

International Centre for Diarrhoeal Disease Research, Bangladesh

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New Millennium Issue



Prof. David Sack Replies



Training Courses and Workshops

Dear Readers...

Publication of the September 1999 and December 1999 issues of Glimpse was deferred for this grand New Millennium Issue with a special 4-page supplement on Strengthening National Health Programmes. We regret for any inconvenience to our esteemed readers.

Editors

## WHO Director General Visits the Centre

In the recent past, the Centre received a number of distinguished visitors from the health programmes worldwide. The most distinguished is Dr. Gro Harlem Brundtland, Director General of the World Health research workforce into theme-based working groups, WHO's contribution of new equipment to improve infection control in our hospital facilities, and the current efforts to designate ICDDR,B as a WHO Regional



Organization, who visited the Centre on 8 September 1999. Dr. Brundtland had brief meetings with the senior members of the management team to get an overview of the Centre.

The team highlighted activities financed by WHO, particularly the child survival initiative supported through the Child Health Research Project and case management of diarrhoeal diseases. WHO has designated the Centre as a WHO Centre of Excellence in diarrhoeal disease management. Other key initiatives of the Centre brought to her attention include: the Centre's reorganization of Nutrition Centre offering opportunities for nutrition research including case management of malnutrition.

The Centre also had the opportunity to give Dr. Brundtland a tour of its Dhaka hospital, where she initiated dialogue with the attendants, primarily the mothers of patients who are mostly children of less than five years. She also engaged our physicians, nurses, and healthcare workers in discussions on patient care, education, immunization, and other activities that take place in the Short Stay Ward of the Nutrition Rehabilitation Unit and the Special Care Unit.



The Centre was established in 1978 as successor to the Cholera Research Laboratory which was formed in 1960 to study the epidemiology, treatment, and prevention of cholera. The Centre is an independent nonprofit organization for research, education, and training in population and health sciences, and to provide clinical services.

As the leading international health and population research centre located in a developing country, the Centre has several comparative advantages. Its rural and urban hospitals, backed by state-of-theart laboratories, allow rapid completion of research on diagnostic techniques, and clinical, pharmaceutical, and nutritional interventions. The Centre has rural and urban community-based extension services and 40 years of experience in meticulous record-keeping and data management. Its surveillance systems for clinical, epidemiological, and demographic data yield an incomparable wealth of information and invaluable opportunities for health, population, and family planning studies. Research findings of the Centre provide guidelines for policy makers, implementing agencies, and health and family planning professionals all around the globe.

The Centre's Strategic Plan: "To the Year 2000" outlines work in three key areas: Child Survival, Population and Reproductive Health, and Application and Policy in improving both supply of and demand for existing health technologies, and in replicating the successful interventions piloted in its projects through health systems research.

The Centre is governed by a distinguished multinational Board of Trustees comprising researchers, educators, public health administrators, and representatives of the Government of Bangladesh. The Board appoints a Director and Division Directors who head the four scientific divisions: Clinical Sciences, Public Health Sciences, Laboratory Sciences, and Health and Population Extension.

### Glimpse

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### **Prof. David Sack Replies...**

Prof. David Sack assumed his responsibilities as Director of ICDDR,B: Centre for Health and Population Research from October 1999. As a longtime friend of the Centre, he was aware of the infrastructure and research programmes undertaken by the Centre, even before his joining. In an interview with Ms Vanessa Brooks, Editorin-Chief of the Glimpse, he highlights the past, present and future of the Centre, specifically his own approach to the adminis-

tration of the Centre and its scientific priorities for moving forward during his tenure:

Vanessa Brooks: There are people who argue, the Centre must "re-invent" itself that we have successfully managed the effects of diarrhoeal diseases with Oral Rehydration Therapy (ORT) and have drastically reduced mortality among children of less than five years. After your two tours

to ICDDR,B—once in the mid-seventies and again as Associate Director and Head of Epidemiology and Laboratory Sciences Division in 1984-1987, how do you see the future role of the Centre in the management of diarrhoeal diseases? Is there scope for a new chapter?

David Sack: Yes, there's a new chapter for the Centre to expand into areas outside diarrhoeal disease research. It is wrong to believe that we have conquered diarrhoeal diseases. These are still responsible for 3 to 4 million deaths per year and only declined to become the second most important cause of death among children in the developing countries. Thus, diarrhoeal diseases are still critically important, and we continue to improve management and prevention of diarrhoeal diseases. ORT is a life-saving therapy but we continue to look for ways to improve it. Good treatment plans are not enough; we need to know how to prevent these diseases through the use of appropriate public health education and vaccines. Thousands of people in Bangladesh die of diarrhoeal diseases that are potentially preventable but these vaccines can only be developed and tested if we pursue an active research programme toward this goal.

**VB:** The Centre is now widely regarded as the Centre for Health and Population Research with broader agenda in addressing child survival strategies, reproductive health issues, vaccine evaluation, and nutrition. What do you see as the Centre's priorities as we move into the new century?

**DS**: The areas that you just have mentioned remain priorities of the Centre. The scientists at the Centre continually examine the health problems of developing countries, and develop and evaluate potential interventions for these problems. Malnutrition has long



been recognized as being a critically important area but now the Centre has an integrated research approach to improve the health of malnourished children in Bangladesh and prevent malnutrition. 'Child survival` is not just a slogan but is a reality for interventions that control pneumonia and diarrhoea. Children's survival cannot be separated from 'family survival,` and research on adolescent health and reproductive health involving both men and women has gained importance.

Research on a group of emerging and re-emerging infectious diseases, including tuberculosis, dengue, and STDs, is becoming an important new issue at the Centre. The Centre also cooperates with the national HIV surveillance programme although Bangladesh, with a very low prevalence of HIV infection, is felt to be at the earliest stage of an HIV/AIDS epidemic. However, there is an opportunity for prevention strategies.

Vaccine research is a renewed priority for the Centre, and several vaccines for pneumonia and diarrhoea are being planned, including vaccines for rotavirus, cholera, enterotoxigenic *E. coli*, pneumococcus and *H. influenzae* type b.

