

Ahmed Hossain, Ph.D.

Assoc. Professor · Department of Health Services Administration, University of Sharjah
Professor · Department of Public Health, North South University
Co-founder and Research Director · Health Management BD (HMBD) Foundation
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Education

Department of Clinical Epidemiology and Biostatistics

McMaster University, Canada.

CIHR post-doctoral Research Fellow

Jan 2012- Dec 2013

- Canadian Institute of Health Research (CIHR) DSECT Award Winner.
- <http://www.safeandeffectiverx.com/trainees>

Dalla Lana School of Public Health

University of Toronto, Canada.

Ph.D. in Biostatistics

Sept 2004- Nov 2010

- SickKids Research Training Competition (RESTRACOM) Award Winner.
- **Supervisor:** Dr. Joseph Beyene and Dr. Andrew Willan.
- **Thesis Topic** Contribution to Statistical Techniques for Identifying Differentially Expressed Genes in Microarray Data.
- <https://tspace.library.utoronto.ca/handle/1807/29749>

Department of Clinical Epidemiology and Biostatistics

McMaster University, Canada.

Masters of Science

Sept 2002- April 2004

- University Tuition Bursary Award Winner.
- **Supervisor:** Dr. Narayanaswamy Balakrishnan.
- **Thesis Topic** Estimation of Parameters of generalized Logistic Distributions based on complete and progressively Type-II Censored Samples.

Department of Statistics, Informatics and Biostatistics

University of Dhaka.

Masters of Science

Sept 2000

- First class First position.

Department of Statistics, Informatics and Biostatistics

University of Dhaka.

Bachelor of Science


Sept 1998


- First class First position.

Editor/ Senior Editor/ Associate Editor of Journals

1. Frontiers in Public Health (**Editor** on Conflicts and humanitarian crises on displaced people's health)
<https://www.frontiersin.org/research-topics/46288/conflicts-and-humanitarian-crisis>
2. BMC Research Notes (**Senior Editor**)
<https://bmcresearchnotes.biomedcentral.com/about/editorial-board>
3. American Journal of Infectious Disease (**Associate Editor**)
<http://thescipub.com/journals/ajid/editors>
4. Advances in Modern Oncology Research (**Associate Editor**)
<http://www.advmodoncolres.com/index.php/AMOR/about/editorialTeam>

Five selected publications (Total publications: 68)

ORCID iD:  <https://orcid.org/0000-0003-4575-1273>

ResearchGate:  <https://www.researchgate.net/profile/Ahmed-Hossain-2>

Google Scholar:  <https://scholar.google.com/citations?user=fXu9ey0AAAAJhl=enoi=ao>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=7102502757>

1. **Ahmed Hossain**, Baten RBA, Sultana ZZ, Rahman T, Adnan MA, Hossain M, Khan TA, Uddin MK. Predisplacement Abuse and Postdisplacement Factors Associated With Mental Health Symptoms After Forced Migration Among Rohingya Refugees in Bangladesh. *JAMA Netw Open*. 2021 Mar 1;4(3):e211801. doi: 10.1001/jamanetworkopen.2021.1801. PMID: 33724392; PMCID: PMC7967081.
2. Zeeba Zahra Sultana, Aditty Arefin, **Ahmed Hossain**, Addressing child protection issues in Bangladesh's Rohingya and host community to improve children's health, *The Lancet Regional Health - Southeast Asia*, Volume 5, 2022, 100070, ISSN 2772-3682, <https://doi.org/10.1016/j.lansea.2022.100070>. (<https://www.sciencedirect.com/science/article/pii/S2772368222000865>)
3. **Ahmed Hossain** Sarker Mohammad Nasrullah, Zarrin Tasnim, Md. Kamrul Hasan, and Md. Maruf Hasan, Seroprevalence of SARS-CoV-2 IgG antibodies among health care workers prior to vaccine administration in Europe, the USA and East Asia: A systematic review and meta-analysis, *EclinicalMedicine-The Lancet* 2021. [https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370\(21\)00050-X/fulltext](https://www.thelancet.com/journals/eclinm/article/PIIS2589-5370(21)00050-X/fulltext)
4. **Ahmed Hossain**, Shakil Ahmed, Md. Shahjalal and Gias U. Ahsan (2019) Health risks of Rohingya children: Two years on, *The Lancet*, October 19, 2019. DOI: [https://doi.org/10.1016/S0140-6736\(19\)31395-9](https://doi.org/10.1016/S0140-6736(19)31395-9)
5. Islam M, Sultana ZZ, Iqbal A, Ali M, **Ahmed Hossain** Effect of in-house crowding on childhood hospital admissions for acute respiratory infection: A matched case-control study in Bangladesh. *International J. Infectious Disease*. 2021 March 5;105:639-645. DOI:10.1016/j.ijid.2021.03.000 PMID: 33684561.

