

# Malawi's First Dietetics Program: Lessons from a multi-pronged approach to building human and institutional capacity for nutrition

# **Webinar Transcript**

## Katie Heneveld

Good morning, good afternoon, good evening. Thank you all for joining today's webinar to learn more about Malawi's First Dietetics Program. My name is Katie Heneveld, and I am an assistant researcher for the Feed the Future Innovation Lab for Nutrition and will be your MC for this webinar today. As more attendees are joining, I will begin by going over some housekeeping items. I'd like to direct all attendees to a few functions on the Zoom webinar. At the bottom of your screen, you should see at chat icon and a Q&A icon. Use the chat feature to engage in relevant conversation with the other attendees. If you have a question for one of the panelists, please use the Q&A feature. Panelists will respond to questions in the Q&A box throughout the webinar as they're able, and we have allotted the final 25 minutes of this webinar for the Q&A. If you're experiencing any technical difficulties, send a message in the chat box to "All panelists" so that our technical support staff can work with you to resolve them. This webinar is being recorded and will be made available on the Nutrition Lab for Nutrition website and the USAID Advancing Nutrition website. There you can register for upcoming webinars and view recordings and slide decks of previous webinars. We will repeat these technical housekeeping items in the chat throughout the webinar as people may join in at later times. The moderator for today is Elizabeth Marino-Costello. She is a registered dietitian and senior program manager for the Nutrition Innovation Lab as well as a clinical instructor, and academic and career advisor for the graduate science program at the Friedman School of Nutrition Science and Policy. Elizabeth has been in the field of dietetics for over 20 years as a practicing clinical dietitian, clinical nutrition director for Aramark Health Care Division and hospital administrator for Tufts Medical Center. She has been with the Nutrition Innovation Lab since its inception ten years ago, overseeing partner awards, financials, as well as supporting the nutrition

capacity building activities of the lab in all countries. In addition to her role at the Friedman School supports student admissions and advising for both the dietetics and Master's in nutrition science and policy programs. Liz will begin by giving a brief background of the lab before introducing today's speakers and panelists. Liz, over to you.

# Elizabeth Marino-Costello

Well, thank you Katie, and welcome everyone. We have quite a group today. Grace, next slide.

This map shows the work of our Feed the Future Innovation Lab. The Nutrition Lab is supported by USAID Bureau of Resilience and Food Security and the Nutrition Innovation Lab is the group hosting the webinar series today. Our nutrition lab is active in supporting research and capacity to build the evidence around critical questions linking agriculture, nutrition, and health. As you see on the map, our work is both in sub-Saharan African and South Asia. For more details on our research by country, and also details about this webinar or the webinar series, please visit our website at nutritionnnovationlab.org.

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We certainly cannot do all this work alone. The Nutrition Innovation Lab is a consortium led by the Friedman School of Nutrition Science and Policy at Tufts University.

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Our US government partners and our country partners are, on this slide, our collaborators we areso grateful for, in particular the Lilongwe University of Agriculture and Natural Resources, University of Malawi, College of... representatives from both our core partners speaking today.

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So, let's begin. Today's webinar is the 9<sup>th</sup> in our webinar series and a little slightly different from the previous webinar topics. Today's main focus highlights our Nutrition Lab's capacity building efforts, specifically zeroing in in Malawi.

Those efforts are around building the first even Malawian Dietetics Program. We are so very please today to have with us our collaborators and partners from Malawi who have been with us from the start and with the different perspectives that include education, policy, medicine, and health care. So, that's

what's going to make today so interesting. Our first speaker will be Bernadette Chimera-Khombe. She holds a rather unique to Malawi position and in the dietetics program, she's the clinical coordinator. And by being the clinical coordinator, she provides direction to the dietetic students during their hands-on clinical rotations in the hospitals. And having been through those rotations as a medical student, Bernadette's value is really so helpful to our students, brings to the dietetics program over five years of clinical experience...

# Shibani Ghosh

Yes, sorry, I think everybody... we're just trying to figure out what's going on. I think we lost Liz Marino-Costello and I'm just going to figure out ... Can everybody hear me on the panel?

# Participants,

Yes, we can hear you.

#### Shibani Ghosh

We lost one colleague of ours who is the moderator. So let me jump in. My name is Shibani Ghosh. I am the Associate Director for the Nutrition Innovation Lab. And I was not meant to be the moderator. So I'm going to take on this role, but until we get Liz Marino-Costello back online. I think, Grace, if you don't mind going back to the presentation because we are seeing your recording slide and not your .... So please thank you. Back one slide, please. Great. Welcome everybody from my end and I think Liz was giving a very nice introduction to Bernadette Chimera-Khombe, and so I'll move on and introduce the rest of the panel. We have Lynne Ausman, who is professor of biochemistry at Tufts University, who is going to be joining us, and she's been part of the program from the start. Lynne is also an endowed Chair at the Friedman School of Nutrition Science and Policy and is the director of the Master's program in Nutrition Science and Policy. We also have Sanele Nkomani, who is the lead on the ground from Tufts University. She's a registered dietitian and is based in Malawi for Tufts University, and she works very closely with Bernadette and the team members at LUANAR and College of Medicine. On our panel discussion, we will have Professor Manani, Tinna Manani, who is from the Lilongwe University of Agriculture and Natural Resources. We will also have Professor Alexander Kalimbira and we... on the... College of Medicine. We will have Professor John Phuka, and from the Ministry of Health, we will have Dr. Janet Cuta, who is part of the Department of Clinical Services and who has been a critical, critical member of this program... to move this program forward in the direction of supporting human

and institutional capacity around dietetics in Malawi. So without further ado, I'm going to hand over to Bernadette Chimera who is going to be the first speaker. She will be followed by Lynne Ausman, and then Sanele Nkomani, and then we will break into the panel discussion. We apologize if there are any issues related to Wi-Fi and related to any breakdown. On our end, we do know that all our colleagues from Malawi might have some issue on their internet, so we are planning to ... we will have some prerecorded remarks if we lose any of our colleagues. So thank you everybody for joining us and I'm going to hand over to Bernadette. Bernadette, the floor is yours.

#### Bernadette Chimera-Khombe

Good morning Shibani for the introduction. Good morning and good afternoon to everyone joining us depending on where you're joining us from. To kick off this webinar, I'll give a presentation on the state of nutrition in Malawi. Knowledge that the landscape of nutrition in Malawi is quite broad. So for the purposes of this webinar, this presentation will provide a brief description of the current state of clinical nutrition services in Malawi. I'll highlight the progress made in achieving better nutrition for the population, and I will continue to describe prevailing challenges that are now being addressed by registered dietitians who have been locally trained through institution... institutions that have undergone commendable capacity building through this program.

