

# **Factors associated with readmission of respiratory diseases' cases to Cairo University Children's Hospitals (March- 2013)**

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## **Abstract**

### **Introduction**

Recently, increasing attention has been drawn to hospital readmission as an outcome measure for assessing the quality of health care delivery system. One of the common causes of children's recurrent hospitalization is respiratory tract diseases which accounts for 30-40% of the hospital visits by children.

### **Objectives**

- 1) Identification of the proportion, pattern and factors contributing to readmission of children with recurrent respiratory tract diseases in Cairo University Children Hospitals. 2) Recommended strategies or process modifications that could reduce readmission.

### **Methods**

This is a case control study conducted in the internal medicine departments in the two Cairo University Children's Hospitals over a six month period (from October 2011 to December 2012).

### **Results**

The proportion of readmitted cases with respiratory tract diseases during the study period was 20.3% with average  $2.3 \pm 1.6$  admissions per patient and average  $140 \pm 48$  days interval between current admission and previous one. Pneumonia was the most common cause of readmission among respiratory diseases. Rural residence, high crowding index, social status, occupation and

educational level of mothers together with children's exposure to indoor and outdoor pollution were significantly associated with recurrent hospital admission (p-value<0.001). doctors' communication with the patients was significantly higher among controls than cases (P-value <0.001).

## **Conclusion**

Absence of standardization for case management and defective patient education contributed to higher level of readmission of patients with respiratory tract diseases.

## **Key words**

Readmission, respiratory diseases, children, quality, hospital utilization.