

The pull of public health studies

Public health has burgeoned over the past 100 years, from the study of tropical diseases in the 19th century to national public health systems after World War One and, more recently, to include international public health. Education has kept up with these trends, and today there are hundreds of schools around the world, many flourishing in developing countries.

Public health has become an attractive area for many students. Some come from the medical profession to join the growing ranks of those enrolling in courses, while others are from such diverse areas as computer engineering, nursing and journalism.

“Public health is an excellent mix of health and social issues,” says Abebual Zerihun Demilew, an Ethiopian student who just graduated from the James P Grant School of Public Health in Dhaka, Bangladesh, which is run by the world’s largest development nongovernmental organization, BRAC (formerly the Bangladesh Rural Advancement Committee).

The James P Grant School is one of a new breed of public health institutions based in a developing country. It offers courses relevant to Bangladesh as well as international public health issues, and attracts students from both developing and developed countries.

“The main drive for students to come to this school is that the course is given in partnership with internationally prestigious schools, including Johns Hopkins, Harvard and so on,” Zerihun says, adding: “We are 25 students, 12 from Bangladesh and 13 from all over the world. Six of those are medical doctors.” Their countries of origin include Afghanistan, Ethiopia, India, Kenya, Myanmar, Nepal, Pakistan, Uganda, the United Republic of Tanzania, Singapore and the United States of America (USA). Students on Zerihun’s course are also attracted by the real-life experience of fieldwork.

Public health schools have existed since the late 1890s. The first two,



Courtesy of Abebual Zerihun Demilew

Abeebual Zerihun Demilew, an Ethiopian graduate of the James P Grant School of Public Health, accompanies a research programme manager from the International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B), on a field trip to rural Bangladesh to assess hygiene and sanitation practice during flooding. Both the public health school and the centre are based in the capital, Dhaka.

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the Liverpool and London schools of hygiene and tropical medicine, were founded in the United Kingdom in

1898 and 1899, respectively. They studied diseases brought home by sailors returning from far-flung shores and the health risks that administrators, merchants and soldiers faced in the British empire’s colonies and trading stations.

During the first part of the 20th century, public health schools tended to be in rich, industrialized countries and focus on national health systems.

The last few decades have witnessed a shift. Today there are schools, like

the Bangladesh school, in developing countries such as China, Benin, Brazil, the Democratic Republic of the

Congo, Ghana, India, Kazakhstan and Thailand, to name but a few, covering international public health issues and local concerns.

Some schools provide both degrees and training in diverse disciplines for specific professionals while others have a purely academic focus.

Courses range from one to seven years, require varying amounts of fieldwork and cater to professionals, who are already working in public health, and recent graduates. Depending on the school, a student can opt to study full-time, part-time and by correspondence, online; earn anything from a master’s degree in public health (MPH) to a doctorate; or take a short course and receive a certificate in a particular subject.

In the USA, for example, accredited public health schools generally offer five core disciplines, according to the American Association of Public Health Schools, the umbrella organization: biostatistics, epidemiology, health services administration, health education/behavioural science and environmental health.

Schools in the USA and elsewhere also offer courses in international health, maternal and child health, nutrition, public health programme management and biomedical laboratory science.

There are as many instruction methods as there are schools. The University of Pretoria's School of Health Systems and Public Health offers a self-directed learning programme including epidemiology; health policy and management; environmental and occupational health; disease control; health research ethics and health promotion. Although there are structured classes, the school encourages independent learning.

"We strongly believe that all our graduate students are self-directed learners," according to the Pretoria school's MPH course description. "For this reason, the MPH programme is very flexible in time and content. The programme is focused on enabling students to learn what is important, in light of previous education and a vision of their own future in the health system." The goal is to create a "learning environment for students, not a teaching format for the school".

Because schools are so diverse, there are many things to consider when choosing a programme besides the cost and length of time.

Many public health schools in developed countries are affiliated to or collaborate with others in developing nations, offering exchange programmes and the opportunity to do joint projects or fieldwork in the affiliated school. Professors and lecturers also move between schools. A student who can't get a place or afford to study at a specific school may be able to attend one that is connected with that institution.

Public health careers run the gamut from working in community clinics to consulting for private companies to serving at the top of a country's public health sector, as health minister, according to public health school web sites.

Some schools assure their graduates a job after they complete their studies. For example, all the students at Kazakhstan's School of Public Health are from that country and most go on to work in its public health offices and clinics as determined by the Kazakhstan Ministry of Health. Graduates of the School of Public Health at Beijing University can expect to find a job mainly in preventive medicine and related fields in China itself, though some alumni work abroad.

