

GRADUATE AND POSTDOCTORAL STUDIES

MCGILL UNIVERSITY

**FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY**

OF

**MATILDA ESSANDOH LAAR
SCHOOL OF DIETETICS AND HUMAN NUTRITION**

15th July, 2015

9:00 AM

**CINE Board room, Room 102
McGill University, Macdonald Campus**

TITLE:

ABSTRACT

The Ghana Health Service's (GHS) outreach program has expanded its reach to remote rural communities through monthly growth monitoring and promotion (GMP) community-based clinics. Even though the wasting (< -2 weight-for-length z-score [WLZ]) prevalence rate is higher than underweight in infancy, only weight is measured; no provision exists to measure length in the GHS GMP outreach service. The inadequate nutrition knowledge and poor counseling skills of community health workers (CHW) and the lack of counseling aids and tools further impede the prevention and management of wasting. The aim of this study was to determine if increasing the capacity of CHW, by providing them with appropriate tools and nutrition knowledge to

respectively). A higher proportion of caregivers were provided with individual counseling in the algorithm and control group compared to length (mean difference: 0.24; 95% CI: 0.17 to 0.31, and 0.23; 95% CI: 0.15 to 0.31, respectively). Length measurements taken by CHW and those taken by the experienced anthropometrist at GMP sessions were of moderate agreement ($\kappa = 0.53$, $p < 0.0001$). The present study gives rise to further investigations on using locally relevant predictors and WAZ to identify children with low WLZ. Regular assessment of undernutrition rates is important to understand the current situation at regional and district levels. The reliability of length measurements taken during GMP sessions may be susceptible to errors due to overburdened CHW and understaffed and crowded GMP clinics. Pre- and in-service training for CHW are important for improving and maintaining reliable length measurements. In future, there is a need to evaluate rural GMP programs in Ghana to identify bottlenecks and how these can be addressed to improve program effectiveness.

PUBLICATIONS

Laar, A., Manu, A., Laar, M., El-

volunteers in outreach health services of a rural district in Ghana. Paper presented at biennial meeting of the VIth African Nutrition Epidemiological Conference (ANEC), Accra, Ghana.

Matilda E. Laar, Grace S. Marquis, Anna Lartey, Kathryn Gray-Donald (2014, July). Improving the capacity of community nurses to identify and mitigate wasting: developing an algorithm. Poster presented at biennial meeting of the VIth African Nutrition Epidemiological Conference (ANEC), Accra, Ghana.

Matilda E. Laar, Grace S. Marquis, Anna Lartey, Kathryn Gray-Donald (2015, Mar-Apr). Growth Monitoring and Promotion in Rural Ghana: Lack of Motivation or Tools? Paper presented at the annual Experimental Biology Conference (EB), Boston, USA

Matilda E. Laar, Grace S. Marquis, Anna Lartey, Kathryn Gray-Donald (2015, Mar-Apr). Growth Monitoring and Promotion in Rural Ghana: Lack of Motivation or Tools? Poster presented for Emerging Leaders in Nutrition Science Award (Finalist) at the Experimental Biology Conference (EB), Boston, USA.

EMPLOYMENT AND RESEARCH EXPERIENCE

Preceptor, International Community Nutrition Rotation for Dietetic Interns, University of Ghana's Nutrition Research and Training Center, Ghana (2012)

Senior Public Health Nutritionist, Hennepin County Supplementary Nutrition Program (2011-2013)