

## Curriculum Vitae

**Dr. Krishna Kumar, PhD**

**Specialisation:** Public Health, Mathematical Modelling, Data Quality, Indirect and Direct Estimation of Vital Rates, Big Data Analysis, Spatial Analysis, Primary Quantitative and Qualitative Study.

**Email ID:** [krishhna94@gmail.com](mailto:krishhna94@gmail.com)

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### Academic Qualification

<b>Degree</b>	<b>University</b>	<b>Institute</b>	<b>Year</b>	<b>Results</b>
Ph.D. in Population Studies	Jawaharlal Nehru University	Centre for the Study of Regional Development	2024	Completed
M.Phil. in Population Studies	Jawaharlal Nehru University	Centre for the Study of Regional Development	2021	80.8%
Post-Graduation	International Institute for Population Sciences	International Institute for Population Sciences	2018	67.5%
Graduation	Patna University	Patna Science College	2016	74.3%
Intermediate	CBSE	Kendriya Vidyalaya	2012	72.0%
Matriculation	CBSE	Patna Central School	2010	83.6%

### Area of Research Interest

Civil Registration System, Sample Registration System, Data Quality, Indirect Estimation of Vital Rates, Public Health, Immunisation, Big Data Analysis, Primary Quantitative and Qualitative Studies in Public Health, Report Writing

### Software Skills

- Statistical Software: Nvivo, Atlas-ti, Stata, R, Tableau, Eviews, CSPro, Geoda, MGWR and ArcGIS.
- Other tool: MS word, MS Excel, MS PowerPoint, and Adobe Photoshop.
- Statistical modelling techniques: linear and non-linear regression, multilevel regression, survival analysis, time series, decomposition analysis, spatial auto-correlation, geometric weighted regression, advance econometrics.

### **Scholastic Achievements**

- Presented a research article titled “*Assessing the Socioeconomic Predictors and Spatial Clustering of Missed Measles Vaccination in India: Evidence from the Fifth Round of National Family Health Survey*” in National Public Health India Conference, 2024
- Received the best youth paper award in the oral presentation on research topic “*Rural urban inequalities in death registration completeness in India: A Fairlie decomposition analysis*” in Indian Association of Social Science and Health Conference, 2023.
- Presented a research paper titled “*Death Registration Coverage in India: Results from nationally representative survey*” at international seminar conducted by Indian Association for the Study of Population, 2022.
- Received third prize in essay writing competition on topic “*Sustainable development goals in India*” organised by Indian Association for the Study of Population, 2022.
- Selected for oral presentation titled “*Determinant of Death Registration in India: Evidence from National Family Health Survey, 2019-21*” in Population Association of America, 2023.
- Presented a research paper titled “*Estimation of Completeness of Death Registration at the National and Sub-national Level Using Empirical Method*” at International Seminar conducted by IIPS, Mumbai, India, 2022.
- Selected for poster presentation titled “*Mapping Performance Barriers to Birth and Death Registration in Bihar, India: A Qualitative Study*” in Population Association of America, 2022.
- Presented a research paper titled “*Performance Barriers of Civil Registration System in Bihar: A Qualitative Analysis*” at International Population Conference, 2021.
- Presented a research paper titled “*Completeness of Death Registration in India: An Empirical Approach*” at International Population Conference, 2021.

