Abstract

EVALUATING THE IMPLEMENTATION OF MINISTRY OF HEALTH GUIDELINES IN THE MANAGEMENT OF SEVERE MALNUTRITION AT THE GARISSA PROVINCIAL GENERAL HOSPITAL, GARISSA, KENYA:

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Background: Every year 10.6 million children die worldwide [1], with malnutrition accounting for about 2.2 million of these deaths. Half of Kenya’s high infant and under five mortality rates is also due to malnutrition. Although the national prevalence of acute malnutrition is 6%, the prevalence in North Eastern Province ranges from 17 to 30% [1]. Malnutrition is thus an important public health problem. Among other interventions in reducing child mortality, the World Health Organization has developed an evidence based guidelines (EBG) in the management of severe malnutrition. Proper implementation of this protocol was shown to reduce mortality rates to less than 5%.

Objectives: The primary objective of the study was to establish the level of adherence to Ministry of Health (MOH) guidelines in the management of severe malnutrition at Provincial General Hospital Garissa (PGH). The secondary objectives was to find out the proportion of children appropriately managed for severe malnutrition (steps 1-8) as per the protocol, the availability and accessibility of the guidelines, and to find out the barriers health workers face in utilizing the guidelines at PGH Garissa. 2nd Bi-annual International Scientific Conference 2013, Nairobi Kenya 43

Study design: This was a short longitudinal study of 96 children, aged 6-59 months admitted to the Garissa Provincial General Hospital with diagnosis of severe malnutrition over 4 months period (July to October 2012).

Methods: The primary targets were children admitted to the pediatric ward with diagnosis of severe malnutrition and the staff working in pediatric ward, child welfare clinic and general outpatient department. Data extracted from medical file was recorded in an audit tool and a questionnaire administered to the health workers.

Data Management: Data was entered into the computer using MS access and analyzed with Stata version 11.

Results: Marasmus was the commonest presentation (93.8%); A higher proportion (63.5%) of patients were males. 85.4% of patients were younger than 2 years. Patients with marasmus were younger [mean age for admissions with marasmus was 16 (± 10.6) months compared to a mean age of 25 (± 13.7) months for kwashiorkor]. The commonest co- morbid conditions were diarrhea (52.1%), malaria (43.7%) and pneumonia (31.3%). The mean length of stay was 7.6 days (± 2.9). Overall, 13 children died giving an inpatient case fatality rate of 13.5% with 53.8% deaths occurring after 48 hrs of admission. 22% of HCWs were trained on Integrated Management of Acute Malnutrition and availability of guidelines was reported by 37.5%. Health workers constraints included lack of training (78%), lack of guidelines (63%) and language barrier (68%).
Appropriate management was documented in only 14.6% for hypoglycemia, 5.2% for hypothermia, 31.3% for dehydration, 85.4% for electrolyte imbalance, and 90% for Infections. Overall monitoring (Temp, pulse, RR, fluids) was done for 5.8% of patients.

**Conclusion:**
- MOH guidelines were followed in 5 out of the 8 steps
- Appropriate management of children with severe acute malnutrition was inadequate at Garissa PGH particularly for the critical steps (1, 2 and 3) despite the availability of essential supplies
- Less than half (37.5%) of the HCWs were aware of MOH guidelines and only 37.5% reported the availability of guidelines at GPGH
- Health care workers have challenges - lack of updates (31.3%), staff shortage (40.6%) & language barrier (31.3) in the care of malnourished child. 44 2nd Bi-ennual International Scientific Conference 2013, Nairobi Kenya

**Recommendations:** Training of HCWs on the implementation of WHO guideline and improving staffing levels can improve quality of care for these children.