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So like in any country, nutrition is a priority area in Malawi. This is because we acknowledge that nutrition is essential for the success of all sustainable development goals, and that nutrition is both a maker and a marker for development. And so we believe improved nutrition is inevitably a platform for progress in health, education, employment, empowerment of women, and reduction of poverty and inequality in Malawi.

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We also know that without adequate and sustained investments in good nutrition, these SDGs will not be realized due to extensive losses attributed to the cost of malnutrition in Malawi. For instance, in 2012 alone, Malawi lost 597 million USD to health, education, and productivity losses. Therefore it is for this reason that the government, academia, and partners such as the Feed the Future Innovation Lab for Nutrition, continued to increase their focus on impactful nutrition interventions in all sectors in Malawi.

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So, so far, what has been Malawi's progress in nutrition?

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Well, based on a 15-year trend in the Demographic and Health Survey, it shows a decline in all components of undernutrition within a significant decrease of 18 percent in chronic malnutrition. Additionally, we also see specific progress in micronutrient profiles showing a decline in deficiency in vitamin A, iron, and iodine.

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So whilst we have such commendable progress for nutrition in Malawi, in the next slides, I will discuss persistent and emerging nutrition challenges, and perhaps provide a background into the gaps that this program and the dietitians it has trained are feeling in Malawi. Notably, we see that our challenges are evolving from specific undernutrition concerns to dealing with the double burden of malnutrition, and we will see in the presentation and discussions that follow how the government is adapting its interventions to meet these evolving needs.

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So, as in most parts of the world, non-communicable diseases are a problem for everyone, and historically in Malawi societal perspective was that NCDs were for the affluent, however in recent studies like those conducted by MSyamboza and Price, it states otherwise. We're seeing NCDs rise in both rural and urban areas, in both male and female populations, and so, for this reason, it is evident that we require trained nutrition professionals at all levels of health care service if we're to effectively and efficiently address the burden of NCDs in Malawi.

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From the next slide, this slide that we have now, we see there is an evident increase in over nutrition and diabetes by sex over the past years, which is worse in the female population in Malawi, and this speaks further to the need for more trained nutrition professionals who can meet the population needs as per these graphs shown on the slide

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So in addition to NCDs, like most African countries, Malawi continues to put efforts in promoting... providing and promoting optimal clinical nutrition care. However, we're not yet where we hope to be. So for instance, in recent studies from Blaauw and friends, the study showed that 61% of hospital admissions in Africa are at risk of malnutrition, therefore leading to a prolonged hospital stay of patience and the need for individualized nutrition care. Unfortunately, if this care is not given, approximately 70% of admitted patients are likely to weigh less on hospital discharge. Even though we do not have Malawispecific data, this begs the question: is the clinical setting therefore also contributing to community malnutrition since we are discharging our patients into the community weighing less than they did on admission? In the absence of a registered dietitian in practice, who provides individualized nutrition services in hospital, what we'll see is a vicious cycle of malnutrition.

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However, as you see on this slide, the introduction of registered dietitians in the healthcare team would positively contribute to the improvement of patient outcomes in Malawi and Africa in general. Now when we go specifically to Malawi...

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Specifically to Malawi, the positive impact of a registered dietitian's introduction into a health team could be shown as is on this slide. It is also notable that qualitative research around a nutrition support program led by a dietitian at Queen Elizabeth Central Hospital in Blantyre, Malawi, showed that nurses and physicians who worked alongside the dietitian valued the role of nutrition support in improving quality of care. So in Malawi, having a hospital dietitian, having a dietitian in hospital could lead to improved individualized care, equal attention to adult nutrition care just as it is given to pediatric nutrition, and the presence of nutrition counselling services in NCD outpatient clinics. It also gives an opportunity for the healthcare team to refer cases with specific nutrition concerns to the dietitian across all levels of health care delivery.

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So the presence of sound clinical nutrition care structures and resources is even more pertinent now in the face of the COVID pandemic. It is important to anticipate challenges exerted by COVID-19 on delivery of clinical nutrition services in fragile health systems such as Malawi. Knowing that in the

absence of a specific clinical nutrition response, hospital malnutrition will likely increase in both COVID -19 patients and other hospitalized patients in countries like Malawi, and this can be due to challenges such as the need for specialized nutrition for COVID patients, who are likely to be on ventilation for longer duration. The lack of access to food for hospitalized patients was served by a food service system that is anchored by food brought in by guardians. Now these guardians no longer have adequate access to hospital premises due to physical distancing, and we also anticipate a lack of access to continuity of nutrition care in NCD outpatient clinics following the scaling down of outpatient clinics in response to physical distancing guidelines.

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So for these reasons there is need for ... there is need to build capacity for dietitian training and include nutrition personnel such as dietitians in the COVID-19 response at facility level ... at facility level in order to address both immediate and enduring nutrition challenges posed by COVID-19.

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Next slide please. So the survival of nutrition in Africa is ...the slide before... the survival of nutrition in Africa is hinged on sound capacity building and based on the evolving nutrition challenges that are presented. Now these challenges call for adequate nutrition professionals and capacity building in local training institutions. However Malawi, like most African countries, faces more acute challenges with respect to dietitian training programs as compared to general nutritionist training programs whose curricula are largely community-oriented

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From a broader perspective, Africa in general faces a shortage of RD training programs with up to 60 percent of African countries having no programs at all, and only a handful of countries have regulatory structures such as standards of practice, codes of ethics, and scope of practice for dietitians.

Additionally, most African countries lack opportunities for networks and policies on continuous professional development in dietetics. For instance as of 2013, South Africa and Nigeria were the only African countries to be members of the International Confederation of Dietetics Association, even though we acknowledge that we need more collaborations with international, regional, and local institutions to build capacity, as has been shown in the implementation of Malawi's first dietetics program. For this reason, we realize the importance of sharing the experiences in developing a dietetics

program in a resource-constrained setting, where leveraging of partnerships and collaborations has led to the genesis of the dietetics profession in Malawi

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So coming to this point, I will end my presentation and I thank you for paying attention, and I urge you to stay on as I hand over to Pr. Lynne Ausman, who will share the process of curriculum development of Malawi's first dietetics program. Thank you, over to you Lynne.

# Lynne Ausman

Thank you Bernadette. Good morning or good afternoon to everybody online. This section of our webinar is devoted to how the dietetics program was developed once the need has been identified.