Many of the world's public health schools give classes in English language or have special programmes in English

for foreign students. The University of Debrecen's School of Public Health in Hungary, for instance, offers an international health programme in English. Pretoria requires a good command of English, as do many other schools, while those in Algeria, Benin and Lebanon require a good command of French.

Pretoria conducts all its graduate courses in English and offers language programmes to help students, as proficiency in English is a requirement to enrol in the school's MPH programme.

Programmes vary, too, on their prerequisites. Debrecen's applicants are required to pass tests in biology, physics and chemistry, though the requirement can be waived for students with degrees in biology and related subjects. ■

Research and report by
Theresa Braine

Global directories

In 2008 WHO, in collaboration with Denmark's University of Copenhagen, will publish global directories of teaching institutes across all health system disciplines including medicine, pharmacy, dentistry and public health.

Public health schools: six portraits

The **James P Grant School of Public Health** was established in Dhaka, Bangladesh, in 2004 by the world's largest development nongovernmental organization, BRAC (formerly the Bangladesh Rural Advancement Committee), to train future public health managers and leaders.

The idea of setting up the school grew out of BRAC's work alleviating poverty in disadvantaged parts of the world, says the school's dean, Professor A Mushtaque R Chowdhury. He says that the school's goal is to "improve the health of the population by training future leaders in public health".

BRAC collaborated with prestigious public health schools in developed countries, such as Johns Hopkins and Columbia universities to determine the curriculum. Guest professors from those schools also teach on the school's courses. "We wanted to make it a centre of excellence, so we talked to different schools of public health in different



Students from the James P Grant School of Public Health who have just finished their Environment and Health course at Savar campus, located in a village in Bangladesh. The course is designed to give students first-hand experience of public health in real life.

parts of the world and launched the [MPH] programme with their help," Chowdhury says.

The master's of public health (MPH) programme was launched in February 2005. The course covers diverse topics, including public health management, health financing, communicable and noncommunicable

diseases, and runs for 12 months. Students spend half of that time learning about the health challenges faced by rural communities in field locations in Bangladesh. This experience also gives students themes and material for their dissertations. Chowdhury says: "We feel that it is very important that the students are given exposure to real life." ■

Among public health schools in Latin America, the **Sergio Arouca National School of Public Health** in Rio de Janeiro, stands out. It is part of Brazil's most prominent science and technology health institution, the Oswaldo Cruz Foundation (FIOCRUZ) and is Brazil's national school of public health. The director, Professor Antônio Ivo de Carvalho, says the school attracts students from all over the country, as well as other parts of Latin America and Portuguese-speaking African countries.

Established in 1954, the school was inspired by the need to train professionals in public health but it soon evolved into a cornerstone of the Brazilian government's strategy to modernize the country's economy and society, Carvalho says. The school is also key to "the process of change of strategies for public action in the



Virginia Damas/CCI/ENSP/Fiocruz

MPH students from the Sergio Arouca National School of Public Health (Escola Nacional de Saúde Pública Sergio Arouca) on their graduation day, which is part of Brazil's most prominent science and technology health institution, the Oswaldo Cruz Foundation (FIOCRUZ).

context of developmental policy".

Even today, the school plays a leadership role in Brazil's public health system. It helped establish the country's network of schools of public health, which trains the managers of the public health system and health services on both the national and local level.

The school offers two MPH

programmes, one of which requires students to write about their fieldwork in their dissertation. The subjects covered by the school include: epidemiology; information and communications technology; health communications; health policy and management of health systems; research methodology in health and health surveillance. ■

The **High Institute of Public Health** in Alexandria is "the centre for progress in health development throughout Egypt and in many other countries in the region", says its director Dr Moustafa Ibrahim Mourad, referring to the Eastern Mediterranean Region of the World Health Organization (WHO). The 21-country region extends from Morocco across north Africa and the Middle East to Afghanistan and Pakistan.

Founded in 1956, the school became part of the University of Alexandria in 1963. Most of its students are sponsored by Egyptian ministries, the governments of other countries in the WHO region and international organizations, such as WHO and the United



Courtesy of the High Institute of Public Health

Graduation day for students from the High Institute of Public Health in Alexandria, Egypt.

Nations Children's Fund (UNICEF).

The institute has nine academic departments offering 23 public health specializations. These include epidemiology, biostatistics, tropical health, microbiology, nutrition, family health, health administration and behavioural

science, environmental health, and occupational health and hygiene.

