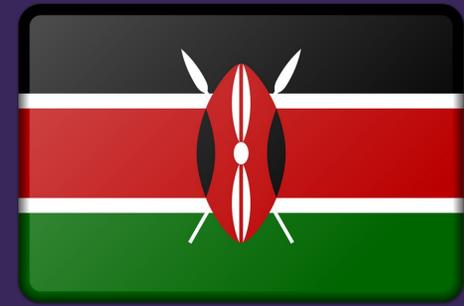


UW Medicine Addressing Childhood Malnutrition through Provider Education in Naivasha, Nakuru County, Kenya

UW SCHOOL OF MEDICINE

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BACKGROUND

- Childhood malnutrition remains a public health issue in Kenya, contributing to increased morbidity, mortality, and communicable disease risk.
- In Nakuru County, 17.5% of children under five are stunted; mortality exceeds national averages.
- Lack of knowledge among parents and medical interns contributes to higher rates.

Project Aim: Improve provider knowledge and skills in identifying, treating, and preventing childhood malnutrition in a public hospital in Nakuru County, Kenya.

METHODS

Study Design

- Literature review used the Kenya Demographic and Health Survey (2022), WHO severe acute malnutrition guidelines, and relevant peer-reviewed studies.
- One-hour interactive presentation on malnutrition management and caregiver counseling.
- Multiple-choice pre- and post-presentation knowledge assessment on treatment, prevention, and signs of malnutrition.
- Providers refined materials, ensured cultural relevance, and helped develop a nutrition handout.

Outcomes

Twelve providers attended; ten completed pre-presentation and six completed post-presentation assessments.

Statistical Analysis

A Mann-Whitney U test assessed statistical significance between these tests.

Plain Language Summary

This study aimed to improve provider knowledge about identifying, treating, and preventing childhood malnutrition in Nakuru County, Kenya. To accomplish this, a one-hour interactive presentation was developed alongside a parental nutrition handout to improve counseling. Effectiveness of the presentation was assessed using a multiple-choice pre-presentation and post-presentation assessment which demonstrated a statistically significant knowledge improvement about childhood malnutrition.

RESULTS

Quantitative Data

- Average pre-test scores were 78.0% compared to 90.8% post-test, demonstrating a statistically significant knowledge improvement about childhood malnutrition (Mann-Whitney U = 11.5, p = 0.048).

Qualitative Data

- Participants valued the emphasis on prevention and appreciated the inclusion of mild and moderate malnutrition, as well as culturally relevant counseling strategies.



Figure 1. Provider knowledge about childhood malnutrition pre-presentation vs post-presentation

DISCUSSION

This project strengthened provider knowledge about malnutrition and introduced sustainable tools, including a parent handout, to support counseling. Providers noted the utility of these materials for ongoing staff development and expressed intent to integrate them into future intern trainings. This underscored the project's potential for long-term impact. Challenges included low intern attendance and incomplete post-test participation, limiting evaluation strength.

CONCLUSIONS

Outcomes highlight the feasibility of provider-focused education. Future efforts should include repeated training sessions for interns and incorporation of locally specific misconceptions about nutrition into training. Sustained implementation could meaningfully reduce malnutrition-related morbidity and mortality in the region.

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