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As Bernadette already mentioned, nutrition is an important part of the goals of the National Nutrition Policy and Strategic Plan that was developed between 2007 and 2012. So a variety of professionals including educators, excuse me, clinicians and allied health personnel will be needed for these efforts, and Malawi already has several groups of people ready to tackle nutrition problems but it does not have registered dietitians.

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Let us first understand the definition of a dietitian. Dietitian is a medical professional qualified **to assess, diagnose, and treat** dietary nutrition-related problems at an **individual** and **public health** level. There is a set course curriculum and there are set clinical training placements. They're the only nutrition experts that are regulated by law and they're licensed to practice with an RD title. They're also governed by a code of ethics.

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Once the probable need for more nutrition training and competency was identified, it was time for a serious needs assessment. And this was done in 2012 - 2013. A wide variety of stakeholders were polled regarding their view of the need for dietitians in Malawis. And these included the Ministries of Health

and Agriculture, the College of Medicine, various tertiary and secondary hospitals, NGOS, academic institutions, and food and agricultural organizations. They were asked if they could see a need for dietitians in Malawi, and if so, how would they be used and where would they be employed, what could be their career path? As you can imagine, the result was emphatically positive and this is something that Malawi needed.

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From the beginning, LUANAR was identified as the site to develop this dietetics program. It already had a rich Bachelor's degree in nutrition and food science, so that any new program could depend on these resources and build from there. The actual work began in 2013 with a grant from USAID to the Nutrition Innovation Lab at Tufts that allowed us to help LUANAR Faculty design and implement the program. We worked with LUANAR to identify possible faculty for teaching in the program, and if these weren't immediately available in the department, there were other departments at LUANAR and also at other educational institutions.

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Our challenge was to develop a course curriculum that was right for Malawi, but that also took advantage of standards that were developed internationally. So examples include the Standards for the International Dietetics Association as well as the Dietetics Associations in Ghana, South Africa, Britain, Australia and the United States. Again stakeholders were extremely important in order to help identify specific resources, especially for the unit and the acute clinical placements. We were also very pleased when the College of Medicine in Blantyre and Lelongway was able to collaborate with us in providing biochemical instructors with clinical components in their instruction to help teach the entire two semester course in nutritional biochemistry. Faculty and other of the schools at LUANAR were able to teach the two semester quantitative units, and even in the School of Nursing there was a unit on ethics and patient counseling. So once the program was designed though, it was... had to be approved at the departmental level and then at the Senate level, and obviously this process took a few iterations with every change improving the program

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Now once the program was designed and approved at LUANAR, we needed to seek approval from the Medical Council of Malawi. We worked most closely with Mr. Kondwani Kandewiri, who was then the

Assistant Registrar of Professional Practice at the Medical Council of Malawi. He was very helpful right from the beginning and, I might add, quite tough. He, as we all, wanted to make sure that this program was top-notch and was addressing the needs specified in our assessments. There were no road maps on how to do accreditation for a dietetics program, so we tried to model our documentation after medicine and other allied health sciences. We ended up working with a consultant who was adept at preparing these types of documents, and a committee of professionals was formed by the Medical Council to evaluate our submission, which included a several hour in-person meeting, [Alex Kalimbara] was there with me where we had to answer questions. The program was subsequently approved and we gained accreditation in February of 2016.

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The overall program was 20-month postgraduate diploma, which included 30 weeks, that is two semesters, of classroom time and another 1200 hours of clinical placements. The emphasis was on medical nutrition therapy, nutritional biochemistry, counseling, behavior change and ethics. We also had research skills, and these were emphasized through statistics, nutritional epidemiology, and research methods.

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There were 30 weeks of that is 1200 hours of clinical practice, which included six weeks of surgery and clinical care, six weeks of adult medicine, eight weeks of pediatric care, four weeks of community nutrition, four weeks of food service management, and two weeks of research. We were extremely fortunate that the critical care placements could take place at advanced teaching hospitals, the Groote Schuur and Red Cross in Cape Town, with well-developed dietetics departments. This has continued for the first two cohorts. As our program matures in Malawi, these acute clinical placements will eventually be switched to Malawi hospitals.

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Now evaluation is always an important part of developing, implementing, and fine-tuning a program. After the first cohort, we had a complete review of each course and the program, and while the courses and program appeared to be accomplishing our assigned tasks, we did identify a couple of challenges. Accordingly we developed a writing course for Cohort 2 to reinforce our writing skills as well as a breeding bridging course in medical terminology. And this really helped prepare the students for the

coursework to come. Cohort 2 has now finished their coursework and clinical placements and we are now in the midst of an extensive program review using outside consultants from developed dietetics programs. We aim to cover all aspects of the courses and the programs, including the sustainability of the program. And with that I will turn you over to Sanele Nkomani, MS, RD.

#### Sanele Nkomani.

Right, thank you Lynne. Thank you very much, good afternoon everyone and good morning for those who are further afield. I will take you through the key achievements, the lessons learned, and the future directions of the dietetics program, and professional practice in Malawi

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Some of our notable key achievements over the past six years include establishing the program itself. And we are very proud to have a full approved curriculum, established clinical internship sites with two cycles of students who have completed training. Through the program and its graduates, we have seen growth in the practice of dietetics, especially in the public sector, where the first registered dietitians were employed about two years ago. These dietitians have been placed in the first Dietetics Department in a Malawian public hospital. We've also ... we've also been heavily involved in clinical nutrition capacity-building of doctors, nurses, among other health professionals, and food service staff in hospitals. To date, with a team of less than 15, we have trained 407 health professionals from 10 different institutions in Malawi. These trainings initially started with sensitization on the role of dietitians, but they've expanded more to more advanced training on topics like enteral and parenteral feeding and other disease-specific nutrition care plans. Another key achievement is the building of capacity for teaching and precepting through mentoring faculty from our partner institutions, the College of Medicine of LUANAR. We are also mentoring graduates to take up teaching roles in the future

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Thus far, the program has produced 10 graduates, which has more than tripled the number of practicing dietitians in Malawi. So to highlight some of our students achievements, I'd just like to highlight the capacity-building activities that the students have been taking part in that they have done through journal clubs, in-service training, and case presentations. We found that not only did these activities educate clinicians on the role of dietitians, but also the students gained confidence by interacting with a multi-disciplinary team at a very early stage of their career. Also built into their curriculum was a major quality

improvement element, where students were challenged to develop new products, services, and protocols that would improve the quality of nutrition care.

