

MD. SAKHAWAT HOSSAIN

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PERSONAL DETAILS

Date and Place of Birth: January 01, 1984, Joypurhat, Bangladesh.

Gender: Male, Nationality: Bangladeshi, Marital status: Married

Permanent address: Village: North Jamalpur, P.S.: Joypurhat, Dist.: Joypurhat- 5900

CAREER SUMMARY

Hardworking and self-motivated with in research, monitoring, evaluation, data science and analytics, and information management. A bachelor's degree and MSc qualification in statistics and over ten years of working experience in the research and development program. A mathematically inclined individual with a penchant for statistics and the ability to find valuable information buried deep in the numbers. Experience in study design, study survey, data management, subject tracking, baseline survey, program monitoring and evaluation, data analysis, information management, knowledge management, statistics, situation analysis, outbreak investigation, endemicity analysis, cross-border surveillance, analysis of DHIS2 data, report writing, GIS and producing visual presentations and dashboards of various epidemiological studies and health programs. It was established proficient in statistical skills like making regression models, using predictive models, and knowing different risks. Assist and facilitate the management of reporting requirements such as national and global infectious diseases reports and national reports on the progress of the SDGs.

EDUCATION

2006-2008 Masters of Science in Statistics
Rajshahi University, Rajshahi, Bangladesh.
<https://www.ru.ac.bd>

2001-2006 Bachelor of Science in Statistics
Rajshahi University, Rajshahi, Bangladesh.
<https://www.ru.ac.bd>

PROFESSIONAL DIPLOMA

Course Name : Diploma in Web Presence Solution and Implementation under IT Scholarship
Project Round - 8 of IDB-BISEW.

Course & Training Conducted by: Islamic Development Bank-Bangladesh Islamic Solidarity Educational Wakf (IDB-BISEW) (Web: www.idb-bisew.org)

Duration: 1 year (October 1, 2008 to October 1, 2009)

Upwork: <https://www.upwork.com/freelancers/~010a25fca8fc9574b0>

CERTIFICATION

DHIS2 : Academy Level-1 and Level -2
<https://hispsbd.org/> and <https://hispsindia.org>

70-536 : Microsoft® .NET Framework- Application Development Foundation.

70-528 : Microsoft® .NET Framework 2.0 -Web-Based Client Development.
Microsoft Certified Professional ID: **sr5853548**

KEY SKILLS

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|---------------------------|--------------------------|----------------------------------|
| • Study design | • Team lead | • Statistical data modelling |
| • Survey | • Data analysis | • Data-driven decision |
| • Data management | • MIS | • GIS mapping |
| • Research | • Information management | • Infographic presentation |
| • Monitoring & Evaluation | • Health Innovation | • Making Public dashboards |
| • Database Design | • Questionnaire design | • Webpage design and development |

EMPLOYMENT HISTORY (16 YEARS)

Aug 2025 – June, 2026
Dhaka, Bangladesh

Monitoring & Evaluation Assistant (11 months)
Climate Change and Health Project
Funded by Global Fund
National Malaria Elimination Program
Disease Control Division, DGHS

Jan 2025 – June 2025
Dhaka, Bangladesh

Consultant (6 months)
World Health Organization, Bangladesh
<https://www.who.int/bangladesh/>

Mar 2020 – July 2025
Dhaka, Bangladesh

Monitoring & Evaluation Manager (6 yrs 3 month)
National Kala-azar Elimination Program, CDC, DGHS
<https://dghs.gov.bd/>

Nov 2015 - Jan 2020 Dhaka, Bangladesh	Data Management Supervisor (4.2 yrs) icddr,b, Bangladesh (NCSD Division) Mohakhali, Dhaka https://www.icddrb.org
Jan 2014 - Oct 2015 Dhaka, Bangladesh	Data Management Officer (1.8 yrs) icddr,b, Bangladesh (NCSD Division) Mohakhali, Dhaka https://www.icddrb.org
Jun 2011 - Jul 2012 Dhaka, Bangladesh	Senior Web Developer (1.2 yrs) Nogor Solution Niketon, Dhaka https://www.nogorsolutions.com
Feb 2011 - May 2011 Dhaka, Bangladesh	Data Management Assistant (0.3 yr) icddr,b, Bangladesh (CNFS Division) Mohakhali, Dhaka https://www.icddrb.org
Sep 2010 - Jan 2011 Dhaka, Bangladesh	Junior Programmer (0.5 yr) Mysoftheaven (BD) Ltd. Mirpur-1, Dhaka http://www.mysoftheaven.com