We are also seeking for the means to expand primary healthcare and reproductive healthcare programmes through our Centre, other centres, and through strategies adopted by and implemented through the Ministry of

Contd. p.11

# **BOT Covers Broad Agenda in 1999**

he Centre's Board of Trustees met twice in 1999 as it does every year. The first of these two meetings of 1999, held on 5-9 June, focused on critical issues concerning the Centre's future viability to continue its role in the international health community. These key issues included the impact of the restructuring and right-sizing of the Centre, addressing the human resources issues, launching of the thematic approach to the research agenda, and the financial forecast in the face of major changes in the sources of fund for its research, services and training activities.

The second meeting, held on 6-8 November, continued the discussion of the above issues and also focused on questions of further strengthening the Centre's scientific outputs, expanding its research agenda and improving its prospects for a more rapid financial recovery. Looking at its own resource capacity, BOT began the process of identifying ways in which the Trustees could individually and collectively enhance their contributions to the Centre.

#### Reorganization

Reorganization was by far the most important of the issues addressed by the Board of Trustees and the Centre's management in 1998 and 1999. The Centre's Reorganization Plan had to accomplish the delicate task of addressing critical financial needs of the Centre, while protecting the quality of the Centre's scientific outputs and sustaining the level of performance and morale of its workforce. Representatives from various levels of the staff were given an opportunity to share their views and proposals on how the Centre could most effectively and efficiently operate both in its scientific work and administration. Their opinions and conclusions were shared with a formal Reorganization Task Force.

The Reorganization Task Force comprises scientists, administrators, and senior members of the management team. Following a series of meetings, the Task Force consulted a committee of the Board, led by Board member Peter McDonald of Australia on how the Centre should proceed with its reorganization. The Board, based on the recommendations of the Reorganization Task Force, agreed upon the general direction proposed by the Task Force which included: further development of cross-cutting scientific themes, decentralization of administrative authority, establishment of a new costing strategy, and upgrading the information technology at the Centre in a manner that accommodates the reorganized structure. While the Board acknowledged the progress of the Reorganization Task Force, it also encouraged the Task Force to continue its work in identifying and articulating some clear objectives and desired outcomes of the reorganization exercise.

Another important issue addressed by the Board concerning the Centre's future was Prof. Fuchs outlined the new directions in nutrition research with support from a variety of donors. He mentioned the World Bank funding for the Bangladesh Integrated Nutrition Project (BINP) under a cooperative agreement with the Johns Hopkins University and USAID. He also informed the Board about the progress in arrangements with other institutions, such as Thrasher Research Foundation, Helen Keller International, and the World Bank Development Grant Facility which had infused one million dollar into nutrition research for the fiscal year beginning July 1998.

At the November Meeting of BOT, Head of

the Reproductive Health Working Group and Director of the Public Health Sciences Division Prof. Lars-Ake Persson presented the plans and efforts made to develop the reproductive health as a research theme. Prof. Persson showed how research activities, training programmes, and extensive services in the field of reproductive health were conducted in various urban and rural settings with support from a variety of donors that included European Union, Government of Japan, USAID, and BADC (Belgium).

Both presenters shared with the Board of Trustees and the donor representatives attending these

presentations the future prospect of approaching research primarily from the standpoint of the themes. In their view, the current skill-based divisional research does not expand, and rather limits, the Centre's potential research opportunities. The thematic approach, in their opinion, is a more effective method of organizing the Centre's expertise and resources.

#### **Financial Challenges**

The changing nature of donor priorities in the field of international health, coupled with a shift toward specific project funding, created a pattern of deficit over the past several years that left the Centre financially vulnerable. The survival of the Centre requires infusion of new resources and a tightening in the pattern of expenditure. At the June Meeting, the Centre's management reported to the BOT Finance Committee for the first time in two years a significant reduction in the Centre's deficit and a trend toward financial recovery. The Finance Committee, in providing its forecast of 1999 expenditure, noted that the fi-

Board of Trusagendum that strengthens the Centre's sci-

A view of the June 1999 Meeting of the Board of Trustees

entific outputs and administrative capacity. To modernize and restructure the Centre's recruitment process and to address issues, such as achieving better gender balance and

recruitment process and to address issues, such as achieving better gender balance and advancing women, the Board recognized the need to recruit a person with a broad range of expertise as Head of Human Resources.

#### **Research Themes**

As part of the reorganization plan and the strategy—initiated by former Director Dr. Robert Suskind—the Centre had its first presentation to the Board on how the thematic approach to research would work. At the June Meeting of BOT, Interim Director and Head of the Nutrition Working Group Prof. George Fuchs presented the Centre's agenda on nutrition research, organized into a theme. In his presentation, Prof. Fuchs gave a profile of the Centre's research, clinical service and training activities in the field of nutrition as developed over the past five years.

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nancial recovery was multifaceted, attributing it to a number of factors. The financial recovery was attributed partly to the factors such as salary savings resulting from the Voluntary Severance Package offered to the eligible staff in 1998; new support from traditional donors such as Government of the Netherlands; programme support from new donors such as World Bank; and a USAID-funded collaboration with John Snow Inc.'s Urban Family Health Project that would support the existing programmes and initiate new activities within the Dhaka hospital of the Centre.

The sustained contributions of USAID, Swiss Agency for Development and Cooperation, Government of Japan, SIDA, and DfID, among others, continue to form the backbone of the Centre's financial support. At the November Meeting, the BOT Finance Committee announced a continued trend of financial recovery and optimistic predictions for the upcoming year.

#### Composition of the Board and Changes in 1999

In both the meetings, the Trustees had the opportunity to welcome new members. The BOT welcomed the participation of Dr. David Sack as Centre's Director-designate at the June Meeting and as Centre's new Director at the November Meeting. Prof. Tikki Pang joined the Board of Trustees in June, one week before assuming his duties in Geneva as the new WHO Director of Research and Programmes. He replaced Dr. Ralph Hendersen, the former WHO representative in BOT. Dr. Zheng Qing-si of China began her tenure in the Board in June. Prof. Ricardo Uauy Dagach of Chile replaced Prof. Cesar Victora of Brazil, effective

July 1999. Prof. AK Azad Khan, Secretary General of the Bangladesh Institute of Research and Rehabilitation in Diabetes, Endocrine and Metabolic Disorder (BIRDEM), succeeded Major General (Retd) MR Choudhury as one of the three Trustees appointed by the Government of Bangladesh.

