Resume of **MD. ABDUR RAZZAQUE SARKER** Country of birth: **Bangladesh** Email: razzaque.sarker@gmail.com

#### **CURRENT POSTSION**

Assistant Scientist (From 01.01.2016 to date) Health Economic and Financing Research International Centre for Diarrheal Disease Research, Bangladesh 68, Shahid Tajuddin Ahmed Sarani, Mohakhali, Dhaka-1212, Bangladesh.

## ACADEMIC QUALIFICATION

- PhD Researcher in Management Science of *Health Economics* Session: 2015-2018 University of Strathclyde, Glasgow, UK
- Master of *Health Economics* Session: 2007, Held in 2009 University of Dhaka, Bangladesh.
- Master of *Economics* Session: 2011-3-88-10, Held in 2013 East West University, Bangladesh.
- Bachelor of Science in *Environmental Sciences* Session: 2000-2001, Held in 2006 National University, Bangladesh.

# ACADEMIC AFFILIATION

- Part time Faculty in *Health Economics and Management Course*, School of Public Health at Independent University of Bangladesh (IUB).
- Teaching assistantship in *Health Economics and Economic Evaluation*, James P Grant School of Public Health, BRAC University.
- Course facilitator of introductory course on *Economic Evaluation of Health care intervention*. Health in 7-9 January, Centre for Excellence for Universal Health Coverage Project, CEHS, icddr,b.
- Post graduate researcher, University of Strathclyde, Glasgow, UK

## TRAINING AND CERTIFICATES

- Course on "*Introduction to Quantitative Methods: Survey Design & Analysis*" organized by Strathclyde University, UK in February 23-25, 2016.
- Course on "*Research Philosophy*" organized by Strathclyde University, UK in December 7-12, 2015.
- Training on "*Result Based Management (RBM*)" organized by icddr,b. Held in September 1-2, 2015.
- Training on "*Scientific Project Management*" organized by Westat, USA and icddr,b. Held in May 13-14, 2014.

- Training on "*National Accounts*", organized by Health Economics Unit, Ministry of Health and Family Welfare Government of the People's Republic of Bangladesh. Held in February 3-6, 2014.
- Certificates on "*Training of Trainers (TOT*)", organized by Technical Training Unit, icddr,b. Held in December 18-19, 2013.
- Certificates in "*Getting Published in High Impact Journals*" held in June 11, 2013. Organized by icddr,b and PLOS medicine and BMJ journal.
- Training course on "*Measuring and Monitoring Health Equity using ADePT*", held in 28-29 April, 2013. Organized by Centre of Excellence for Universal Health Coverage and World Bank.
- Training on "*Statistical Analysis using STATA*", organized by icddr,b and JPGSPH. Held in November 18, 2012 to January 17, 2013.
- Training on "*Introductory course on Healthcare Financing*", held in 24-26 September 2012, organized by JPGSPH and icddr,b.
- Training on "*Introductory course on Universal Health Coverage*", held in 2-4 July 2012, organized by JPGSPH and icddr,b.
- Certificates on "*EndNote Training Course*", held in 5 April 2011, organized by icddr,b, Bangladesh.
- Certificates on "*Literature Search Training Course*", held in 6 March 2011, organized by icddr,b, Bangladesh.
- Certificates on "*Information Literacy Training Course*", held in 20 February 2011, organized by icddr,b, Bangladesh.
- Certificate in "*Health Economic Workshop*", Organized by Centers For Diseases Control and Prevention (CDC), USA and icddr,b, Bangladesh. 7to 9 December 2010.
- Training Course on "*Tobacco Economics*", held in February to March 2010, organized by Unnayan Shamannay, Dhaka.
- Training on "*Research Methodology*", Organized by Advance Research in Social Sciences (CARSS), University of Dhaka.25-5th July 2008.

# **ONLINE CERTIFICATES**

- Web based training course on "*Basic of Health Economics*", held in September-October 2015, organized by World Bank Group (WB).
- Online course on "*Measuring and Valuing Health*", held in February 2015, organized by School of Health and Related Research, University of Sheffield.
- Online course on "*Ebola in Context: Understanding Transmission, Response and Control*", held in February 2015, organized by London School of Hygiene & Tropical Medicine.
- Certificates on "*Health Technology Assessment*", held in August 2014, organized by School of Health and Related Research, University of Sheffield.
- Certificates on "*Economic Evaluation*", held in 11 September 2011, organized by Global Health eLearning Centre. A joint venture of USAID and John Hopkins Bloomberg School of public health.
- Extramural Research Certificates on "*Protecting Human Research Participants*", Organized by National Institute of Health (NIH).3.15.11Feb-march 2010.