Other publications

1. Jakariya M, Ahmed F, Islam MA, Al Marzan A, Hasan MN, Hossain M, Ahmed T, **Hossain**

- A**, Reza HM, Hossen F, Nahla T, Rahman MM, Bahadur NM, Islam MT, Didar-Ul-Alam M, Mow N, Jahan H, Barceló D, Bibby K, Bhattacharya P. Wastewater-based epidemiological surveillance to monitor the prevalence of SARS-CoV-2 in developing countries with onsite sanitation facilities. *Environ Pollut.* 2022 Jun 23;119679. doi: 10.1016/j.envpol.2022.119679. Epub ahead of print. PMID: 35753547; PMCID: PMC9225114.
2. Sultana N, Nguyen TTP, **Hossain A**, Asaduzzaman M, Nguyen MH, Jahan I, Nguyen KT, Duong TV. Psychometric Properties of the Short-Form Geriatric Depression Scale (GDS-SF) and Its Associated Factors among the Elderly in Bangladesh. *Int J Environ Res Public Health.* 2022 Jun 28;19(13):7935. doi: 10.3390/ijerph19137935. PMID: 35805593; PMCID: PMC9266010.
 3. Abedin M, Rahman FN, Rakhshanda S, **Ahmed Hossain** Epidemiology of non-fatal burn injuries in children: evidence from Bangladesh Health and Injury Survey 2016. *BMJ Paediatrics Open* 2022;6:e001412. doi:10.1136/bmjpo-2022-001412
 4. Shahjalal M, Gow J, Rahman MA, Hossain MJ, Khan MNA, Alam MS, **Hossain A**, Mahumud RA. Proportion and associated factors of the utilisation of complementary and alternative medicine exclusively in a hospital in Bangladesh. *BMC Complement Med Ther.* 2022 Aug 26;22(1):225. doi: 10.1186/s12906-022-03709-8. PMID: 36028844; PMCID: PMC9414049.
 5. Ahsan Raquib, Radwan Raquib, **Ahmed Hossain**, ATM Abdullah Mamun, Knowledge, Attitudes, and Practices Toward the Prevention of COVID-19 in Bangladesh: A Systematic Review and Meta-Analysis. *Front. Med.*, 06 June 2022, <https://doi.org/10.3389/fmed.2022.856156>.
 6. **Hossain A**, Ahsan GU, Hossain MZ, Hossain MA, Sultana ZZ, Arefin A, Jahan SMS, Sutradhar P. A prospective longitudinal study with treated hypertensive patients in Northern Bangladesh (PREDICT-HTN) to understand uncontrolled hypertension and adverse clinical events: A protocol for 5-years follow-up. *PLoS One.* 2022 May 31;17(5):e0269240. doi: 10.1371/journal.pone.0269240. PMID: 35639707; PMCID: PMC9154182.
 7. Shahjalal M, Chakma SK, Ahmed T, Yasmin I, Mahumud RA, **Hossain A**. Prevalence and determinants of using complementary and alternative medicine for the treatment of chronic illnesses: A multicenter study in Bangladesh. *PLoS One.* 2022 Jan 5;17(1):e0262221. DOI: 10.1371/journal.pone.0262221. PMID: 34986159; PMCID: PMC8730415.
 8. Mohammad Ali, Zakir Uddin and **Ahmed Hossain**, Combined effect of vitamin D supplementation and physiotherapy on reducing pain among adult patients with musculoskeletal disorder: A quasi-experimental clinical trial, *Frontiers in Nutrition*, 2021, Vol 8, p379, DOI: 10.3389/fnut.2021.717473
 9. Ali M, **Hossain A**. What is the extent of COVID-19 vaccine hesitancy in Bangladesh? A cross-sectional rapid national survey. *BMJ Open.* 2021 Aug 24;11(8):e050303. DOI: 10.1136/bmjopen-2021-050303. PMID: 34429316; PMCID: PMC8387740.
 10. Sultana, Z.Z., Hoque, F.U., Beyene, J., **Ahmed Hossain** HIV infection and multidrug-resistant tuberculosis: a systematic review and meta-analysis. *BMC Infect. Dis.* 21, 51 (2021). <https://doi.org/10.1186/s12879-020-05749-2>.
 11. Mosharop Hossain, Mohammad Hayatun Nabi, **Ahmed Hossain**, Nadira Sultana Kakoly, Individual and Occupational factors associated with low back pain: The First-ever oc-

cupational health study among Bangladeshi online professionals, *Journal of Preventive Medicine and Public Health*, January 2022.