The Trustees expressed their profound grief at the sudden death of Major General (Retd) MR Choudhury of Bangladesh. Acknowledgements of his contributions to ICDDR,B, and more importantly, to the improvement of public health in Bangladesh, were duly noted in the record of the November Meeting.

The Board of Trustees gave a vote of thanks to Prof. George Fuchs for his tenure as Interim Director of the Centre. The Board also acknowledged the contributions of individual Trustees completing their tenure in the Board in 1999.

## Board of Trustees Examines Its Effectiveness and Future Role

In addition to reviewing the Centre's activities in the preceding six months, the November 1999 Meeting of the Board of Trustees, held on 6-8 November, had a special prior session to examine the role and responsibilities of the Trustees.

Chairperson of the Board Mr. Jacques O Martin of Switzerland, Dr. David A. Sack, Director of ICDDR,B and Secretary of the Board, Mr. Rolf C Carriere of UNICEF, Prof. Rita R Collwell ant to the Director and the Board of Trustees, participated during the retreat. The meeting had two facilitators—Ms Mary DeKuyper, an international consultant with expertise in board governance and management issues and Mr. John Brown of Canada, a consultant, currently residing in Bangladesh.

The board retreat was designed to be a conversation among the Trustees about their

roles and re-

sponsibilities and their rela-

tionship with the

Centre. The Board took this

opportunity to

better under-

stand how to op-

erate more effec-

tively as a team.

The retreat also

provided the

Trustees with an

opportunity to

see whether the

policies and pro-

cedures for deci-

sion-making and

their subsequent



The November 1999 Meeting of BOT was followed by the Donors Support Group Meeting

of the United States, Prof. Marion Jacobs of South Africa, Prof. AK Azad Khan of Bangladesh, Dr. Tawfik AM Khoja of the Kingdom of Saudi Ariabia, Prof. Peter F McDonald of Australia, Dr. AKM Masihur Rahman of Bangladesh, Dr. Tikki Pang of World Health Organization, Mr. MM Reza of Bangladesh, and Prof. Carol Vlassoff of Canada participated in the session.

In the afternoon of 4 November, senior members of the Centre's management team joined the discussions on issues relating to management of the Centre and on the Board and staff relations.

Prof. George Fuchs, former Interim Director, Ms Vanessa Brooks, Grants Administrator, and Ms Judith G Bennett Henry, Executive Assistactions to implement policies adhere to commonly practiced standards of similar nonprofit organizations.

The retreat ended with assignments for future actions by the Board and the senior members of the management team. The discussions also enabled the Board to become more familiar with the needs of the Centre and how they can effectively contribute to addressing some of those needs, such as its role in the Centre's fundraising initiatives.

Many of the Trustees informally noted that they regarded the retreat as both an effective exercise in self-examination and an opportunity to improve their decision-making process.



esearch findings of ICDDR,B: Centre for Health and Population Research have always been instrumental in strengthening national health programmes in developing countries, especifically so in the host country Bangladesh. Findings of applied research conducted by the Health and Population Extension Division of ICDDR,B have further accelerated the process in the recent years.

The Health and Population Extension Division (HPED) of the Centre primarily conducts operations research and disseminates findings to programme managers and policymakers, and provides technical assistance to the Government of Bangladesh (GoB) and non-governmental organizations (NGOs) working in the health and population sector of Bangladesh.

Until January 2000, Centre's Epidemic Control Preparedness Programme (ECPP) and Environmental Health Programme (EHP) conducted activities that also contributed to the portfolio of HPED. Their contributions through 1999 are noted in this report. ECPP now operates as part of the Public Health Sciences Division of the Centre. The EHP concluded their activities in December 1999.

The Operations Research Project (ORP) is the largest project of the Centre, and is the applied research component of a partnership involving the Government of Bangladesh and the United States Agency for International Development (USAID). This partnership is known as the National Integrated Population and Health Programme (NIPHP). Since August 1997, ORP has been continuing, and has expanded, the activities of the former MCH-FP Extension projects. It has been focusing on generating useful information based on research and promoting their use to address critical problems, thus affecting the availability, use and sustainability of quality health services in the country.

ORP has established collaborative research ventures, as part of NIPHP activities, with the

# Strengthening National Health Programmes

limpse Supplement

## Applied Research and Technical Assistance

government and non-government agencies that provide essential health services in urban and rural areas and that address programmatic issues relating to quality improvement, behaviour change communication, social marketing, logistics management, and child survival with emphasis on polio eradication.

ECPP provided technical assistance to the Ministry of Health and Family Welfare (MOHFW), aiming at improving capability of local response for control of diarrhoeal disease epidemics. Specifically, ECPP conducted studies on the epidemiology and ecology of *Vibrio cholerae* at the selected sentinel sites, carried out epidemiological investigations of outbreaks of diarrhoeal diseases, and in response to specific requests, assisted in the management and control of cholera epidemics at the international level.

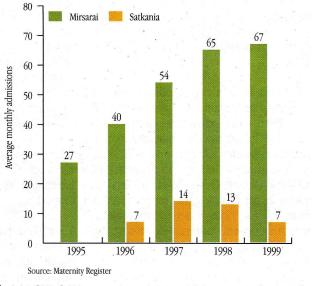
EHP conducted basic and actions research, and provided technical assistance to GoB and NGOs on environmental health issues. Key areas of EHP interventions included: hygiene education in the slums and fostering community, government, NGO and private sector partnerships in arsenic mitigation and surveillance of water quality. EHP coordinated the activities of the Global Applied Research Network for Water and Sanitation (GARNET) in South Asia.

