

glimpse

summer 2012

An Award-Winning Scientist
Safe Motherhood Day
Assisting UNICEF in Africa

Editor's Note



icddr,b Interim Executive Director Dr. Abbas Bhuiya.

Welcome to the summer issue of *Glimpse*, a quarterly publication containing news of icddr,b's achievements in research, training, and services.

This issue covers the second quarter of 2012, during which time we welcomed the Board of Trustees to Dhaka for its June meeting. At this time, icddr,b's Executive Director Dr. Alejandro Cravioto decided to step down by mutual agreement with the board. As the international search for his successor begins, it is my privilege to serve as interim executive director.

In this issue, we recognise the work of icddr,b Centre for Vaccine Sciences Director Dr. Firdausi Qadri. In June, the Institut de France presented Dr. Qadri with its prestigious Christophe Mérieux Prize in recognition of her pioneering research in the area of infectious enteric diseases. We warmly congratulate Dr. Qadri on her achievement.

As always, our scientists have been busy generating high-quality research to inform policymakers and practitioners and providing capacity building to translate knowledge into practice. In the second quarter of 2012, our scientists published 69 original papers in scientific journals, six book chapters and monographs, and two letters and editorials.

During the pre-monsoon and monsoon period of April through June, our doctors and nurses treated 55,457 patients at the Dhaka and Matlab hospitals and 6,097 at the Mirpur Treatment Centre, which was an increase in 10,000 patients over the

first quarter of the year. We thank our clinical staff for their dedication and service during this busy time of the year.

icddr,b continued working to strengthen healthcare services in Bangladesh and improve cholera preparedness abroad, helped by commitments made at the 2011 Clinton Global Initiative annual meeting. Our partnerships with humanitarian organisations and private donors ensure that we are increasingly able to meet the challenge of cholera outbreaks, wherever they might occur.

Meanwhile, we shared our technical expertise in Bangladesh to facilitate a training programme on severe acute malnutrition for government doctors, to host the first national biosafety and biosecurity symposium, and to provide support to Bangladesh's National Tuberculosis Referral Laboratory.

I invite you to read more about these and other achievements in this issue of *Glimpse*. ■

For more than 50 years, icddr,b has provided practical, low-cost solutions to the health problems affecting billions of people living in poverty in Bangladesh and across the globe. The institution's unique proximity to the health challenges of the developing world, both urban and rural, allows for the development of evidence-based interventions that are relevant, rigorously tested, translatable, and scalable in resource-limited settings.

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Celebrating an Award-Winning Scientist

Every year, diarrhoeal diseases kill an estimated 1.5 million children in the developing world. icddr,b has saved millions of lives in Bangladesh and abroad with its research, treatment protocols, and trainings. This year's Christophe Mérieux Prize winner, senior scientist and Vaccine Sciences Director Dr. Firdausi Qadri, has dedicated her life to crucial pieces of the puzzle—detection and prevention.

The first Bangladeshi to receive the Institut de France's prestigious annual scientific grand prize, Dr. Qadri accepted the award at a ceremony this June in Paris. Worth 500,000 euros, the award supports research into infectious diseases in developing countries. Dr. Qadri accepted it for her work to optimise and formulate vaccines and develop strategies for mass immunisation to reduce the burden of disease due to common enteric pathogens.

The Institut de France houses five French academies, including the famous Académie Française. Each year, it recognises significant achievements in the fields of science, culture, and humanitarian services. Since 2007, the Institut has chosen the grand prize winner from the list of researchers identified by the Fondation Mérieux. The independent family foundation, which gives the award its name, works to strengthen the local capacities of developing countries to reduce the impact of infectious diseases on vulnerable populations.

"I am overwhelmed to have received this honour for my team, for icddr,b, and for Bangladesh," said Dr. Qadri. "With this prize, I would like to continue the research that is the pivotal focus of my activities and my mission in life. It is a great recognition



The first Bangladeshi to receive the Christophe Mérieux Prize, Vaccine Sciences Director Dr. Firdausi Qadri (2nd from right).

of the work of my colleagues, who are constantly setting the bar higher for all to follow."