JOB PERFORMANCE

As M&E Assistant primary responsibilities are

- Support to develop Early Warning and Alert Response System (EWARS) for Malaria, Dengue, Acute Watery Disease (AWD), TB and others.
- Support API integration from DHIS2 to the EWARS system
- Provided support to strengthen the project's Monitoring and Evaluation (M&E) system.
- Participated in the development and implementation of the project's M&E framework.
- Worked under the guidance of the Program Operations Advisor and program personnel to harmonize and standardize data collection, analysis, and reporting systems in line with program indicators.
- Supported the regular review of field activities to assess the utilization and impact of monitoring tools.
- Measured program quality improvements and provided timely feedback to field-level staff and implementing partners.

As Consultant primary responsibilities are

- **Comprehensive** Desk review of various Global, regional and country documents including strategic plan, guidelines, reports, published studies etc. and records to analyse Kala-azar situation and local transmission
- **Review** existing data on Kala-azar cases in Bangladesh, including geographical distribution, trends over time, and case demographics.
- **Develop** protocol/ SOP/ Methodology for endemicity assessment in consultation with NKEP, WHO and other relevant stakeholders. This methodology should be clear, transparent, and replicable.
- **Review** existing criteria and apply standardized criteria to classify upazilas into different endemicity levels for Kala-azar. Also Review, validate and analysis of DHIS2 data and data from other sources on case, vector, ecology etc. about Kala-azar in Bangladesh
- **To assess** the factors contributing to the variations in endemicity across different upazilas and Develop tools for obtaining necessary information and interview of relevant stakeholders and Kala-azar patients for decision making about Kala-azar endemicity
- **Collect** necessary information and data on Kala-azar endemicity from various sources and analyze the collected data to understand the endemicity, spatiotemporal distribution of Kala-azar cases, trends over time, and patient demographics.
- **Conduct** a spatial analysis to identify geographical clusters of Kala-azar cases.
- **Visit Kala-azar** endemic/non-endemic upazilas, health facilities and places as required to collect and verify information regarding Kala-azar endemicity
- **Utilize appropriate** statistical methods to assess Kala-azar endemicity at upazila level, and identify factors (socioeconomic conditions, environmental factors, vector ecology, and access to healthcare services etc.) associated with Kala-azar endemicity.
- **In consultation** with NKEP and WHO, the consultant will revise endemicity of Kala-azar based on the information and data available
- **Facilitate** consultative meetings/workshops with stakeholders at the national level to revise endemicity of Kala-azar and incorporate the recommendations of the stakeholders and finalize the revised endemicity of Kala-azar
- **Document** methodology and steps followed to revise endemicity of Kala-azar and prepare final report on methodology and revised endemicity of Kala-azar and submit it to NKEP and WHO

As Monitoring & Evaluation Manager primary responsibilities are

- **Ensuring** program quality by providing technical and managerial support to achieve goals.
- **Creating/Updating** M&E frameworks, toolsets, plans, and guidelines in alignment with strategy.
- **Providing** on-the-job support, coaching, mentoring, and guidance to project staff and partners for effective task execution.
- **Gathering** data and delivering analysis, interpretation, evaluation, and reporting with recommendations to maintain project progress.

- **Effective disease surveillance**, investigation of outbreaks, investigation of cases, cross-border surveillance, and endemicity assessment
- **Review**, validate and analysis of DHIS2 data and data
- **Monitoring** the project regularly to enhance M&E components and support authorities with findings and frequently field visit in Kala-azar endemic/non-endemic upazilas regarding patient information.
- **Developing** Guidelines/Strategies/ Protocol and SOP's for National Kala-azar Elimination program.
- **Ensuring** effective knowledge management, reflection, and learning mechanisms among Principal Recipient (PR), Sub-Recipient (SR), and Sub-Sub-Recipient (SSR) teams.
- **Documenting** procedures, lessons learned, and best practices, and preparing monthly, quarterly, annual, and completion reports. Strategies, guidelines and SOP
- **Data analysis** of various patient information by SPSS/STATA and spatial or GIS analysis to identify geographical clusters of Kala-azar cases.
- **Carrying** out other duties as assigned by LD-CDC through PM-M&PDC and DPM-NKEP.