Recent achievements of these three arms of HPED include progress in the following areas:

ORP was requested by the Ministry of Health and Family Welfare of GoB to operationalize new national strategies to ensure the availability of the essential services package (ESP). Based on the practical field experiences, ORP has already been providing feedback to the policy-makers and the senior programme managers on the key issues relating to the establishment of community clinics to deliver ESP throughout the country

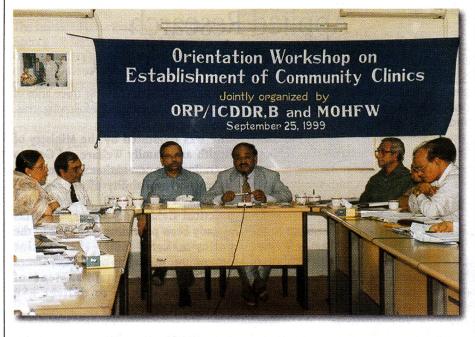
The Health and Population Sector Programme (HPSP) of MOHFW plans to provide a range of health and family planning services through ESP, particularly to the

Average monthly admissions at the THC maternity, Mirsarai and Satkania



The joint ORP-GOB intervention to improve EOC services at the upazilla level and below in Mirsarai has resulted in substantial increase in the use of services

vulnerable and disadvantaged groups. The cornerstone of HPSP and ESP-delivery system is the establishment of one accessible community clinic per 6,000 population. During 1998-1999, ORP, in close collaboration with MOHFW, carried out research on orientation and training needs of the field staff of MOHFW and on the procedures for community mobilization and selection of sites for the community clinics. This research documented the In October 1999, a day-long workshop for the senior programme managers of MOHFW and the Directorate General of Health Services and the Directorate of Family Planning was held to develop facilitation and monitoring guidelines for the community clinics, based on the experiences from the ORP field sites. The presence of Hon'ble State Minister for Health Prof. Dr. M Amanullah and the Health Secretary in the workshop confirmed the importance attributed by MOHFW to these



Prof. Dr. M Amanullab, Hon'ble State Minister for Health and Family Welfare, addressing the Orientation Workshop on Establishment of Community Clinics. On his left is Prof. Barkat-e-Khuda, Director, HPED and at the right is Mr. Mohammad Ali, Head, Management Change Unit, MOHFW

operationalization process. ORP plans to (a) monitor, analyze, and evaluate the performance of the new system; (b) identify the problems in implementation; and (c) suggest probable solutions to the problems being encountered. This research is being conducted in the three main ORP rural field sites.

In August 1999, a two-day dissemination workshop was organized jointly by MOHFW and ORP to share experiences on the issues critical to the nationwide implementation of the community clinic approach. The workshop, attended by the Secretary of MOHFW, Director General of Health Services and of Family Planning, and representatives from donor agencies, reviewed the problems that may be encountered in setting the community clinics. The existing national guidelines were modified based on the findings of operations research conducted by ORP. operations research activities for establishing the community clinics nationwide.

ORP supported the operationalization of ESP by establishing Dhaka City ESP Committee with participation from the Directorate General of Health Services, Directorate of Family Planning, and the Health Department of Dhaka City Corporation. The Committee worked closely with the ORP staff in implementing and monitoring an intervention to make the ESP services available at the Government Outdoor Dispensary at Sherebanglanagar (Dhaka) and to transform it into a Model ESP Clinic with trained clinical and counselling staff and appropriate logistics support.

A unified management information system for the national health and population sector programme is being implemented nationwide with technical support from ORP

A new management information system has

been designed to integrate the previous separate systems for recording and reporting health and family planning activities at the upazilla level and below. MOHFW established a task force to finalize the formats, registers, record-keeping cards and reporting procedures proposed for the unified management information system (UMIS). The task force comprised the Director of the Institute of Epidemiology and Disease Control Research (Chairperson); Line Directors for UMIS, ESP, and Reproductive Health; officials of MOHFW; officials of the Management Change Unit; Programme Coordination Cell of MOHFW; and representatives of ORP. UMIS was pilot-tested in three ORP intervention upazillas. ORP produced orientation manuals and users' guidelines for the new system, and is currently working to develop and test monitoring and supervisory tools to increase the use of information generated by UMIS at different levels. At the request of MOHFW, the new unified MIS is being field-tested and monitored by ORP in the Project's rural sites.

ORP, jointly with the Government of Bangladesh, the Urban Family Health Partnership, and the Population Council, is developing and field-testing interventions to improve reproductive health services for adolescents

The International Conference on Population and Development (ICPD) held in Cairo in 1994 identified adolescents as a priority target group and urged all government and nongovernmental organizations to address the reproductive health needs of adolescents. However, efforts to address the reproductive health issues relating to adolescents in Bangladesh have been limited in scope and coverage till date. Both HPSP and NIPHP have identified adolescents as an under-served group.

In the process of designing strategies to address the reproductive health needs of adolescents, ORP conducted an extensive literature review and an analysis of current interventions targeted to the adolescents by organizations working in the health and population sector. Since the review highlighted the need to identify the health needs of adolescents in Bangladesh, ORP

conducted a needs assessment study during December 1998-April 1999. The findings of the study showed that the adolescents had limited knowledge and many misconceptions about physical changes during puberty, fertility, STDs/RTIs, including HIV/AIDS and family planning. The study also found evidence of pre-marital sexual activities, unsafe sex practices, and impaired access for the adolescents to the existing health services. The findings of the study were presented at two international workshops organized by the Population Council in Washington, D.C. and by the Centers for Disease Control and Prevention in Atlanta. The Directorate General of Health Services and the Directorate of Family Planning have been using the findings in developing new programmes for the adolescents.

This year, ORP collaborated with the Rural Service Delivery Partnership of NIPHP and BRAC on the assessment of the Adolescent Family Life Education Programme and its activities with the newly-weds.

ORP has begun a joint initiative with the Population Council and the Urban Family Health Partnership (UFHP) to field-test and adapt interventions in two municipalities in Bangladesh, as part of a multi-country network, including similar activities in Mexico, Kenya, and Senegal.

Operations research activities on strategies to improve prevention and management of RTIs/STDs/HIV/AIDS have been initiated involving GoB, NGOs, and pharmacies in the private sector

Improving the prevention and management of RTIs/STDs and HIV/AIDS is a priority in the agenda of organizations delivering services within the health and population sector of Bangladesh. Recently, ORP completed a review of current activities concerning the prevention and management of RTIs/STDs in the country, and has started interventions in collaboration with MOHFW and other NIPHP partners. The three areas of intervention are: antenatal screening for syphilis, strengthening capacity of pharmacies for services to prevent STDs/HIV/AIDS, and operationalization of syndromic management at the primary healthcare level.

