

Md. Rasel Biswas

CONTACT INFORMATION	Assistant Professor Institute of Applied Statistics and Data Science (IASDS) University of Dhaka, Bangladesh	+8801752441075 rasel@du.ac.bd https://rasel.rbind.io
RESEARCH INTERESTS	Survival Analysis, Causal Inference, Public Health Statistics, Survey Data Analysis, Statistical Computing, Machine Learning, Reproducible Research, Data Visualization	
EDUCATION	Institute of Statistical Research and Training (ISRT) (now Institute of Applied Statistics and Data Science–IASDS), University of Dhaka M.S., Applied Statistics , February 2022 ◊ Thesis: <i>Evaluation of the Methods for Multi-Parameter Hypothesis Testing in Multiple Imputation</i> ◊ Advisor: A.H.M. Mahbub Latif, Ph.D ◊ Result: GPA 4.00/4.00 ◊ Merit Position: First B.S., Applied Statistics , February 2020 ◊ Thesis: <i>The Impact of Sample Sizes on the Accuracy of Estimates for a Multi-Level Logistic Regression Model</i> ◊ Advisor: Ms. Noor Jahan Aktar ◊ Result: CGPA 3.96/4.00 ◊ Merit Position: First	
ACADEMIC POSITIONS	Assistant Professor Institute of Applied Statistics and Data Science (IASDS), University of Dhaka	Nov 2025 – Present
	Part-time Lecturer Department of Psychology, University of Dhaka	Sep 2025 – Present
	Teaching Fellow MPH Program, James P Grant School of Public Health, BRAC University, Bangladesh	Mar 2022 – Apr 2022
	Lecturer Institute of Statistical Research and Training (ISRT), University of Dhaka	Jul 2022 – Nov 2025
	Graduate Student Tutor Institute of Statistical Research and Training (ISRT), University of Dhaka	Mar 2020 – Sep 2020
COURSES TAUGHT	Institute of Applied Statistics and Data Science, University of Dhaka ◊ CSE331: Python for Data Science (2025–2026) ◊ AST230: R for Data Science (2024–2026) ◊ AST305: Lifetime Data Analysis I (2025–2026) ◊ AST301: Design and Analysis of Experiments II (2022–2024) ◊ AST405: Lifetime Data Analysis (2024) ◊ AST403: Multivariate Statistics II (2023) ◊ AST406: Research Methodology and Social Statistics (2022, 2023)	

◇ AST332: Statistical Computing VIII (2022, 2023)

Department of Psychology, University of Dhaka

◇ PSY206: Data Management and Analysis (2025)

James P Grant School of Public Health (Teaching Fellow)

◇ MPH 521: Biostatistics (Lab) (2022)

ADVISING AND
MENTORING

University of Dhaka, Bangladesh

Master's Projects Supervised

- ◇ Samiul Ehsan (MS Session 2022–23): “The Impact of Maternal Employment on Child Nutritional Diversity in Bangladesh: A Causal Forest Analysis with Clustered Data” [[Journal paper link](#)]
- ◇ Tanjim Ahmed Ardi (MS Session 2022–23): “Investigating the Role of Rural Residence in Early Marriage in Bangladesh: A Causal Analysis Approach”

Undergraduate Projects Supervised

- ◇ Saiyeda Tasmia Ahmed (BS Session 2023–24): “Factors Influencing Age at First Birth in Bangladesh: A Survival Analysis Approach”
- ◇ Rabiul Alam Nayem (BS Session 2023–24): “Investigating the Timing of First Antenatal Care Among Women in Bangladesh: A Survival Analysis Approach”
- ◇ Tayaba Cheragee Prachee (BS Session 2022–23): “Exploring the Socioeconomic Determinants of Dietary Diversity in Rural Bangladesh: A Longitudinal Study” [[Journal paper link](#)]
- ◇ Md. Al Amin (BS Session 2022–23): “Modelling and Forecasting Maximum Temperature of the Dhaka City”
- ◇ Jannatul Yasmin (BS Session 2022–23): “Knowledge of HIV/AIDS Among Married Women: Comparison Between Three South Asian Countries”
- ◇ Md. Aminul Islam Shazid (BS Session 2021–22): “Factors Associated with Fertility: A Poisson Regression Approach”

