

Building Clinical Nutrition Capacity in sub-Saharan Africa: Experiences of Developing a Post Graduate Diploma in Dietetics in Malawi

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Program description

Clinical dietetics as a profession has seen exponential global growth, and is widely recognized as an essential component of preventative and curative health care.¹ The leading role of registered dietitians in the detection and treatment of hospital malnutrition, which directly contributes to reductions in morbidity, mortality and health care costs is also widely recognized.² Despite this, sub-Saharan Africa has lagged behind the dietetic advances seen in other parts of the world, owing in part to a lack of academic programs to train a critical mass of dietitians.

Moreover, the persistent and unacceptably high prevalence of malnutrition in African countries, including Malawi, coupled with the emerging burden of overweight/obesity and diet related non-communicable diseases emphasizes the need for registered dietitians who are uniquely trained to counter the burden of disease.

Objectives

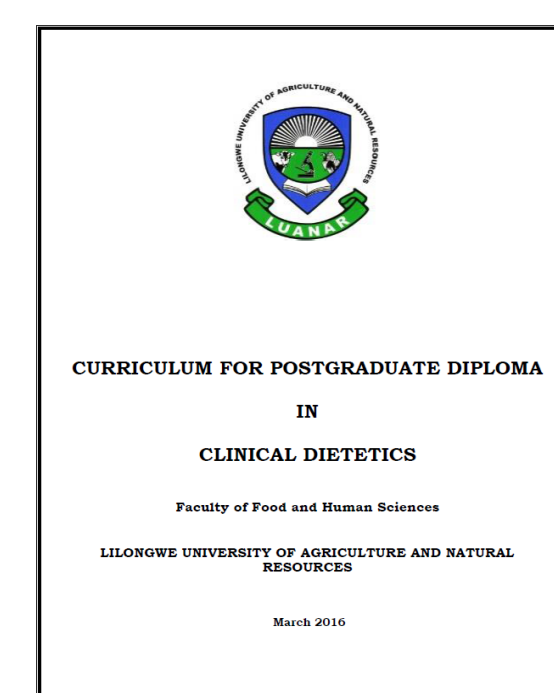
To describe the development and implementation of the dietetics program in Malawi (between 2013-2017) and its early outcomes.

Methods

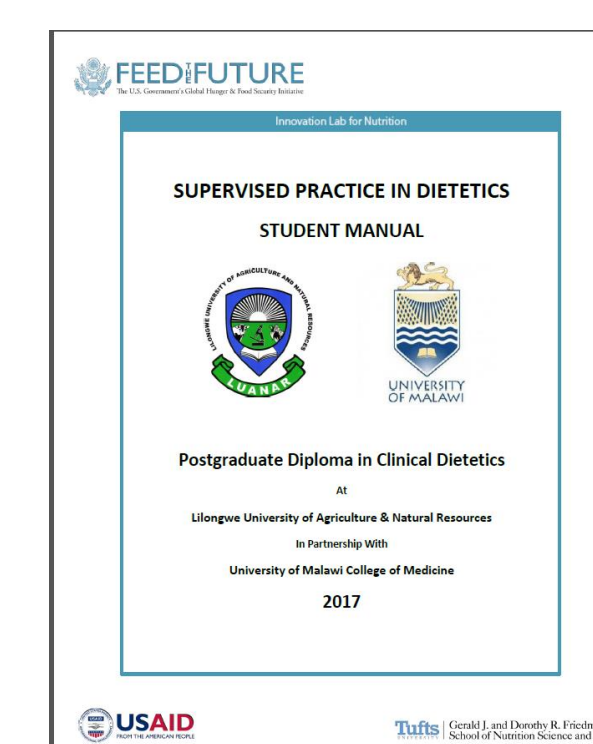
The 20 months postgraduate diploma in dietetics was developed at Lilongwe University of Agriculture and Natural Resources (LUANAR) in partnership with Tufts University and College of Medicine, University of Malawi (COM). The duration of the program includes 12 months of didactic coursework and the remaining 8 months in supervised clinical practice.

The curriculum was developed through referencing global standards of practice and curricula for training and merging with contextual references from a comprehensive needs assessment performed. Partnerships built on the strengths of different institutions were relied upon throughout the process of development and implementation of the program. The course content laid emphasis on clinical training to fill the gap in clinical nutrition services in Malawian hospitals.

Background



Curriculum accredited by the Malawi Medical Council in March 2016



Supervised practice rotations manual



Humphrey Chatenga and Christopher Chirwa outside of the Dietetics department at Groote Schuur Hospital, Cape town

Didactic coursework

- Medical Nutrition Therapy
- Nutritional Biochemistry
- Nutrition Counselling & Behavior Change
- Nutritional Epidemiology
- Biometric Research Methods & Design
- Bio Statistical Data Analysis
- Global Nutrition Programs
- Ethics for Health Professionals

Supervised practice rotations

- 4 weeks Food Service Management
- 4 weeks Community Nutrition
- 8 weeks Pediatrics
- 6 weeks Adult Medicine
- 6 weeks Surgery, Trauma, and Critical Care
- 2 weeks Research

Registration

Registered dietitian exam



Doris Nanga training food service staff on the importance of temperature control in food handling



Innocent Makawa working hard developing a nutrition care plan in a neonatal ICU

Conclusion

This program leveraged the strengths of multiple collaborators to accelerate implementation a diploma program to address the lack of dietitians in Malawi. Furthermore, the graduates of this program will fill a critical gap in providing nutrition support services such as protocols on nutrition support delivery where they have previously not existed.

