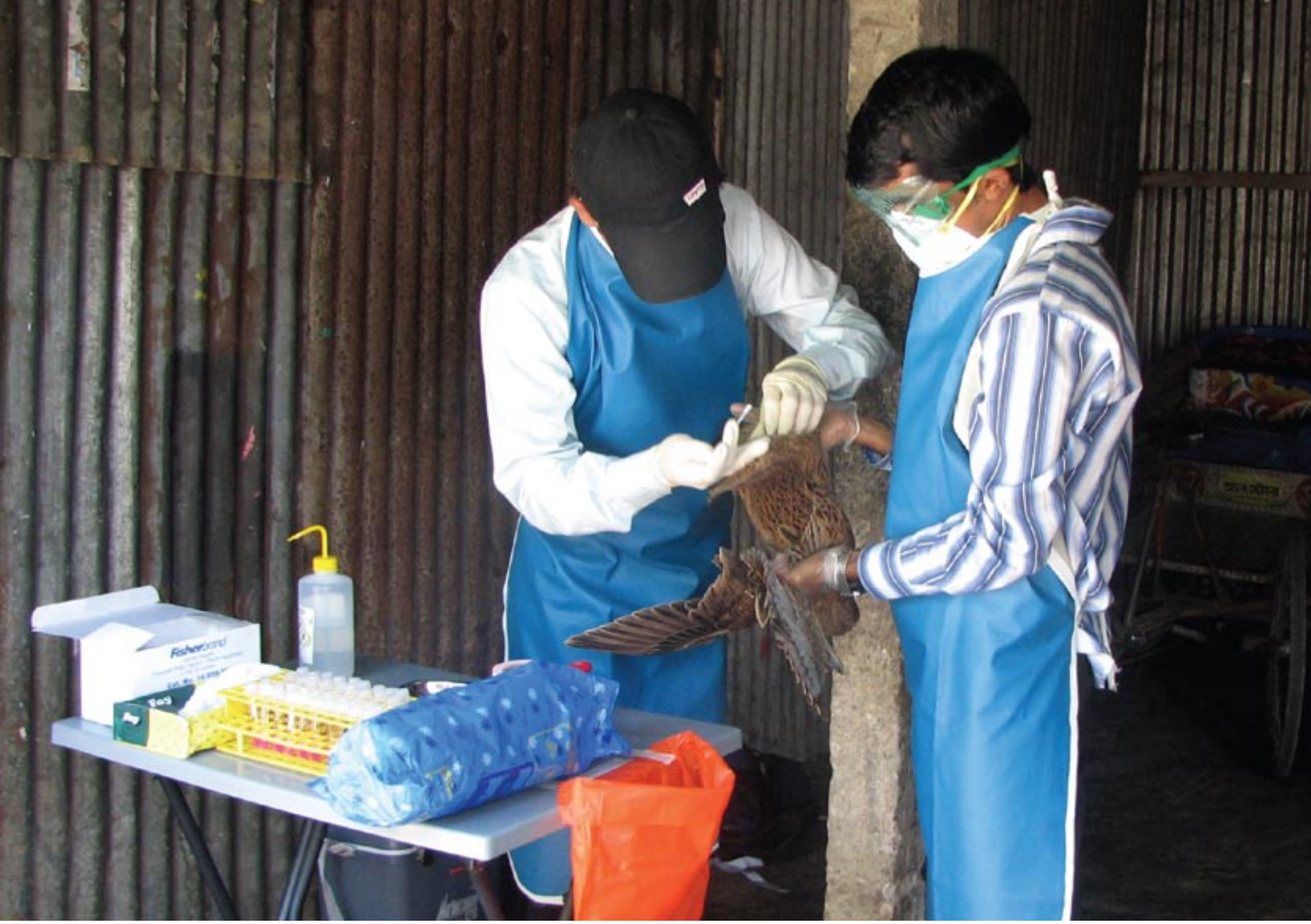

volume 33 | number 3 | an icddr,b newsletter

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SEPTEMBER 2011

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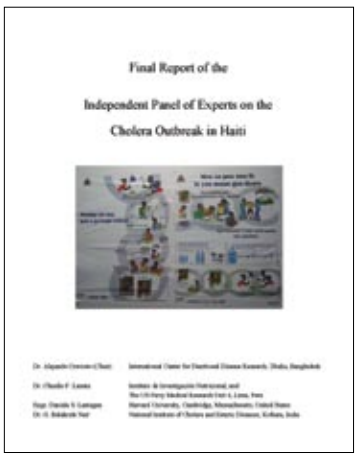
Final Report of the

