A new school of public health in Bangladesh

Article by A Mushtaque R Chowdhury

The world has made spectacular progress in the past century, which has brought prosperity and better health to many. However, the benefit of this has been much less striking for the greater part of the developing world. The poor-world rich-world divide is well known, as is the divide between dominant and marginalized groups within countries. While the inter-country inequities in health were known previously, the past decade has seen the unearthing of intra-country inequities in almost every corner of the world.[1,2] Unfortunately, the gap between the rich and the poor in many societies has either remained the same or has shamelessly widened.

The Millennium Development Goals (MDGs) have raised new hopes for a world free of poverty and other 'deprivations', including ill health. A recent report published by the Task Force on Child Health and Maternal Health under the UN Millennium Project has called for a new vision and strategies to address the health problems that people in developing countries face. The report concluded that the world has enough knowledge and necessary technologies available to solve many of the health problems, but the real challenge lies in how these would be made available to the world's poor.[3] In other words, the potential to prevent the vast majority of the estimated 10 million annual child deaths and annual half million maternal deaths is within the world's reach, but there is a lack of relevant experience, resources, and probably, the will and political commitment, to make it happen.

Good public health is critical to making further progress, particularly in preventing deaths and suffering. Public health, as defined nearly a century ago by CEA Winslow, is 'the science and art of preventing disease, prolonging life and promoting health and efficiency through organized community effort.'[4] The Alma Ata Conference of 1978 reaffirmed the critical role of public health in attaining Health for All with particular emphasis placed on the centrality of equity, community participation and intersectoral collaboration. The recently formed WHO Commission on Social Determinants of Health recognizes the ever-important role that 'beyond health' measures play in ensuring and sustaining good health.

The extent of emphasis given to 'science' and 'art' that compose public health has recently been under scrutiny in the context of Schools of Public Health in the United States. It has been suggested that the schools in the United States have systematically ignored the art (application) in favour of the science (discovery and the medical model of diagnosis and treatment), has resulted in the imbalance and mismatch in the progress of the two arms of public health.[4] However, the failure to make many life-saving discoveries available to the vast majority of the world's population in the South cannot be fully attributable to this imbalance in the North. The history of developing countries investing in public health schools is not one of great pride, and their contribution to the improvement of the public's health is unclear at best. While the debate rages in the North, there is not much discourse in the developing countries, mainly due to the near absence of public health education (or public health schools) as a whole.

One of the first public health educational institutions in South Asia was the School of Tropical Medicine set up in Kolkata in 1922. However, such schools or their 'microcosm' in the Department of Preventive and Social Medicine in medical colleges in India and other South Asian countries failed to create much impact, as mentioned in a recent critique, due to: 'neglect, assignment of lowest priority, low prestige, poor quality of staff, and inadequate facilities such as transport, field practice areas'.[5]

Most public health schools set up in developing countries followed the path laid out by their counterpart schools in the North. To integrate community experiences in public health education, the Rockefeller Foundation helped set up a few 'Schools of Public Health without Walls' in Uganda, Kenya, Ghana, Zimbabwe and Vietnam. However, the number of such and other public health schools is too small to cater to the need. Then there are questions about their relevance and effectiveness. The Joint Learning Initiative on Human Resources for Health (JLI) identified a shortage of human resources in health as a major impediment towards attaining health goals in most developing countries. It was estimated that Africa alone would need a million new health workers if it is to achieve the MDGs.[6] To address the many problems that public health faces now and to test new teaching-learning methodologies, BRAC, a non-governmental organization (NGO) has set up a school of public health in Bangladesh. Named after the late Executive Director of UNICEF, the James P Grant School of Public Health is breaking new ground in innovative teaching and in creating

Published by: Global Forum for Health Research, WHO, Geneva (2005)

leaders for public health in developing countries.

The James P Grant School of Public Health

From its long involvement in the health field,[7] BRAC felt the need for a new breed of public health graduates who would simply be different in order to serve the poorest. FH Abed, the founder and chair of BRAC first conceived the idea of the School in the late 1990s. Afterwards, he consulted with a few public health leaders in the world: Jon Rohde, Patrick Vaughan, Richard Cash, Lincoln Chen, Cole Dodge and David Sack, who enthusiastically welcomed it. In 2001, Jack Bryant and Richard Cash undertook a feasibility study. It was preceded by a detailed survey of existing public health education in Bangladesh and the region, their relevance, quality and method of instruction and the job prospects of public health graduates.[8] The Bryant-Cash study found great potential for a new school of public health that could cater to the needs of not only Bangladesh but the region.[9] A meeting of the JLI in June 2003, hosted by BRAC and attended by HR experts from all over the world, wholeheartedly backed the idea of the School. BRAC thus went ahead and set up the School in collaboration with ICDDR,B: the Centre for Health and Population Research, also based in Bangladesh.

Why a school of public health and why at BRAC?