This approach of program development and implementation may be applicable to other developing countries with similar resource constraints as Malawi.

Results

Five candidates have successfully completed training and passed the national registered dietitian exam. The graduates will be employed by the government through newly established dietetic posts. Although the program is still in its infancy, notable achievements have been realized through screening of 526 individuals in communities, more than 200 in/outpatient cases managed, 17 scholastic presentations delivered to 286 health professionals within 1200 hours of student supervised practice (See Figure 1).

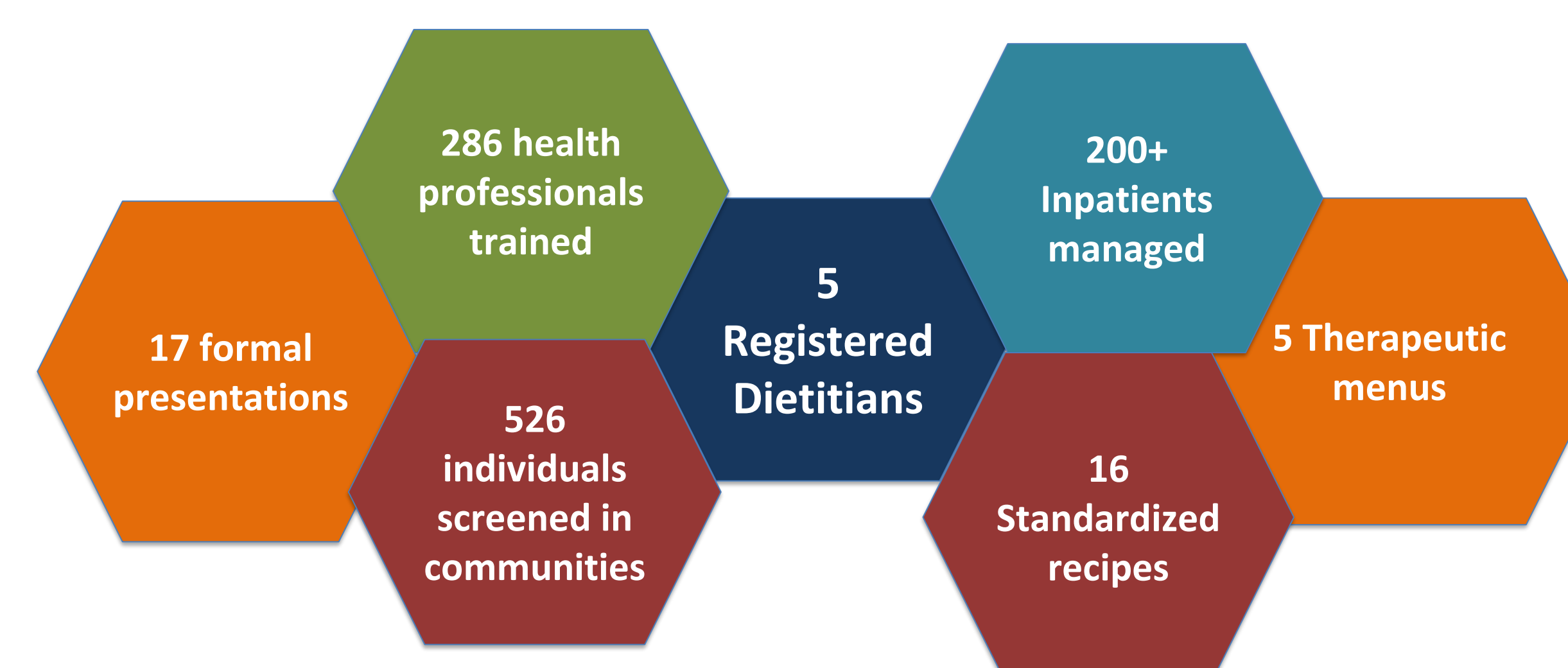


Figure 1: Outcomes of supervised practice rotations



Dietetic graduates (left to right): Humphrey Chatenga, Innocent Makawa, Jonathan Misolo and Doris Nanga



Dietetic completion recognition ceremony (left to right): Jonathan Misolo, Doris Nanga, Dr Charles Mwansambo (Chief of Health Services, Ministry of Health, Malawi), Ambassador Virginia Palmer (US Ambassador to Malawi), Dr Patrick Webb (USAID Feed the Future Nutrition Innovation Lab director), Christopher Chirwa, Humphrey Chatenga, Innocent Makawa

References

1. Calabro KS, Bahl S. International Perspectives: The Profession of Dietetics. Nutrition 2001;17(7/8):594-9.
2. Bunyani A, Kalimbira A, Kamalo P. Experiences of health professionals with nutritional support of critically ill patients in tertiary hospitals in Malawi. Malawi Medical Journal. 2015;27(1):1-4.

Acknowledgements

Funding sources: Support for this research was provided by the Feed the Future Innovation Lab for Nutrition, which is funded by the United States Agency for International Development under grant ID:AID-612-LA-15-00002. The opinions expressed herein are solely those of the authors.