12. Rownak Jahan Tamanna, M. Iftikhar Alam, **Ahmed Hossain**, Md Hasinur Rahaman Khan, On sample size calculation in testing treatment efficacy in clinical trials, *Biometrical Letters*, Vol. 58 (2021), No. 2, 133-147, DOI: 10.2478/bile-2021-0010.
13. Shakil Ahmed, Md. Golam Kibria, Morshed Alam, **Ahmed Hossain**, Psychometric Properties of the Bengali version brief Questionnaire on Smoking Urges (QSU-Brief), *Asian Pacific Journal of Cancer Prevention*, Volume 22 (2021), Issue 12, DOI: 10.31557/APJCP.2021.22.12.3857.
14. Ali M, Uddin Z, **Hossain A**. Prevalence and Patterns of Risk of Osteoporosis in Bangladeshi Adult Population: An Analysis of Calcaneus Quantitative Ultrasound Measurements. *Osteology*. 2021; 1(4):187-196. <https://doi.org/10.3390/osteology1040018>
15. MohammadAli, Zakir Uddin, Gias U.Ahsan and **Ahmed Hossain**, Association between daily commute and subjective health complaints among the office workers in an urban community, *Heliyon* Volume 7, Issue 8, August 2021, e07841, <https://doi.org/10.1016/j.heliyon.2021.e07841>.
16. Abedin M, Islam MA, Rahman FN, Reza HM, Hossain MZ, Hossain MA, Arefin A, **Hossain A**. Willingness to vaccinate against COVID-19 among Bangladeshi adults: Understanding the strategies to optimize vaccination coverage. *PLoS One*. 2021 Apr 27;16(4):e0250495. DOI: 10.1371/journal.pone.0250495.
17. Urme Binte Sayeed and **Ahmed Hossain** How Japan managed to curb the pandemic early on: Lessons learned from the first eight months of COVID-19. *Journal of Global Health* 2020;10:020390. <http://www.jogh.org/documents/issue202002/jogh-10-020390.htm>.
18. Rudbar Mahmood, Md. Shadly Benzadid, Sophie Weston, **Ahmed Hossain**, Tanveer Ahmed, Dipak Kumar Mitra, Shakil Ahmed, Dengue outbreak 2019: clinical and laboratory profiles of dengue virus infection in Dhaka city, *Heliyon (Elsevier)*, Volume 7, Issue 6, 2021, e07183, ISSN 2405-8440, <https://doi.org/10.1016/j.heliyon.2021.e07183>.
19. Mohammad Ali, Zakir Uddin, Nawara Faiza Ahsan, Muhammad Zahirul Haque, Monisha Bairagee, Sabbir Ahmed Khan, **Ahmed Hossain**, Prevalence of mental health symptoms and its effect on insomnia among healthcare workers who attended hospitals during COVID-19 pandemic: A survey in Dhaka city, *Heliyon (Elsevier)*, Volume 7, Issue 5, 2021, e06985, <https://doi.org/10.1016/j.heliyon.2021.e06985>.
20. Mohammad Ali, Zakir Uddin, **Ahmed Hossain** Economic stressors and mental health symptoms among Bangladeshi rehabilitation professionals: A cross-sectional study amid COVID-19 pandemic, *Heliyon (Elsevier)*, 2021, DOI: 10.1016/j.heliyon.2021.e06715.
21. Chowdhury, S.R., Sunna, T.C., Das, D.C., **Ahmed Hossain**, et al. Mental health symptoms among the nurses of Bangladesh during the COVID-19 pandemic. *Middle East Curr. Psychiatry (Springer)* 28, 23 (2021). <https://doi.org/10.1186/s43045-021-00103-x>
22. Mohammad Morshad Alam, Md Nazrul Islam, Mohammad Delwer Hossain Hawlader, Shakil Ahmed **Ahmed Hossain**, Prevalence of multidrug resistance bacterial isolates from infected wound patients in Dhaka, Bangladesh: A cross-sectional study, *International Jour-*

nal of Surgery Open (Elsevier), Volume 28, January 2021, Pages 56-62. <https://www.sciencedirect.com/science/article/pii/S2405857220301364>

23. Ali, M., Ahsan, G.U., Khan, R., **Ahmed Hossain** Immediate impact of stay-at-home orders to control COVID-19 transmission on mental wellbeing in Bangladeshi adults: Patterns, Explanations, and future directions. *BMC Res Notes* 13, 494 (2020). <https://doi.org/10.1186/s13104-020-05345-2>.
24. Md Hasinur R. Khan and **Ahmed Hossain**, Machine Learning Approaches Reveal that Number of Tests does not Matter to Predict Global COVID-19 Confirmed Cases, *Front. Artif. Intell.*, 2020, DOI: 10.3389/frai.2020.561801 <https://www.frontiersin.org/articles/10.3389/frai.2020.561801/abstract>
25. **Ahmed Hossain**, Bhupendra Niruala, Shangita Haldar, Shakil Ahmed (2020) Maternal profiles and Social determinants of severe acute malnutrition among under five years of age: A case-control study in Nepal, *Heliyon (Elsevier)*, 6(5):e03849. <https://doi.org/10.1016/j.heliyon.2020.e03849>
26. **Ahmed Hossain**, Saeem Hossain, Aneeka Fatema, Abrar Wahab, Morshed Alam, Nazrul Islam, Gias U. Ahsan, Mohammad Z. Hossain (2020), Age and Gender-specific Antibiotic Resistance patterns among Bangladeshi patients with Urinary Tract Infection caused by *Escherichia coli*, *Heliyon (Elsevier)*, Volume 6, Issue 6, June 2020, e04161. <https://doi.org/10.1016/j.heliyon.2020.e04161>
27. Md. Golam Kibria, Taslima Islam, Md. Shamim Miah, Shakil Ahmed and **Ahmed Hossain** (2020), Barriers to healthcare services for persons with disabilities in Bangladesh amid the COVID-19 pandemic, *Public Health in Practice (Elsevier)*, July 2020, 100027. <https://doi.org/10.1016/j.puhip.2020.100027>.
28. Mohammad Ali, GU Ahsan, **Ahmed Hossain** (2020) Prevalence and associated occupational factors for low back pain among the bank employees in Dhaka City, *Journal of Occupational Health (Wiley)* Vol 62 Issue 1. <https://doi.org/10.1002/1348-9585.12131>
29. **Ahmed Hossain**, Bhupendra Niruala, Shangita Haldar, Shakil Ahmed (2020) Maternal profiles and Social determinants of severe acute malnutrition among under five years of age: A case-control study of Nepal, *Heliyon (Elsevier)*, 6(5):e03849. <https://doi.org/10.1016/j.heliyon.2020.e03849>
30. Jisan Jisi, Shajjad Udash, Abrar Wahab, **Ahmed Hossain** (2019) Association between Internet addiction and Sleep quality among students: A cross-sectional study in Bangladesh, *Journal of Sleep and Biological Rhythms (Springer)*, 1-7, DOI: <https://doi.org/10.1007/s41105-019-00219-y>
<https://link.springer.com/article/10.1007/s41105-019-00219-y>
31. Alam MM, Hawlader DH, **Ahmed Hossain**, GU Ahsan (2019) Knowledge and practice towards Hepatitis B among Biological and Biomedical Sciences students in a Public University of Bangladesh, *Mymensingh Med J.* Apr;28(2):389-398. <https://pubmed.ncbi.nlm.nih.gov/31086156/>
32. Sadia Afrin, Anisur Rahman, **Ahmed Hossain** (2019) Maternal and Socio-demographic factors associated with the Birth weight of Newborns delivered at a teaching hospital of

Dhaka city, *Journal of medical research*, Vol 6, No 1 47-52.

