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Employer

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Education

PhD-2007 (Statistics), Department of Statistics, Gauhati University, Guwahati, Assam
MSc-1999 (Statistics), DDU University, Gorakhpur, UP
BSc-1997 (Mathematics, Statistics), DDU University, Gorakhpur, UP

Research Interest

The research domain is biostatistics, with the sub domain of cancer epidemiology and population genetics. The research interest involves deciphering the role of genetic susceptibility and epidemiological factors towards the causation of breast, bladder, aero digestive tract, Non Hodgkin's Lymphoma and squamous cell carcinoma. During the past three years the interest has been in applying the various advanced biostatistical methods like binary/conditional logistic regression analysis, survival analysis, discriminant analysis, categorical principal component analysis, multi dimensional reduction methods (MDR) and applying the ROC curve for the better understanding of the etiopathogenesis of the cancer under investigation. In time to come the idea is to apply more advanced and novel biostatistical approaches to the existing database that can help in better understanding of the system biology of the cancer under study and may possibly yield result of utmost medical and clinical importance

Computational Skills:

Statistical Packages SPSS, STATA
Database MS Excel, Visual Fox Pro
GIS Health Mapper

Professional Experience

2006- Scientist-‘B’ (Biostatistics), Institute of Pathology, Indian Council of Medical Research (I.C.M.R.), New Delhi-110029, India

2003-2006 Assistant Professor (Biostatistics), Department of Community Medicine, Ruxmanibeen Deepchand Gardi Medical College, Ujjain, Madhya Pradesh (M.P.), India

- 2001-2003 Statistical Fellow (Biostatistics), Department of Biostatistics, Sanjay Gandhi Post Graduate Institute of Medical Sciences (SGPGIMS), Lucknow, India
- 2000-2001 Investigator, National Institute of Medical Statistics, Indian Council of Medical Research (I.C.M.R.), New Delhi, India

Honors and Awards

- 2007 Received 'World Bank' Travel grant through 'International Statistical Institute' to attend the "56th International Statistical Institute Conference" held at Lisboa-Portugal, from 22nd August 2007 to 29th August 2007
- 2001 Received Fellowship in Biostatistics from Sanjay Gandhi Post Graduate Institute of Medical Sciences, Lucknow, through All India Entrance Test
- 2000 Received Gold Medal for Master of Science (MSc.) Degree from Deen Dayal Upadhyaya Gorakhpur University, Gorakhpur.

Professional Activities

Memberships

- Life Member of 'Indian Society of Medical Statistics'
- Life Member of 'Indian Association for Study of Population'

Research and Educational Services

2006-

Research Activities

- Broad Domain-Biostatistics
- Sub domain-Cancer Epidemiology and Population Genetics
- Biostatistical Inputs in the research methodology
- Definition of the intellectual contents
- Analysis (demographic/epidemiological/Histopathology/IHC/CK expression).
- Dimension reduction techniques
- Regression approaches
- Survival analysis
- Review of literature
- Manuscript preparation
- Manuscript Editing
- Manuscript reviewing

Teaching

- Probability Analysis Variables in Biology
- Research Methodology
- Correlation and correlation Coefficient
- Regression Analysis
- Significance Testing
- Application of Computers in Statistics

- 2003-2006 Involved in teaching and research activities while working as 'Assistant Professor (Biostatistics)' at Department of Community Medicine, Ruxmanibeen Deepchand Gardi Medical College, Ujjain, Madhya Pradesh (M.P.), India

2001-2003

Training

- Orientation to lectures/ laboratory sessions to health care system
- Orientation to basic epidemiology and Medical terminology
- Computer programming and statistical computing
- Use of statistical packages like SPSS
- Application of advanced statistical methods in medical research
- Working out problems coming from other specialties for statistical consultancy
- Development of study design and protocol for hospital/community based studies

Teaching Assistance to MD/MS students

- Introduction to Biostatistics
- Descriptive Statistics (Central tendency and Dispersion)
- Correlation and Regression
- Logistics Regression
- Testing of Hypothesis
- Survival Analysis- Kaplan Meier and Cox Regression Hazard Model
- Measurement of uncertainty in clinical decisions
- Introduction to Statistical Computing
- Management of Research data
- Use of data base packages to enter, store and explore data
- Introduction to SPSS Statistical Package
- Data Transformation and Validation using SPSS and Statistical graphics using SPSS