During her 25 years at icddr,b, Dr. Qadri has gained a reputation as an international expert in immunology and vaccine science. In 2008, she received a Gold Medal from the Bangladesh Academy of Sciences for her contribution to biological science. Her key achievements lie in her research into enteric and diarrhoeal infections and vaccines focusing on *Vibrio cholerae* and enterotoxigenic *Escherichia coli* (ETEC)—major causes of severe diarrhoea.

Her work also involves the study of *Salmonella Typhi/Paratyphi*, *Helicobacter*

pylori, and other enteric pathogens impacting on natural infections and protection by vaccination. Her current work includes a large-scale feasibility study for adoption of an oral cholera vaccine in Bangladesh prior to its use in the national health system. Dr. Qadri's work has influenced the health policy and health outcomes in Bangladesh, as well as in other countries in the region that face similar public health challenges.

"icddr,b has been integral to my identity, both as a researcher and as a human being," said Dr. Qadri. "I credit the institution's thriving research environment for enabling me to work with experts in the field in Bangladesh and around the world." ■



Dr. Qadri receives the Christophe Mérieux Prize from Académie Française member Pascale Cossart at a special ceremony in Paris on 6 June.



Ambassador of the French Republic in Dhaka, H.E. Mr. Michel Trinquier, hosting a reception in honour of Dr. Qadri at his residence on 19 July.

Raising Awareness for Safe Motherhood



Civil Surgeon Dr. A.S.M. Abdus Sattar Miah, Reproductive Health Director Dr. Laura Reichenbach, and Matlab Health Research Centre Head Dr. Md. Anisur Rahman look on as Matlab Field Assistant Abdul Latif Sarker takes a sample from a Matlab resident during a blood grouping programme.

Worldwide, maternal mortality rates are lowest in areas where the percentage of births attended by a skilled health worker is highest. Bangladesh is no exception. In icddr,b's Matlab service area, 80 percent of deliveries take place in a health facility, versus 29 percent in the rest of Bangladesh. This is thanks to the work of icddr,b staff, who celebrated Safe Motherhood Day on 28 May.

"According to national statistics, maternal and neonatal child mortality is very low in Matlab compared to other areas of the country [where 194 women die per 100,000 live births]. icddr,b's work there serves as a great example for Bangladesh," said Dr. A.S.M. Abdus Sattar Miah, a civil surgeon from Chadpur district. He was one of several local government officials to celebrate Safe Motherhood Day with icddr,b.

"icddr,b works to promote universal access to comprehensive reproductive healthcare during pregnancy, delivery, and post-delivery to benefit mothers and their children," said

icddr,b Reproductive Health Director Dr. Laura Reichenbach.

"By partnering with the government, we advocate for supportive policies to improve maternal and neonatal health outcomes. We are proud that they see us as a positive example to be followed in other parts of

Bangladesh to achieve key Millennium Development Goals."

Safe Motherhood Day events in both Dhaka and Matlab aimed to increase public awareness and policy attention for maternal, newborn, and child health (MNCH). In Dhaka, icddr,b staff took part in a Ministry of Health and Family Welfare march from the National Museum to the National Press Club that culminated in an event inaugurated by Prime Minister Sheikh Hasina.

The Matlab Health Research Centre highlighted this year's theme, *Safe Delivery is a Woman's Right*, with a march and safe motherhood awareness programme for around 100 community members.

Dr. Reichenbach launched the Matlab programme that awarded staff for saving maternal lives. The event featured testimony from a mother who suffered postpartum haemorrhaging during delivery at the Matlab Hospital and offered local women free blood group testing. ■



The Matlab Health Research Centre highlights this year's theme, *Safe Delivery is a Woman's Right*, with a march led by Reproductive Health Director Dr. Laura Reichenbach and Matlab staff.

Gender Mainstreaming in Research

icddr,b held two seminars at the Mohakhali campus on 31 May to familiarise principal investigators with gender issues in biomedical sciences.

The seminars followed a series of trainings and training-of-trainers sessions on how to use the newly developed Gender Analysis Tool when preparing protocols for the icddr,b Research Review Committee (RRC).

Approved by the Board of Trustees in 2003, our Gender Policy aims to address gender issues both at the organisational level, as well as in our research, intervention, services, and training activities. In 2010,

a Gender Working Group, led by scientist Dr. Ruchira Tabassum Naved, developed the Gender Analysis Tool based on a World Health Organization model.