## SEMINARS/SYMPOSIUM/CONFERENCE ATTENDED

- Attending conference on *Priorities 2016 New frontiers of priority setting*, held in 7-9 September 2016 at University of Birmingham, UK
- Attending Symposium on *"Global Health : Recent progress and Future Challenges"*, held in 25 Feb 2016 at Royal College of Physicians of Edinburgh, UK.
- Attending seminar title "Achieving better health outcomes and value for money in low and middle-income countries (LMICs): the prioritization challenge". November 20, 2015, University of Strathclyde, Glasgow, UK.
- Conference on Vaccine -2013 as a presenter on "Cost of Illness for Cholera in a High Risk Urban Area in Bangladesh: an Analysis from Household Perspective" held on 29-31 July, 2013, Las Vegas, USA, organized by Vaccine and Vaccination of OMICS.
- Presentation in meeting of Bill & Melinda gates foundation and International Vaccine Institute (IVI). Title: *Economic components of Introduction cholera Vaccine in Bangladesh*. Held in 2012 and 2013 (as a presenter).
- Attending Symposium on *Health Economics Issues and Health Financing* held on 20-21 April 2013. Organized by the University of Dhaka.
- Attending Manuscript Round Journal Club, March 2011, Led by Dr. Richard SW Smith, Director, United Health Chronic Diseases Initiative, and Former Editor, The British Medical Journal (BMJ).
- Attending *Annual Summer Research Workshop in Management Science*, held in 4-5 February, 2016. Strathclyde University, Glasgow, UK.
- Thesis paper presenting at East west University of Bangladesh. Title: "Impact of ill health on Labour Productivity and Healthcare Utilization- A case of informal sector worker in urban Bangladesh" held in 2014, Dhaka, Bangladesh.

## POSTER PRESENTATION

- Priorities 2016 New frontiers of priority setting, held in 7-9 September 2016 at University of Birmingham, UK. Title of the poster: <u>Determinants of Enrolment of Informal Sector</u> <u>Workers in Cooperative Based Health Scheme in Bangladesh</u>.
- Global Health: Recent progress and Future Challenges, held in 25 Feb 2016 at Royal College of Physicians of Edinburgh, UK. Title of the poster: <u>Health related Quality of Life</u> (QoL) and treatment cost for cholera patient in urban Bangladesh.
- Annual BoT Meeting, held in 2012 at icddr,b, Bangladesh. Title of the poster: <u>Cost</u> Implications on Households and Vaccine Provider for Cholera in Bangladesh.

### POSITIONS PREVIOUSLY HELD

- Research Investigator (From 14.04.2012 to 31.12.2015)
  Health Economic and Financing Research
  International Centre for Diarrheal Disease Research, Bangladesh
- Research Fellow (From 03.11.2010 to 14.04.2012) Health Economic Unit (HEU) International Centre for Diarrheal Disease Research, Bangladesh (icddr,b).

## **OTHER ACTIVITIES**

- Gender Focal Point, Centre For Equity and Health System, icddr,b.
- Member of Research Abstract Review Committee for the International Society for
  Pharmacoeconomics and Outcomes Research (ISPOR) 7th Asia-Pacific Conference, 2016
- Abstract Review Panel Member of iHEA World Congress Revolutions in the Economics

of Health Systems

#### **REVIEWER OF JOURNALS:**

- 1. Nordic Journal of Health Economics
- 2. Cogent Economics and Finance
- 3. SpringerPlus
- 4. Journal of Water, Sanitation and Hygiene for Development
- 5. EURO Journal on Decision Processes
- 6. Phramacoeconomics
- 7. Journal of Occupational and Environmental Medicine
- 8. BMJ Global Health

## **COMPUTER SKILLS**

- MS Office package (Word, Excel, Power Point)
- Database, SPSS, STATA, DISMOD, R, TreeAge, ADEPT.

### LANGUAGE SKILLS

• Fluent both in English and in Bengali.

