IMPROVING THE MANAGEMENT OF SEVERE ACUTE MALNUTRITION AMONG INFANTS AND CHILDREN THROUGH CAPACITY BUILDING: FINDINGS FROM AN EVALUATION STUDY WITH MALNUTRITION ELEARNING

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Background and objectives:

The University of Southampton and International Malnutrition Task Force developed Malnutrition eLearning to reduce child mortality by Severe Acute Malnutrition (SAM) through training health professionals globally. Since made available in 2010, over 14,000 from 100+ countries used the course. To investigate its effectiveness, a 2-year evaluation study was conducted from 2015, face-to-face in Ghana and Central America (CA), and online in other countries.

Methods:

Using a mixed method approach, the study explored if and how Malnutrition eLearning supported knowledge gain and behavioural change (application of knowledge in clinical practice), and resulting clinical outcomes in the management of SAM. Assessments, questionnaires and interviews/focus groups were conducted with individual in-service and pre-service participants pre- and post-training, and 12 months of medical records data collection, observations and hospital personnel interviews were carried out from participating healthcare institutions.

Results:

Total 1,261 health professionals (Ghana:915, CA:142, other countries:201), and 10 hospitals and 2 community health centres in Ghana and 2 hospitals in CA participated in the study 3,955 (pre:01/08/2014–31/07/2015) and 3,737 (post:01/08/2015–31/07/2016) medical records of children (0-60 months) were collected from the hospitals, and summary data on malnutrition cases (pre:76, post:67) from community health centres. Individual participants scored significantly higher in the post assessment (mean difference(SD): 14.0(12.5), 95%CI(12.7, 15.2), p<0.001). 87% of in-service health professionals (102/117) applied their knowledge and changed clinical practice in screening, assessment, diagnosis and management of SAM. This group demonstrated retained knowledge 6-

month after the training (mean difference from pre-assessment(SD): 12.7(11.7), 95%CI(10.4, 15.0),p<0.001). Significant increases (p<0.001) in recording malnutrition-markers, i.e. length/height and weight-for-length/height z-score, and diagnosed SAM cases (pre: 491(12.4%), post:810(21.7%)) were observed. Mortality by SAM was declined from 26(5.9%) to 14(1.9%) (p<0.001). The community centres initiated the management of SAM (pre:0/32, post:7/21).

Conclusions:
The results suggest that Malnutrition eLearning is effective in training the WHO guideline on the management of SAM. After a 2-day self-directed training with Malnutrition eLearning, the participants not only gained knowledge but were also able to apply the knowledge in their clinical practice, leading to significant impacts on clinical outcomes.

Further collaborators:
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