**Mohammad Nayeem Hasan**

1st floor, Rahib Mansion, Uttar Dikkul, Cox’s Bazar Sadar, Cox’s Bazar, Bangladesh

**E-mail:** [nayeem5847@gmail.com](mailto:nayeem5847@gmail.com) (personal), [nayeem@cpi-ypsa.org](mailto:nayeem@cpi-ypsa.org) (professional), **Cell:** +8801671912637

**Web of Science:** <https://www.webofscience.com/wos/author/record/G-9469-2019>

**LinkedIn:** <https://www.linkedin.com/in/nayeem5847/> **Website:** <https://nayeemlab.github.io/>

**Education**

* **Master of Science (M.S.)** in Statistics, Shahjalal University of Science and Technology **(SUST)**, 2018, **Dissertation:** Assessment of Ground Water Quality in the Vicinity of Sylhet City, Bangladesh: A Multivariate Analysis
* **Bachelor of Science (B.Sc.)** in Statistics, SUST, 2016
  + **Second Major** in Computer Science and Engineering **(Double Major)**, SUST

**Professional Experiences, Joint Rohingya Response (Humanitarian) Program**

1. **Monitoring and Evaluation Officer**, Community Partners International, Cox’s Bazar (Feb-2023 to present)

**Responsibilities:** Participating in monitoring, evaluation, and research activities

2. **Health Information System Officer**, Food for the Hungry, Cox’s Bazar (Mar-2022 to Feb-2023)

**Responsibilities:** Preparing and submitting all types of qualitative and quantitative health facility reports

3. **Management Information System Officer**, Partners in Health & Development (Feb-2021 to Feb-2022)

**Responsibilities:** Participating in monitoring, designing, and assessing health projects

**Statistical Programming Language & Analytical Skills**

* Analytical skills with **R, Python, SPSS, SAS, and STATA** (<https://github.com/nayeemlab>)
  + Research methodology, machine learning, data mining, regression analysis, forecasting, multivariate techniques, survival analysis parametric, nonparametric analysis, etc.
* Skilled in **MS Office, Pivot Table, Kobo Toolbox** & **Power BI**

**Research Experiences (Projects), associated with University Research Center (URC), SUST**

1. **Research Assistant,** Vicious Cycle of Poverty in Haor Region of Bangladesh: Impact of Formal and Informal Credit, Sponsored by the Ministry of Education under the Grant of Advanced Research in Education (GARE), **Duration:** Jul 2020 - Dec 2020, **Grant:** Tk. 15,00,000.00

2. **Research Assistant,** Effectiveness of Some Selected Promotional Social Safety Nets Programs in Bangladesh: Formulation for Future Strategies, Financed by The Social Science Research Council, Planning Division, Ministry of Planning, **Duration:** Jan 2020 - Jun 2020, **Grant:** Tk. 6,00,000.00

3. **Research Assistant,** Reducing the Errors in the Measurement of Food Security in Bangladesh through Development and Implementation of an Innovative Method, Sponsored by The Ministry of Education, Government of Bangladesh under GARE, **Duration:** Jan 2019 - Jun 2019, **Grant:** Tk. 18,00,000.00

**Publications (Journal)**

1. Haider N, **Hasan MN**, et al. Global Landmark: 2023 Marks the Worst Year for Dengue Cases with Millions Infected and Thousands of Deaths Reported. ***IJID Regions*** 2024 (**Article:** [**The Guardian**](https://www.theguardian.com/global-development/2024/oct/23/dengue-fever-record-cases-in-2024-so-far-what-is-driving-the-worlds-largest-outbreak))

2. Ghosh S, **Hasan MN**, et al. Rabies control in Bangladesh and prediction of human rabies cases by 2030: a One Health approach. ***The Lancet Regional Health - Southeast Asia***2024

3. Ullah MA, Mim AS, **Hasan MN**, et al. Deep Learning Based Forecasting Models of Dengue Outbreak in Bangladesh: Comparative Analysis of LSTM, RNN, and GRU Models Using Multivariate Variables with a Two-Decade Dataset. ***IEEE*** 2024