The shortage. As mentioned earlier, there is an acute shortage of human resources for health in developing countries, and the institutions that provide training are inadequate to meet the need. The United States, with a population of about 280 million, for example, has over 30 accredited schools of public health. South Asia with a population of 1.5 billion, on the other hand, has 12 institutions dedicated to public health training.[10] Bangladesh with a population of 140 million has only one institution that offers a Master in Public Health degree (MPH).

Clearly there is a need for many more such schools

Curriculum and teaching methods. For many of the existing schools, the curriculum followed is not always relevant to society's needs. In the absence of a modern and latest curriculum, the students are not well prepared to take on effective leadership roles and responsibilities in an ever-changing world. The teaching methods used are often less effective as they use didactic and rote learning without much emphasis on interactive learning. There is hardly any practice of field-based experiential learning.

Public health and Bangladesh. Despite widespread poverty, Bangladesh has done quite well in social development, particularly in education and health. The infant mortality and fertility rates have more than halved since independence, life expectancy has risen to over 60 years, with the disappearance of female disadvantage, various intervention programmes such as oral rehydration therapy (ORT) for diarrhoea, immunization and family planning have been successful and health equity has registered improvements.[11] Bangladesh is the home of many of the world's most successful NGOs such as Grameen, BRAC, etc. Yet challenges galore remain: maternal mortality is still unacceptably high; nutritional status has not improved to an expected level; and people remain poor. The management of the health system is a major challenge.

Presence of ICDDR,B. ICDDR,B is one of the most reputable health research institutions in the developing world. With its world-class researchers (potential faculty for the school), state-of-the-art laboratories, and libraries it is a great resource for any school of public health. It has one of the world's most sophisticated demographic databases.

BRAC as the host. BRAC is one of the world's largest and most successful NGOs. Its innovative programmes have earned wide reputation: ORT, TB/DOTS, nutrition, non-formal primary education and micro-finance. BRAC is present in over 70% of Bangladesh's 84,000 villages and has a wide network of residential training centres. Its research department is large and carries out relevant interdisciplinary research. BRAC's dependence on donor support has diminished significantly as it generates nearly 80% of the budget from its own domestic resources. The school builds on and demonstrates the experience of BRAC in the provision of affordable health services to the poor. Access to such a resource is a privilege which no other school can imagine.

Combat brain drain. It is expected that graduates trained in the South will stay in the South.

Goals and mission of the BRAC school

The long-term goal of the school is to improve health outcomes in Bangladesh and other developing countries, applying the best public health science. The school aims to produce graduates who are:

- Life-long, problem-based learners and critical inter-disciplinary thinkers.
- Contributing to the expansion of knowledge through research.
- Leading public health practitioners, researchers, managers, academicians and policy makers.
- Advocates/stewards of public health and policy at the community, district, national and international levels.
- Promoters and practitioners of both the science and art of public health.
- Committed to the health needs of the global South.

The training provided at the school will:

- Be community-oriented providing experiential problem-based teaching centred around the public health problems of Bangladeshi communities.
- Emphasize critical, innovative thinking that is rooted in best practice and rigorous research methods.
- Use a multidisciplinary intersectoral approach to teaching and problem-solving.

- Inculcate the values, vision and experiences of its founding and partner institutions into the daily work of its students and graduates.

Core values

- Equity – improving the health of the poorest, ethnic minorities, women and children, and other disadvantaged and marginalized groups.
- Scaling up – bringing the fruits of development and new innovations to as large a population as possible.
- Responsiveness to, respect for, and learning from communities.
- Learning from own mistakes and building on successes.
- Intersectoral and interdisciplinary approach to development.
- Diversity and heterogeneity among student body.
- Partnership and collaboration.
- Creating new knowledge and translating it to improving the health of the population (the science and art of public health).

Partnerships and collaborations

BRAC is working with many institutions in implementing the school's goals. These include ICDDR,B (Bangladesh), Columbia University (the United States), London School of Hygiene and Tropical Medicine (UK), Uppsala University (Sweden), University of Amsterdam (The Netherlands), Carleton University (Canada), George Washington University (the United States), Harvard University (the United States), Johns Hopkins University (the United States), Karolinska Institute (Sweden) and Umea University (Sweden).

An International Advisory Board (IAB), chaired by Professor Allan Rosenfield of Columbia University, provides guidance in implementing the school ideals.

The Master of Public Health Programme

The School's first major undertaking is a Master of Public Health (MPH) Programme which opened its doors to students in February 2005. It is a 12-month programme divided into three blocks. The first 6 months, which are completed at a rural campus, teach public health concepts, competencies and approaches (anthropology, biostatistics, epidemiology, health economics and management). For the next block the students move to Dhaka where they attend[1] short courses on various aspects of public health practice. In the final 10-week block, students carry out independent field studies of intervention programmes of their own choice.