Independent Panel of Experts on the

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ISSN 0253 7508

Cover photo: Specimen collection for avian influenza studies

Working with BRAC University and Rockefeller Foundation for universal health coverage

In April this year, Dr Judith Seitz Rodin, President of the Rockefeller Foundation, inaugurated a Center of Excellence for Universal Health Coverage within the BRAC University's James P Grant School of Public Health. Established with generous support from the Foundation, the Center will be housed at the icddr,b Dhaka campus, and will encourage policy action for universal health coverage.

In an interview shortly after the inauguration, the Dean of the School Dr Tim Evans shared his thoughts of the Center, the role it can play in making universal health coverage a reality in Bangladesh and the involvement of the Rockefeller Foundation.

What is the Center's primary purpose?

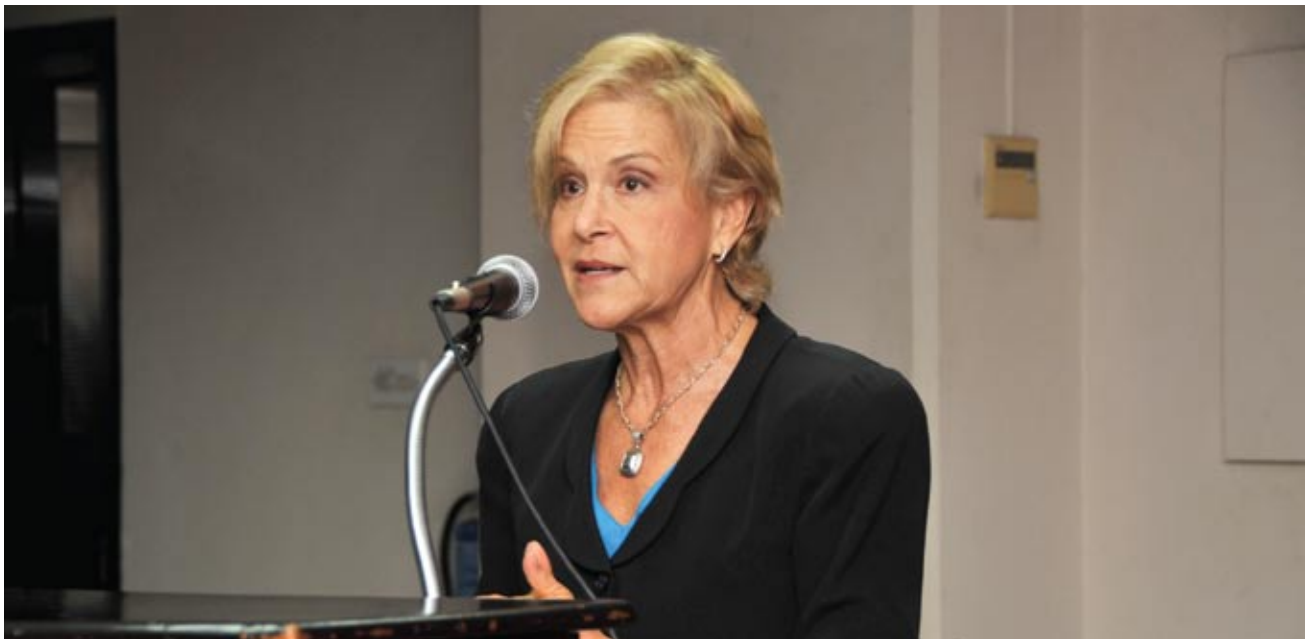
The Center exists to encourage evidence-informed policy action for universal health coverage. And there are three dimensions that we are working on moving towards that. First is the generation of critical knowledge through research into health-financing systems.