#### **PEER-REVIEWED PUBLICATIONS:**

- 1. Sarker AR, Sultana M, Mahumud RA, Nurnabi S, Meer RVD, Morton A (2016) Prevalence and healthcare-seeking behaviour for childhood diarrheal disease in Bangladesh. *Global Pediatric Health.* Volume 1(3) pp 1-12;
- Sarker AR, Islam Z, Khan IA, Saha A, Chowdhury F, Khan AI, Cravioto A, Clemens JD, Qadri F, Khan JAM (2015). Estimating the cost of cholera-vaccine delivery from the societal point of view: A case of introduction of cholera vaccine in Bangladesh. *Vaccine*. Volume 11; 33 (38): 4916-21.
- 3. **Sarker AR**, Islam Z, Khan IA, Saha A, Chowdhury F, Khan AI, Qadri F, Khan JAM (2013). Cost of Illness for Cholera in a High Risk Urban Area in Bangladesh: An Analysis from Household Perspective. *BMC Infectious Diseases* 13 (1), 518.
- 4. Sarker AR, Sultana M, Mahumud RA et al et al (2016). Occupational illness on labor productivity: A socio-economic aspect of informal sector workers in urban Bangladesh. *Journal of Occupational Health.* Volume 58(2):209-15
- Sarker AR, Sultana M, Mahumud RA (2016). Co-operative Societies: A sustainable platform for promoting universal health coverage in Bangladesh. *BMJ Global Health*. Volume 1(3) 2016; 1:e000052. doi:10.1136/bmjgh-2016-000052
- 6. Sarker AR, Mahumud RA, Sultana M et al (2014). The impact of age and sex on healthcare expenditure of households in Bangladesh. *SpringerPlus* 3:435.
- 7. Sarker AR, Khan JAM (2013). Informal Workers in Bangladesh: An Analysis from socioeconomic perspective. *Asian Journal of Research in Business Economics and Management*. Volume 3, Issue 6.
- 8. Mahumud RA, Sultana M, **Sarker AR** (2016). Prevalence and associated determinants of low birth weight in developing countries: A multi-country analysis from nationwide population-based survey. Accepted in *Journal of Preventive Medicine and Public Health*
- Mahumud RA, Sultana M, Sarker AR (2015). Trend of Healthcare Expenditures in Bangladesh over Last Decades. *American Journal of Economics, Finance and Management*. Volume. 1, Issue 3, pp. 97-101.
- Sultana M, Sarker AR et al (2016). Inequalities in health status among low income communities: EQ-5D findings from household survey in selected communities of Bangladesh. *International Journal of Health Policy and Management.* Volume 5 (3)
- 11. Islam Z, **Sarker AR** et al (2015). Costs of integrating demand based reproductive health commodity model into the Government and NGO service delivery systems in Bangladesh: a supply side perspective. *SpringerPlus*. Volume 4:808
- 12. Sultana M, Mahumud RA, **Sarker AR** (2015). Emerging Patterns of Mortality and Morbidity in District Level Hospitals in Bangladesh. *Ann Public Health Res.* 2(4)
- Mahmud RA, Hossain MG, Sarker AR et al (2015). Prevalence and associated factors of contraceptive discontinuation and switching among Bangladeshi women of reproductive age. *Open Access Journal of Contraception.* Volume 6:13-19.
- Sultana M, Mahumud RA, Sarker AR, Hossain SM (2016). Hand hygiene knowledge and practice among university students: evidence from Private Universities of Bangladesh. *Risk Management and Healthcare Policy*. Volume 2016:9 Pages 13—20
- 15. Khan JAM, Ahmed S, **Sarker AR**, Sultana M et al (2016). Benefit Incidence Analysis of Healthcare in Bangladesh Equity Matters for Universal Health Coverage. *Health Policy and Planning*. Volume 2016:1 Pages 1–7.
- 16. Ahmed S, Hoque ME, **Sarker AR**, et al (2016). Willingness-to-Pay for Community-Based Health Insurance among Informal Workers in Urban Bangladesh. *PLoS ONE*. Volume 11(2)

## PROTOCOL

1. Sultana M, Mahumud RA, Ahmed S, Islam Z, Khan JAM, **Sarker AR** (2017). The effectiveness of introducing Group Prenatal Care (GPC) in selected health facilities in a district of Bangladesh: study protocol. Accepted in *BMC Pregnancy and Childbirth*.

### EDITORIAL

1. Mahumud RA, Sultana M, Sheikh N, Ali MN, Mitra DK and **Sarker AR** (2016). Diagnostic Errors in Low and Middle-Income Countries: Future Health and Economic Burden for Patient Safety. *Austin Emergency Medicine*. Volume 2 Issue 8.