As Data Management Supervisor primary responsibilities are

- **Managed** data entry, editing, and reporting, ensuring all forms of data were properly administered.
- **Coordinated** routine data entry for the project, maintaining security for survey and field data.
- **Conducted** data consistency checks, cleanup, analysis, and documentation of data sets.
- **Disease surveillance**, investigation of outbreaks, investigation of cases,
- **Developed** software for data entry tasks, created database scripts, and generated graphs and slides for reports.
- **Reviewed** field data for errors, performed database backups, updated the record management system and produced summary reports.
- **Field visit** frequently in Kala-azar endemic/non-endemic upazilas, health facilities and places as required to collect and verify information regarding Kala-azar patients.

As Data Management Officer primary responsibilities are

- **Created/Designed** a web-based surveillance system on the DHIS2 platform for real-time Kala-Azar data collection within the MIS government system.
- **Developed** functionalities for generating patient discharge certificates, follow-up cards, Event Reports, Pivot Tables, GIS maps, and custom reports based on program needs.
- **Prepared** training materials for GoB personnel on data entry and reporting methods at the Upazila, district, and national levels for the Kala-azar elimination program.
- **Collaborated** with DGHS surveillance database staff as part of the national VL elimination campaign.

- **Planned** and coordinated routine data entry, managed various data formats, ensured data management tasks were monitored, and maintained the security of survey and field data.

As Senior Web Developer primary responsibilities are

- **Designed** and developed user-friendly, responsive websites and web applications tailored to client needs.
- **Cooperated** with cross-functional teams to gather requirements, plan projects, and implement technical solutions.
- **Optimized** website performance by improving loading speeds, enhancing security measures, and ensuring compatibility across browsers.
- **Maintained** and updated web content, ensuring accuracy and consistency with branding and design standards.
- **Led a team** of junior developers, providing guidance, code reviews, and mentorship to ensure high-quality project delivery.

As Data Management Assistant primary responsibilities are

- **Managed** data entry tasks, ensuring accuracy and completeness across multiple datasets.
- **Conducted** data cleaning and validation to maintain data integrity and consistency.
- **Assisted** in the development and maintenance of databases, including data updates and backups.
- **Generated** reports and visualizations to support data analysis and decision-making processes.
- **Worked together** with team members to troubleshoot data issues and implement effective data management practices.

As Junior Programmer primary responsibilities are

- **Develop and maintain** websites by writing clean, efficient HTML, CSS, and JavaScript code, ensuring cross-browser compatibility and responsiveness.
- **Collaborate with designers** and senior developers to translate UI/UX wireframes into functional web pages and implement front-end features.
- **Assist in back-end development** by integrating APIs, databases, and server-side functionality to ensure seamless web application performance.
- **Test and debug** web applications across various devices and browsers, identifying and resolving technical issues to enhance user experience.
- **Stay updated on web development** trends and best practices, applying new technologies and frameworks to optimize website functionality and user engagement.

A BRIEF OUTLINE OF RESEARCH GRANTS/ACTIVITIES PARTICIPATION

1. **Agency** UK-Aid, Mott MacDoland, UK
Period October 2015 – December, 2019
Title Tackling Visceral Leishmaniasis in Bangladesh (KalaCore Project)
Objective To support National VL Elimination Program of Bangladesh; to conduct studies on impact evaluation of KalaCore activities in Bangladesh, to investigate access barriers for VL health seeking for women, minorities and tribal population.
Role Data Management, Data Analysis, Capacity building and reporting
Total amount £ 1.42 millions

2. **Agency** Thrasher Research Funds, USA
Period June, 2014 – December, 2016
Title Safety and efficacy of Miltefosine for treatment of children and adolescents with Post-Kala-azar Dermal Leishmaniasis (PKDL) in Bangladesh.
Objective To investigate safety and efficacy of Miltefosine at allometric dosing for treatment of PKDL in children and adolescent in Bangladesh
Role Database design, Data Management, Data Analysis and Capacity building.
Total amount: 299,999 USD

3. **Agency** Programme for Appropriate Technology in Health (PATH), India
Period September, 2014 - December, 2018
Title Operational plan for visceral leishmaniasis pharmacovigilance in Bangladesh.
Objective To provide technical support to the Communicable Disease Centre, Directorate General of Health Services, Government of Bangladesh for establishing visceral Leishmaniasis pharmacovigilance activity in the country.
Role Database design, Data Management, Data Analysis, Capacity building and reporting.
Total amount 134,261 USD

4. **Agency** Special Programme for Tropical Disease Research (TDR), World Health Organization, Geneva, Switzerland
Period June 2015 – December, 2016
Title Improved Visceral Leishmaniasis (VL) Case Detection and Vector Control to Support the VL Elimination Initiative in Bangladesh.
Objective To investigate efficacy of different active case detection strategies, safety and efficacy of insecticidal wall paints for controlling sandflies
Role Data Management
Total amount 150,000 USD