4. **Hasan MN**, et al. Two decades of endemic dengue in Bangladesh (2000–2022): trends, seasonality, and impact of temperature and rainfall patterns on transmission dynamics. ***J Med Entomol*** 2024

5. Haider N, **Hasan MN**, *et al.* The 2022 dengue outbreak in Bangladesh: hypotheses for the late resurgence of cases and fatalities. ***J Med Entomol*** 2023

6. **Hasan MN**, *et al.* Early childhood developmental status and its associated factors in Bangladesh: a comparison of two consecutive nationally representative surveys. ***BMC Public Health*** 2023

7. Haider N, **Hasan MN**, *et al.* The disproportionate case-fatality ratio of COVID-19 between countries with the highest vaccination rates and the rest of the world**. *IJID Regions*** 2023

8. **Hasan MN**, *et al.* Knowledge of HIV/AIDS among married women in Bangladesh: analysis of three consecutive multiple indicator cluster surveys (MICS). ***AIDS Res Ther*** 2022

9. **Hasan MN**, *et al.* The Global Case-Fatality Rate of COVID-19 Has Been Declining Since May 2020. ***Am J Trop Med Hyg*** 2021

10. **Hasan MN**, *et al.* Cesarean delivery and early childhood diseases in Bangladesh: An analysis of Demographic and Health Survey (BDHS) and Multiple Indicator Cluster Survey (MICS). ***PLOS One*** 2020

11. Haider N, Yavlinsky A, Chang YM, **Hasan MN**, *et al.* The Global Health Security Index and Joint External Evaluation score for health preparedness are not correlated with countries’ COVID-19 detection response time and mortality outcome. ***Epidemiol Infect*** 2020

**Reviewer activities**

|  |  |  |
| --- | --- | --- |
| Journal of Health, Population and Nutrition | Scientific Reports | BMC |
| Research in Health Services & Regions | PLOS Global Public Health | PLOS ONE |

**Board Memberships, Professional Associations, and Affiliations**

|  |
| --- |
| * **Editorial board member**, PLOS ONE & Frontiers in Water (2023 to present) * **Biostatistician**, Biostatistics, Epidemiology and Public Health Research Team (2023 to present) * **Team Leader,** Research & Reporting Team, UNITY Bangladesh (2022 to present) * **Researcher,** Biomedical Research Foundation (2021 to present) |

**Conferences**

1. **Oral presentation** on “Global case-fatality rate of COVID-19 is declining since May 2020” at the “World One Health Congress 2020” Conference.

2. **Oral presentation** on “A Comparison of Logistic Regression and Linear Discriminant Analysis in Predicting of Female Students Attrition from School in Bangladesh” at the “Electrical Information & Communication Technology 2019” Conference.

3. **Oral presentation** on “Association between exclusive breastfeeding and common childhood diseases in Bangladesh” in the “Data Science and SDGs: Challenges, Opportunities, & Realities 2019” Conference.

**Mentorship experiences**

1. “**Workshop on Data Analysis Using SPSS**" organized by **OGIVE Analytics**

2. "**Statistics and Data Analysis for Research**" which is under the "Autumn 2020 Research Internship Program" organized by **Chittagong University Research and Higher Study Society**

3. “**Workshop on Data Analysis**” organized by **SUST Science Arena**

**Training participations**

|  |  |
| --- | --- |
| **“R for Bioinformatics”** by **CHIRAL**  **“Astronomical Data Analysis”** by **CAM\_SUST** | **“Professional Report Writing Skills”** by **BDJOBS**  **“Research Techniques on Social Sciences”** by **URC** |

**Extra Co-curricular Activities**

|  |  |
| --- | --- |
| **Clean-up Campaign:** ‘‘DESHTAKE PORISHKAR KORI (Let’s clean-up the country)” | **Campus Ambassador, SUST,** Worldwide Organization for Charity & English Olympiad |