Operations research on antenatal screening for syphilis is based at Mirpur, Dhaka in Paribarik Sasthya Clinic of Progoti Samaj Kallayan Protisthan—an NGO supported by UFHP. The study involves about 1,200 pregnant women. It is being conducted in collaboration with the Laboratory Sciences Division of ICDDR,B. This intervention uses the rapid plasma reagin (RPR) test to screen for syphilis among all the pregnant women seeking antenatal care at the clinic.

ORP, in collaboration with the Social Marketing Company, conducted a baseline survey to explore the present situation of STD services provided by the medicine-sellers. This survey was conducted in the Tongi municipality area-north of Dhaka city-as part of the process of designing the operations research intervention to improve preventive services for STDs/HIV/AIDS provided by the pharmacies. The medicinesellers were given a self-administered questionnaire, and the "mystery shoppers" visited the randomly-selected pharmacies and collected information on the actual practice of the medicine-sellers. Most medicine-sellers reported that they had provided counselling services and referred clients with STDs to the qualified medical doctors. The findings of the "mystery shopping" showed that most medicine-sellers dispensed medicines to the STD clients, instead of referring them to physicians. The prescriptions of the medicinesellers did not conform to the national technical standards. A few medicine-sellers provided information on prevention, such as use of condoms and avoidance of multiple sex partners.

ORP is assisting agencies in the health and population sector to improve behaviour change through improved communication materials, messages, and job-aids to increase clinical contraception

HPSP emphasizes the need to increase and sustain the demand for clinical contraceptive methods and to reduce contraceptive discontinuation rate through improving the quality of family planning service.

A review of the published literature and reports produced by the Government and NGOs, recently done by ORP, pointed out that the principal barriers to the adoption of clinical contraception were: (a) inadequate knowledge and lack of proper counselling by the service providers, and (b) insufficient and/ or lack of measures to inform the males and involve them in the process of decisionmaking with regard to method selection and continuation.

The results of the national demographic and health surveys also indicate the highdiscontinuation rates due to poor selection, screening of and counselling to clients and lack of proper management of side-effects and complications. Based on these findings, the ORP and the NIPHP partners designed an intervention to develop strategies for improving the quality and performance of the clinical contraceptive services.



Tubewells have been installed to supply pure water as part of the Environmental Health Programme's efforts for implementation of water supply and sanitation improvement programmes in rural and urban Bangladesh

As part of the intervention, an inventory of the existing materials for behaviour change communication (BCC) and job-aids on clinical contraception was made. Appropriate materials that are to be used in the servicedelivery sites and in the community were identified. Besides, some new materials were also either developed or adopted. A workshop was held to share the initiallyselected materials with the programme managers, service providers, and policymakers. Subsequently, a working group, with Dr. Shameem Ahmed, Health Scientist of ORP as its Convenor, finalized the selected and newly-prepared BCC materials and job-aids.

The other members of this working group were: Dr. Jafar Ahmad Hakim, Directorate of Family Planning (DFP); Dr. Rafigus Sultan, DFP; Dr. Abu Jamil Faisel, Quality Improvement Partnership (OIP)/AVSC; Dr. AKM Sadeque, Family Planning Association of Bangladesh; Dr. Md. Alauddin, Rural Services Delivery Partnership, and representatives of the Unified Behaviour Change Communication (UBCC) Section of DFP and the Bangladesh Centre for Communication Programme. The contents and quality of the materials were subsequently discussed at a workshop chaired by the Director of UBCC Mr. Md. Aktaruzzaman and were sent to the Technical Review Committee of MOHFW for approval of use nationwide.

### ORP is improving services for safe motherhood

ORP continued to support GoB and other stakeholders in conducting interventions to help reduce maternal morbidity and mortality. The Mirsarai Model for establishing Comprehensive Emergency Obstetric Care at the upazilla level has been successfully scaled up to five upazillas by GoB. Current plans include an attempt to replicate the model in 78 upazillas. Materials, such as pictorial card for pregnancy care, produced by the project in Mirsarai, are being adapted for nationwide use. The ORP scientists worked with the Behaviour Change Communication Unit of the Directorate of Family Planning and UNICEF in developing a communication and social mobilization plan to support the national effort to reduce maternal mortality.

# ECPP continued to assist GoB in epidemic investigations and cholera surveillance activities

As part of its assistance to the Government of Bangladesh in 1998-1999, ECPP investigated outbreaks in 81 flood-affected upazillas of Bangladesh. This work also involved evaluation of logistics and supplies needed for the management of outbreaks and provision of technical advice to the managers at the central and local levels. The programme continued cholera surveillance activities in five sentinel sites.



The Centre's Director Prof. David A. Sack and representatives from USAID had discussions with the local staff during their recent visit to the ORP sites

#### ECPP strengthened the GoB capacity in the management of diarrhoea epidemics at the upazilla level

ECPP provided technical assistance to MOHFW in the improvement of skills of the local workers in the management of diarrhoea epidemics. During November 1998-September 1999, ECPP imparted specialized training to 418 mid-level GoB managers stationed in Dhaka, Khulna, and Rajshahi, as part of the assistance to the Control of Diarrhoeal Diseases Programme.

### EHP studied options for drinking water supply in the arsenic-affected areas

The researchers of the Environmental Health Programme completed the first phase of studies aiming at developing drinking water supply options for the arsenic-affected areas of Bangladesh. This phase is being followed up with the field-testing activities to select the feasible options identified.

### EHP provided technical assistance in the formulation of VISION 21

EHP has been assisting the stakeholders for water and sanitation in Bangladesh in the formulation of a shared vision and overall strategy for future activities. EHP has been working with representatives of the Ministry of Local Government, Rural Development, and Cooperatives, Local Government Engineering Department, and a variety of NGOs in the formulation of VISION 21.

#### The Future Agenda

Future plans include continuing the fieldtesting of the ongoing interventions and providing technical assistance to GoB concerning the community clinics and UMIS.

