

CERVIX CANCER SCREENING PROJECT  
PARTICIPATING INSTITUTIONS:  
ORCI, IARC & INCTR  
PRINCIPAL INVESTIGATOR:  
DR. T WALIB A. NGOMA



# The Human Factor in Cancer Control

by Angela Leuker

*The IAEA is responding to critical human resources shortages in Africa with the launch of a virtual university and a regional training network for cancer control.*

**A**s the incidence of cancer increases in developing countries so too does the need for skilled cancer care professionals to help fight the growing epidemic. But with over-burdened health services already afflicted by acute staff shortages, attracting doctors and nurses to this specialized field is particularly difficult. Now the IAEA is launching a Virtual University for Cancer Control and Regional Training Network (VUCCnet) with the aim of helping to fill the human resources gap in Africa.

According to the World Health Organization (WHO), there were 667,000 new cancer cases in Africa in 2008 alone, and more than half a million cancer deaths. And these figures are set to rise dramatically over the next decade. Yet it's estimated that Africa currently has a needs-based shortage of more than 818,000 health workers. The field of cancer care and control is one of the hardest hit because human resources are mainly channeled towards the continent's heavy burden of infectious diseases. In addition, a number of more specific hurdles hamper recruitment.

## Barriers to Recruitment

Three years ago, when 25-year old Miriam Owusu Sekyere was considering oncology nursing, many people in her home country, Ghana, tried to dissuade her.

“There are many misconceptions about working in an oncology unit,” she says. “Some people believe that proximity to radiotherapy may result in cancer later on in life or that a young woman could become infertile. I was discouraged, and frightened.”

But Miriam’s family and colleagues were supportive and she went on to successfully complete her oncology nursing training in South Africa, funded by the Ghanaian government. Today, working in the cancer unit of the Komfo Anokye teaching hospital in Kumasi, Ghana’s second largest city, Miriam is dedicated to her job and says she has never regretted her decision. (See box, “A Personal Journey,” in this article.)

As Miriam’s story illustrates, fear and misunderstandings surrounding the nature of the work are hindering many sub-Saharan African countries in their efforts to recruit and train cancer care professionals. At the same time, poor conditions and few prospects of career development do little to entice Africa’s brightest and best into oncology. The reality is more likely to be a long hard slog of low paid work in poorly equipped cancer centres, where the numbers of patients are overwhelming. That’s why the IAEA, through its Programme of Action for Cancer Therapy (PACT) and in collaboration with WHO and other international partners, is aiming to tackle the human resources shortfall where it can have the most impact — on the ground, in Africa.

## Cancer Centres Linking Learning, Mentorship

Four established cancer centres in sub-Saharan Africa will form the hub of a pilot phase for the VUCCnet, which has been developed to advance knowledge transfer, professional mentorship and continuous learning across the region. High-quality training programmes will be delivered through a network formed by the four pilot centres together with mentor cancer centres in countries such as Egypt and South Africa. The Virtual University of Cancer Control (VUCC) will provide students with access to information and training modules online. Content will be developed with reference to the pattern of prevalent cancers in sub-Saharan Africa,

namely those of the cervix, breast, head and neck, and prostate, as well as lymphomas and Kaposi’s sarcoma, the AIDS-related cancer.

Dr. Kennedy Lishimpi, Acting Executive Director of the Cancer Diseases Hospital (CDH) in Lusaka, Zambia, says that cancer is a major public health problem across the region. For example, Zambia now has one of the world’s highest rates of cervical cancer, at 53.7 per 100,000 women. Since the CDH opened in 2006, it has treated more than 3,500 patients with a total staff of just 32.

“These are the only staff with oncology training in Zambia today, so clearly we need to train more people,” says Lishimpi. “The creation of centres of excellence in Africa, backed by a virtual university, is a great concept because it will provide good resources for already practicing oncologists and other cancer professionals. It will also help to train the core staff that are urgently required in oncology units in Africa.”

## Halting the Brain Drain

Long term, it is hoped that the VUCCnet will help ensure the spread of sustainable, comprehensive cancer care and control across the region. It also aims to staunch the flow of trained health care professionals away from Africa to better jobs and opportunities in the world’s richer countries. It’s been estimated that every year thousands of newly qualified doctors and trained nurses go abroad in search of better salaries and conditions. Others do not return to their home countries following training overseas. This ‘brain drain’ of medical professionals not only has a negative impact on the quality and availability of health care in African countries but also represents a huge loss of government financial investment in education and training.