Curriculum development

The school followed a rigorous process of consultation and learning in designing the curriculum for the MPH programme. The feasibility study provided some initial suggestions on the list of potential courses that were further revised by the JLI meeting. The IAB in its various meetings also provided inputs into the process. But the major inputs came from the two meetings of course coordinators that were held in August 2004 and April 2005. The first meeting, attended by all course coordinators and curriculum experts, discussed the various courses and came out with the curriculum, with a day-by-day lesson plan. The second meeting reviewed the experiences thus far and discussed the curriculum for the Dhaka-based courses. An important discussion point in both the meetings was how to operationalize the community-based experiential learning approach.

Community-based experiential learning

The village exposure is the 'foundation' of the programme. Each class gets its 'own' village (the social laboratory) raising a sense of uniqueness by students and the real work of their community exercises. The village is chosen in collaboration with local leaders who are well briefed in advance. The village leaders are informed about students' work (interviewing, making maps/sketches and observing village life), but the students provide no intervention in terms of health care or other inputs. However, they do advise villagers to go to existing facilities in case of any perceived or discovered needs, and after the conclusion of their work in the village BRAC would start discussing new interventions in the village based on the identified needs. Students provide feedback to villagers that may include recommendations for further action. During the Dhaka semester, students visit urban communities for specific purposes such as gaining an understanding of the life of the elderly, assessment of water and sanitation and waste disposal.

The first course (Introduction to public health) started with an immersion of the students into the life of the villagers (and urban slums). On the second day, the students walked through the village (transect) and then investigated a pre-selected issue such as food security, nutrition, major illnesses, sanitation, housing, or government health services by informal interview, observation, and participatory methods. This was repeated in an urban slum on the fourth day. The second course, anthropological approaches, took the students further into the village situation exposing them to different aspects of health such as menopause, ageing, sanitation, traditional practice of medicine, essential drug use, etc. They spent an extended amount of time with villagers visiting them three to four times in a week.

Such close interactions create close bonds between students and villagers. For the third course (epidemiology, biostatistics and research design) the students surveyed the village for a specific health problem such as hypertension (blood pressure measurement) and used the data to add meaning to various concepts, competencies and skills they learned in biostatistics. In epidemiology they do outbreak investigation, and in research design, they carry out a quantitative health needs assessment. For the health management course, the students visit and study different primary and tertiary health facilities run by government,

NGOs and the private sector for hands-on learning of management concepts. They also visit organizations that are known for better management practices, such as BRAC.

The student body and faculty

The first MPH programme has 25 students. They all have at least 16 years of schooling and were selected through a rigorous process of a written test, group meeting and individual interview. The group is diverse:

- Female: 13, male: 12.
- Bangladeshi: 15, international: 10 (Afghanistan, India, Kenya, Nepal, Pakistan, Philippines, Uganda, the United States).
- Medical doctors: 15, non-doctors: 10 (dentistry, nursing, demography, philosophy, economics, statistics, sociology, business).

The core faculty is small with just four members. The others, numbering nearly 40, come from BRAC, ICDDR,B and foreign partner institutions. For each course there is a foreign faculty member and one or more local counterpart(s). The plan is to gradually reduce dependence on foreign faculty through induction of more core faculty.

To facilitate all-round learning, the school also organizes seminar programmes and other events. For example, in a seminar series on 'successful public health programmes', the students present case studies selected from a recent volume.[12]

With generous grants received from donors, BRAC provided full scholarships to all students in the first group. The one million dollar Global Health Award that BRAC received from the Gates Foundation in 2004 is being used as an endowment for the school.

A built-in evaluation is in place to understand progress and to measure success. A doctoral student from the Teachers College of Columbia University is documenting progress as a participant observer.

Research

Research is a core function of any vibrant academic institution. Although it is not emphasized in Bangladeshi universities, research is an important component of the BRAC school. Current research projects comprise:

- Monitoring equity in the Bangladesh health system (with ICDDR,B and MoH).
- Study on sexual and reproductive health and rights (with IDS/Sussex, Indepth Network, Engender Health, etc).
- Global Health Equity Project (The World Bank).

Concluding remarks

The BRAC School of Public Health is new, with the promise of becoming a centre of excellence in research, practice and education in Bangladesh. BRAC is promoting a new paradigm in public health education that is problem-based, community-centred, experiential and yet academically rigorous. As we gain new experiences through the first MPH group and research programmes, it will be scaled up to train a larger number of future public health leaders. It is hoped that with the core values inculcated, BRAC School graduates will simply be different, breaking new grounds in both public health practice and research. ❑

Dr Mushtaque Chowdhury is a Deputy Executive Director of BRAC and Dean of the James P Grant School of Public Health, BRAC University. He was educated in Dhaka and London, and has an interest in the wider aspects of development. He has published extensively in the areas of health, education, poverty alleviation and environment. During 2002–2004, Dr Chowdhury was a Visiting Professor at the Mailman School of Public Health, Columbia University, the United States. He is Co-chair of the Task Force on Child Health and Maternal Health under the UN Millennium Project and of the Joint Learning Initiative on Human Resources for Health.

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