33. Bhavana Shrestha, Zannatul Ferdoush and **Ahmed Hossain** (2018), Adherence to Medications among Nepali Hypertensive Population: A Hospital-Based Cross-Sectional Study, *Biomedical Research and Clinical Practice*, 2:1:8, DOI: 10.15761/BRCP.1000159
34. Taifur Rahman and **Ahmed Hossain** (2018) Effects of poor protein intake and in-house over-crowding on childhood tuberculosis in a low-income Bangladeshi Rural Community: A case-Control Study, *Journal of Infectious Diseases and Immune Therapies*, Vol 2, Issue 1.
35. Maruf Hasan, Abrar Wahab, Morshed Alam and **Ahmed Hossain** (2018), Socio-Demographic Risk factors of Surgical site infections in inguinal hernia surgery: A hospital-based case-control study, *Journal of Medical Sciences*, 2:1:8, DOI: 10.15761/BRCP.1000159
36. Kakon Farzana, Mohammad Omar Faruque and **Ahmed Hossain** (2018), Factors Affecting Therapeutic Compliance among the Patients with Rheumatic Heart Disease in Bangladesh, *Cardiovascular Journal*, 10(2): 180-185, DOI: 10.3329/cardio.v10i2.36289
37. Fazle Rabbi and **Ahmed Hossain** (2018), Prevalence and Occupational Factors Associated with Low Back Pain among the Female Garments workers: A Cross-Sectional Study in Bangladesh, *Global Perspectives in Medical Sciences*, 2: 2-8, DOI: 10.26535/gpms.v2i1.10
38. Paola Muti, Andrea Sacconi, **Ahmed Hossain**, Noa Bossel, Sabina Sieri, Vittorio Krogh, Franco Berrino, Francesca Biagioni, Sabrina Strano, Joseph Beyene, Yossi Yarden, Giovanni Blandino (2017) MiRNA-513a-5p Inhibits Progesterone Receptor Expression and Constitutes a Risk Factor For Breast Cancer: The ORDET Prospective Study, *Carcinogenesis*, 4, DOI:10.1093/carcin/bgx126.
<https://doi.org/10.1093/carcin/bgx126>
39. Sanjoy Sutradhar, GU Ahsan, Hayatun Nabi and **Ahmed Hossain** (2017) Occupational factors and Low Back Pain: A Cross-Sectional Study of Bangladeshi Female Nurses, *BMC Research Notes*, 10-173.
<https://bmcresearchnotes.biomedcentral.com/articles/10.1186/s13104-017-2492-1>
40. **Ahmed Hossain**, GU Ahsan and Hayatun Nabi (2017) An Integrated Approach for Identifying Genes Associated with Chemotherapy Resistance in High-grade Serous Epithelial Ovarian Cancer, *Advances in Oncology Research*, 3(1): 31-39. DOI: 10.18282/amor.v3.i1.173.
<http://www.advmolres.com/index.php/AMOR/article/view/173>
41. Samira Irfan, Mahabubul Islam, Omar Faruq, **Ahmed Hossain** (2017) Socio-Demographic Determinants of Adult Tuberculosis: A Matched Case-Control Study in Bangladesh, *American Journal of Infectious Disease*, 2:113. DOI : 10.3844/ajidsp.2017.32.37.
42. **Ahmed Hossain** and Tasnuva Ahmed (2017) Relationship between gestational weight and antenatal visits among third-trimester low-income women: A cross-sectional study in Bangladesh, *Journal of Pregnancy*. 1(3):1-5 DOI: 10.15761/JPR.1000116
43. Dilshad Afrin and **Ahmed Hossain** (2017) The school-level factors associated with internet addiction among adolescents: A Cross-Sectional Study in Bangladesh, *Journal of Addiction and Dependency*, 3(2): 170-174. DOI: 10.15436/2471-061X.17.1686