TRAINING SUMMARY

Training Title	Topic	Institute	Year	Duration
Data Science & Machine Learning with Python	Python, Data analytics with Numpy and Pandas, Machine Learning, data analytics, Time Series, etc.	https://ostad.app/	2026	6 Months
Data Analysis Specialization	Introduction to Data Analytics, Statistics for Data Analytics, Data Analytics with Excel, Google Spread Sheet, Power BI, SQL (MySQL / PostgreSQL), Tableau, Exploratory Data Analysis with Python, Project with Looker	ai quest intelligence www.aiquest.org	2024	6 Months
Post-kala-azar dermal leishmaniasis: training of health workers on skin-NTDs (NTDs-PKDL)	Introduction to NTDs, skin NTDs and PKDL. Epidemiology of PKDL, Clinical presentation and differential diagnosis, Diagnosis, Treatment and monitoring of treatment in PKDL, Surveillance, monitoring and evaluation	OpenWHO.org https://openwho.org/courses	2024	
Neglected Tropical Diseases Monitoring and Evaluation Framework (NTDs-ME-framework)	Introduction to the M&E framework, Conceptual framework and shifts guiding monitoring and evaluation Quantitative approach to monitoring of the road map, Qualitative approach to monitoring of the road map, Evaluation of progress towards the Road Map, Looking Forward Research agenda for M&E	OpenWHO.org https://openwho.org/courses	2024	
Health-care associated infection surveillance (IPC-HAI-EN)	Surveillance Planning, Data Collection, Analysis, Risk stratification methodology, Interpretation, Communication, Evaluation,	OpenWHO.org https://openwho.org/courses	2024	
Response Preparedness for Zoonotic Disease Outbreaks Using a One-Health Approach (reprep-zoonotic-outbreaks)	One Health response to zoonotic disease outbreaks, The human health perspective to One Health, The animal health perspective to One Health	OpenWHO.org https://openwho.org/courses	2024	
Machine Learning with R	Data Processing, Data Visualization, Essential Statistics, Regression Analysis, Classification Analysis, Clustering Analysis, Association Rule Learning & Time Series Analysis, advanced machine Learning	Thriving Skill, Bangladesh	2021	1 month

Training Title	Topic	Institute	Year	Duration
R Programming	R basics, Function, Loop, Data manipulation in dplyr, Data visualization in ggplot, Descriptive Statistics in R, Classical hypothesis test, Simple and multiple linear regression model.	Data Science Era, Bangladesh	2021	1 month
R Essentials	Basic R, Data handling, Data analysis, etc.	SRCBD, Bangladesh	2021	12 hours
SPSS	SPSS basic, Data entry, Data transformation, Data visualization, Descriptive analysis, Hypothesis testing, linear regression model.	Data Science Era, Bangladesh	2021	45 Days
SPSS Advanced	ANOVA, MANOVA, Nonparametric Test, Time Series Analysis, Survival Analysis, Principal Component Analysis.	Data Science Era, Bangladesh	2021	1 Month
Project Monitoring and Evaluation	M&E methods, tools, Indicator, Data Analysis, M&E framework, M&E Logical Framework, Report Writing, M&E Challenges etc	Bangladesh Institute of Management, Bangladesh	2019	5 Days
DHIS2 Academy Level-1	DHIS2 Basic, Data Element, Indicator, Tracker Capture, Form Development and Report Generation	HISP India	2017	7 Days
Creating a Map using QGIS	Basic QGIS, handling shape file, external co-ordinate using, filtering etc	Statistical Unit, Training Support Group (TSG)	2015	2 Days
Training on Web based Data Management	Data Entry, Data Cleaning, Audit log, Analysis	CMC, Vellore, India	2015	3 Days
Training on Good Clinical Practice	How to manage good clinical practice	icddr,b Bangladesh	2015	2 Days
DHIS2 Academy Level -2	Advanced area of DHIS2, Programme development for aggregate and Individual. Report format generation	HISP Bangladesh	2014	7 Days