In accordance with the fundamental mission of the Centre, HPED, through its Operations Research Project, will continue to disseminate lessons learnt from its applied research activities and help translate findings into policy actions, aiming at improving the effectiveness and efficiency of large-scale national programmes. In this endeavour, the project staff will study the problems affecting the programmes of agencies in the health and population sector and will assist GoB and NGOS in developing sustainable solutions

## **Training Courses and Workshops**

The Centre organized and conducted a series of training courses and workshops in the recent past. These include the following:

#### Laboratory Diagnosis of Common Diarrhoeal Disease Agents

A two-week international training course on Laboratory Diagnosis of Common Diarrhoeal Disease Agents was conducted from 11 to 22 July 1999. The Government of Japan provided financial support to conduct the course, attended by 10 senior laboratory scientists from Bangladesh, Indonesia, Pakistan, and Zimbabwe. The participants learned the principles of laboratory procedures of isolating and identifying diarrhoeal pathogens and preparation of culture media.

The participants, in their evaluation, confirmed that the objectives of the course were fully achieved.

#### **Epidemiology and Biostatistics**

A four-week national course on Epidemiology and Biostatistics was conducted from 01 to 26 August 1999. In total, 19 professionals from the government and non-governmental organizations attended the course, organized in collaboration with several national institutions. The course was designed to orient the participants on how to plan, design and implement epidemiological research and to analyze and interpret data. The course, in addition to theoretical lectures, imparted trition Centre of Excellence.' The Child Health Programme of the Clinical Sciences Division coordinated with the Training and Education Department in conducting the course.

Hands-on training on the management of severely malnourished children is a long-felt need of the health professionals of Bangladesh and other developing countries where protein-energy malnutrition is commonly associated with other illnesses. To strengthen the programmes for management and rehabilitation of severely malnourished children in the healthcare facilities, the course was designed to provide participants with an intensive hands-on training after the lecture sessions. This task-oriented and competencybased course has been developed from detailed analyses of the successful tasks performed in the Nutrition Rehabilitation Unit (NRU) of the Child Health Programme at the Clinical Research and Service Centre of ICDDR,B. Practical aspects of the standardized protocol for the management of severely malnourished children in the NRU that reduced mortality rate by half was an integral component of the course materials.

The course provided the participants with an overview of the magnitude and importance of the problem of malnutrition, assessment and classification of different types of malnutrition, identification of the acutely ill and severely malnourished children, treatment requirements, and management with follow-



Participants in the Epidemiology and Biostatistics course practical training in data collection from the field and in the use of PC-based software.

### Management of Severely Malnourished Children

The Centre, in collaboration with the Dhaka Shishu Hospital, conducted a training course on the management of severely malnourished children in three batches during 2-12 October, 30 October-10 November, and 14-25 November 1999. Thirty-five physicians and nurses from Dhaka Shishu Hospital, Food for Hungry International and Radda MCH-FP Centre attended the course, organized with World Bank support to ICDDR,B for the 'Nuof indigenous low-cost diets for use in the community-based nutritional rehabilitation. This hands-on training

up. The course empha-

sized the preparation

is suitable for physicians, programme managers, nutritionists, and health professionals directly involved in the management of severely mal-

nourished children both in the hospitals and in the community. In view of the substantial demand for such training, the Centre will conduct it on a regular basis.

## Training Workshop on Emergency Response to Cholera and Shigella Epidemics

The Centre organized a workshop during 10-21 October 1999 to train the healthcare professionals of international NGOs and other agencies that respond to disaster situations. The workshop was attended by 10 participants from 7 countries, representing Medicines Sans Frontiers, International Rescue Committee, International Medical Corps, Catholic Relief Services, and OFDA. The objectives were to strengthen the capacity of the international NGOs in managing epidemic of cholera and shigellosis effectively to reduce morbidity and mortality. The workshop also emphasized on preparedness to handle disaster situations, prevention of diarrhoea, ensuring safe water supply and addressing sanitation hazards. The participants received hands-on training at the facility in Dhaka and in the makeshift treatment centres in the field and prepared an action plan to be used by their organizations during disasters and epidemics.

#### **Research Methodology Workshop**

Eleven health researchers from Bangladesh. Kenya, Pakistan, South Africa, Malaysia, Sri Lanka, Indonesia, and four members of the ICDDR,B staff attended a two-week workshop on Research Methodology on 14-25 November 1999. The workshop aimed at improving knowledge of the participants in biostatistics and advanced epidemiology used in clinical trials and epidemiological studies. The Training and Education Department invited the Centre's epidemiologists to deliver lectures, which were followed by exercise sessions. Selected participants presented critical reviews of journal articles discussed by other participants, followed by comments from the trainers. Participants attended computer sessions for analyzing data using the 'Stata' software package. On the closing day, they presented three research proposals, developed as group exercise, for critical review by other participants and the trainers.

### Reproductive Health Programme through Operations Research

An international workshop on Improving Effectiveness, Quality of Service and Sustainability in Reproductive Health Programme through Operations Research was organized during 4-15 December 1999. The objectives were to: (a) familiarize the participants with experiences and lessons learnt from the reproductive health research in Matlab and the ORP field sites, (b) acquaint the participants with innovative interventions of the service-delivery agencies working in the field of reproductive health in Bangladesh, and (c) disseminate the experiences of linking operations research with the process of policy formulation to improve reproductive health programmes. Twelve participants from Bangladesh, Vietnam, India, the Philippines, Mexico, Pakistan, Ghana, Zimbabwe, Indonesia, Zambia, Tanzania, and Kenya attended the workshop. The participants felt that such workshops can greatly contribute to strengthening the maternal- child health and family planning programmes in developing countries.

### ICDDR,B's Tribute to a Great Friend

The Centre recently lost a great friend Major General (Retd) MR Choudhury, an eminent medical scientist of Bangladesh. He died on 24 June 1999 at the age of 71.

For his meritorious service to the nation and for his professional excellence, MR Choudhury was honoured by the Government of Pakistan with the civil award Tamghae-Quaide Azam. His academic contributions

also earned recognition of the Government of Bangladesh. In 1977, he received the Independence Day Award (in Medical Science), which is one of the highest national awards in the country. He was honoured by the Bangladesh Academy of Sciences with their highest award in biological sciences in 1995. In recognition of his contributions to medical sciences, he was awarded fellowships by Royal College of Pathologists, London; Royal Col-

lege of Physicians, Edinburgh; Bangladesh College of Physicians and Surgeons; International Biographical Association; American Biographical Institute; and Bangladesh Academy of Sciences.