- Presented a research paper titled “*Estimation of Completeness of Death Registration in India: An Empirical Approach*” at the seminar organised by Indian Association for the Study of Population, 2021
- Presented a research paper titled “*A Qualitative Approach to Mapping Performance Barriers of Civil Registration System in Bihar*” at the seminar organised by Indian Association for the Study of Population, 2021
- Presented a research paper titled “*Birth Registration in India: A Study Based on NFHS-2015-16*” at International Seminar conducted by IIPS, Mumbai, India, 2021.
- Presented a research paper titled “*Completeness of Birth and Death Registration in Bihar: A Quantitative Approach*” at International Seminar conducted by IIPS, Mumbai, India, 2020.
- Presented a research paper titled “*Socio-Demographic Correlates of Hypertension in India*” at International Seminar conducted by IIPS, Mumbai, India, 2020.
- Presented a research paper titled “*Geographical and Sociodemographic Correlates of Hypertension in India: An Observational Study of 6,99,686 women and 1,12,122*” at conference conducted by Indian Association for Social Sciences and Health, India, 2019.
- Presented a research paper titled “*A Comparative Study to Assess the Maternal and Child Health Care in Bihar and Tamilnadu*” at conference conducted by Indian Association for Social Sciences and Health, India, 2019.
- Qualified for Assistant Professor and Junior Research Fellowship, 2018
- Qualified for Govt. of India fellowship for pursuing M.Sc. in International Institute for Population Sciences from July 2016 – May 2018.
- Got first prize in essay writing competition organised on world statistics day, Central University of South Bihar, Gaya, Bihar, 2015.

### **Academic Reports**

- PhD. Thesis on title “*A Study of the Level, Trends and Determinants of Death Registration in India at National and Sub-national Level*” 2021-2024 (Submitted on 15 November 2024)
- M.Phil. Dissertation on title “*Completeness of Birth and Death Registration in India: a Mixed Method Evaluation*”, 2021.

- Master dissertation on title “*A Comparative Study to Assess the Utilisation of Maternal and Child Health Care in Bihar and Tamil Nadu*”, 2018.

### **Publications**

- Kumar K, Misra S (2021). *Sex differences in prevalence and risk factors of hypertension in India: Evidence from the National Family Health Survey-4*. PLOS ONE, 16(4), e0247956. <https://doi.org/10.1371/journal.pone.0247956>
- Kumar K, Saikia N (2021). *Determinants of Birth Registration in India: Evidence from NFHS 2015-16*. PLOS ONE. 2021; 16(9):e0257014 <https://doi.org/10.1371/journal.pone.0257014>
- Kumar K, Saikia N, Diamond-Smith N. *Performance barriers of Civil Registration System in Bihar: An exploratory study*. PLOS ONE. 2022 Jun 1;17(6):e0268832. <https://doi.org/10.1371/journal.pone.0268832>
- Saikia N, Kumar K, Das B. *Death registration coverage 2019–2021, India*. Bulletin of the World Health Organization. 2023 Feb 1;101(2):102-10. <https://apps.who.int/iris/bitstream/handle/10665/365858/PMC9874366.pdf?sequence=1>
- Saikia N., Kumar, K. Boro, B and Bora, J.K. (2021). *A report on the review of the Data Quality Assurance Protocol of Program and Administrative Data in India*. <https://ndqf.in/wp-content/uploads/2022/05/A-Review-of-Data-Quality-Protocols-in-Administrative-Data.pdf>
- Saikia N, Kumar K, Bora JK, Mondal S, Phad S, Agarwal S. *What Determines the District-Level Disparities in Immunization Coverage in India: Findings from Five Rounds of the National Family Health Survey*. *Vaccines*. 2023; 11(4):851. <https://doi.org/10.3390/vaccines1104085>
- Kh Jitenkumar Singh, Krishna Kumar, Saurabh Sharma, Jeetendra Yadav, Reema Mukherjee, Sunita. *Bayesian Approach Analysis to Identify the Determinants of Cesarean Section in Northeastern states, India*. *International Journal of Scientific Research*. 2024; 13(1):2277-8179.
- Gupta S, Singh KJ, Kumar K, Khan MA, Gupta R, Sharma S. **Non coverage of Hepatitis B immunization among children and its predictors in northeastern states of India: A multiscale geographically weighted regression analysis**. *Journal of Family Medicine and Primary Care*. 2025 May 1;14(5):1757-68.

