

# 影響兒科急診病患 72 小時再返之相關因素—以 2005-2007 年北部某醫院為例

## The Factors Affecting Unscheduled Returns within 72 Hours for the Pediatric Emergency Patients — A Study of a Northern Taiwan Hospital - 2005-2007

### 中文摘要

中央健康保險局於 2002 年施行總額支付制度，醫療院所在住院服務部份以縮減病床的方式來因應，致使門、急診部門直接受到衝擊，在急診量不斷成長中，重返急診率成爲監控急診醫療品質之重大指標。但兒科重返急診之疾病診斷與成人有顯著不同，且研究指出急診室處理兒科之醫療品質，成爲其是否繼續住院之重要因素，而國內關於急診重返之研究，多以不分年齡病患爲研究對象，鮮少單獨對於兒科進行研究，因此本研究針對兒科病患，探討其 72 小時再返急診之相關因素，對兒科醫療品質更顯現其重要性。

本研究爲乙橫斷式研究，研究期間爲 2005 年 1 月 1 日至 2007 年 12 月 31 日，以北部某區域醫院六家綜合院區，未滿 18 歲以下急診兒科病患作爲研究對象，利用該醫院六院區之小兒科急診病患資料，串聯就醫資料檔、72 小時重返急診檔及醫師人事資料檔，彙總成爲本研究所需之資料格式後，再以 SPSS 14.0 統計軟體，進行百分比、平均值、標準差、卡方檢定、Spearman 相關及羅吉斯迴歸等統計資料分析。

研究結果發現：該區域醫院 2005 年至 2007 年兒科急診病患 72 小時再返率，平均爲 14.9%；各年度再返率分別爲 14.5%、15.2%及 15.1%。六院區中以一般綜合性區域醫院 D 院區(17.9%)再返率最高，而「婦幼專科」之 E 院區再返率(15.7%)較低；病患年齡 1~3 歲(17.9%)，非假日(16.3%)，白班(15.0%)，檢傷分類第一級(19.8%)及處置項目 6~10 項(18.4%)再返率最高。院區( $\chi^2=719.8, p<0.001$ )、醫師年齡( $\chi^2=71.3, p<0.001$ )、病患年齡( $\chi^2=1387.5, p<0.001$ )、假日/非假日就診( $\chi^2=209.7, p<0.001$ )、檢傷分類( $\chi^2=49.5, p<0.001$ )及處置項目( $\chi^2=91.3, p<0.001$ )再返率之卡方檢定爲顯著。羅吉斯迴歸顯示，院區 A~F (OR=0.51~0.75,  $p<0.001$ )，30~39 歲及 50 歲以上看診醫師(OR=0.93,  $p=0.021$ ; OR=0.87,  $p=0.002$ )，病患年齡 1 歲以下及 4~18 歲(OR=0.16~0.44,  $p<0.001$ )，假日(OR=0.79,  $p<0.001$ )，白班、小夜班(OR=0.90,  $p<0.001$ ; OR=0.93,  $p<0.001$ )，檢傷分類第三級(OR=0.81,  $p<0.001$ )及處置項目 1~5 項(OR=1.26,  $p<0.001$ )爲兒科急診病患 72 小時再返之顯著變項。

由本研究結果得知院區、醫師年齡、病患年齡、假日就診、就醫抵達班別、檢傷分類、處置項目爲影響兒科急診病患 72 小時再返之顯著變項，故急診室提供兒

科專科醫師服務及疾病衛教與說明，讓陪診家屬即時了解患童疾病，適度降低其驚慌與不知所措，可減少不必要之急診再返與住院。

## 英文摘要

The Bureau of National Health Insurance implemented global budgets system since 2002, and the inpatients service parts of medical institutions reduce bed numbers to cope with the system. This directly impacts the emergency and outpatient departments. With the ongoing amount of emergency medical care service; the emergency revisit is one of the significant indexes to monitor emergency medical quality. However, the diagnoses of pediatric patients are much different than adults, and many researches indicate the quality of pediatric emergency medical care is an important factor making patients to be inpatients. Nevertheless, the researches about emergency department revisits in Taiwan are mostly regardless age ranks, and lack of pediatric studies. Therefore, this research focuses on pediatric patients to investigate the related factors of 72 hours emergency department revisits, which displays the significance of pediatric medical quality.

This study is a transaction quantitative research, which chooses pediatric patients who are under age 18 from 6 branch of a northern Taiwan Hospital to be the study objects since 1st Jan 2005 to 12th Dec 2007. The research data integrates the pediatric patients basic information data, inpatient data, 72 hours emergency department revisits data, and medical staff human resource file from 6 branch, then analyzes it in percentage, Average value, Standard Deviation, Chi-square Test, Spearman correlation, and Logistic Regression.

The result indicates that the average of 72 hours revisit rate of a northern Taiwan Hospital from 2005 to 2007 is 14.9%; each of them is 14.5%, 15.2%, and 15.1% of the 6 branch, the general branch (D) gets the highest revisit rate, which is 17.9%; branch for Women and Children (E) gets 15.7%. The rate of ages from 1 to 3 is 17.9%; none holiday is 16.3%; daytime is 15.0%; triage class one is 19.8%; treatment 6 to 10 items is 18.4%, which are the highest. Branch ( $\chi^2=719.8$ ,  $p<0.001$ ), age of doctors ( $\chi^2=71.3$ ,  $p<0.001$ ), age of patients ( $\chi^2=1387.5$ ,  $p<0.001$ ), holiday/non-holiday inpatient ( $\chi^2=209.7$ ,  $p<0.001$ ), triage classes ( $\chi^2=49.5$ ,  $p<0.001$ ) in Chi-square Test are significant variables. Branch A~F (OR=0.51~0.75,  $p<0.001$ ), doctors' age of 30 to 39, and over 50 (OR=0.93,  $p=0.021$ ; OR=0.87,  $p=0.002$ ), patients' age of less 1, and 4 to 18 (OR=0.16~0.44,  $p<0.001$ ), holiday (OR=0.79,  $p<0.001$ ), day and evening

(OR=0.90~0.93, $p<0.001$ ), triage class three (OR=0.81, $p<0.001$ ), and treatment 1 to 5 items (OR=1.26, $p<0.001$ ), are the significant variables of pediatric 72 hours emergency department revisits in Logistic Regression.

The result demonstrates that branch, age of doctors, age of patients, holiday inpatients, inpatient duties, triage classes; treatment items are the significant variables of pediatric patients 72 hours emergency department revisits. Therefore, the ER should provide pediatric doctors to service pediatric patients, which make families understand the diseases, and reduce their panic, to decrease all the non-necessary revisit and admission.