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Our students were engaged in a variety of projects from developing therapeutic menus to feeding protocols, adverse units of the hospital, to developing referral criteria and tools such as hygiene and sanitation audits. On your screen are examples of student work, on the left hand side is an example of a journal club that was presented to qualified professionals by a student, and on the right hand side is a referral criteria, which was also developed by a student. We are very proud of this work because many of these tasks have been incorporated into routine hospital practice

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I would just like to pick up from where my colleague Bernadette left off and highlight really that the nutrition challenges that she outlined ... she quite well outlined in Malawi are not unique to just Malawi. Many other countries in Sub-Saharan Africa are experiencing a double burden of malnutrition with prevailing high rates of under nutrition and rising rates of overweight, obesity, and NCDs. We also have very serious challenges with hospital-based nutrition interventions and support in many of our hospitals. Bernadette touched on the role that nutrition plays in in the recovery of hospitalized patients, yet for many hospitals in Malawi and in our region there's limited attention given to nutrition support. Compounding ... compounding to these issues is the fact that more than 60 percent of our countries in Africa lack the human resource capacity to tackle these problems head-on by not training dietitians. So we put to the audience that there's an urgent need for the expansion of dietetics of the dietetics profession in Africa, and this can only be done by making training more available and making training a priority. Hence we believe that our program can be replicated in other countries with similar situations and these countries can learn from how things were done in Malawi

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So with that I would like to present a couple of lessons learned, the first being... the first lesson is to develop a program that responds to the contextual needs of the country. In Malawi we took several steps to understand the context which started with several scoping visits to map out the stakeholders and how nutrition and health programs were delivered in the country. We also carried out an extensive analysis of the national nutrition and health policy and strategic directions, and we identified where

dietitians can contribute to these. We also, as Lynne my colleague Lynne alluded to, we also performed a needs assessment. Finally we also engaged in early and sustained engagement with stakeholders, particularly the government who were crucial in getting the country ownership of the program.

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As a result of these actions, we believe this program responds directly to the needs of Malawi, which were identified to be the need to address the rising prevalence of the overweight obesity and NDC pandemic, and also to look into the hospital-based nutrition support including critical care, and also a clinical nutrition research agenda

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Following up on the last slide, the second lesson is the need for early and sustained engagement with stakeholders and advocacy. This process starts with accurately identifying who your influences and decision makers are. In our case, we had many but I would like to highlight the role of the Ministry of Health, particularly the Department of Clinical Services, and the Department of Nutrition, HIV and AIDS in Malawi. We went on a campaign of raising-awareness and sensitizing them on the gap that dietitians fill in clinical care. We kept them engaged through frequent updates and developed very good relationships particularly with them. We use we use site visits to hospitals with senior government officials to show how dietitians fit into clinical practice and the consequences of their absence.

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We believe these strategic ... we believe these strategies contributed to the very positive response we received from government. Sorry just go back yes. We believe these strategies contributed to the very positive response we received from government which has led to 27 new government-funded posts created for dietitians and our graduates are already employed by government months after graduating. This is very impressive considering that that the existing vacancy rates of health professionals in Malawi are quite high. To this point we're very proud to have Mrs. Guta, Mrs Janet Guta, who has come in as one of our panelists in this webinar and has been one of many senior government officials that took ownership of the program right from the beginning. We believe too that the creation of these posts contributed to the growing interest in the program seen by a three-fold increase in applications from the first to second cohort.

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Finally on the lessons learned is the need to leverage strengths of local, regional, and global partnerships to develop and implement a quality program. This program was built on the collaboration between LUANAR and COM who brought together their respective strengths to build a quality program. I must emphasize that at the start no one institution in Malawi had the sole capacity to implement all elements of the program. We also relied heavily on the international partnership, who in this case was Tufts University, who mainly brought the dietetics content expertise, the leadership, and coordination in the development of the program.

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Our other local and regional partners also came to raise the standard of training by providing preceptor and mentoring support to students and benchmarking their training programs with ours. Here I must highlight the support that we received from the University of Cape Town who took students on a six-week practical rotation to practice with nutrition support resources that were not available in Malawi at the time. I would also like to highlight the role of our *very* experienced nutrition professionals in Malawi who played a very important role in mentoring our students and some of them are mentioned already on the slide.

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On the academic side, future priorities include the need to sustain and expand the program through mentoring future leaders of the program, and by that we need to mentor instructors, preceptors, and researchers. We have made some progress with LUANAR and COM faculty that we have trained in clinical dietetics. Building a critical mass of dietitians is also a priority and we need to do that at all levels of healthcare. We are planning to do that really by supporting an undergraduate program and also supporting specialization of dietitians in various disciplines. In her presentation my colleague Bernadette highlighted the gaps in clinical nutrition research that we have in Malawi. Hence we need to develop a research agenda for the dietetics field that is generating Malawian-specific knowledge that will inform practice in our setting. This is already on the cards with the establishment of a Nutrition Center of Excellence at LUANAR.

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On the professional practice side, we need to focus our attention on regulation of practice. This is very important for the integrity of a relatively new profession like dietetics. Establishing an association is an

important first step, and we've made some progress there by first identifying all the qualified dietitians in Malawi, and we do interact with each other on various platforms. We also have an interim Secretariat, with whom we have developed draft code of ethics and a scope of practice for dietitians. We're working on registering the association formally. We're also lobbying for the protection of the registered dietitian title, which should be legally protected. Also we need to ensure that there's a standard for education and a standard for the registration for dietitians. For that we're working with the Medical Council to enact these standards, which already exist. Actually they've already been drafted and have gone through several levels of review by qualified dietitians in the country. Very important too is that we need to consider continuous professional development to be mandatory for all practicing dietitians

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Finally we need to create a conducive practice environment for our graduates. Learning from other professions, we know that the practice conditions will be a major push factor in retention of our dietitians, especially where they are needed the most, which is in government. This is why we need policy that supports practice including resource allocation for dietetic support services, procurement of equipment, and nutrition support. All these are necessary for them to do their job well. The good news is that the government is very supportive of this and is taking steps to improve this. Lastly we need to address equitable distribution of dietetic services by continuing to advocate for establishing dietetic departments at all other tertiary hospitals and cascading down to districts and rural areas.

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Finally I would like to end my portion of the presentation with showing you our first cohort of dietitians that just ... that graduated, and a really nice quote from one of them about his experience and what this meant for him, and then with that I'll hand it back to Liz to present the panel. Thank you for the attention.