44. Mustapha Kabir Musa¹, Faisal Muhammad, Kabir Musa Lawal, A B M Alauddin Chowdhury and **Ahmed Hossain** (2017), Risk Factors of Severe Acute Malnutrition among Under-five Children: A Hospital-based Study in Bangladesh, *Journal of Medical Sciences and Health*, Sep-Dec 2017/Volume 3/Issue 3.
45. **Ahmed Hossain** and Orin Mithila (2016) Sleep duration and treatment compliance: A population-based cross-sectional study of hypertensive patients, *BMC Research Notes*, 2016, 9:271.
<http://bmcresnotes.biomedcentral.com/articles/10.1186/s13104-016-2075-6>
46. **Ahmed Hossain** and Hafiz T.A. Khan (2016) Identification of genomic markers correlated with Sensitivity in solid tumors to Dasatinib using sparse principal components, *Journal of Applied Statistics*, DOI: 10.1080/02664763.2016.1142941.
<http://www.tandfonline.com/doi/abs/10.1080/02664763.2016.1142941?journalCode=cjas20>
47. **Ahmed Hossain**, Hafiz Khan and Joseph Beyene (2015) Bayesian Regression Technique to estimate Area Under Receiver Operating Characteristic Curve and its application to MicroRNA data, *Annals of Biometrics and Biostatistics*, 2(1): 1013.
<http://jscimedcentral.com/Biometrics/biometrics-2-1013.pdf>
48. **Ahmed Hossain** and Joseph Beyene (2015) Application of Skew-Normal Distribution for detecting differential expression to MicroRNA data. *Journal of Applied Statistics*, 42 (3): 477-491.
<http://www.tandfonline.com/doi/abs/10.1080/02664763.2014.962490>
49. Paola Muti, Andrea Sacconi, **Ahmed Hossain**, Noa Bossel, Sabina Sieri, Vittorio Krogh, Franco Berrino, Francesca Biagioni, Sabrina Strano, Joseph Beyene, Yossi Yarden, Giovanni Blandino (2014) Downregulation of microRNAs 145-3p and 145-5p is a Long-Term Predictor of Postmenopausal Breast Cancer Risk: the ORDET prospective study, *Cancer Epidemiology, Biomarkers and Prevention*, 23(11):2471-8.
<https://www.ncbi.nlm.nih.gov/pubmed/25073626>
50. **Ahmed Hossain** and Joseph Beyene (2013) Estimation of Weighted Log partial Area Under the ROC Curve and its Application to MicroRNA Data, *Statistical Applications in Genetics and Molecular Biology*, 2(6): 743-755.
<https://www.ncbi.nlm.nih.gov/pubmed/24246291>
51. **Ahmed Hossain** and Joseph Beyene (2014) Analysis of Baseline, average and longitudinally measured blood pressure data using linear mixed model. *BMC proceedings*, 8 Supplement 1: S80.
<http://www.biomedcentral.com/1753-6561/8/S1/S80>
52. **Ahmed Hossain**, Andrew Willan and Joseph Beyene (2013) A flexible nonparametric approach to find candidate genes associated to disease in microarray experiments, *Journal of Bioinformatics and Computational Biology*, 11(2): 1250021
<https://www.ncbi.nlm.nih.gov/pubmed/23600812>
53. **Ahmed Hossain**, Andrew Willan and Joseph Beyene (2013) An Improved method on Wilcoxon Rank Sum Test for Gene selection from Microarray Experiments, *Communications in Statistics-Simulation and Computation* 42(7): 1563-1577.
<http://www.tandfonline.com/doi/abs/10.1080/03610918.2012.667479>

54. **Ahmed Hossain** and T.A.Khan (2010) Mixtures density estimation in lifetime data analysis: an application of nonparametric Bayesian estimation technique, *Journal of Statistics & Management Systems*, 13(3): 605-615.
http://www.tandfonline.com/doi/abs/10.1080/09720510.2010.10701490#.Ub_mmZV0G5c
55. **Ahmed Hossain**, Joseph Beyene and Andrew Willan (2009) A Flexible Approximate Likelihood Ratio Test for Detecting Differential Expression in Microarray Data, *Computational Statistics and Data Analysis*, 53(10): 3685-3695.
<http://www.sciencedirect.com/science/article/pii/S0167947309001212>
56. **Ahmed Hossain**, and Andrew Willan (2007) Approximate MLEs of the Parameters of location-scale Distribution under Type-II Censoring, *Statistics: A Journal of Theoretical and Applied Statistics*, 41(5): 385-394.
<http://www.tandfonline.com/doi/pdf/10.1080/02331880701395387>
57. Balakrishnan, N. and **Ahmed Hossain** (2007) Inference for the Type II Generalized Logistic Distribution under Progressive Type-II Censoring, *Journal of Statistical Computation and Simulation*, 77(12): 1013 – 1031.
<http://www.tandfonline.com/doi/abs/10.1080/10629360600879876>
58. **Ahmed Hossain** and T.A.Khan (2007) Risk factors for sleep disturbance and its effect on the quality of life: An analysis of retrospective cohort study of adults with neck injuries, *The Indian Journal of Sleep Medicine*. 2(3): 95-100.
<http://www.indianjournals.com/ijor.aspx?target=ijor:ijsm&volume=2&issue=3&article=005>
59. **Ahmed Hossain** and T.A.Khan (2007) Risk Factors of Coronary Heart Disease: An Analysis of Framingham Heart Study. *Indian Heart Journal*, 59: 147-151.
<http://www.ncbi.nlm.nih.gov/pubmed/19122248>
60. **Ahmed Hossain** and T.A.Khan (2007) Bayesian Analysis of Three-Way ANOVA Model and a Diagnostic Test for the Convergence of the Estimation, *Journal of Statistics & Management Systems*, 10(1):153-160.
<http://www.tandfonline.com/doi/abs/10.1080/09720510.2007.10701245#.UcCkj5V0G5c>

Technical Reports/ Books

1. COVID-19 and Bangladesh: Analytical report I, II and III. <http://www.northsouth.edu/news-events/covid-19-and-bangladesh-analytical-reports.html>.
2. Prevalence of disability among return to work injured workers. Published by GIZ.
3. Child labor in Rohingya and host community at Cox's Bazar, Bangladesh.
4. Burden of Non-communicable diseases in Bangladesh (Yet to be published by Universal press).

Experience

Professor

DEPARTMENT OF PUBLIC HEALTH

- <http://www.northsouth.edu/faculty-members/shls/pbh/>

North South University,
Dhaka.

May 2019- Continue

Director

GLOBAL HEALTH INSTITUTE

- <http://www.northsouth.edu/research-innovation/nghi.html>

North South University,
Dhaka.

May 2020- Continue

Director

HEALTH MANAGEMENT BD FOUNDATION

- <https://hmbdfoundation.org/researches/>

Research and Development,
Dhaka.