The second is developing a competent workforce that can manage and lead new types of health-financing arrangements that are based on prepayments.

And the third is that we are trying to enhance knowledge translation, learning from other countries and contexts, and ensuring that people who are implementing policy and programme leaders are equipped with the best evidence and knowledge-translation function.

How will the Center approach the issues of healthcare and universal health coverage?

In this country, the need for systems of more reliable and responsive financing that fall under the universal health coverage umbrella is long overdue. Prepayment systems and insurance systems for financing health are linked unequivocally to better health services, better functioning healthy systems, greater efficiency, more health for the money, and also much more linked to minimising healthcare and reducing poverty.



Dr Judith Rodin

There is overwhelming evidence that this is the way not only Bangladesh but every country should be moving. The real issue is how this Center can really promote the know-how that is necessary to move from where we are now, which is an inequitable and inefficient system of financing, to one with an equitable financing system.

James P Grant School of Public Health

Established in 2004 with critical support from icddr,b, the James P Grant School of Public Health at BRAC University aims to improve the health of people in disadvantaged areas of the world through the application of the art and science of public health. With a reputation for its emphasis on community-based, experiential learning, the School now attracts students from around the world. The Bulletin of the World Health Organization has featured the School as one of six in the world promoting and practising innovative higher public-health education.

icddr,b provides support by sharing faculty and by giving the School access to its research and field site facilities.

As I mentioned, to do that, the Center will basically run three programmes: one on essential evidence, the second on core competencies, and the third on linking research to policy action.

Did Dr Rodin share anything during the inauguration that was particularly poignant?

Dr Rodin talked about not only the shortfalls in coverage of key interventions, but the growing evidence that the country's healthcare financing system—patients paying out of pocket—is connected to impoverishment, in the order of millions of people every year becoming impoverished. She was very articulate about the importance of the case for universal health coverage.

The second thing that I think she stressed very clearly is that there is real value in understanding and drawing on what works and what doesn't in other context. She wisely pointed out that there isn't a one-size-fits-all but there are certainly key lessons that can be learned from other efforts, such as the RSBY scheme in India and its smart card which allows cashless transactions, which basically means that bottom of the pyramid recipients have an easier point of entry into the hospital system of India.

Can you share some thoughts about the involvement of the Rockefeller Foundation?

It is wonderful to have the support of the Rockefeller Foundation. What I think is really exciting is that the support of this Center is linked to a set of other grants that the Rockefeller Foundation has made to other organisations, such as icddr,b, the Government, the Bangabandhu Sheikh Mujib Medical University, and other NGOs related to promoting more policy more action in the area of universal health coverage.

We have the opportunity to work with a growing number of partner organisations in other sectors in Bangladesh.

Another reason for excitement is that we are linking to a set of global actors, meaning Rockefeller-supported grantees in countries like India, Thailand, and even in Africa, and there is a whole focus on learning through partnerships across countries.

We feel very much part of a larger programme that the Rockefeller Foundation is promoting, which we feel is very cutting.

Biosafety Level 3 Lab inaugurated at ***icddr,b's*** Dhaka campus

In May 2011, US Ambassador H. E. James F Moriarty inaugurated a biosafety level 3 laboratory at our Dhaka campus. One of the first of its kind in Bangladesh, it will enable icddr,b to isolate biological agents that otherwise could not be safely studied locally, including those responsible for multi-drug-resistant tuberculosis, avian influenza, and HIV.

H. E. Moriarty inaugurates the BSL-3 laboratory

The lab will also enable icddr,b to assist the Government of Bangladesh and other institutions in South Asia with research on deadly diseases and also to provide accurate diagnoses.

The lab was certified by Biosafety Biosecurity International in July 2010. It began operations on 1 August 2010.

A biosafety level defines a specific combination of work practices, safety equipment, and facilities, which are designed to minimise the exposure of workers and the environment to infectious agents. Level 1 through level 4 signify increasing requirements for protection against the risk that individual pathogens can present to humans.

