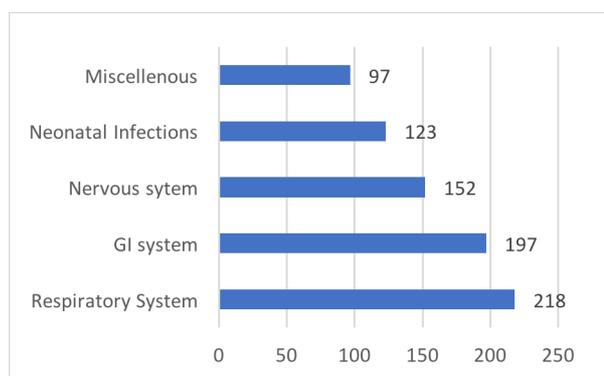


Figure 4: System wise distribution of pediatric patient admitted to the hospital

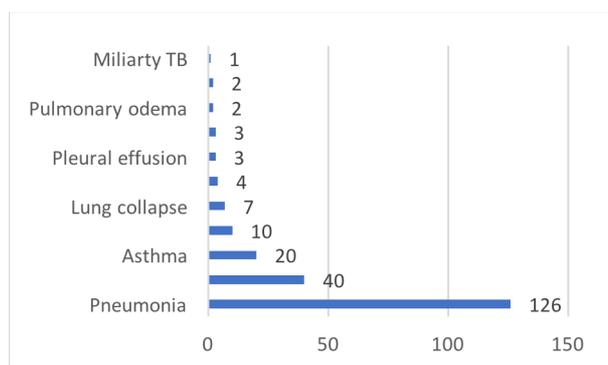


Figure 5: Causes of of admission due to respiratory problem

DISCUSSION

In this study, 14.9% of the admitted patient belonged to pediatric group. Out of all pediatric admission, respiratory infection was the common amongst which Pneumonia (57.7%) was the common diagnosis. A study from western region hospital Nepal was similar to our study, respiratory infection was 85% out of which pneumonia was 30%.⁴ Gorgon DM et al in their also found respiratory infection as most common diseases.⁵

The maximum admission was observed in September (10%) and minimum in February (6.3%). Report from Africa shows 1022 similar to us were admitted from emergency department. They have maximum admission in January and min July month.⁶ Study showed admission of male(55.5%) patients were more than females. A Study from Africa also showed similar report as us.⁶ Report from Nepalgunj on pediatric admission also showed 63.6% were male and 36.4% were female.⁴ This gender distribution is also similar to the study done in Lumbini zonal hospital pediatric inpatients in which out of 977 admitted children, 579(59%) were males and 398(41%) 3 females.⁷ Majority of patients in this study falls on age group 1-5 years (35.5%), similar findings was observed in studies in other part of Nepal.^{7,8}

CONCLUSION

Respiratory infection is one of the most common cause of hospital admission in pediatric age group. Out of these admission Pneumonia was the most common cause of hospital admission in this study.

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