May 2016- Continue

Associate Professor

DEPARTMENT OF HEALTH SERVICES ADMINISTRATION,
College of Health Sciences

- Taught Courses: Epidemiology and Biostatistics.
- <https://www.sharjah.ac.ae/en/academics/Colleges/healthsciences>

University of Sharjah, United
Arab Emirates

August 2022- Continue

Associate Professor

DEPARTMENT OF PUBLIC HEALTH

- Taught Courses: Epidemiology II, Biostatistics I, Data Management and Analysis, Research Methodology.
- Supervised more than 100 students.
- Chaired the department of Public health from March 2016-September 2016.
- <http://www.northsouth.edu/faculty-members/shls/pbh/>

North South University,
Dhaka.

Jan 2015- April 2019

Principal Biostatistician

RESEARCH AND DEVELOPMENT

- Therapeutic Areas: Oncology, Cardiovascular, Asthma, and Allergy.
- Maintained and analyzed large databases (Phase I-Phase III) using SAS/ R and interpreted the results for Bio-pharmaceutics team.
- Provided statistical support in the planning of new studies
- Estimated appropriate sample size estimation for a design (Adaptive design, parallel design, and crossover design).
- Worked in a team environment with clinicians, statisticians, Programmers and others.

Pharma Medica Research
Inc., Mississauga, ON.,
Canada

April 14-Dec. 2014

Adjunct faculty for Summer course

SCHOOL OF OCCUPATIONAL AND PUBLIC HEALTH

- Taught course: Health informatics.

Ryerson University, Toronto,
Ontario, Canada.

Jan 2014- Dec 2015

CIHR Research Fellow

McMaster University,
Hamilton, Ontario, Canada.

DEPARTMENT OF CLINICAL EPIDEMIOLOGY AND BIostatISTICS

Jan 2012- Dec 2013

- Researcher in the SIGMA group under the supervision of Professor Joseph Beyene.
- Published 5 papers during the post-doctoral period
- Supervised 2 students
- Sessional Lecturer of a course: Statistical Genomics
- <http://www.safeandeffectiverx.com/trainees>

Senior Biostatistician, RD8

Toronto, Ontario, Canada.

APOTEX INC., BIOCLINICAL DEVELOPMENT

Feb 08- Dec 11

- Lead pharmacokinetic (PK) team in selecting a particular statistical tool for analyzing the highly variable drugs (Trospium, Omega 3, Atorvastatin etc.)
- Collaborated with other departments, e.g., Clinical development
- Performed statistical analysis for different phases of clinical trials and interpret results to PK people to ensure validity of conclusions.
- Developed and improved statistical methodologies for the need of design of experiments and the analysis to prove the bioequivalence.
- Provided randomization schemes, sample size, and power calculations.
- Wrote statistical reports and statistical section of protocols and data analysis plans.
- Reviewed and written protocol, SAP, and data analysis plan and finalize the report for outsourced studies.
- Presented statistical methods that were used in different projects.

Biostatistician (Research Associate)

Toronto, ON, Canada

CHILD HEALTH EVALUATIVE SCIENCE

Aug. 04- Feb. 2008

- Assisted with R coding and analysis of Microarray Gene Expression Data.
- Conducted and organized literature searches/ Systematic Review.
- Wrote report as a publishing format.
- Participated in weekly meetings and reading groups led by Dr. Joseph Beyene and his graduate students.
- Collaborated with other Research groups like STAGE, Biostatistics Methodology Unit etc.

Senior Lecturer

East West University, Dhaka

DEPARTMENT OF MATHEMATICS AND PHYSICS

May 04-Aug. 2004

- Taught courses: Sampling Techniques and Inference.

Teaching Assistant

McMaster University and
University of Toronto,
Canada

DEPARTMENT OF CLINICAL EPIDEMIOLOGY AND BIostatISTICS (Mc.U.) AND
DALLA LANA SCHOOL OF PUBLIC HEALTH (UOFT)

Sep. 02-April 2007

- Taught Courses: Biostatistics I and II, Categorical Data Analysis, Introduction of Statistics including MINITAB.

Lecturer

University of Dhaka

DEPARTMENT OF STATISTICS, INFORMATICS AND BIostatISTICS

Apr 01-Aug. 2002

- Taught Courses: Biostatistics I and II, Survival Analysis and SAS.

Computer Skills

Statistical S-Plus/R, SAS, MINITAB, SPSS and WINBUGS.

Operating Systems Linux, UNIX, Windows, Mac-OS.

Language LATEX.

Data Management Microsoft SQL server 2008.

HTML Skills

Proficient in HTML code writing and built the following websites:

1. http://individual.utoronto.ca/ahmed_3/
2. <http://beyene-sigma-lab.com/index.html>

Software: Statistical Package for R

An R package for estimating the summary measures of receiver operating characteristic (ROC) curves and their standard errors. It also provides a statistic of weighted log partial area under the curve. These functions are targeted at the use of high-dimensional data analysis.