Biosafety level 1 applies to agents that do not generally cause human diseases, while biosafety level 4 is used for the diagnosis of exotic agents that pose a high risk of life-threatening diseases, which may be transmitted by the aerosol route and for which there is no vaccine or therapy.

> "icddr,b's BSL-3 laboratory is a very good example of broad collaboration linking the US Department of Agriculture, the Centers for Disease Control and Prevention, the National Institutes of Health, the US Agency for International Development, the Bangladesh Ministry of Health and Family Welfare, and the Bangladesh Ministry of Finance."
>
> James F Moriarty

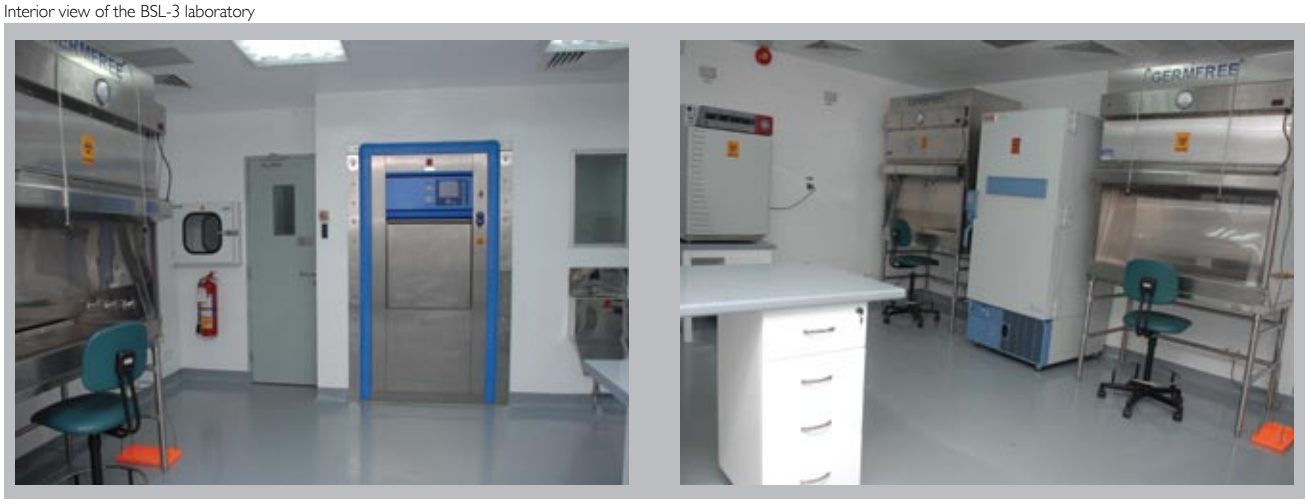
Biosafety level 3 is applicable to clinical, diagnostic, teaching, research, or production facilities in which work is done with indigenous or exotic agents that may cause serious or potentially lethal diseases after inhalation for which vaccine or therapy may be available. The lab personnel have specific training in handling pathogenic and potentially fatal agents and are supervised by competent scientists who are experienced in working with these agents.

BSL-3 agents include bacteria, parasites, and viruses, such as multi-drug-resistant *Mycobacterium tuberculosis*, responsible for tuberculosis; and avian and other highly pathogenic influenza viruses.

The BSL-3 lab at icddr,b includes a heating, ventilating and air-conditioning computerised control system for climate control and maintains negative air pressure inside the room, allowing air in but not out. It also includes double filtration systems that prevent the spread of airborne contaminants.

Engineers have been closely observing the systems of the lab and have found them to be safe, stable, and smooth. icddr,b plans to build another two such labs in future.

Interior view of the BSL-3 laboratory



Detecting avian influenza in Bangladesh

Collaboration creates success

icddr,b and the Government of Bangladesh have worked hand-in-hand since mid-2007 to detect and treat cases of avian influenza nationwide. Popularly known as 'bird-flu', avian influenza is a contagious disease of birds caused by influenza A viruses that can cause a range of symptoms, from mild illness and low mortality to a highly-contagious disease with a near 100% fatality rate.