While the return of trained medical personnel will be difficult to accomplish, it is hoped that by expanding radiotherapy facilities, improving working conditions and salaries, and offering better career and training opportunities to cancer care professionals in Africa, they will be encouraged to stay on. And that is at the heart of the VUCCnet initiative.

## Addressing a Vital Global Health Need

Acknowledging the mission and vision of IAEA/PACT in the global fight against cancer, Ambassador Glyn T. Davies, Permanent Representative of the

USA to the IAEA, said his country was proud to continue its support of these 'noble efforts' by donating \$750,000 to the VUCCnet project. "PACT is more than just a programme addressing a vital, critical, global health need," he said in a speech given on the occasion of World Cancer Day 2009. "It is also a model of how the IAEA is promoting the peaceful use of nuclear technology in a results-based way, focusing on cost-effectiveness and on building sustainable partnerships between recipient countries and donors."

VUCCnet is a timely new initiative that draws on the IAEA's parallel efforts in cancer education and training. Through its Technical Cooperation programme for Africa, the Agency already supports individual

fellowships and scientific exchanges in cancer management. At the same time, VUCCnet will rely on the technical expertise and competence of the Division of Human Health for training content and curricula. The IAEA's experience in Distance Assisted Training (DAT), a fellowship programme providing support for doctors from countries without formal university programmes in nuclear medicine, will be invaluable. VUCCnet will also benefit from other relevant IAEA experience, such as the Applied Sciences of Oncology Distance Learning Course. 

---

*Angela Leuker is a consultant at the IAEA's Programme of Action for Cancer Therapy (PACT). E-mail: ALeuker@yahoo.co.uk*

## A Personal Journey by Angela Leuker

**The story of nurse Miriam Owusu Sekyere in Ghana shows how barriers to recruitment and training of cancer professionals in Africa can be overcome.**



Miriam Owusu Sekyere, an oncology nurse, works in the cancer unit of the Komfo Anokye teaching hospital in Kumasi, Ghana. (Photo: M. Sekyere)

**N**urse Miriam Owusu Sekyere was 25 years old when the hospital where she was working offered to send her to South Africa for specialized training in oncology. But a lot of people tried to dissuade Miriam from taking the opportunity, as some have the mistaken belief that simple proximity to radiotherapy may damage your health. Miriam says she became discouraged and frightened. But, with the support of her family and colleagues, she went on to successfully complete her oncology nursing training.

Now, three years later, Miriam is working in the cancer unit of the Komfo Anokye teaching hospital in Kumasi, Ghana's second largest city, and says she has never regretted her decision. But the workload is heavy. Ghana has only two oncology units for the whole of the country: Korle Bu teaching hospital, which serves the southern sector of Ghana, and Komfo Anokye serving the northern sector. These two centres also take patients from neighbouring countries such as Burkina Faso and Cote d'Ivoire, which have no cancer treatment facilities of their own.

Since it opened in 2004, Komfo Anokye's oncology unit has treated more than 4300 cancer patients, with a staff of 10 or fewer. Currently, the department has two trained radiation oncologists, one radiopharmacist, one medical physicist, one radiotherapist and three oncology nurses, including Miriam herself. A similar situation exists at the Korle Bu hospital. Ghana's two cancer units have no wards for

patients and function on an out-patient only basis. This means that hospital staff must work long hours to cope with the overwhelming ratio of patients to health professionals.

Ghana's severe staff shortages are typical of those found across the region of sub-Saharan Africa. Miriam believes that many health professionals shy away from working in oncology because of its high-risk reputation and the fear that they will not be sufficiently protected. Another major factor, she says, is the paucity of training opportunities. "It's very expensive to send cancer professionals abroad for training and Ghana is a low income country. It simply cannot afford to train enough health professionals to fill the human resources shortfall."

Lack of incentives and low salaries are a further factor. "There's little motivation to specialize in oncology," Miriam says. "And little to stop the few trained professionals from leaving for better conditions elsewhere. Hence the shortage."

Miriam believes a regional training network, along the lines of the IAEA/PACT planned VUCCnet, will help advance the global fight against cancer, especially in Ghana and Africa as a whole. "It will create training opportunities for those health professionals wishing to specialize in oncology and, as a result, will encourage trained staff to stay on," she says. And that will benefit cancer patients and cancer care professionals alike. 