

Clinical Officers in Uganda: *"The Pearl of Africa"*

Author's Profile:

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A graduate from the Great Lakes University Bachelors of Science in Clinical Medicine and Community Health (BCMCH) program in Kisumu-Kenya; Ms. Namugosa serves her community as a Senior Medical Clinical Officer (CO) managing the Kawanda Health Centre III. She additionally acts as the current Master Trainer in safe practices of adult male and early infant male circumcision at the Ministry of Health (MOH) of the Republic of Uganda.

As a supplement to her Clinical role, Annet C. Namugosa holds the Secretary General position on the board of the General Medical Clinical Officer's Professionals Association of Uganda, advocating for the further recognition of the CO role. A founding member of the Global Association of Clinical Officers and Physician Associates (GACOPA), she utilizes her role as the First Deputy, Organizing Secretary to improve health care services and/or delivery throughout the African continent via unification of all mid-level professionals towards a common health goal, and especially in pursuit of universal health coverage.

General Information:

The Uganda CO profession was crafted by a gentleman named Sir Dr Albert Cook. Cook originally arrived in Uganda as a missionary in 1918, establishing Mengo Hospital, one of the oldest hospitals in East Africa. Cook went through extraordinary lengths to train Africans to become skilled medical workers, training African Medical Assistants (MA) at Mulago during World War I, opening a school for midwives at Mengo, and encouraging the opening of the first medical college. In 1929, the government took over the training of these professionals, which would be renamed in 1996 from the term "MA" to "Medical Clinical Officer" through the Allied Health Professionals Council Act CAP 268. Since then, COs have served on the front lines of multiple national pandemics including but not limited to Ebola, Marburg, Yellow Fever, Measles and Rift Valley Fever. During the COVID-19 Pandemic, COs have been assigned to various border points and surveillance facilities to assist in tracking, testing, and future vaccination of the country's constituents. Also COs are also working at health center III in-charge of all managerial activities.

Entry Criteria:

Due to the poverty and various gaps in access to healthcare for the citizens of Uganda, the country's social determinants of health are considered in the process for acceptance to their medical programs. After matriculation, each student--regardless of their background--is responsible for their own performance and are trained equivalent to one another regardless of their upbringing or prior education. A quota system is utilized during the admissions process where each district is assigned a specific number of seats in the program. Those districts where education is hard to attain and students are arising from socially disadvantaged environments are provided a higher number of seats within the program for which they can fill. Extra consideration is provided for student athletes, those with physical disabilities, and females

seeking higher education. Competition is high, so it is encouraged that those interested in medical training engage in alternative activities that promote their ability to help others.

International students require review of completed training programs by the Uganda Allied Health Examination Board (UAHEB) and the NCHE before acceptance for matriculation is considered. There is no required clinical experience to enter the program.

PROGRAM	Diploma in Clinical Medicine and Community Health (dCMCH)	Bachelor of Science in Clinical Medicine and Community Health (BCMCH)
DIRECT APPLICANTS	• Must have UACE with a principle pass in Biology • Must have subsidiary pass in any of the following: ○ Chemistry, ○ Physics, ○ Mathematics, ○ Foods/Nutrition	Holders of the Advanced (“A”) Level Certificate • Sat/passed the Uganda Certificate of Education (UCE) exam or equivalent with passes in at least five subjects taken at the same sitting • Sat/passed the Uganda Advanced Level School Certificate of Education (UACE) with principal passes in both Biology and Chemistry
EXTENSORS	• Must have basic certificate in health-related discipline • Ex: nursing, midwifery, lab sciences • Must have served 2 years of work experience after previous training	• Possess a diploma or its equivalent in health-related field ○ Ex: clinical medicine, lab technology, radiography, public health, dental health, advanced nursing, registered nurse • Be registered with relevant professional council of home country • Possess a BSc with obtained qualifications that are recognized by the accepting institution.
INTERNATIONAL STUDENTS	N/A	Holders of Kenya School Certificate of Education (KCSE) • Must have a minimum grade of C+ in all coursework Holders of School Certificate Graded in Percentages and Average Points • Includes those in countries such as Sudan, The Democratic Republic of Congo (DRC), Rwanda and Burundi • Must have their grades standardized by the UNEB prior to seeking admission to the program

Education:

There are currently 28 total schools that provide training to COs. Twenty-seven of these award Diplomas in Clinical Medicine and Community Health (dCMCH); while only one awards a BCMCH degree (Bachelor's). The National Council for Higher Education (NCHE) currently regulates the enrollment and / or accreditation process for programs. While there is no defined limitation for diploma programs, the BCMCH program matriculation limit is 200 students annually.