In paying a tribute to our great friend, we echo the comments made by a senior official of the World Bank in Bangladesh, who also had the privilege of working with Major General Choudhury. "With his untimely death Bangladesh has lost a visionary leader, who had the right combination of scholarship, substance, integrity, team spirit and passion for doing something for the people. Personally he was a good conversationalist endowed with a fine sense of humour."

The management and staff of the Centre remember his services as a member of our Board of Trustees. He continuously promoted the Centre and its scientific achievements and pushed the Centre forward in embracing new initiatives in the area of infectious diseases, particularly HIV/AIDS.

He started his career as a commissioned officer in the then Pakistan Army Medical Corps in 1952, and became Major General in 1985. Before his retirement in 1992, he was the Director of the Armed Forces Institute of Pathology and Transfusion (formerly Army Pathological Laboratory—abbreviated as APL)—a premier pathological institution in the country. MR Choudhury was the Executive Director of the National Health Laboratories (now National Institute of Health) of Pakistan in 1970. After independence, he was once again put in command of the APL in 1973 on repatriation. He was the Chairman of the Bangladesh National AIDS Committee during 1989-1992, and then became the Chairman of the Technical Committee of the National AIDS Committee and remained in this position till the last moment of his life.



Major General (Retd) MR Choudhury, speaking from the audience in the 8th Annual Scientific Conference of ICDDR,B

Since his retirement from the army, he devoted his time in conducting research, and in teaching microbiology and laboratory medicine in different institutes. He was the founder President of the Bangladesh Society for Microbiologists and of the Bangladesh Society for Immunology, Chairman of the Committee for National Policy on HIV/AIDS and STD-related Issues, and member of: Board of Trustees of ICDDR, B and its Hospital Endowment Fund, Bangladesh Kidney Trust, Expert Advisory Panel on Health Laboratory Service of WHO, and editorial boards of a number of professional journals, including the Journal of Diarrhoeal Diseases Research and the Kidney Disease and Transplantation Bulletin of the Kingdom of Saudi Árabia.

Maj. Gen. (Retd) MR Choudhury had his SSC in 1944 with first division and stood first in HSC in Asam Board, India, in 1946. He graduated from the Calcutta Medical College in 1951, obtained a postgraduate diploma in Bacteriology with distinction from the University of London in 1958-1959, and was trained in different hospital laboratories in England.

MR Choudhury has to his credit about 50 research papers published in various professional journals, and has written and published a book titled Modern Medical Microbiology. He attended many meetings, conferences, seminars, and workshops both at home and abroad.

#### Centre loses one of its senior scientists in a plane crash

Every death is shocking to the dearest ones of the deceased

but what an untimely accidental death transmits in our cognition is more than a shock. The entire Centre, with its busy schedule of routine work, had such an experience when we heard the sad



Dr. Shameem Ahmed

news that our dear colleague Dr. Shameem Ahmed died in a plane crash in Nepal on 5 September 1999.

Dr. Shameem Ahmed, Health Scientist of the Operations Research Project of the Health and Population Extension Division was the Team Leader of a recently-formed working group, comprising public health scientists and physicians from the Centre and Government of Bangladesh, to address the quality of patient care in the health facilities in Bangladesh.

Before joining ICDDR,B, Dr. Shameem Ahmed had worked in various positions at the Dhaka Medical College Hospital and the Institute of Postgraduate Medicine and Research (now called Bangabandhu Sheikh Mujib Medical University), including the position of Associate Professor of Paediatrics at the Bangabandhu Sheikh Mujib Medical University and Registrar of the Department of Paediatrics at the Dhaka Medical College Hospital. She worked as a WHO consultant in the health sector in both Egypt and Somalia. In 1994, she returned to Bangladesh and joined ICDDR,B.

Dr. Shameem Ahmed received her PhD degree in infant feeding and growth from the Institute of Child Health in London. Her thesis led the way to establish the first lactation Centre in Bangladesh. For her communication skills and eloquence, she became a wellknown personality for her contributions in health-related programmes in Bangladesh Television. She also participated in programmes broadcast from BBC World Service.

#### **Prof. Sack replies**

Continued from .... p. 2

Health and Family Welfare of the Government of Bangladesh. A priority is to translate the findings of the Centre's research into action through operations and extension activities.

### **VB:** *How do you see ICDDR,B changing in its structure?*

DS: The ICDDR,B's administrative structure needs to be sure to take advantage of the cross-disciplinary and integrated approach and that is possible at the Centre. Breakthroughs in science are often the outgrowth of such multidisciplinary and synergistic strategies. To accomplish this, we are developing theme-based groups which span the different divisions to help focus our work on the most critical issues. Each of the themes includes input from basic sciences, clinical sciences, public health sciences, and has the potential for extension to the government programmes. The key themes that have been identified include: nutrition, child health, reproductive health, health systems research, demography, emerging infections, and vaccine sciences.

### **VB**: Have you set any goals for yourself over the next three years of your tenure?

**DS:** My first goal is to support science at the Centre, to create an environment where breakthroughs are likely. These breakthroughs may be exciting new drugs or vaccines, a new understanding of prognosis of a disease, or a new approach to address the problems of providing services. The findings should mean improved health and less disease for people in Bangladesh and also applicable to other areas of the world.

I see special opportunities for the introduction of certain new vaccines and micronutrients, especially zinc, in addition to vitamin A which is already being used widely. I also see special opportunities for the treatment of severe malnutrition at the community level and learning how to intervene with children before they become severely malnourished.

A research institution, like ICDDR,B, must be open to new opportunities; so, my goals are also to assist in building the Centre as a partner with the Government and the international scientific community. The outcomes of these goals will be measured in terms of relevance with and usefulness to the country where we carry out our work, and also in terms of scientific results which improve the health of people.

