

## SILENT TRAGEDIES: UNDERSTANDING THE CHARACTERISTICS AND PREDICTORS OF PREVENTABLE UNDER-5 MORTALITY IN KLUANG DISTRICT

Khalsom Samsudin  
Kluang District Health Office

Linayanti Rosli  
Kluang District Health Office

Mohd Redzuan Jokiram  
Kluang District Health Office

Nurdiyana Aimi Binti Ahmad Zaki  
Kluang District Health Office

---

### ABSTRACT

*INTRODUCTION: Preventable under-5 mortality is a critical public health concern in Kluang District, Malaysia. A comprehensive understanding of the characteristics and contributing factors associated with these deaths is vital for developing targeted interventions to reduce child mortality rates. OBJECTIVE: This study aimed at the characteristics and predictors of preventable under-5 mortality in Kluang District. METHODOLOGY: All under-5 deaths were reported and investigated using the SU5MR-1/2012 forms, with data spanning from 2017 to 2023. Stillbirths were excluded. Data were analyzed using IBM SPSS Version 25.0, employing descriptive statistics and binary logistic regression to identify key factors linked to preventable deaths. RESULTS: Of the 227 cases analyzed, 50 (22.0%) were classified as preventable. Neonatal deaths accounted for the majority (N=26, 52%), followed by deaths in infants aged 1 month to 1 year (N=15, 30%) and children aged 1 to 5 years (N=9, 18%). Preventable deaths were predominantly observed among Malay children (N=33, 66.0%) and females (N=27, 54.0%), with most occurring in hospital settings (N=40, 80.0%). The leading causes of death included infections (N=17, 34.0%), respiratory illnesses (N=14, 28.0%), and diseases involving the circulatory system (N=4, 8.0%). Contributing factors were delays in seeking treatment (N=12, 24.0%), noncompliance with medical advice (N=6, 12.0%), and nonadherence to medication (N=5, 10.0%). Health system-related issues included protocol non-adherence (N=4, 8.0%), delayed transfers to appropriate care (N=3, 6.0%), and insufficient consultation with senior staff (N=3, 6.0%). Regression analysis found no significant association between socioeconomic or health service factors and preventable deaths, potentially due to the small sample size. CONCLUSION: The findings highlight the need for enhanced health services and timely medical intervention to reduce preventable under-5 mortality in Kluang District. Strengthening early treatment strategies, ensuring adherence to medical advice, and improving health system protocols are essential to mitigating these preventable losses.*

Keywords: Under-5 mortality, preventable deaths, Kluang, Malaysia, public health

---