Our tool, in use since this past January, meets donor requirements. In July, the RRC made it mandatory for all research proposals submitted to the committee for review and approval. Researchers who have begun using the tool were invited to share their experiences at the seminars on 31 May.

Dr. Makhdum Ahmed, a research investigator with Communicable Diseases, described the tool as “useful and easy to apply” when

designing a research study.

icddr,b recognises gender as an important social determinant of health, and our Strategic Plan 2020 identifies gender, human rights, and health as cross-cutting themes in all scientific research and discussions.

Mainstreaming gender will improve our science, as it calls for greater attention paid to the construction of measurements and variables. It can also help reduce bias in research, improve predictive validity, and widen the scope of funding and publication. It is the hallmark of ethical research. ■

Improving Global Cholera Preparedness

icddr,b continues to honour the commitment to global cholera preparedness made at the 2011 Clinton Global Initiative annual meeting. In the second quarter of 2012, we combined AmeriCares medical supplies and emergency response experience with our technical expertise in the treatment of cholera and other diarrhoeal diseases in Somalia and Kenya.

Dhaka Hospital Chief Physician Dr. P. K. Bardhan and Diarrhoeal Diseases Unit Head Dr. Azharul Islam Khan returned to Bangladesh on 15 May after a two-week trip to Dadaab, Kenya, and Mogadishu, Somalia, where they trained 50 health professionals in cholera management techniques. These

professionals, in turn, train other local health workers to increase preparedness for the predicted outbreak.

It was their second visit to the region at the behest of UNICEF.

“These experiences work both ways,” said Dr. Khan. “We share our expertise in cholera preparedness in Kenya and Somalia, and we bring back the experience of handling outbreaks to Bangladesh.” ■



Dr. Azharul Islam Khan (back right) and Dr. P.K. Bardhan (front) training health professionals in Kenya.

Increasing Biosafety and Biosecurity



Participants at the first national Endorsing Biosafety & Biosecurity symposium work to address this global security concern in Bangladesh.

icddr,b, and the Bangladesh Biosafety & Biosecurity Association jointly organised the first national symposium on Endorsing Biosafety & Biosecurity: Prospects and Challenges on 26 May at our Mohakhali campus. "I highly appreciate that icddr,b is leading the initiative to raise awareness on this important issue," noted Dr. Pran Gopal Datta, vice

chancellor of the Bangabandhu Sheikh Mujib Medical University.

Biosafety strives to reduce or eliminate personal and environmental exposure to potentially hazardous infectious agents. Biosecurity works to prevent the loss, theft, and misuse of microorganisms, biological materials, and research-related information.

Also in May, icddr,b and the Switzerland-based Foundation for Innovative New Diagnostics (FIND) signed a consultancy agreement to upgrade the biosafety level of the National Tuberculosis Referral Laboratory, located in the National Institute of Diseases of the Chest and Hospital (NIDCH), Dhaka. ■

Reducing Child Mortality

Nutrition & Food Security scientists facilitated a training of trainers programme on the management of severe acute malnutrition (SAM) in April at the Sylhet MAG Osmani Medical College.

The Government of Bangladesh's Institute of Public Health Nutrition sponsored the capacity-building programme to help it achieve MDG 4 to reduce child mortality in Bangladesh.

According to national data, four percent of children under five in Bangladesh suffer from SAM. A new treatment protocol, based on icddr,b research and used in our hospitals, has reduced the death rate among children suffering from SAM and other acute illnesses by 50 percent. ■

Research Recognised at ICID

The Respiratory Viruses Research Group within icddr,b Communicable Diseases received an award at this year's International Congress on Infectious Diseases (ICID), held in Bangkok, Thailand, 13-14 June. The abstract, *Virus specific incidence rates of hospitalization for severe acute respiratory infections among children <5 years in rural Bangladesh, 2010*, was one of two recognised by the Novartis Vaccines Awards for Epidemiology of Infectious Diseases at the conference. ICID promotes collaboration between clinicians, researchers, microbiologists, and epidemiologists to find new solutions to the world's infectious diseases. ■



Hand Washing for Health

Our Communicable Diseases' Water Sanitation and Hygiene Research Group, in association with Washington, DC-based Alive & Thrive (A&T), introduced findings from icddr,b's formative research study, *Hand Washing and Complementary Feeding in Bangladesh*, at a national dissemination seminar held at our main campus on 19 April.