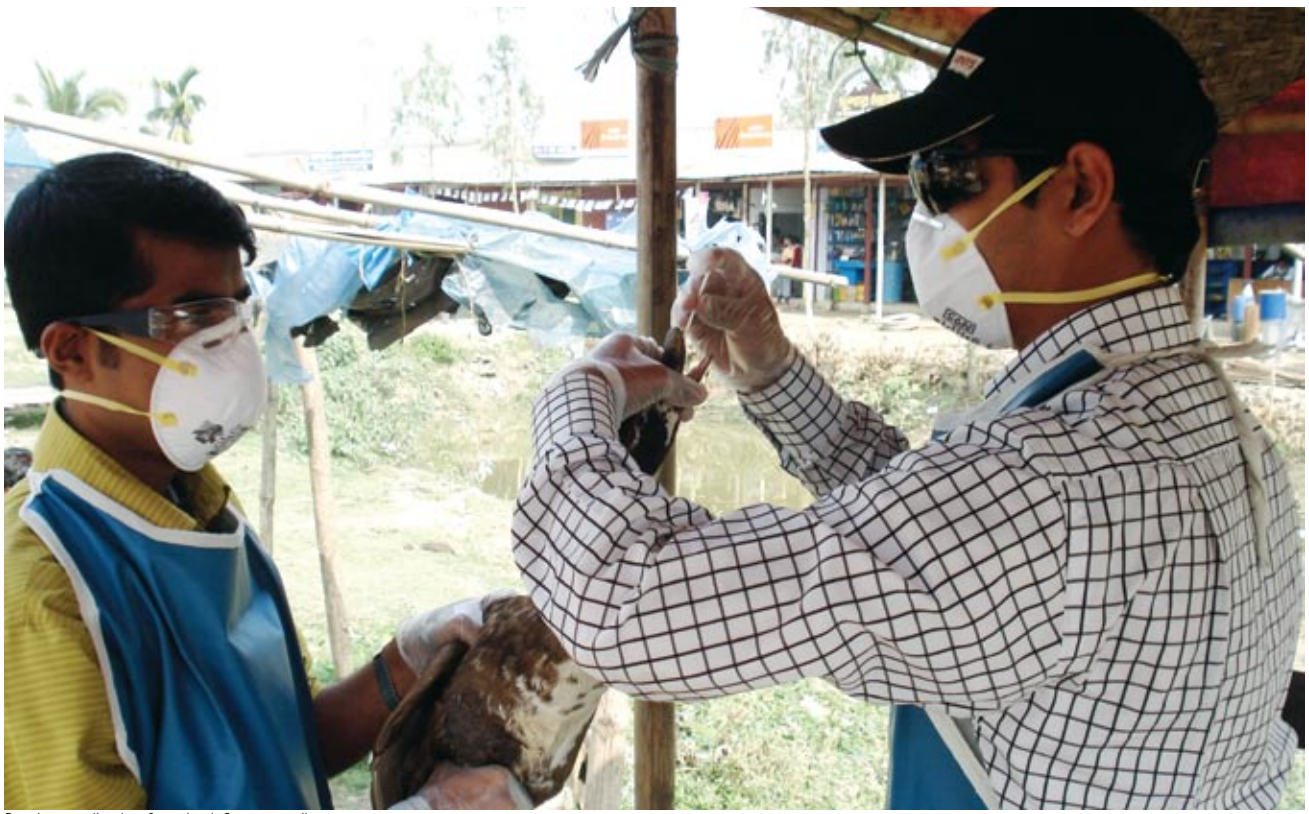
The collaboration between the Bangladeshi government and icddr,b helps in surveillance and decision-making in times of an outbreak. As of 2011, the influenza surveillance system has detected three human cases of avian influenza A infection, two caused by subtype H5N1 and one caused by subtype H9N2. This surveillance network can only get stronger as Bangladesh has strong ties between district and sub-district animal health services that can be harnessed to deliver a stronger surveillance and control programme.