#### Elizabeth Marino-Costello

Well thank you Sanele, I really appreciate it. I want to thank everyone for the questions. We do see them coming in and I want to make sure to let you all know that we will address the questions right after the panels. I have the pleasure of introducing the panel of experts we have put together today. They've been our partners from the creation of the dietetics program. The panelists represent views and lenses from the government, universities, and healthcare institutions. Our first panelist will be Janet

Guta, Deputy Director Nutrition Management for the health care sector in the government of Malawi. Janet is a public health nutrition specialist with 16 years' experience in the field of public health and nutrition, working with international organizations, academics, and public and private sectors. Janet has helped guide the establishment of the dietetics program and we thank her so much in Malawi at the policy level from the beginning stages of the program, and has been key in establishing the first registered dietitian job positions in the hospitals. So I think with that, I'll turn it over to Janet and thank you.

# lanet Guta

Thank you very much colleagues and thank you Elizabeth for the introduction. Good afternoon, good morning, and good evening to all colleagues who are around. I just wanted to share my experience in this program [] so far. I was indeed involved right from the start and now I'm speaking on behalf of Ministry of Health, specifically the Department of Clinical Services. So I interacted with the students as they started the program. I was also a part of the delegation you certainly mentioned that there was a visit to Cape Town. I was one part of the delegation that when they just to learn and see how it's done. And as Malawi... part of the delegation that went to Cape Town was also one of the deputy directors for human resource development and management, which was a very good motivation for us all. By that time we were already trying to create an enabling environment for the program that had studies. We tried to create positions. So when we went there, when we had an opportunity to see what is happening in Cape Town, what dietitians do, so we are even motivated further so much so that when we came back it was easier now for our colleagues from the human resource to help and also to advocate for creation of these positions. So already in Malawi, we had an enabling environment for this program for dietitian, because then we had already a policy in place, which is the Malawi Nutrition Policy, which has the priority to prevent advanced undernutrition, prevent and manage over nutrition, and all other nutrition-related conditions. So that was one of our enabling environment. We were able to create positions and also to facilitate the recruitment of the first dietitians that we trained. They are all recruited and now already we are also working on the recruitment of the second batch that have been trained. And so far also to support this dietetic program; what we've done as a country is quantification and costing of the needs, because we know that they are in the facilities for them to work, they will need supplies, they will need equipment. So we've already done that and submitted to the Head of Pharmacy, so that they can submit to Central Medical Trust, which is where all facilities order their drugs and those other medical supplies. In addition to that, for our program in Malawi, because it was the first ever, what we did was for the first posting of the graduates that we had, we posted them a the

I hospital which is our referral hospital for central region of Malawi, where the way to set up a dietetic...dietetics unit on how best to establish [] it but at the same time also help with the training or any other support that the [sound cut] we've been able to do. And now, moving forward, what we're doing as a country already through the functional review that the Minister of Health has undertaken, we are already creating some posts. For now, the target is to have posts you know the [] hospitals of Malawi and from there looking ahead we plan to go into the district hospitals, which are all referral hospitals with for healthy facilities with their districts. So, so far already while creating these positions, we've already established also the career path for our dietitians, so that at least they should move in their career. So we have already done that. And also, we wish we could even go to the rural hospitals, but looking at five years, government plans to go at least to the district level, because we're aware how important this one is. And also looking ahead, what we plan to do as government is to develop guidelines for these dietitians, so that they can guide them...the information, education, communication materials, and so that they can help in their work, for example when they are contacting NCDs clinics such as diabetes, I can go on and go on because we were so excited as government but let me stop there and hand over to Tinna. And let me also take this opportunity to thank USAID, Tufts University, LUANAR, College of Medicine, and all other stakeholders that have been helping us. I hand over to Tinna.

#### Elizabeth Marino-Costello

Hi everyone. This is Liz again. I just wanted to introduce Tinna for a moment. She is the Dean Faculty of Food and Human Sciences at Lilongwe University. She provides overall [], and she's helped us ensure the quality of the dietetics program and has facilitated the development of the newly launched dietetics Master's degree. So without further ado, Dr. Tinna Manani. Thank you.

# Tinna Manani

Thank you Liz for the introduction. Good morning and good afternoon everyone or participants wherever you are. I will be talking about how the dietetics program fits into the Faculty of Food and Human Sciences and LUANAR's vision, and also how LUANAR responded to the demand for the dietetics program. At LUANAR, we aspire to be a world-class university and the Faculty of Food and Human Sciences aims to improve the lives of Malawians through quality teaching, research, and public engagement in food nutrition and human sciences. And we do that for sustainable economic development. And we believe that through this program ... the dietetics program, we'll be able to contributing to research, and also socioeconomic development. And because the dietetics program

builds on an already existing nutrition and food science program at LUANAR, which my faculty has been offering for a very long time. However, the introduction of the dietetics program has ensured that we expand and strengthen our scope in terms of influence, because now the institution can conduct research and provide evidence that can influence policy in terms of clinical nutrition, and in terms of health care and its associated practices. So through this program at LUANAR, we are now able to join in the fight against other forms of nutrition other than the condition protein energy malnutrition, so because our dietetics... dietitians rather will be providing a nutrition therapy to patients with a variety of conditions in districts, hospitals, as well as in the communities. And also by training dietitians, LUANAR is responding to the national goals, just to mention some of the goals that are contained in the National Education Sector Plan for Malawi, which include increasing access to quality education, and also providing relevant degree trainings, because in this program, we were able to provide scholarships to students who may not have been able to support themselves to get such a quality and relevant degree. So ... excuse me... on a global level, the dietetics program at LUANAR also contributes to the realization of the sustainable development goal that relates to improving nutrition improving, providing good health, and also providing quality education. So the demand for the dietetics program has been well known in Malawi, particularly it was expressed by the Minister of Health through the Department of Nutrition and HIV and AIDS. And my faculty collaborates or has a long history of collaboration with the Department of Nutrition, HIV and AIDS. So as an opportunity rose, LUANAR together with the partners that is already allowed to develop the concept proposal, developed the curriculum, and then my faculty was mainly involved in having them approved at different committees of the university, because university has statutes that guide how programs are supposed to be developed and certain requirements that the programs are supposed to meet. So my faculty was quite involved in that one. And I would like to acknowledge the role that my predecessor, Dr. Agnes Manguera, played in having the program approved when she was Dean. So apart from the program being approved by Medical Council, as has already been alluded to, the program also had to be accredited by the National Commission for Higher Education, and that's the role of LUANAR to have its programs accredited. So just to emphasize that the National Commission for Higher Education is very important in this case, because that's the body that recognizes higher education qualifications in Malawi. So as I talk now, this dietetics program is also accredited by that body here in Malawi. Now talking about the future and also what we're doing now is that because this program is very young, it's a baby, and Malawi would like to continue with the collaboration and also expand our collaboration because we have learnt that the experiences that the different partners bring into the program are very critical, and also they strengthen the program, and also they add value in terms of quality, and also trust in terms of the program. So I would like to continue with the collaboration into the future. And also would like to continue training

dietitians until we get a critical mass, as it has been indicated, we only had two groups of students who have graduated, and the demand is really high. So we'll continue training dietitians until a critical mass is reached, especially in the critical areas. And we are also building capacity of faculty at LUANAR, because sustainability will mean that we have to do some of the critical, you know, parts of the training at LUANAR. Yes, we still need the collaboration, but we also need to build capacity. So with that, I would like to turn over to my friend and my colleague Alex.