It offers master's degrees, diplomas and training programmes for health providers. These include the Leadership in International Health course, and health quality management programmes. ■

The **University of Ghana School of Public Health** in Accra was created to meet "the urgent need for health personnel to man several newly created administrative districts and municipalities to address emerging health issues", says the school's dean, Isabella Quakyi. "The School of Public Health continues to play a crucial role in the health of the nation, providing essential health training for academia, research, policy and community mobilization for health improvement."

Students on the Master's of Public Health course come from across

Africa, Canada and the United States of America, though the majority are Ghanaian, Quakyi says. Most of the Ghanaian students are sponsored by the country's health ministry and international organizations, including the United Nations Population Fund, the United Nations Children's Fund (UNICEF) and WHO. Many students also come from disciplines and fields other than health, creating a diverse mix that is especially attractive for students with a special interest in the developing world.

"Upon returning to Canada, it's very interesting to see how people

respond to your CV [curriculum vitae] with an MPH from a school in a developing country," says recent graduate, Ian Wagg, from Canada. "How does that compare to [the] Johns Hopkins [University] or the London School of Hygiene and Tropical Medicine? In many ways it is much better than those schools, and in some ways it is not."

Wagg's story is an example of advantages to be gained from attending school outside the developed world. He initially chose the school to be close to research into antimalarial bednets at the Navrongo Health Research Centre in northern Ghana. But

it also brought him into contact with top researchers in Africa, which he says was “the best thing for me aside from the educational experience” and gave him a unique perspective as the only Westerner in his class.

MPH students study biological and environmental occupational health sciences, biostatistics, epidemiology and disease control, health policy planning and management, and population and reproductive health planning, as well as social and behavioural sciences.

“We cover all issues of developed nations,” Quakyi says. This ranges from communicable diseases such as malaria, HIV/AIDS and tuberculosis, to non-

The **Arkhangelsk International School of Public Health** is establishing a new type of public health education in the Russian Federation.

“Public health, as it is seen and perceived abroad, is not well developed in the Russian Federation,” says project coordinator Alexander Kudryavtsev. “So our programme is one of the first attempts in the Russian Federation to establish public health education in accordance with international standards.”

The school was founded in September 2006 at the country’s Northern State Medical University with support from the Department of Health Care of the Administration of Arkhangelsk Region in collaboration with several north European universities, Kudryavtsev says. The school is partly funded by the Barents Euro-Arctic Council (BEAC), a forum for intergovernmen-

The **Swiss School of Public Health + (SSPH+)** was founded on 7 July 2005 by merging the public health schools of six universities: Basel, Berne, Geneva, Lausanne, Lugano and Zurich. The new school combines studies in public health and health financing, and is geared primarily towards health administrators and policy-makers in Switzerland.

The schools were merged to avoid duplicating one another’s efforts. “We realized that each faculty is fundamentally too small to organize all the master’s programmes,” says Executive Director Gilles de Weck.

The institute offers several postgraduate degree courses covering public health, international health, and



Ilan Waagg

Students from the University of Ghana School of Public Health on a field trip.

communicable diseases like diabetes, stroke and cancer. Graduates go on to become district or regional directors of

health in their own countries or to hold positions in various international health organizations, she says. ■



Courtesy of Alexander Kudryavtsev

Students from the Arkhangelsk International School of Public Health.

tal cooperation in the Barents Region, and it admitted its first students in January 2007.

Currently, 24 students are enrolled on MPH programme and a further 29 will be admitted in January 2008. They come from diverse backgrounds and include medical doctors, social workers, psychologists, university teachers and health administrators.

A school was needed for many

reasons. Kudryavtsev says public health has deteriorated since the 1991 collapse of the Soviet Union, with life expectancy, infant mortality, cardiovascular and infectious diseases, alcoholism, accident rates and drug abuse going “from bad to worse in all instances”.

Kudryavtsev says: “There’s a need for new quality of specialists trained to deal with public health, and we are training such specialists”. ■



Luciana Vaccaro

Students from the Swiss School of Public Health+, based at the University of Lausanne.

health economics and management. It offers courses to health professionals who need medical knowledge but not a medical degree.

The school offers several master’s degrees in French, German and Italian – the country’s three main national languages – in diverse aspects of public

health. Its MPH programme covers epidemiology and biostatistics, sociology and psychology of health, prevention and health promotion, health and the environment, health economics, and health-care management and policy. ■

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