

# Causes of death among hospitalized children under 5 years of age in Sulaymani Pediatrics Teaching Hospital

jamal Ahmed Rashid<sup>1</sup>CABP, Mohammed Jalal AlKhalidi<sup>2</sup> CABP, Ban Abdulhammed Majeed<sup>2</sup> CABP, Khalid Hama Saleh<sup>3</sup> CABP

## **Abstract**

**Back ground:** Knowledge about the causes of death in children is important to evaluate health system progress and provide what is needed for an efficient design of health care delivery system.

**Objective:** To find out the main causes of death in children under 5 years & evaluate the effects of different variables like: age, gender, body weight, residency, and months of year for the causes of death.

**Patient& Method:** This is a retrospective study which was carried out in order to find out the main causes of death among admitted children younger than 5 year in Sulaymani Pediatrics Teaching Hospital for the period of 5 years from of January 1<sup>st</sup> 2001 to December 31<sup>st</sup> 2005 included. The total numbers of admitted cases was 137,739 out of which 1455 had died. We obtained the information from case files of the deceased patients.

**Results:** The incidence of death among admitted patients was (1.06%), the rate was higher in male gender (59.3%), while in female it was (40.7 %), with a P-value of <0.05 which is significant statistically with male to female ratio 1.48:1.

Deaths were mainly in neonates (61.8 % of all age groups in the study) with a p-value

of <0.05. Death was mainly in those with body weights <2.5kg, which accounts for (42.1%). The main cause of death in neonate was prematurity (54.7%) while diarrhea and Acute Respiratory Infections (ARI) were main causes during infancy (57.4%, 15.9%) respectively.

Seasonal variation of died cases showed that were two peaks of death, one in June and another in November with a p-value of <0.05. The percentage of death in the rural and urban area were (64.5%, 35.5 %) respectively, with a p-value of <0.05 which is also significant.

**Conclusion:** This study has revealed that prematurity was the main cause of death among neonate while diarrhea and acute respiratory diseases were the main causes of death during infancy. Malignancy was the least common cause of death. Deaths were mainly in neonates. There was a significant association between deaths and gender, body weight, residency& the months of the year.

**Key words:** mortality rate, death cause, children under five.

IRAQI J MED SCI, 2009; VOL.7 (1):11-20

## **Introduction**

The registration of birth and death is compulsory in all developed countries but it is so in only some of the developing countries. In addition to recording the fact of death, it's useful to establish the cause of death.

In the developed countries the first year of life represent the period of highest risk for death while death rate is very low in older children<sup>(1)</sup>.

On the other hand in most of the developing countries, although the first year does represent the period of highest risk, a high mortality rate persists in older children. In 1999 the Under 5 Mortality Rate (U5MR) was 6/1000 in the developed industrialized countries but 173/1000 in Sub-Sahara and Africa <sup>(1)</sup>.

It is estimated that in the developing countries; (50 %) of total mortality occurs in the first five years of age, of this (79 %) occur in the first year of life, of which (43 %) occurs

<sup>1</sup>Dept. Pediatrics, College of Medicine, Al-Sulaymania University, <sup>2</sup>Dept. Pediatrics, AlKindy Medical College-Baghdad University, <sup>3</sup> Pediatric Teaching Hospital in Sulaimania.

Adress Correspondence to: Dr. Mohammed Jalal Al-Khalidi

Al-Kindy Medical college-Baghdad University, Mobile 07705050095.

E-mail: [jmkhalidi@yahoo.com](mailto:jmkhalidi@yahoo.com)

Received: 28<sup>th</sup> September 2008, Accepted: 26<sup>th</sup> January 2009.