PUBLICATION

1. Chowdhury, R., Hazarika, A., Sultana, S., Hossain, M.S., Saha, S., Nabi, S.G., Sohel, A.N.M., Rana, M.J., Rahman, M., Khan, M.H. and Maheswary, N.P., 2026. Elimination of visceral leishmaniasis as a public health problem in Bangladesh: Lessons learned and questions remaining. *PLOS Neglected Tropical Diseases*, 20(2), p.e0013949.
2. Hossain, F., Sharfaraz, A., Ghosh, P., Sarwar, G., Uddin, M.R., Rashid, M.U., Ghosh, D., Nath, R., Maruf, S., Sagar, S.K. and Shomik, M.S., 2026. Visceral Leishmaniasis & HIV Co-infection in Bangladesh: Investigating Prevalence and Policy Recommendations. *Journal of Infection and Public Health*, p.103233.
3. Maruf, S., Uddin, M.R., Luba, F.R., Sagar, S.K., Ghosh, D., Hossain, S., Banjara, M.R., Kroeger, A., Halleux, C., Aseffa, A. and Mondal, D., 2025. Mapping the last mile: micro-stratification for sustained visceral leishmaniasis elimination in Bangladesh. *medRxiv*, pp.2025-08.
4. Owen, S.I., Hossain, F., Ghosh, P., Chowdhury, R., Hossain, M.S., Jewell, C., Cruz, I., Picado, A., Mondal, D. and Adams, E.R., 2021. Detection of asymptomatic *Leishmania* infection in Bangladesh by antibody and antigen diagnostic tools shows an association with post-kala-azar dermal leishmaniasis (PKDL) patients. *Parasites & vectors*, 14(1), p.111.
5. Hossain, M.S., Kumar, A., Hossain, A.A., Mahshin, M., Sharma, A., Hossain, M.A., Sharma, V., Haque, R., Shamsuzzaman, A.K.M., Maruf, S. and Ghosh, P., 2018. Using focused pharmacovigilance for ensuring patient safety against antileishmanial drugs in Bangladesh's National Kala-azar Elimination Programme. *Infectious diseases of poverty*, 7(04), pp.37-49.

PROGRAMMING AND COMPUTER SKILLS

Application software

- MS office package
- Google Forms
- SPSS
- Stata
- Epi-Info
- Epi data
- QGIS
- Adobe Photoshop
- EndNote

Databases & Visualization

- MS Access
- MYSQL
- Kobo Toolbox
- Open Data Kit (ODK)
- DHIS2
- Google Looker studio
- Tableau
- XML
- Power BI

Programming & Others

- R
- PHP
- JavaScript
- HTML & CSS
- .NET C#
- VB .NET
- WordPress
- C++
- Python

ORGANIZING AND PRESENTATION SKILLS

- ◆ **Oral presentation:** Md. Sakhawat Hossain. Experiences from Implementation of Focused Pharmacovigilance for Visceral Leishmaniasis Treatment in Bangladesh. The 6th World Congress on Leishmaniasis (WL6) in Toledo, Spain from 16 to 20 May 2017.
- ◆ **Poster presentation:** Md. Sakhawat Hossain. Strengthening Web-based Surveillance for VL Elimination Programme in Bangladesh. The 6th World Congress on Leishmaniasis (WL6) in Toledo, Spain from 16 to 20 May 2017.
- ◆ Organized and facilitated the **orientation** and various **training** programs of the National Kala-azar Elimination Program and other stakeholders.
- ◆ Facilitated online data entry, analysis, supervision and reporting on the National Health Data platform DHIS2 system for the National Kala-azar Elimination Program.

CONTRIBUTION OF NATIONAL GUIDELINES, SOP, AND DOSSIER DEVELOPMENT

- ◆ Assist in developing a country validation dossier for Kala-azar in Bangladesh.
- ◆ Contribute to developing various guidelines such as the Kala-azar Case Management Guideline, Costing of the National Strategic Plan for Kala-azar Elimination in Bangladesh, National Vector Control Guideline for Kala-azar, Kala-azar Surveillance, Outbreak Investigation, and Monitoring & Evaluation Guidelines, as well as Kala-azar Guidelines for field workers.
- ◆ Developed a training module for statisticians to enter data into the DHIS2 system, export data, and perform analysis.
- ◆ Enhanced SOP for medical officers and senior staff nurses to complete the Kala-azar Patient Surveillance form.
- ◆ Expanded DHIS2 platform for individual patient entry (Tracker Capture) for Kala-azar on the MIS-DGHS.

LANGUAGE PROFICIENCY

Bengali: Native

English: Full professional proficiency

I certify that the statements made by me in my personal profile are true, complete and correct. I also certify that any documents that may be requested of me in support of my application are authentic and accurate.



(Md. Sakhawat Hossain)