The dCMCH is completed over six semesters in three calendar year. Each semester is comprised of seventeen weeks in which a total of 38 courses (134 credits) are completed. The first year focuses on biomedical sciences, second year on pathological sciences, and the final year on clinical subjects. During the clinical year, students are assigned to specific sites and attend ward rounds. They present medical cases to collaborative medical teams, writing prescriptions that are counter-signed by supervising clinicians, and may opt to do a specialty rotation in ENT, ophthalmology, psychiatry, dermatology, or dentistry if desired.

Diploma in Clinical Medicine and Community Health (dCMCH)

TERM	CATEGORY OF COURSEWORK	FIRST SEMESTER	SECOND SEMESTER
FIRST YEAR	Biomedical Sciences	Anatomy I Physiology I Biochemistry I Public Health I/Primary Care First Aid Communication Skills Ethics & Integrity Computer Skills	Anatomy II Physiology II Biochemistry II Basic Nursing Immunology Public Health II/ Nutrition Health Education Social Psychology
SECOND YEAR	Pathological Subjects	Basic Microbiology & Parasitology Basic Pharmacology Mental Health Public Health III/ Health Services Management General Pathology Palliative	Applied Microbiology & Parasitology Clinical Pharmacology & Therapeutics Public Health IV / Maternal/Child Health Hematology Ophthalmology Public Health V/ Environmental Health Public Health VI/ Research Methods Intro to Clinical Methods/ Clerkship
THIRD YEAR	Clinical Topics Clinical Clerkship	Medicine I Surgery I Pediatrics I OB/GYN I Public Health VII/ Research Methods II	Medicine II Surgery II Pediatrics II OB/GYN II Public Health VIII/ Epidemiology

The BCMCH degree is a 4.5-year program that provides advanced training in basic/biomedical sciences as well as clinical medicine and community health so that clinicians can provide curative and preventative healthcare encompassing aspects of theory and practical concepts. Students are obliged to complete a total of 253 credit units over a duration of the program including a compulsory needs assessment and community health attachment during the first and third year of study respectively. The latter is comprised of 53 credit units in total. Students in this program are compelled to supplement their training with community outreach, such as health education or provision of immunizations to people residing in the area. The BCMCH accredited curriculum in Uganda mandates the graduates to further undergo a one-year National Internship training prior to Licensing.

Bachelor of in Clinical Medicine and Community Health (BCMCH)

TERM	FIRST SEMESTER	SECOND SEMESTER	THIRD SEMESTER
FIRST YEAR	Communication & Counseling Skills Computer Applications Behavioral Sciences Principles of Ethics & Integrity Applied Biology Applied Mathematics Applied Physics Applied Chemistry Entrepreneurship	Gross Anatomy of Lower & Upper Limbs Basic Histology & Embryology Medical Physiology I Basic Microbiology Basic Immunology Medical Biochemistry I	Coberms I: community health/nutrition/food security Principle of Epidemiology I Principles of Nursing & First Aid Skills Biostatistics Research Methods I
SECOND YEAR	Gross Anatomy of the Trunk Systemic Histology & Embryology Medical Pharmacology II Medical Biochemistry II Applied Immunology Medical Parasitology Basic Pharmacology	Gross Anatomy of Head, Neck and Neuroanatomy Medical Physiology II Medical Biochemistry III Haematology & Blood Transfusion Basic Systemic Pharmacology (Clinical Pharm I) Clinical Microbiology (bacteriology)	Epidemiology II Environmental & Port Health Health Systems & Population Health Noncommunicable Diseases in Public Health Communicable Diseases in Public Health Occupational Safety & Health
THIRD YEAR	Principles of General Pathology Systemic Pathology Pathophysiology Hematology & Blood Transfusion Chemical Pathology	Internal Medicine I (theory & rotation) Child Health & Pediatrics (theory & rotation) Mental Health & Psychiatry	BREAK

