



Comorbidities and Factors Associated with Mortality among Children under Five Years admitted with Severe Acute Malnutrition in the Nutritional Unit of Jinja Regional Referral Hospital, Eastern Uganda

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BACKGROUND AND AIMS

Mortality among children with severe acute malnutrition remains an immense health concern in the hospitals in developing countries, but its attributes are not fully known in various hospital settings. This study set out to determine the proportion of mortality, the comorbidities and factors associated with in-hospital mortality among children under five years of age admitted with severe acute malnutrition at Jinja Regional Referral Hospital, Eastern Uganda.

METHOD

This was a hospital-based analytical and descriptive prospective cohort study conducted in the nutritional unit of Jinja Regional Referral Hospital. A total of 338 children and their caretakers who met the criteria were consecutively enrolled into the study. Descriptive statistics were used to each of the independent factors and comorbidities were subjected to Chi-square test followed by logistic regression analysis to assess its association incidence of mortality among children. All independent variables with p-values ≤ 0.05 were entered into a multivariate model for factors and comorbidities independently. Factors and Comorbidities with p-values ≤ 0.05 were considered as associates of mortality of mortality among children.

RESULTS

Of the 338 children under 5 years of age enrolled, 49(14.5%) died. Although the majority children were diagnosed with dehydration, 128(37.9%), pneumonia, 127(37.6%) and malaria, 87(25.7%). Anemia (aRR=2.9, 95%CI: 1.23-6.62, p=0.01), bacteremia (aRR=10.0, 95%CI: 3.62-29.01, p=0.01), HIV (aRR=4.8, 95%CI: 1.42-16.30, p<0.01), TB (aRR=4.3, 95%CI: 1.28-14.49, p <0.02) and shock (aRR=60.9, 95%CI: 9.05-410.28, p <0.01) were the comorbidities significantly associated with a likelihood of mortality.

CONCLUSION

The mortality among children under 5 years of age admitted with Severe Acute Malnutrition is still high (14.5% versus 5%). The comorbidities are significantly associated with mortality. The clinicians are recommended to follow up closely patients with Severe Acute Malnutrition and to focus on the critical comorbidities identified.

