Envisioning One Health

Infectious diseases have gained a new momentum over the last few years especially due to the emergence of high impact emerging and re-emerging infectious diseases. An estimate shows that out of the emerging and re-emerging diseases over 70% is of zoonotic origin. So, for the wellbeing of human, animal and plant the One Health concept has emerged to address the issue holistically.

For wide acceptance of one health concept and its implementation in the field level a close collaboration between experts, scientists and practitioners of human health, animal health, environment, plant and agriculture is of paramount importance. Unfortunately, traditional mind set and attitude problem hinder such collaboration. To overcome this challenge a strong advocacy and awareness raising campaign among the students of each disciplines of one health can act as an ice breaker.

**Involvement of university students of diverse discipline to advocate for one health issue:**

To advocate, raise awareness about the importance of one health in action and change the mind set about multi sectorial collaboration students from different disciplines such as medical, veterinary, agricultural, zoology, ecology, environment, plant, soil and wildlife should be involved. Such engagement will sow the seed for collaborative approach in professional life at early student life. This huge endeavour can be done through engagement of student in different activities-

**Arranging seminars and symposia On One Health**

Usually each university has a fixed date for weekly or monthly seminar. By contacting and collaborating with the faculties a seminar can be arranged where students from different disciplines will share the importance and success stories of one health in action. Thus the future doctors, veterinarians, ecologists, environmentalists, scientists and faculties will be made aware about the importance of one health approach and act as a behaviour change intervention to seek help from different disciplines to solve conglomerate issues of global health. After such seminars or symposia quiz sessions can be arranged to reinforce the learnings.

**Use of local university newspapers or journals for advocating**

All the universities have their own student newspapers. They can be strong media to raise awareness among broad range of students.

**Involvement of students clubs for advocacy**

All universities have youth clubs, environment clubs, health clubs or science clubs. These clubs can be involved in awareness raising about one health and this collaborative work could be the first step towards collaborative activities in professional life.
Quarterly or Half yearly One Health festivals

Quarterly or half yearly one health festivals can be arranged in the campus where quizzes, game shows and essay competitions can be arranged to boost awareness regarding one health issues.

Outreach material and posters

Innovative, informative and witty outreach materials and posters can be mounted in the canteens and university premises to enhance people’s understanding about one health.

Thus an effective and proactive generation of professionals can be made for effective control of emerging and re-emerging infectious diseases through mutually beneficial collaborative networks among medical doctors, veterinarians, wildlife experts, scientists and academia.
Dr. Sultan Mahmood

Section: 6, Block: E, Road No: 1, House No: 7, (4th Floor), Mirpur, Dhaka – 1216, Bangladesh.

Phone: (+88) 019-11488914
Email: dr.sultanmahmood@yahoo.com

Objective
Professional, qualified Doctor with excellent organizational, communication and team working skills. Ideal candidate for position requiring drive, initiative, responsibility and challenge.

Research Experience
1. Title of the research: Aetiology of Neonatal Sepsis in South Asia (ANISA) study
   Supervisor: Professor Dr. Abdullah H. Baqui, Johns Hopkins Bloomberg School of Public Health and Dr. Dipak Mitra, Johns Hopkins Bloomberg School of Public Health

2. Title of the research: Pneumoccal Conjugate Vaccine (PCV) Impact Assessment in Bangladesh study
   Supervisor: Professor Dr. Abdullah H. Baqui, Johns Hopkins Bloomberg School of Public Health and Dr. Dipak Mitra, Johns Hopkins Bloomberg School of Public Health

3. Title of the research: Using ongoing newborn intervention trials to obtain additional data critical to maternal, fetal and newborn health in a harmonized way: The AMANHI (Alliance for maternal and newborn health improvement) study
   Supervisor: Professor Dr. Abdullah H. Baqui, Johns Hopkins Bloomberg School of Public Health and Dr. Dipak Mitra, Johns Hopkins Bloomberg School of Public Health

Professional Experience
October, 2014 to Present
One Health Epidemiology Fellow
Institute of Epidemiology, Disease Control & Research, Bangladesh and Massey University, New Zealand