# Elizabeth Marino-Costello

Again, this is Liz. I wanted to just quickly introduce Dr. Kalimbira. He's earned his PhD in applied human nutrition from the University of Guelph in Canada. Dr. Alex Kalimbira is an Associate Professor and Head of the Department of Human Nutrition and Health at Lilongwe University. He directs the clinical dietetics program, we're grateful for that, with the primary role of facilitating and coordinating program activities, evaluating program delivery, and advising the university on program outcomes. And with that, I turn it over to my esteemed colleague Dr. Alex Kalimbira.

#### Alexander Kalimbira

I thank all of you who are attending this webinar from various locations around the world. My talk will focus on selected components of my involvement in program implementation. As Liz has indicated, I'm the Head of the Department of Human Nutrition and Health, and therefore we host the program ... the dietetic program, and implement what ∏. So I consider myself as a frontline worker in implementation of the program, because I implement resolutions of university [] to for example advertise the program, packaging, address for the program, holding meetings final year students to interest them to join the program. These are nutrition and food science program students. I facilitate meetings of dietitians to have interface meetings with students and get them to answer specific questions regarding career development and other important aspects of being a dietitian. And I also respond to random questions from current students and graduates of our nutrition and food science program, as well as graduates from other programs within the country, those that are contemplating on becoming dietitians. I also oversee implementation of the program for example making sure that the dietetics program when we admit students is appropriate timetabled. I manage examinations presiding over examination vetting processes. I receive exams I invite faculty to vet the exams to make sure that they are up to scale, they are fair, and that they reflect course content as approved by university senate. This also includes ... I chair also the vetting of the licensure exam, which comes at the end of the supervised clinical practice for the dietetic students. Another role that I critically perform is to supervise administration of exams

and ensure that every exam is secure before and after the student seat, and coordinate the assessment of all exams that students take in the program. I chair assessment meetings of my department where together we take a look at how students have performed, identify challenges in every course module, and give feedback to students as needed. Since my university implemented the program in partnership with the College of Medicine of the University of Malawi, my work involved... involves also working with them, colleagues from the College of Medicine to ensure that they can deliver nutritional biochemistry courses, and that the courses are assessed and feedback is given to students. In terms of my personal involvement also, my experience is that I teach nutritional epidemiology. My MSC classes are a little larger than the dietetic student class, and therefore because the dietetic students have been largely the first cohort... we graduated four ... now we are graduating, six this makes the interaction to be much easier. It allows us to get on a one-to-one more close relationship of me as an instructor and them as my students, and get to know who is progressing well and those that need any kind of support. And being part of the creation of the program itself, as previous speakers have spoken, and right now seeing it to actually take off and see some of our graduates already placed in the hospital system in Malawi. It is a profoundly electing experience. I'm used to develop programs and courses for regular nutrition programs, but this was an exciting undertaking because it was far more collaborative involving a number of institutes and the government of Malawi, as previous speakers have already indicated. My perspectives as an educator, when I reflect on the barriers of this program, hasn't been indicated. The two cohorts that we have trained so far have run with resources from Feed the Future Innovation Lab for Nutrition, and obviously this is an expensive undertaking and it's not sustainable on its own. But I'm quick to say that it is immensely necessary. Necessary because Malawi needs to build a critical mass of dietitians that can quickly undertake dietetic roles in the national economy. The current model therefore allows us to admit Malawians, who trained as nurses, who trained as clinical officers, nutritionists, food scientists, and other backgrounds, who hear the dietetic calling. And therefore, we need to not to stop them but allow them to pursue their dreams. That said, we are already planning as a university to reduce injection of donor resources into the program by devolving some program course to the government of Malawi. There are several modalities, for example, changing the program structure to ensure that students can compete for entering to the program as freshmen and fresh women, which then makes them eligible for government loans and grants. So those are some of the roles that I've been personally been involved in. And as I exit, I leave you in the hands of Dr. John Phuka, Dean of the School of Public Health and Family Medicine of the College of Medicine in Malawi, who apart from his roles in dietetics is also driving the Malawi COVID-19 response as a co-chair. Through that, I take you back to Liz. Thank you

#### Elizabeth Marino-Costello

Thank you Alex and our final panelist speaker is Dr. John Phuka. He's the Dean School of Public Health and Family Medicine at the College of Medicine, University of Malawi. Dr. Phuka co-chairs currently the Presidential Task Force for COVID-19, as Dr. Kalimbira mentioned. Dr. Phuka is Associate Professor of public health. He serves as a chair, leading the school in strategic planning, needs assessment, quality assurance, especially embedding new curricula, which is why we needed him. He serves as the principal investigator for the Feed the Future Innovation Lab for Nutrition activities at the College of Medicine. And to that, I turn it over to Dr. John Phuka.

# John Phuka

Greetings to all wherever you are in the in the world. Since I've also been introduced as co-chair of the Presidential Task Force to COVID, I'll start by reporting that we are doing reasonably very well in terms of the COVID fight and response. Our epidemiology shows that we've really sort of gone down to daily numbers to sometimes seeing zero cases, as well as the number of burden, in terms of death has really gone low, with improved clinical outcomes, which therefore part of it should be nutrition in nature. What are we doing towards COVID response can be the linkage between COVID response and dietetics. Coming to the topic of the day, I think they ... what we brings us here to report is basically complementarity of capacity and competencies, maybe individual competencies, then institutional capacity brought together both from LUAMAR and College of Medicine, and then working with the national institutions, national...the government, the stakeholders and other stakeholders, regular bodies residing in where we are. As a lot has already been said, the capacity, and competence, and skills from College of Medicine of course included ... because we are medical school ...our biomedical sciences were really very strong in that component. Therefore we clearly brought that today to the table. The other thing that we brought is our extensive knowledge after over 20 years of middle school with the postgraduate courses, specialization. Therefore, we also brought a capacity of clinical placement. The idea... our idea is that clinical teams in the hospital ...sciences either physicians, specialists...specialized physicians, surgeons and so forth clearly cross-cutting issue that we're liking was that of dietitians. So our model is that over having teams in the world to make sure that our dieticians also are part of these teams. To this effect, we have a unique placement supervision, whereby Seneje and the other presenters are core supervised students which is quite unique innovation. [No sound].