Package name: WLPaUC

Website http://individual.utoronto.ca/ahmed_3

Funding/ Grants

Stichting Vluchteling, Laan van Nieuw Oost-Indië 131 M, 2593 BM The Hague, The Netherlands, 2022

Promoting Equitable Access to COVID-19 Vaccinations for the Most Vulnerable Groups among Rohingya Refugees and Host Communities (August 2022- September 2022) (**Principal Investigator**) (\$20000.00)

International Rescue Committee (IRC), 2022 Evaluation of Child Labor Situation in The Context of Rohingya And Host Community in Cox's Bazar, Bangladesh. (January 2022- June 2022) (**Principal Investigator**) (\$20000.00)

CDD and GIZ, 2022 Disability Prevalence and Barriers to Inclusion Survey at the Baharchara Union of Teknaf Upazilla in Cox's Bazar, Bangladesh (**Principal Investigator**)

Consortium project: GIZ, CRP and BBDN, 2022 Develop a curriculum for health professionals working in the RMG industry to learn how to address prevalent work-related and occupational diseases (February 2022-April 2022) (**Principal Investigator**) (\$20000)

Bangladesh Medical Research Council (BMRC) Research grant, 2022 Chronic illness-related suffering and understanding the needs for palliative care. (**Principal Investigator**)

OBAT Helpers, USA 2022 Evaluation of health care needs of people from a remote area beside Jamuna river in Tangail. (**Principal investigator**).

Consortium project with IRC, Concern Worldwide, and BBC Media Action, 2021 Delivering Health, Nutrition, and Livelihood, and Protection services for Rohingya Refugees and vulnerable host communities in Cox's Bazar, Bangladesh. (March 2021- August 2021) (**Principal Investigator**) (\$20000.00)

R2HC's Call 8, 2020 Health care needs and appropriateness of rehabilitation programs for the elderly population in Rohingya and host community of Bangladesh (Seed fund £10000) (**Co-investigator**)

R2HC's Call 7, 2019 Alleviating neglected suffering: Community-based responses to the palliative care gap in refugee camps, (Seed fund £10000) (**Co-investigator**)

DGHS/LD/NCDC/ Procurement Plan/ GOB (Service) /2018-2019/2018/SP-10/5589 January 2019- August 2019, **Research Investigator** (Taka 16000000, One core sixty lacs taka). Project title: Baseline Public Health situational analysis for implementing a "Healthy City" project to combat non-communicable diseases in Dhaka North Khulna City Corporation of Bangladesh.

GIZ and CDD February 2019- November 2019, **Principal Investigator** (Taka 570300, Fifty-seven lacs and three hundred taka) Project title: Prevalence of disabled workers due to work injuries and occupational diseases in the textile and leather sectors in Bangladesh.

North South University Internal Research grant, 2017 July 2019- June 2020, \$5000 (**Principal Investigator**) Project title: Pattern and Magnitude of illicit substance use among Adolescents from Rehabilitation Centers: A Mixed Method Study in Urban Contexts.

Bangladesh Medical Research Council (BMRC) June 2017- May 2018, \$8000 (**Principal Investigator**) Project title: Associated factors of an adequate number of Antenatal Care Visits (ANCs) among low-income women.

North South University Internal Research grant, 2017 July 2017- June 2018, \$5000 (**Principal Investigator**) Project title: Models of lung cancer risk to smoking.

Edward M Kennedy Center small grant 2018 July 2018- May 2019, \$10000, (Principal Investigator) Project title: Effective School Health and Nutrition for Adolescents (ESHNA) program in a rural area of Bangladesh.

North South University, University of Maryland and NASA collaborative fund April 2016- March 2018, \$300000. (**Principal Investigator**: Professor Anawarul Haq, University of Maryland).

Canadian Institute of Health Research Feb 2012- March 2014, \$72000. (**Principal Investigator**: Ahmed Hossain).

Hospital for Sick Children Research Training Fellowship (RESTRACOMP) July 2005-August, 2008, \$67800.00 for 3 years. (**Principal Investigator**)

KMH fellowship, University of Dhaka Sept 1998-Aug 2000, \$1500 per year to cover tuition fees.

A Few Newspaper Writings

1. Resistance to Antibiotic: An Ignored Enemy at COVID-19, July 5, 2020 <https://www.daily-sun.com/printversion/details/491581/Resistance-to-Antibiotic:-An-Ignored-Enemy-at-COVID-19-fbclid=IwAR0kFCSjZXVR16rzAvAbUwpTA6QCaetmr6hYC1-YX00SVCF5thIta4sLdDw>.
2. Taking Care of Child Begins with Taking Care of Mom. Daily Sun: 18 March, 2020 12:00 AM <https://www.daily-sun.com/printversion/details/469941/Taking-Care-of-Child-Begins-with-Taking-Care-of-Mom>
3. Healthy Lifestyles to Tackle High Blood Pressure. Daily Sun: 14th February, 2020 10:59:20 <https://www.daily-sun.com/post/462169/Healthy-Lifestyles-to-Tackle-High-Blood-Pressure>

4. When a doctor is at fault. Published in Dhaka Tribune: March 28, 2019
<https://www.dhakatribune.com/opinion/op-ed/2019/03/28/when-a-doctor-is-at-fault>
5. Can Doctors in Bangladesh make mistakes? Daily Sun: March 27, 2019
<https://www.daily-sun.com/printversion/details/380641/2019/03/27/Can-Doctors-in-B>
6. Why sleep problems among students are not an alarming issue in Bangladesh?, Daily Sun, 28 June, 2018
<https://www.daily-sun.com/printversion/details/318191/2018/06/28/Why-sleep-problems-among-students-are-not-an-alarming-issue-in-Bangladesh>
7. The neglected health problem of female garments workers, BDnews24, October 27, 2017.
<https://opinion.bdnews24.com/2017/10/27/the-neglected-health-problem-of-female-ga>
8. Can we dream of a smoke-free Dhaka? Published in Dhaka Tribune: 01:16 September 3, 2015.
<http://www.dhakatribune.com/op-ed/2015/sep/03/can-we-dream-smoke-free-dhaka>
9. Can we be a healthier nation? Published in Dhaka Tribune: 00:42 June 1, 2015
<http://www.dhakatribune.com/op-ed/2015/jun/01/can-we-be-healthier-nation>
10. Childhood obesity: A public health problem, Published in The Daily Star: 12:00 April 1, 2016
<http://epaper.thedailystar.net/index.php?opt=view&page=14&date=2016-04-01>
11. Chewing the fat, Published in Dhaka Tribune: 00:09 April 7, 2016.
<http://www.dhakatribune.com/op-ed/2016/apr/07/chewing-fat>
12. Connected and addicted, Dhaka Tribune: 12:02 AM December 11, 2016.
<http://www.dhakatribune.com/opinion/op-ed/2016/12/11/connected-and-addicted/>