**VB:** Are there any specific achievements that you would like to have been associated with during your tenure?

**DS:** The Centre will undoubtedly make progress in many areas. The prevalence of cholera had not changed substantially in our field sites during the decades we had been studying cholera. I believe, we can change this, and more specifically, I would like to see a reduction in the prevalence of cholera by 80% in the Matlab area within five years. I believe, this can be done by a combination of vaccine, water treatment strategies, and hygiene practices. If we are successful, this would be a remarkable achievement that I would like to be associated with.

Another challenge for the Centre is to define and alleviate the arsenic problem in Bangladesh. Obviously, we cannot solve this major environmental contamination but we can conduct the sentinel surveillance and research in our field sites, documenting the extent and effects of arsenic contamination on public health, and developing the most appropriate strategies for correcting it.

Finally, I would like to see real progress in our operations research activities, working hand-in-hand with the Ministry of Health and Family Welfare and the NGOs to address the many questions that arise when attempting to deliver health services. The Centre needs to be a partner and a problemsolver, and we need to study how such a model can be developed.

### **VB**: Where do you see the Centre's greatest potential for growth?

**DS**: One area is the intellectual growth of young Bangladeshi scientists whose research skills are already of an international standard. There is an explosion in the number of capable young scientists in Bangladesh, and they can contribute much to the scientific agenda of the Centre. However, the Centre will prosper from the balanced input from both local and expatriate scientists.

A second area is adoption of the newest tools of information sciences. Our Centre has tremendous resources that need to be shared with others, and our scientists need to keep up with the latest developments in their fields. The training programme at the Centre is already active but I see the potential for new growth, using electronic media as well as hands-on methods.

# **VB:** As an international institution, where can the Centre make the greatest contribution to South Asia and to bealtbcare systems in developing nations?

**DS**: The greatest contribution the Centre can make to South Asia is in training, discussing our "lessons-learnt" and scientific findings, and in disseminating those findings. Another important contribution the Centre can make to South Asia and other developing nations is its research on emerging and re-emerging infectious diseases, especially on diseases prevalent in Bangladesh and other tropical countries.

**VB:** After three decades of demographic surveillance and two decades of maternal and child healthcare and reproductive health interventions, what do you see as the most important contributions that can be made in the Matlab intervention area over the next five years?

**DS:** As we look at the progress made in Matlab in the last 20 years, we see that the number of children dying during infancy has decreased by 70%. Infant mortality still remains a significant concern. Contraceptive prevalence has increased dramatically but even with the changes and improvements in the delivery of family planning services, Matlab still has not reached the desired population levels. If Bangladesh wants to achieve its family planning goals, Matlab can show the way. The health and demographic surveillance programme in Matlab can tell us where the gaps are, and where our programmes need to be strengthened.

In the past, we have not paid sufficient attention to the health needs of mothers, which gave rise to a need to look into expanded methods of delivering reproductive health and obstetric care services to ensure safe motherhood. About 90% of deliveries still occur at home; we need to develop strategies for deliveries in health centres with trained staff where problems can be managed and referrals can be made quickly.

**VB:** *Many institutions believe, their greatest assets are the distinguished alumni:* 

- □ Is this true for ICDDR, B?
- How do you envision the role of the alumni in the evolution of the Centre and in its future direction?
- □ What can they do?

DS: I am proud of our alumni. Many are now prominently positioned in Europe, the United States, Latin America, Africa, and Asia. I want to involve them more in the work of the Centre through collaboration, developing protocols, reviewing manuscripts, and importantly, in fundraising. Over the next year, I will seek opportunities to engage our alumni in strengthening our Endowment Programme, participating in friendship visits, and in exploring new resources for the Centre. They are a relevant and important part of our history, and I believe, our present too. ■

#### **Dr. Benenson Honoured**

The American Journal of Public Health (AIPH) and the American Journal of Preventive Medicine (AJPM) recently honoured Dr. Abram S Benenson, a world-renowned public health scientist and alumna of the Centre. AJPH highlighted his accomplishments as an epidemiologist. In their words, Dr. Benenson is a "gentleman par Excellence." Dr. Benenson's areas of work include: vaccine development, immunization programmes, and infectious diseases. His journal articles and other publications are used by epidemiologists and public health scientists worldwide. Most notable to ICDDR,B and Bangladesh is his extensive epidemiological work in the sixties and seventies on smallpox, cholera vaccines, and Oral Rehydration Therapy (ORT). His famous publication titled Control of Communicable Diseases Manual has been translated into six official languages.

AJPM, in its "Tribute to Abram S Benenson, MD" recognized trials in Bangladesh (formerly East Pakistan). The Journal noted that during the 25<sup>th</sup> Anniversary of Oral Rehydration Therapy, the Bangladesh Government also acknowledged his great contributions. AJPM concluded their remarks by identifying him as "a man of honour and intelligence; a man called on by Presidents (of the United States) to guide their thoughts on biological warfare, a loving husband, father and grandfather; and an extraordinary individual..."

The Centre sends its special congratulations and appreciation to Dr. Benenson for his laudable accomplishments.

### **Centre's Journal Invites Articles**

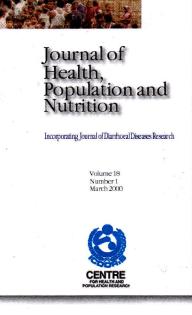
ore than a decade-old Journal of Diarrhoeal Diseases Research, published by the Centre, has been recently re-launched as Journal of Health, Population and Nutrition (JHPN).

of population and nutrition. The Journal has a special interest in publishing original research articles of relevance to developing countries. Most articles are published within four months of acceptance.

This renaming is done to entertain articles on a broader range of health research disciplines other than diarrhoeal diseases alone.

High-quality manuscripts, written in English, are invited for publication in this peer-reviewed quarterly journal. The Journal publishes original research articles, review articles, and

short reports on the prognoses and management of common illnesses, maternal, child and family health, and related issues



The Journal is available through its website: http:// www.icddrb.org/ ihpn. Manuscripts. along with a cover letter, may be sent to: Editor-in-Chief, JHPN, ICDDR,B: Centre for Health and Population Research, GPO Box 128. Dhaka 1000 (or Mohakhali, Dhaka 1212, Bangladesh), or in electronic format to: jhpn@icddrb.org. "Information for Contributors" is

available in the Journal's website.





Glimpse

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