Early days

Although the partnership between icddr,b and the Government of Bangladesh for early detection of avian influenza was initiated in August 2007, at first it only covered a live bird market in Mohonganj upazila of Netrakona district—an area close to the capital city of Dhaka. The surveillance has since expanded to other sites, including Rajshahi, Natore, Sunamgonj, and Chittagong—areas that are spread across the country. The joint surveillance system has also established close collaborations with six public and another six private hospitals country-wide.

Collaboration in action

The primary goal of the surveillance is detection of avian influenza and related diseases from poultry in live bird markets and backyard farming in rural and semi-urban areas. Passive surveillance is also ongoing with the aim to collect specimens from poultry suspected to be infected with the highly-pathogenic avian influenza virus and to analyse the specimens for characterisation of strains that are currently circulating. All these are being done under the assumption that early detection and characterisation of the virus, followed by quick and safe culling of infected and exposed birds, can stop its further spread.



Specimen collection for avian influenza studies

Long-term goals

Although the spread of avian influenza has been checked relatively quickly, Bangladesh still lacks a long-term strategic campaign against the virus. Initially, both the Bangladesh

Better coordination between government and icddr,b is helping in the surveillance and treatment of patients affected by avian influenza

Government and other aid agencies in the country prepared a National Avian Influenza and Human Pandemic Preparedness Plan and an Emergency Operational Plan to meet the threat of bird 'flu and have been implementing these plans to control the disease. But there is an urgent need for vigorously stepping up and extending current H5N1 control campaigns to prevent the virus becoming widely entrenched.

As a reaction to the detection of human cases of avian influenza, and also as a part of a larger project for influenza surveillance in Bangladesh, icddr,b has included avian influenza in its long-term strategic programme. Both the Government of Bangladesh and icddr,b are constantly strengthening their surveillance system so that any transmission of virus can be detected early to prevent a national epidemic.

UN panel on cholera in Haiti submits final report

icddr,b Executive Director leads panel, submits findings

On 4 May 2011, a 4-member independent panel assigned to investigate the source of Haiti's 2010 cholera outbreak submitted their report to the United Nations. The panel was led by icddr,b's Executive Director Dr Alejandro Cravioto and included two more scientists with strong ties to icddr,b: former Board member, Dr Claudio Lanata and former head of the Laboratory Sciences Division Dr G Balakrish Nair. The other member of this panel was Dr Daniele S Lantagne.

"We are honoured that the U.N. asked us to undertake this task", said Dr Cravioto. "It underlines icddr,b's international reputation as one of the world's leading centres in the study, treatment and prevention of diarrhoeal diseases, especially cholera".

The panel operated independently of the U.N. but was given access to all U.N. records, reports, facilities and staff members as required. The panel travelled to Haiti in mid-February to conduct an on-the-ground investigation, before submitting their report in early May.