RESEARCH
GRANTS

1. A Comparison of Ultrasound Therapy, Microwave Diathermy, and Interferential Therapy for Frozen Shoulder in Patients with Diabetes
 - ◇ **Co-Investigator**; funded by the University Grants Commission, Bangladesh
 - ◇ **Duration**: June 2026–Present
2. FertiMeter: Screening for Polycystic Ovary Syndrome and Reducing Adverse Pregnancy Outcomes in Bangladesh
 - ◇ **Co-Investigator**; funded by Department of Foreign Affairs, Trade and Development, Canada
 - ◇ **Duration**: April–November 2025; **Output**: Two Q1 journal articles

RESEARCH
PUBLICATIONS

Published

1. Tanvir, K. M., Hossain, S. S., Turin, H. M., Mahiuddin, M., Ara, T., Faiza, M., Islam, M., Sabbir, A., **Biswas, M. R.**, Islam, T., Khan, T., Ether, S. T., Hossain, I. A., and Ahmed, A. (2026). Non-clinical symptoms associated with polycystic ovary syndrome: evidence from a comparative study in Bangladesh. *Journal of Global Health*, 16, 04314.
2. Tanvir, K. M., Faiza, M., **Biswas, M. R.**, and Ahmed, A. (2026). Dietary patterns among women with polycystic ovary syndrome in Bangladesh: A cross-sectional comparison with women without PCOS. *BMC Women's Health*. Advance online publication.
3. Barua, P., Sultana, F., **Biswas, M. R.**, Das, P., and Musa, S. (2026). Intestinal parasitic infections among adult staff from a public university residential halls in

Bangladesh. *Bangladesh Journal of Zoology*, 54(1), 97-112.

4. Tanvir, K. M., Faiza, M., Hossain, S. S., Shahriyar, S. M., Islam, T., Chowdhury, M. D. E. H., Sabbir, A., Turin, H. M., Islam, M., Mahiuddin, M., Akter, T., **Biswas, M. R.**, Ameen, S., Ether, S. T., and Ahmed, A. (2026). FertiMeter: A Machine Learning-Based Mobile Application for Self-Screening of Polycystic Ovary Syndrome. *IEEE Access*, 14, 102558-102576.
5. Sultana, F., Barua, P., Mishu, I. D., **Biswas, M. R.**, and Musa, S. (2026). Prevalence of Intestinal and Urinary Parasitic and Bacterial Pathogens Among Staffs of Four Residential Halls of a Public University in Bangladesh. *BioResearch Communications*, 12(1), 1981-1990.
6. Prachee, T. C., **Biswas, M. R.**, and Islam, S. (2025). Exploring the Socioeconomic Determinants of Dietary Diversity in Rural Bangladesh: A Longitudinal Study. *PLOS ONE*, 20(2), e0317623.
7. Ehsan, S. and **Biswas, M. R.** (2025). The Impact of Maternal Employment on Child Nutritional Diversity in Bangladesh: A Causal Forest Analysis with Clustered Data. *Journal of Statistical Research*, 58(2), 317-333.
8. Barua, P., Saha, S., Banik, K. S., **Biswas, M. R.**, Das, P., and Musa, S. (2025). Parasitic Contamination of Street Foods from University of Dhaka Campus: Implications for Faecal-Oral Transmission. *Bangladesh Journal of Zoology*, 53(2), 201-208.
9. Barua, P., Mahjuba, S., **Biswas, M. R.**, Alamgir Khan, A., Rahman, M. K., and Musa, S. (2024). Socio-Demographic Factors Associated with the Knowledge, Attitude and Practice (KAP) of Dengue Patients of Dhaka City During 2021 Dengue Outbreak. *Bangladesh Journal of Zoology*, 52(2), 167-184.
10. Barua, P., Mahjuba, S., Khan, A. A., **Biswas, M. R.**, Rahman, M. K., and Musa, S. (2024). Clinical Manifestations and Seasonal Occurrence of Patients With Dengue Hospitalized at Dhaka City of Bangladesh in 2021. *Dhaka University Journal of Biological Sciences*, 33(1), 33-46.