Job Responsibilities:
- Master’s degree education in epidemiology and biosecurity from Massey University.
- Applied epidemiology research involving situation assessments, field studies and evaluation of disease control strategies for priority zoonotic diseases in the country using a multi-sectorial approach.
- Professional engagement with faculty, postgraduate and undergraduate students in the institution, related government related sectors and other One Health professional in the SAARC region.
- Training the trainers: designing One Health epidemiology and/ or zoonotic disease control curriculum and prepare suitable training material for undergraduate, postgraduate and/ or in-service training of health professionals in the country.
November, 2013 to April, 2014
Study Physician, ProjAHNMo project, icddr,b and Johns Hopkins University- Bangladesh office

Project:
- Etiology of Neonatal Sepsis in South Asia (ANISA) study
- Pneumoccal Conjugate Vaccine (PCV) Impact Assessment in Bangladesh
- Using ongoing newborn intervention trials to obtain additional data critical to maternal, fetal and newborn health in a harmonized way: The AMANHI (Alliance for maternal and newborn health improvement) study

Job Responsibilities:
- Clinical assessment, enrollment and management of under 5 children at hospital and/or community after obtaining informed consent from the parents.
- Collection of cerebrospinal fluid from the selected infants and assist/supervise laboratory technician to collect other specimens from the enrolled infants including blood and naso-pharyngeal swab.
- Work in a team to collect biological samples from women and to establish a sample processing laboratory in a rural sub-district of Sylhet.
- Ensure strict adherence to standard operating procedures for sample collection, processing, storage and transportation.
- Provide support to the team for collecting socio-demographic, morbidity and care seeking data along with anthropometric and other measurements working in collaboration with the project manager and investigators.

June, 2013 to November, 2013
Oncology Associate, Sanofi Bangladesh Limited

Job Responsibilities:
- Conduct and arrange CME’s and Round table discussions regarding new modalities of diagnosis and management of cancer.
- Provide presentations in CME’s on updated and newer cancer management strategies and sophisticated anti-cancer agents.
- Conduct, monitor and be involved in publication of local and international clinical studies, journals etc.

December, 2011 to December, 2012
Intern Doctor, Sylhet M.A.G. Osmani Medical College, Sylhet, Bangladesh

Job Responsibilities:
- Assessment, management and monitoring of indoor patients under the supervision of specials doctors & Attend OPDs (Outpatient departments) in hospitals.
- Attend any emergencies including assist in emergency surgeries.
- Attend scheduled surgeries in OT.
- Conduct vaginal deliveries and assist in caesarian section and other routine and emergency obstetrics and gynaecological operations.

Publication
Abstracts

✓ Recent Increase of Breast Cancer among Young aged Females: A Hospital Based Study, Oral presentation: AIUB 1st Conference for Young Public Health Professionals, American International University-Bangladesh.

✓ Snakes in the North Eastern Part (Sylhet) of Bangladesh: Species Specific Identification, Oral presentation: 3rd National Conference on Tropical Medicine & Toxicology BanTropTox 2014, Sylhet, Bangladesh.

Education

MPH-Biosecurity (October 2014 – Present)
Massey University, New Zealand

M.B.B.S. (July 2006 – July 2011)
Sylhet M. A. G. Osmani Medical College,
Shahjalal University of Science and Technology,
Sylhet, Bangladesh.

1st professional examination, January 2008: 967/1300 (74.38%)
2nd professional examination, January 2010: 1068/1500 (71.20%)
Final professional examination, July 2011: 1166/1500 (77.73%)

Notre Dame College, Dhaka, Bangladesh.
GPA: 5.00/5.00

Monipur High School, Dhaka, Bangladesh.
GPA: 4.88/5.00

Workshops

- Regional Induction Workshop of One Health Epidemiology Fellowship Program, Thimpu, Bhutan. Organized by: Massey University, New Zealand and College of Natural Resources, Bhutan.
- A Practical Workshop on the Design and Analysis of Epidemiological Surveys under Zels Project, UK. Organized by: Royal Veterinary College, UK and Chittagong Veterinary and Animal Science University, Bangladesh.

Training

Qualitative Research Methodology
Organized by International Center for Diarrhoeal Disease Research, Bangladesh (icddr,b).

Integrated Management on Childhood Illness

Essential Burn Care
Organized by Acid Survival Foundation in collaboration with Interburns, approved and endorsed by The Royal College of Surgeons of Edinburgh.