Supervisory Students

Ph.D. student (2) Co-supervisor (2022-) for Georgia Venner (email: Georgia.Venner@lshtm.ac.uk) at The London School of Hygiene & Tropical Medicine, UK.
Co-supervised in 2017-2020 for Abdulaziz Alodailah from University of Sydney, Department of Public Health. E-mail: azziz.sa@gmail.com.

MPH Students (168) Department of Public Health, North South University.

MPhil students (2) University of Professionals, Dhaka.

MSc Students (2) Department of Clinical Epidemiology and Biostatistics, McMaster University, Canada.

Reviewer: List of 10 journals

1. The Lancet (4)
2. The Lancet Global Health (7)
3. The Lancet regional health -Europe (3)
4. PLOS ONE (37)

5. BMC Research Notes (112)
6. Public Health Nutrition (6)
7. Statistical applications in genetics and molecular biology (5)
8. Journal of Statistical Computation and Simulation. (6)
9. The Journal of Rheumatology (5).
10. BMJ Open (23)
11. Frontiers in Nutrition (7)

Award and Scholarships

- BMRC Research grant award, 2017, 2019 and 2022
- North South University Internal Research Fund award, 2016, 2019, 2020, and 2021
- Travel Award Winner from Genetic Analysis Workshop 18 (Portland, USA) in November 2012.
- Travel Award winner for Statistical Society of Canada (SSC) presentation from SickKids (Newfoundland) in 2007.
- Recipient of Apotex Award for excellent performance in analytics in 2009.
- University Open Scholarship (2004/09-2010), University of Toronto, Canada.
- University Scholarship (2002/09-2004/04), McMaster University, Ontario, Canada.
- Higher Secondary Scholarship, University of Dhaka, (1996-2000).

Leadership and Professional Memberships

Director (May 2020- Continue) NSU Global Health Institute, Dhaka.

Advisor (September 2019- Continue) Center for Development Action, Dhaka.

Chairman (March 2016- July 2016) Department of Public Health, North South University, Dhaka.

Director (August 2016- Continue) Research and Development, Health Management BD Foundation, Dhaka.

Member (July' 2017-Continue) American Public Health Association (APHA).

President (September' 2007-August'2008) Biostatistics Union of Graduate Students (BUGS), University of Toronto, Canada.

Ph.D. Representative (September' 2005-August'2006) Biostatistics Union of Graduate Students (BUGS), University of Toronto, Canada.

Treasurer (September' 2004-August'2005) Biostatistics Union of Graduate Students (BUGS), University of Toronto, Canada.

Member Statistical Society of Canada (Since 2003) Member American Statistical Association (2013). Member American Public Health Association

Member, 2017 Scientific Committee, International Conference on Genetics, Nanotech and Bio-engineering.

Continuing Education/ Training/ Conferences

- Featured in Your Dalla Lana, University of Toronto, Vol 17 - June 2021, <https://mailchi.mp/utoronto/your-dalla-lana-vol-17?fbclid=IwAR1ddFcZpMyLWlAym-kErG5imnzznNjazsyt>
- Invited speaker, The 2nd international conference of South Asian Institute of Social Transformation, August, 2022.
- Invited speaker, Workshop on Disaster risk reduction (DRR) and health, University of Dhaka, March 2022.
- Featured in The Bridges., North South University <http://institutions.northsouth.edu/oea/wp-content/uploads/2021/01/The-Bridge-Issue-16.pdf>
- Member, NSU Center for peace studies (since 2021). <https://www.cpsnsu.org/people/>
- Certificate course on Research in Global Health Emergencies: Ethical Issues, The Global Health Network. July 4, 2020.
- Conference invited speaker, Impacts, Consequences and Responses to COVID-19 in Bangladesh: A Human Security Approach for Health and wellbeing, June 18, 2020.
- 41st Annual Conference of the International Society for Clinical Biostatistics, August 23-27, 2020, Poland.
- The 5th International Conference on Public Health, Thailand July 2018.
- The 12th International Congress on AIDS in ASIA and the Pacific (ICAAP) Dhaka. November 2015.
- Joint Statistical Meeting 2013, Montreal, Canada: August 2-8, 2013.
- Workshop on Skewed statistical models and applications, McMaster University, May 16-17, 2013.
- OVID Journal Search Training, Department of Clinical Epidemiology and Biostatistics, McMaster University. (Short course, February 2013)
- Effective Scientific Writing, (1 day Course, University of Toronto, March 2013)
- Build your website by HTML (Online training, 2012).
- RefWorks Training. Department of Clinical Epidemiology and Biostatistics, McMaster University. (Short course, January 2013)
- Oral Presentation Skills, University of Toronto, Toronto ON (short course, 2010)
- Becoming a better editor of your own work, University of Toronto, Toronto ON (short course, 2010)
- Academic Essay Writing, University of Toronto, Toronto ON (short course, 2009)
- Statistical Society of Canada Conferences 2002, 2006, 2009 and 2012.