#### Shibani Ghosh

John, John you've gone on mute. Is anybody technical on our team who can unmute?

# John Phuka

I'm back, I don't know where I stopped. Anyway, the first part of my presentation was in that over capacity that the College of Medicine brings by biomedical sciences, clinical placement, and the unique nature of supervision of diet doctors while supervising the additions that are replacements. The next thing that we played as a role was that of advocacy, working hand in hand with our colleagues from LUANAR to advocate in the Ministry of Health. And also more interesting was the trip to Cape Town, where we saw a 250 grams preterm baby surviving, breathing under the intense dietetic care and critical care. I think this just moved everyone. We clearly saw that there was a gap in Malawi. Coming from there, I think that is the genesis when you saw the replacements of these as job establishment in the post. But we have... we still have a big challenge, because it was quite ☐ quality questions and capacity issues. So access to a service now is the question. Who have the access of the few we have developed? And Malawi is largely rural as well. So with that in mind, the ones that we're producing may best fit central level, maybe this level, rural hospitals, but we need to be innovative to produce new cutters that can go all the way to the rural setup. And this borrows again from the medical practice where we have doctors, medical assistant, others, you can call them physician, assistants, and so forth, nurse practitioners. How can we do dietetics in a similar manner? It's a big question we have. Learning from that model, we have now a BSc underway at the College of Medicine, but we still have this big question to resolve and answer. Thank you very much for listening.

# Elizabeth Marino-Costello

Thank you Dr. Phuka. It's now time for question and answer period. So the first question that I think is universal... so I have to start with this one from Christine Walters. Thank you very much and I think I'm going to ask Dr. Phuka and Sanele to ... and Bernadette to weigh in on this one. Christine Walters is asking us: What is the relationship now with the RDs that have graduated and the medical doctors? Sanele, do you want to start?

#### Sanele Nkomani

I think in Malawi we've been very lucky to have a very good relationship with the medical doctors. It's a good dietetic relationship with the medical doctors. I think that really started with the fact that we

engaged them right from the beginning. So we invited them to our journal clubs to get them to understand what we're doing. We invited them to case presentations. We also participated in their events. So they asked us to, you know, do certain things for them and we always were responsive to doing it and we made sure that the students were also responsive to referrals as well. So making sure that you get to patients at the right time and get the right feedback going on to the doctors, I think that really promotes respect between the two professions. Thanks.

# Elizabeth Marino-Costello

And Bernadette, I'd love to hear you... yours and John's since you're representing the medical field.

#### Bernadette Chimera-Khombe

Well to sum up on this point, I think we, from the beginning, we had deliberate intentions to make sure that we are recognized as part of the medical team. And so by doing this, we mean that even within our student training schedules, students are expected to attend all handover meetings with the doctor's team, which means from get go the doctor recognizes that the dietitian is part of the team. And I think we are also privileged to come into the hospital to the point that they the health team already recognizes that there was a need for nutrition care. I can give an example for a burn ... the burns unit where they were already trying to come up with guidelines for their unit and when we came in they were happy to have someone trained and someone skilled to assist with the care of their patients. So I think that's what I can add on to what Sanele said.

#### Elizabeth Marino-Costello

And John?

# John Phuka

Yes, I think the main thing is what Bernadette has just indicated. Beyond the handovers, even in the world rounds, the dream, the vision is that there are the word rounds, there is a team. So the clinical specialists just like they could be a nurse, there has to be a complementary dietitian. And this, you can see clearly that dietetics is a cross-cutting issue. So that is the clinical practice. But again, let's remember that their practice can go beyond that into public health, and other aspects. Again the role is that of our complementarity. Thank you.

#### Elizabeth Marino-Costello

Thank you. This next question ... series of questions that I think I'm going to have Tinna and Alex respond to in that order. A lot of the questions around of funding beyond the next years and how are you going to ... do you have any sustainability plans for the program? Quite an important question. So Tinna or Alex, thoughts?

#### Tinna Manani

Okay, thank you Liz for that question, indeed a very important question. At the moment, we can say that government is supporting our faculty through enrollments. So these are faculty who were already employed before the nutrition ... before the dietetics program came into being. So but apart from that, government has also provided a space for practice in terms of training. And because we realize that there's need for sustainability, at LUANAR we have started keeping capacity of members of staff who are already employed and on full-time, so we can consider those as being supported by government. But moving into the future we hope to develop programs that can be supported through government scholarships. For example, if we develop undergraduate programs, those undergraduate programs are supported through government scholarships, because students can then access loans through a body that is recognized by a government. So I think that's what I can say but Alex can add to that.

## Alexander Kalimbira

Yes, and so thank you very much Tinna. I think the response from Tinna does look at the issue of sustainability in a much broader way, but as I indicated in my presentation the issue is that we have recognized the need for sustainability from the way it go, but we have gotten stuck to the model that we have followed in as far as the training is concerned, because if we are going to develop an undergraduate program, it will take no less than four years before we get the first graduates out. Our current program takes two years, and therefore within every two years, it means we're producing a few dietitians who can be released and begin working, while the Bachelor's programs are really working on having mass production, and then we can feel the positions. we are aware at the university about that, and what we are doing currently is that we are working on many opportunities that are rising to continue to apply for resources to support the current program, which is a postgraduate diploma in clinical dietetics, but as you say or we have already our plans underway to develop a different program that would still deliver dietitian trained by using government resources. That's how I respond to that. Thank you.

#### Elizabeth Marino-Costello

Thank you both. This next question I believe, I'm going to direct to Sanele and anyone else who would like to jump in. It's around accreditation and how we went about accreditation and going forward, what process can we... if there's anything that we need to change. And then also with that how will the dietetic ... creating a dietetic association help with getting accredited, getting continuing education credits. Sanele, do you want to start and then anyone else from our esteemed panel?

#### Sanele Nkomani

Ok, so the process of accreditation and I'm assuming you mean by regulators in a country? Like accreditation of a program?

#### Elizabeth Marino-Costello

Yes, I think we can start from, you know, the RD exam that everyone has to take.