HONORS AND AWARDS

- ◇ **Certificate of Appreciation**, for contribution as a *Teaching Fellow* in MPH Program, James P Grant School of Public Health, 2022.
- ◇ **National Science and Technology Fellowship**, awarded for M.S. thesis research, Government of Bangladesh, 2020.
- ◇ **ISRT Golden Jubilee Gold Medal Award**, for graduating top of the class in B.S. Honors, University of Dhaka, 2020.
- ◇ **Dean's Honor Award**, Faculty of Science, University of Dhaka, awarded for outstanding result in B.S. in Applied Statistics, 2020.
- ◇ **Qazi Motahar Hossain Award**, University of Dhaka, for M.S. and B.S. results, 2020, 2022.
- ◇ **ISRT Merit Stipend**, University of Dhaka, for the B.S. results, 2017, 2018, 2019, and 2020.
- ◇ **Moulovi Ahmed Ullah Memorial Trust Fund Stipend**, University of Dhaka, for the B.S. 2nd year result, 2017.

CONFERENCE PRESENTATIONS

- Conference on the Role of Statistics and Data Science in 4IR (**ICRSDS4IR**) 2024
 - ◇ Presented work: *Evaluation of the Methods for Multi-Parameter Hypothesis Testing in Multiple Imputation: A Focus on Correlated Responses*
 - ◇ Location: Rajshahi, Bangladesh
- International Conference on Applied Statistics (**ICAS 2019**) 2019
 - ◇ Presented work: *The Impact of Sample Sizes on the Accuracy of Estimates for a Two-level Logistic Regression Model*

	◇ Location: Dhaka, Bangladesh
TRAINING INSTRUCTOR	◇ Instructor, Bangladesh Civil Service Administration Academy; delivered 10+ hours of SPSS training under the 139th, 143rd, and 147th Law and Administration Courses, Jul 2025, Dec 2025, and June 2026. ◇ Instructor, Bangladesh Bureau of Statistics; designed and delivered 12+ hours of hands-on Stata training for statistical analysis (materials), Jun 2025. ◇ Instructor, Bangladesh Agricultural Research Council; delivered sessions on unsupervised learning and regression analysis (materials), May 2025. ◇ Coordination Team Member, ISRT, University of Dhaka; conducted 12 hours of lab sessions for government officials, Jan 2023.
PROFESSIONAL TRAINING	Report Writing Workshop on Bangladesh Demographic and Health Survey (BDHS) 2022 The DHS Program & NIPORT, Dhaka Aug 6–14, 2023 ◇ Completed intensive training on survey data analysis and report writing. ◇ Contributed as an author to the BDHS 2022 Final Report. Foundation Certificate in University Teaching & Learning IQAC, University of Dhaka & BARD, Cumilla May 24 – Jun 6, 2024 ◇ Completed a 14-day residential training on higher education pedagogy.
TECHNICAL SKILLS	◇ Programming: R (tidyverse, ggplot2), Python, Stata, SPSS ◇ Reproducible Research: Quarto, R Markdown, L^AT_EX, Git, GitHub
VOLUNTARY SERVICES	Editorial Assistant, Journal of Statistical Research 2022–2026 ◇ Provided L^AT_EX support; prepared galley proofs for 50+ articles in this Scopus-indexed journal. Member, Website Committee, IASDS, University of Dhaka 2026–Present ◇ Manage website content and official social media (@isrt.ac.bd). Organizing Committee Member International Conference on Applied Statistics and Data Science (ICASDS 2025) ◇ Prepared the programme and abstract booklet using R and Quarto. Sports Advisor, IASDS, University of Dhaka 2022–Present ◇ Support student sports activities and coordination.
PROFESSIONAL MEMBERSHIPS	◇ <i>Life Member</i>, Bangladesh Statistical Association (BSA) ◇ <i>Life Member</i>, IASDS Alumni Association, University of Dhaka