The study aimed to determine the feasibility of including a hand washing promotion component (to decrease disease transmission through food and feeding) as part of a nutrition intervention.

Currently, 43 percent of children

under five in Bangladesh are stunted due to continuous malnourishment as a result of poor infant and young child feeding (IYCF) practices.

But, as Water Sanitation and Hygiene Research Group Head Dr. Leanne Unicomb noted, the solution is not a simple one. "An effort to promote increased calorie intake by having a child eat more food may be negated if the hands used to prepare that food and feed that child are dirty and transfer pathogens to the recipient," she said.

The baseline survey of 2,100 families in the Dinajpur, Manikgonj, and Chittagong

districts show that most caregivers were motivated by a desire to improve their children's health and practiced the recommended hand washing behaviours initially. However, over time, the practice decreased slightly due to demands on caregivers' time.

These findings will help to inform a national A&T initiative to promote hand washing and increase nutrient intakes to improve the health of children ages 6 to 23 months. A 2014 endline survey will evaluate the impact of the A&T community activities on IYCF practices, stunting, and anemia. ■

Japanese Deputy Prime Minister Visits

The Honourable Deputy Prime Minister of Japan Katsuya Okada visited the Mohakhali campus on 3 May to discuss ongoing collaborations between icddr,b and the Japanese International Corporation Agency.

He met Dhaka Hospital patients and staff, who demonstrated the hospital's approach to diarrhoeal case management and showed him the overflow tents erected in April to cope with the high number of patients needing treatment. He also met icddr,b scientists who received higher educational and Ph.D degrees in Japan.

For more than two decades, Japanese public institutions, universities, and private foundations have collaborated with icddr,b. Successful joint projects have been developed in the fields of research, diagnosis, vaccination, surveillance, and follow-up of diseases such as cholera, tuberculosis, and Kala-azar. This ongoing relationship reflects Japan's interest in and commit-



Japanese Deputy Prime Minister Katsuya Okada meets Dr. Kaiser Ali Talukder and other Japanese-trained scientists at icddr,b's main campus.

ment to addressing health issues in developing countries.

"Our relationship with the Japanese government, with funders, and with researchers continues to be very important to icddr,b," said now Interim Executive Director Dr. Abbas Bhuiya.

"Together, we have been able to tackle significant health issues that affect not only the people of Bangladesh, but also people across Southeast Asia." Deputy Prime Minister Okada said, "Though it was a very short trip, I am impressed by what I saw." ■

Dr. Cravioto Steps down as Executive Director



Dr. Cravioto receives a crest from senior staff of the Dhaka Hospital during his farewell programme.

Dr. Alejandro Cravioto stepped down as icddr,b executive director on 1 July, following a mutual decision taken with the Board of Trustees at the June board meeting.

Board Chair Dr. Nicolaus Lorenz praised Dr. Cravioto for his considerable achievements and contributions to icddr,b since his appointment in June 2007. "Dr. Cravioto has instigated and overseen a period of institutional transformation. He has built on the past successes of icddr,b, restructuring research priorities and modernising business processes," said Dr. Lorenz.

Dr. Cravioto served as icddr,b deputy executive director from July 2005 to May 2007. Under his leadership as executive director, icddr,b developed and began implementing its Strategic Plan 2020.

Dr. Cravioto's vision for icddr,b and his encouragement of its scientists and researchers helped make the institution's research knowledge increasingly available to fellow researchers, implementers, and policy-makers worldwide.

During his time as executive director, core funding and income from research grants increased, as did the number of

research protocols and publications. Despite rising patient numbers and cost of care, Dr. Cravioto remained fiercely committed to free-of-charge medical care at icddr,b's hospitals and treatment centres.

In September 2011, Dr. Cravioto represented icddr,b at the Clinton Global Initiative for the first time, where the institution was recognised for its commitment to global cholera preparedness.

In January of that year, United Nations Secretary-General Ban Ki-moon appointed Dr. Cravioto to head a panel investigating the source of the 2010 cholera outbreak in Haiti that killed several thousand Haitians.

In accordance with icddr,b's institutional governance framework, Deputy Executive Director Dr. Abbas Bhuiya is serving as icddr,b's interim executive director, with the full support of the board and the Centre Directorate, until a new executive director is appointed.

The international search committee has started work, and selection is expected in time for the next board meeting. ■



Canada



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