## Sanele Nkomani

Okay, as well. So well, I mean globally there are standards for the for programs dietetic programs that we followed as I said. So obviously there will be some basic minim coursework that the students should take for them to be considered dietitians in the first place. And then there's a supervised practice component. So there is a minim number of hours in different rotations that each student... each students must undertake to be eligible to register as a dietitian. And that's the global standard. And then they also need to take a licensure exam at the end of it. So those are the three conditions most countries would follow for dietitians to be accredited in the first place. So what we have done in Malawi is that we have created, and this is for the first time, because prior to this we didn't have any accreditation guidelines, so when you came in as a dietitian in Malawi, there was nothing to measure your competencies or your qualifications against. So what we have done now is that we have developed a standards for that credentialing in the first place. So minimum amount of ... we're looking to all these aspects... so minimum amount of course work that you've done, and your hours of supervision, and having taken in the licensure exam to that. So that's the accreditation question. In terms of the dietetic association, yes as I said, there are plans to create the dietetic association. And certainly historically from other countries, dietetic associations do help with the accreditation process. So they are there in terms of setting exams, and you know, they certainly have an advisory role to play there. So I do see

that the dietetic association will play an advisory role. Indeed we've already seen them play an advisory role, because all these draft regulations that we have, we've drafted with dietitians in the country who will form the association, is an informal association that is already formed actually.

#### Sanele Nkomani

If I can just come in on in addition to you actually, Bernadette, on continuous development ... I think you didn't touch that. So just to add on that in the documentation that has been... is now with Medical Council on the regulation of dietetics, we have a section on continuous development and our proposition is that we have the Medical Council regulates the continuous development of our dietitians and hoping that the current training institutions will take that over and offer continuous training for continuous development. Thank you.

# Elizabeth Marino-Costello

Thank you. Thanks very much both. And I have another important question if quickly, perhaps, John can take this one. Amy Nickerson is asking: How we're going to staff and dietitians in the rural communities? So John or Bernadette?

#### John Phuka

Bernadette go first.

#### Bernadette Chimera-Khombe

Ok, so I think... I thank you for that question. Just to give a brief background, I believe Janet might have said this already. Malawi's health system is set in three levels of ... four levels of healthcare service as of recent years. So we have the tertiary centers, and then we have secondary, primary, and then we have the health posts. At the moment what we have is... our dietitians are in the tertiary centers and the government's goal is that as we continue to train larger numbers of dietitians we're going to cascade down to secondary care, primary care, and hopefully to the to the health posts. However the challenge is that at the moment we have ... we're training dietitians at postgraduate level, so you have the challenge of sending them to the rural areas. And so a discussion has to be had on now training dietitians to a lower level that can cater for primary level care and health post level care. And, at this point, based on the government structure, usually in Malawi as per medical doctors, those that are in

the rural areas are those with a bachelor's degree. So if in the future of Malawi what maybe would be important is to have a Bachelor's degree dietitian or something lower than that that can go to all over ... all the way down to the health post in the rural areas, the hard to reach areas. I'll hand it over to John now to explain more, because John is also involved at national level in terms of human resource for health.

## John Phuka

I think I will answer only to say that that kind of training, perhaps, also answers partly to the sustainable ... stability of the program because the government sponsors much more undergraduate programs as compared to the higher level. So we need to be much more innovative to do the senior level training, whilst we can easily motivate for the lower ones, because the system is already there. So just to complement to that. Thank you.

#### Elizabeth Marino-Costello

Thank you thank you both. I believe we have time for one more question, and I'm going to direct this to Janet. One question from Noel Kasimi. He wants to know if there's any plans for career ladder and promoting dietitians now that they're in the workforce. So Janet I'll let you take this.

# lanet Guta

Thank you very much Elizabeth and thank you for your question. In my presentation, I had indicated that currently the Ministry of Health in Malawi was undergoing a functional review. So that went to our advantage, because in that functional review, what we've done is to already create some career path, especially for promotions for these dietitians, right from the national level, which is the ministry headquarters and also in the center hospitals where currently they are. So that one we covered and we are so excited because the functional review for the Ministry of Health came just at the right time, when we have just started with this dietetic program. So it makes our life easier. Thank so much.

# Elizabeth Marino-Costello

Thank you Janet and I love to hear being a dietitian about promotions and career ladders for our profession all around the world. So that's great. And I see the time and I'm going to stop the questions and answers here. Unfortunately I wish we had more time, but I would like our esteemed panelists to

just give a reflective comment and their thoughts for maybe the future, just 30 seconds. And maybe we'll start with Janet again.

Janet Guta

Thank you very much Elizabeth. For me, it's all excitement and what I want to see on behalf of Malawi government is that all the facilities should have at least one dietitian if we can't manage to put two. And if we can go even up to the community level, so that they can work hand-in-hand with the nutritionists that are also there. Thank you so much.

Elizabeth Marino-Costello

Thank you. Tinna?

Tinna Manani

Thank you Liz. I think for me what I can say that at LUANAR through the dietetics program, we've learned and indeed seen that we're living in a global village, where partnerships have enormous strength in delivering big goals, especially where human capacity has to be leveraged from different institutions, the strength of partnerships. Thank you.

Elizabeth Marino-Costello

Thank you. Alex?

Alexander Kalimbira

Thank you. For me, I think moving forward trained as a nutritionist, I'm not a dietitian but here putting together a dietetic program, I would like us at the very beginning as Malawi and also other countries that may follow suit especially in this region to make sure that dietitians and nutritionists are working together, because they're responding to a nutrition need at the end of the day. And therefore this close work relationships, so that dietitians are not in their own silo, and then also nutritionists are working alone, but together we can achieve a lot in our country. Thank you.

Elizabeth Marino-Costello

Thank you and last, John your words.

John Phuka

Yes, I joked to the first group of students when I first met them, and I said "I'm hoping that there will be

a day when dietitians meet, you would tell me Dr. Phuka, sorry you're not a dietitian". And it seemed as

if that was a joke, but now it seems that it's real and very exciting. And I'm now actually anxious that

they may boot me out from their grouping very soon. Thanks that we still want to be cooperating so I'm

at peace just because of collaboration, but we have a future now. Thank you.

Elizabeth Marino-Costello

Thank you John. That's so funny because actually one of the questions we didn't get to is: Can doctors

do nutrition counseling? I do want to say "yes in Malawi" of course, but as Dr. Phuka just mentioned, he

wants to be replaced. So we'll be happy as RD professionals to do that and work alongside with all of

the healthcare. So I want to end the program and the webinar, and let you all know that please, please

make sure to catch all of our webinars. We're going to highlight a food composition table in a couple of

weeks our first ever Malawian food composition table, and I know that there were some questions

about dietary guidelines. And so we'll be addressing that in that webinar. All of our webinars are

recorded at nutritioninnovationlab.org. So thank you all so very much for tuning in and we're so grateful

to all of the audience participants, and to our speakers, and our esteemed panel. Thank you all.

Participants.

Thank you, thank you, thank you very much, thank you, thanks, bye, bye, bye.

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