[https://journals.lww.com/jfmpc/fulltext/2025/05000/non\\_coverage\\_of\\_hepatitis\\_b\\_immunization\\_among.27.aspx](https://journals.lww.com/jfmpc/fulltext/2025/05000/non_coverage_of_hepatitis_b_immunization_among.27.aspx)

- Singh KJ, Kumar K, Das D, Alee NT, Khan MA, Sharma S, Yadav J, Haobijam NS, Bakshi RK. *Caesarean section delivery & determining factors in northeastern State, India: A Bayesian spatio-temporal analysis of areal data*. The Indian Journal of Medical Research. 2025 Mar 26;161(2):159.  
<https://pubmed.ncbi.nlm.nih.gov/articles/PMC12010782/>

### **Newspaper Articles**

- Krishna Kumar & Nandita Saikia, 2023. Why and where are deaths under-reported in India? IUSSP's online news magazines. <https://www.niussp.org/health-and-mortality/why-and-where-are-deaths-under-reported-in-india/>
- Nandita Saikia & Krishna Kumar, 2021. Counting the covid toll. Indian express. <https://indianexpress.com/article/opinion/india-covid-death-toll-opinion-7348936/>
- Krishna Kumar & Somesh Singh, 2021. Does India really need population control policy?, Rastriya Sahara.
- Nayan Gandhi & Krishna Kumar, 2021. Challenges faced by India in counting coronavirus deaths. The Pioneer.  
<https://www.dailypioneer.com/2021/columnists/challenges-faced-by-india-in-counting-coronavirus-deaths.html>

### **Work Experience**

- Worked as a research associate in a project titled “*What determines the district-level gaps in immunization coverage in India: findings from five rounds of the National Family Health Survey*” funded by Biotechnology Industry Research Assistance Council (BIRAC) during April 1, 2021-February 28, 2023.
- Worked as a research assistant in a project on “*A report on the review of the data quality assurance protocol of program and administrative data in India*”. Funded by ICMR, India during August 15, 2020- February 15, 2021.
- Worked as a research associate in a project titled “*Spatio-temporal Analysis of Caesarean Delivery in Northeastern States, India*”, Indian Council of Medical Research – National Institute of Medical Statistics, New Delhi during September 5, 2023 – March 26, 2024.

- Working as **Statistician** in **ICMR-National Institute for Research in Environmental Health, Bhopal** (permanent position), from 10 April, 2024 to 4 September, 2024.
- Working as **Statistician** in **Indian Council of Medical Research-Rajendra Memorial Research Institute of Medical Sciences, Patna** (permanent position), from 11 September, 2024 to till date.

### **Reviewed Research Articles**

- Social Science and Medicines- Population Health, (2021)-1 Paper
- Plos Global Public Health, (2022)- 2 Papers
- Journal of Population Research, (2023)- 2 Paper
- BMJ open, (2023)- 1 paper
- Demography, (2024)- 1 paper
- Qeios, 2023- 1 paper
- Demography India (2025)– 1 Paper

### **Details on PhD and M. Phil Degree**

- Completed M.Phil. under the supervision of Prof. Nandita Saikia, Jawaharlal Nehru University, New Delhi, 2021.
- Completed Ph.D. under the supervision of Prof. Nandita Saikia, International Institute for Population Sciences, Mumbai and Prof. Bhaswati Das, Jawaharlal Nehru University, New Delhi, 2024.

### **Personal Details**

- **Nationality**- India
- **Religion**- Hindu
- **Date of Birth**- 18 August 1994
- **Marital Status**- Married
- **Language**- English, Hindi
- **Permanent Address**-Pandriwa Lane, Gujri Bazar, Patna City, Patna, Bihar-800008
- **Present Address**- Pandriwa Lane, Gujri Bazar, Patna City, Patna, Bihar-800008

**Declaration**

I hereby declare that the information mentioned above is correct up to my knowledge and I bear the responsibility for the correctness of the particulars mentioned above.

Best regards,

A handwritten signature in cursive script that reads "Krishna Kumar". The signature is written in black ink and is underlined with a single horizontal line.

Krishna Kumar, PhD

Statistician

Indian Council of Medical Research-Rajendra Memorial Research Institute of Medical Sciences, Patna