#### PEER-REVIEWED PUBLICATIONS (SUBMITTED)

- 1. **Sarker AR**, Sultana M, Mahumud RA, Ahmed S, Morton A, Khan JAM (2016) Determinants of Cooperative Based Health Scheme (CoBHS) in Bangladesh: Evidence from a Labor Cooperative of informal sector worker (Peer reviewing process at *Plos One*).
- 2. Mahumud RA, **Sarker AR**, Sultana M, Ahmed S, Islam Z, Khan JAM (2016) Health care seeking behaviour of garments workers in urban Bangladesh (Peer reviewing process at *Occupational Medicine*)
- Ahmed S, Sarker AR, Sultana M, Islam Z, Rukhsana G, Khan JAM (2016) The Impact of Community-Based Health Insurance on the Utilization of Medically Trained Healthcare Providers among Informal Workers in Bangladesh (Peer reviewing process at *Social Science & Medicine*)
- Mahumud RA, Sarker AR, Sultana M, Ahmed S, Khan JAM, Morton A, (2016) The determinants of out-of-pocket healthcare expenditure in Bangladesh: Evidence from the Household Income and Expenditure Survey-2010 (Peer reviewing process at *Journal of Bio-Social Science*).
- 5. Sultana M, Mahumud RA, Ahmed S, Islam Z, Khan JAM, **Sarker AR** (2016) Cost of Introducing Group Prenatal Care (GPC) in Bangladesh: a supply side perspective (Peer reviewing process at *The Journal of Obstetrics and Gynaecology Research*).
- 6. Sultana M, Mahumud RA and **Sarker AR** (2016). Burden of chronic illness and associated disabilities in Bangladesh: Evidence from Household Income and Expenditure survey (Peer reviewing process at *Chronic Diseases and Translational Medicine*).
- Mahumud RA, Sultana M and Sarker AR (2016). Inequity of childhood mortality towards Universal Health Coverage in Bangladesh survey (Peer reviewing process at *International Journal for Equity in Health*).
- 8. Sultana M, Mahumud RA and **Sarker AR** (2016). Socio economic Inequities in the utilization of Maternal Healthcare Services in Bangladesh. (Peer reviewing process at *Plos One*).

#### **CURRENT ENROLLED PROJECTS:**

#### **Principle Investigator (PI)**

#### Project 1

Project title: Introducing Group Prenatal Care (GPC) in Bangladesh.

Funded by: Grand Challenges Exploration of B&M Gates Foundation.

## Project 2

Project title: Estimation of the burden of diarrheal disease: A Case study in several district hospital and a tertiary Level icddr,b Hospital Bangladesh.

Area: Economic cost and Burden Analysis

Funded by: SIDA Funded Young Investigator Award, icddr,b.

#### Project 3

Evaluation of health insurance scheme of garment's workers in Bangladesh – from demand-side perspective evaluation of health insurance scheme of garment's workers in Bangladesh

Area: Health Insurance

Funded by: Swiss Tropical and Public Health Institute.

#### **Co- Principle Investigator (Co-PI)**

#### <u>Project</u>

Self-financed health scheme of labour cooperative for accessing quality healthcare of informal sector workers in Bangladesh

Area: Health care financing

Funded by: Grand Challenge Canada.

## Co - Investigator (Co-I)

## Project 1

Targeted vaccination of children in the urban slums against cholera: evaluation of a potentially costeffective and impactful strategy for deploying oral cholera vaccine against endemic cholera in Bangladesh

Area: Vaccine Research

Funded by: GAVI.

## Project 2

Understanding the burden of enteric fever in Africa and Asia: A study of transmission and antibiotic resistance to improve diagnostics and inform vaccine strategies

Area: Vaccine Research

Funded by: Oxford Vaccine Group.

## <u>Project 3</u>

The Economic Burden of Rotavirus Infection among Under-Five Children in Selected Hospitals of Bangladesh Area: Economic Burden Analysis Funded by: US Centre for Disease Control (CDC), USA. **Project 4** Expanded Program for Immunization (EPI) in Bangladesh: Tracking and analyzing financial resources Area: Resource tracking and cost analysis Funded by: Institute of Health Matrices and Evaluation (IHME), University of Washington. **Project 5** Estimating Costs of Infant and Young Child-Feeding (IYCF) Practices Improvement Program in Bangladesh Using Activity-Based Costing Approach Area: Cost Analysis Funded by: International Food Policy Research Institute (IFPRI).

## **Research Investigator (RI)**

## Project 1

Economic Evaluation of Introduction of Cholera Vaccine in Bangladesh (ICVB)

Area: Cost of illness study, Vaccine delivery cost, Cost-Effective Analysis, Cost-Benefit Analysis

Funded by: Bill and Melinda Gates Foundation

## Project 2

Estimating Costs of MNCH Initiative in Bangladesh Implemented by UNICEF

Area: Cost Analysis

Funded by: UNICEF, JPGSPH and icddr,b, Bangladesh

# Project 3

Healthy Youth Development and Resilience Study

Area: Developing an effective toolkit for Child labour.

Funded by: Collaboration with McGill University, Canada and icddr,b, Bangladesh