	Chemotherapy & Therapeutics Forensic Medicine & Toxicology Immunopathology Clinical Microbiology (virology/mycology)	(theory & rotation)	
FOURTH YEAR	General Surgery (theory & rotation) Reproductive Health/OBGYN I (theory & rotation) Anesthesiology & Critical Care Orthopedics & Traumatology Ophthalmology	ENT Dental Health & Oral Hygiene Infectious Disease I Dermatology & Venerology Radiology & Imaging Palliative Care Medical Ethics & Legal Issues	Health Economics Coberms II: Health Services Management Research Methods II
FIFTH YEAR (6mo)	Internal Medicine II (theory & rotation) General Surgery II (theory & rotation) Reproductive Health/OBGYN (theory & rotation) Child Health & Pediatrics (theory & rotation)		

Financing Education:

The education is financed by the government, students, and occasionally employers.

Accrediting/Regulatory Bodies:

For any university to start teaching a BCMCH program, it must be approved by the National Council for Higher Education (NCHE). Diploma programs in alternative tertiary institutions must seek their approval by the Ministry of Education (MOE) through the Business Technical Vocational Education and Training (BTNET) department.

The accrediting body:

Allied Health Professional Council (AHPC)
P.O BOX 7272, Kampala
Email: info@ahpc.ug
Email: alliedhealthprofessionalscouncil@yahoo.com

Mobile: +256 706345688

Mobile: 0393242736

<https://ahpc.ug/>

National Council for Higher Education (NCHE)

Plot M834, Kigobe Road – Kyambogo

P.O.Box 76 Kyambogo – Kampala

Tel: +256393262140/1

Email: info@unche.or.ug

<https://unche.or.ug/>

The regulating body is:

Allied Health Professional Council (AHPC)

P.O BOX 7272, Kampala

Email: info@ahpc.ug

Email: alliedhealthprofessionalscouncil@yahoo.com

Mobile: +256 706345688

Mobile: 0393242736

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Professional Licensure:

At the end of both the diploma and BCMCH programs students need to pass a summative examination that encompasses all of their professional training. Multiple organizations can proctor and review the performance of students on this exam; however, only the Uganda Allied Health Examination Board (UAHEB) is responsible for the full formal assessment of student performance. The organizations within Uganda that are involved in the certification and licensing process are as follows: MOE, Ministry of Health (MOH), AHPC, NCHE, BTVET, the National Curriculum Development Centre and UAHEB.

Upon graduation from the program, graduates must apply to the AHPC and submit his/her academic documents with their University student identification. The council will then review all documentation to verify accuracy and once satisfied, will provide a registration certificate to the applicant. Those applying for registration with the AHPC as a licensed professional will incur a small registration fee.

Scope of Practice:

COs are formally recognized by the MOH in both private and public health facilities at levels III, IV, and V. These constitute district hospitals within the borders of Uganda. They are also recognized at referral hospitals that encompass outpatient and inpatient units as well as specialized rural clinics. The work of the MOH in supporting increasing numbers of COs in practice to support these public facilities is ongoing. The newly accredited BCMCH course is still in the process of registration by the AHPC to execute health care services as per the CO's scope of practice scheme and service. COs have the ability to take patient histories, physical exams, perform minor surgeries and prescribe medications. Graduates with a Bachelor's degree are allowed to perform cesarian sections.

Maintaining Role:

Renewal of the professional practicing license after initial registration requires 30 continued professional development (CPD) points recognized by any of the above organizations annually.

Job Opportunities:

There are currently 11,794 COs practicing in Uganda at this time. Job opportunities are posted on the accrediting bodies' website. Further opportunities can be found on the few hospital/facility web pages that exist; however, a large portion of opportunities are found via direct communication with healthcare providers in communities.

References

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7. National Council for Higher Education. <https://unche.or.ug/webpages/index.aspx>. Accessed March 2021.