Training on Nutrition

Hospital Waste Management

Training on Tuberculosis
Organized by National Tuberculosis Control Program.
Conferences

- **3rd National Conference on Tropical Medicine & Toxicology BanTropTox 2014**, Hotel Star Pacific, Sylhet, Bangladesh. 5-6 December, 2014: Oral Presenter.
- **Celebration of 2nd Public Health Foundation Day & Scientific Seminar**, icddr,b, Dhaka, Bangladesh. 7-8 December, 2014: Poster Presenter.
- **8th One Health Bangladesh Conference**, RAOWA Convention Hall, Dhaka, Bangladesh. 29-31 March, 2015: Member, organizing committee; Member, scientific committee.

Seminar/ CME

- Case Capsule in Gastroenterology by Dr. T. S. Chandrasekar, Chennai, India.
- Modern treatment in MI and Valve surgery by National Heart Foundation, Dhaka.
- Problems in Pregnancy by Bangladesh Society of Medicine, Sylhet Branch.

Awards

- **One Health Epidemiology Fellowship** to pursue Master of Public Health (MPH-Biosecurity) from Massey University, New Zealand.

- Served as esteemed **Elsevier Student Ambassador** for the year 2012, organized by **Elsevier India** in which ambassadors were selected among 10,000 applicants consisting both undergraduate and postgraduate medical students from 5 South Asian countries.

Professional Strength

- A clear vision to be a successful public health professional in Communicable disease research sector based on field experience and academic backgrounds.
- Maintains a wide communication network with public health professionals and researchers both nationally and internationally.
- Accustomed to accept responsibility, entrust authority and work with people at diverse level including team building.
- Strong believer in inter-sectoral approach and community participation for problem solving and project implementation.
- Ability to generate evidences for policies and programs.
- Ability to communicate in a clear and concise manner in both oral and written form.
- Ability to meet any challenge with confidence, determination, sincerity and hard work.
- Ability to adapt to changes quickly and pick up things easily.
- Ability to identify training and technical assistance needs for capacity building.

Philanthropic activity

- Serves as **Resource person** in **Platform Research wing**, a society of medical and dental undergraduate and postgraduate students and faculties for mainstreaming research in medical and dental education of Bangladesh.

Computer Skills

- **OS Environment**: Microsoft Windows
- A comfortable user of Microsoft Office, Microsoft Powerpoint, Microsoft Excel, Email and internet operations etc.

Language Proficiency

<table>
<thead>
<tr>
<th>Language</th>
<th>Speaking</th>
<th>Reading</th>
<th>Writing</th>
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</thead>
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<tr>
<td>English</td>
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<td>Excellent</td>
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<tr>
<td>Bengali</td>
<td>Excellent</td>
<td>Excellent</td>
<td>Excellent</td>
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Membership of Professional Organizations

- **One World One Health - Bangladesh Initiative**: Life member
- Executive Committee Member of **ISDS One Health Committee**
- Member of International Society for Disease Surveillance (ISDS)
- Member of Bangladesh Medical and Dental Council (BMDC), Registration No: 61066
- Member of Bangladesh Medical Association (BMA)
Personal Information

- **Name:** Sultan Mahmood
- **Fathers Name:** Sheikh Abdul Mannan
- **Mothers Name:** Shahida Khaton
- **Present Address:** Section: 6, Block: E, Road No: 1, House No: 7 (4th Floor), Mirpur, Dhaka-1216, Bangladesh.
- **Permanent Address:** Village: Bazonpara, P.O.: Vojeshwar, Upozila: Naria, District: Shariatpur, Bangladesh.
- **Date Of Birth:** 18-septembar-1988
- **Nationality:** Bangladeshi (by birth)

References

**Dr. Joanna S. McKenzie**
Senior Lecturer in One Health Epidemiology and International Development
International Development Group
Institute of Veterinary, Animal Science and Biomedical Sciences
Massey University
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Email: j.s.mckenzie@massey.ac.nz

**Dr. Dipak Mitra**
Assistant Scientist
Johns Hopkins Bloomberg School of Public Health
Baltimore, Maryland, USA
Email: dmitra@jhu.edu

(Dr. Sultan Mahmood)