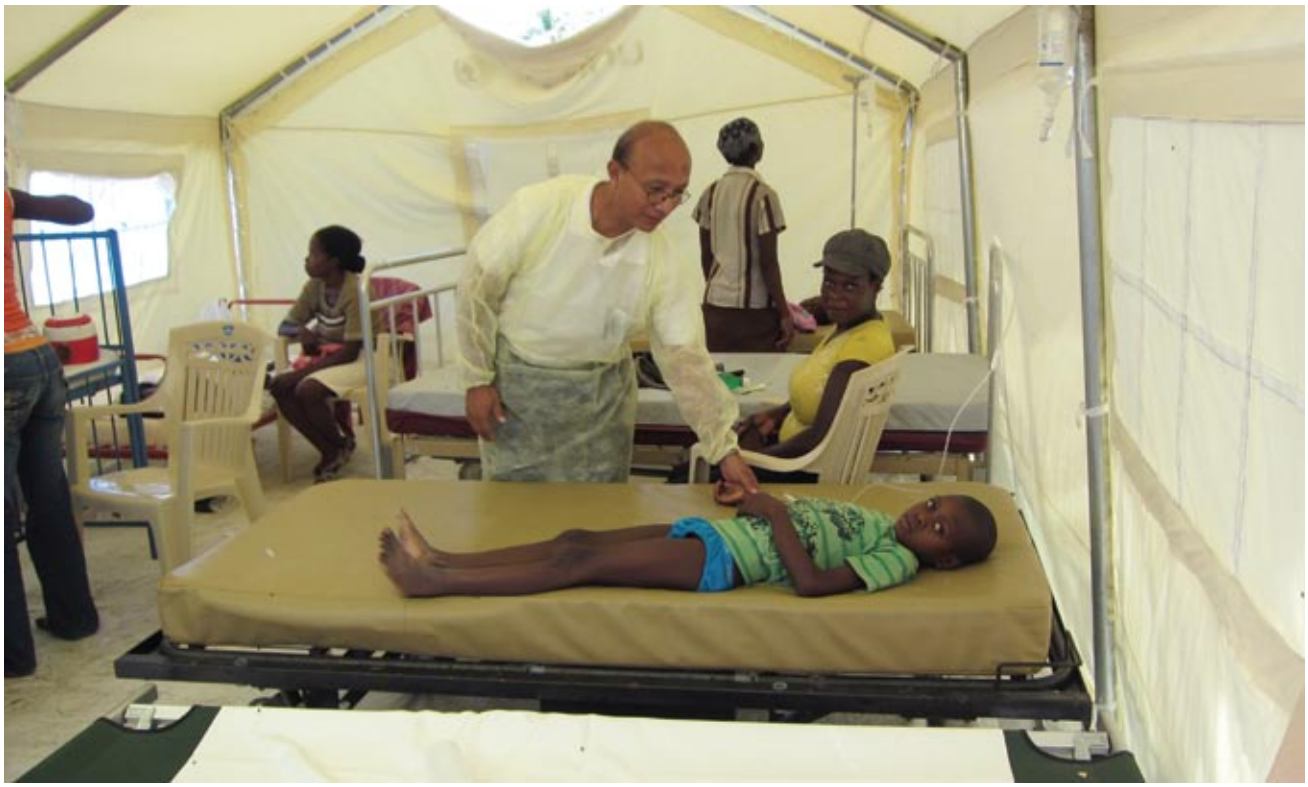
The report concluded that the cholera outbreak was a result of inadequate sanitation facilities belonging to U.N. peacekeeping forces stationed near the Artibonite River in Haiti and also due to a series of circumstances that included the poor water and sanitation infrastructure of the island nation, a breakdown in health services, and a lack of medical supplies.

Poor infrastructure, health services led to outbreak

The panel's findings suggest that the key source of the cholera outbreak in Haiti was U.N. peacekeepers originating from Nepal. The panel based their findings on a review of the genetic and epidemiological data, as well as a study of the sanitation system of a U.N. camp near the site of the first cases.

The panel found that Mirebalais, where the Nepalese MINUSTAH camp is located, was the most likely source of the cholera outbreak. The panel also concluded that the sanitation facilities in the vicinity of the MINUSTAH camps were inadequate, which resulted in the contamination of the Artibonite River.

However, the panel did not put direct blame on the Nepalese soldiers. Instead, the report emphasised that the outbreak became a major public-health disaster due to several factors, and as a result of a series of circumstances, including the country's poor drinking-water and sanitation infrastructure and poor health services in the wake of the earthquake that destroyed much of Haiti in January 2010. The report did not put the blame of the outbreak on any particular group or individual.



Dr Pradip Kumar Bardhan treating a cholera patient in Haiti

Recommendations: screen U.N. personnel for Vibrio cholerae

Based on the investigation's findings, the report has made a series of recommendations to prevent similar catastrophes from happening in the future, for example, ensuring the screening of U.N. personnel hailing from cholera-endemic areas for the presence of *Vibrio cholerae*.

The U.N. Secretary-General has thanked the panel for its efforts and recommendations. The Secretary-General will be convening a task force within the U.N. system to study the findings and recommendations made by the panel to ensure prompt and appropriate follow-up.

icddr,b Acknowledges the Support of Its Core Donors

Australian Government Aid Program

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UKaid from the Department for International Development