Research Projects

2010-

- Co-Investigator for the project “Immunogenetic profile of NPC–Nasopharygeal Cancer in a high prevalence region of Northeast India”

Funding Agency-Department of Biotechnology Government of India, Ministry of Science of Technology

- Co-supervisor for DNB pathology thesis dissertation work-Role of epithelial Mesenchymal transition in progression of bladder cancer: An Immunohistochemical analysis

20003-2006

- ‘Project Manager’ for the research project ‘Longitudinal Demographic, Socioeconomic survey and analysis in 60 villages of Ujjain district’

Funding Agency- Division of International Health, Karolinska Institute, Sweden

2004-2005

- Project Manager for the research project entitled “A study on availability of Health Facilities in the Ujjain district”

Funding Agency- “National Commission on Macroeconomics and Health”, Ministry of Health and Family Welfare, Government of India”. This included the following activities:

2002-2003

- Project Manager for the research project ‘Assessment of disease burden due to Taenia Solium in a rural Community’

Funding Agency-Intramural grant from Research Cell, SGPGIMS, Lucknow

Professional Organization Administration

- 2010 Member of ‘Scientific Committee’ for the ‘Hands on Training on Tissue Microarray (TMA), Institute of Pathology, Indian Council of Medical Research (I.C.M.R.), New Delhi, India
- 2001 Member of ‘Organization Committee’ for the 19th Annual Conference of Indian Society for Medical Statistics held at Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow, India
- 2002 Project Manager on the intramural research project entitled “Assessment of disease burden due to Taenia Solium in a rural community of Northern India”, Department of Biostatistics, Sanjay Gandhi Postgraduate Institute of Medical Sciences (SGPGIMS), Lucknow, India
- 2001-2002 Worked as ‘Investigator’ at the Institute for Research in Medical Statistics (Indian Council of Medical Research), for the project entitled “Baseline Survey in Trans Yamuna Area for the Preparation of a Healthy City”

Invited Talks

- 2010 Served as faculty for the First foundation Workshop on Clinical and laboratory Medicine Research for undergraduate medical students, held at Institute of Pathology, Indian Council of Medical Research (ICMR), New Delhi from 12th-13th March 2010 and delivered invited talk on “Basic Biostatistics”

Served as faculty for the second foundation workshop on Clinical and laboratory Medicine Research, held at University College of Medical Sciences (UCMS), New Delhi from 17th-19th August 2010 and delivered talk on “Basic Biostatistics”

Served as faculty for the second foundation workshop on Clinical and laboratory Medicine Research, held at University College of Medical Sciences (UCMS), New Delhi from 17th-19th August 2010 and delivered talk on “Data Management and Sample Size Determination”

Publications

Thesis

Biostatistical Aspects of Disease Burden due to Some Parasitic Infections: Some Epidemiological Models. Department of Statistics, Gauhati University, Guwahati. 2007

Peer Reviewed Journals

1. Rakhshan Ihsan; Thoudam Regina Devi; Dharendra Singh Yadav; **AK Mishra**; Jagannath Sharma; Eric Zomawia; Yogesh Verma; Rupkumar Phukan; Jagadish Mahanta; AmalChandra

- Kataki; Sujala Kapur; Sunita Saxena. Investigation on the role of p53 codon 72 polymorphism and interactions with tobacco, betel quid and alcohol in susceptibility to cancers in a high risk population from India. Accepted for publication in DNA and Cell Biology
2. Mishi Kaushal, **AK Mishra**, B S Raju, Rakhshan Ihsan, Anurupa Chakraborty, Jagannath Sharma, Eric Zomawia, Yogesh Verma, Amal Kataki, Sujala Kapur, Sunita Saxena, Betel quid chewing as an environmental risk factor for breast cancer. *Accepted for publication in Mutation Research-Genetic Toxicology and Environmental Mutagenesis*
 3. Chintamani Chintamani, Pranjul Kulshreshtha, Anurupa Chakraborty, L.C Singh, **AK Mishra**, D Bhatnagar, A Bhatnagar, Sunita Saxena. Androgen receptor predicts response to drugs not risk in Breast Cancer in Indian Women. *World Journal of Surgical Oncology*. 2010; 8: 64.
 4. Chauhan, Pradeep, Ihsan, Rakhshan, Yadav, Dharendra, **AK Mishra**, Bhushan, Bharat, Abha Soni, Kaushal, Mishi, Devi Thoudam, Saluja Sumita, Gupta Dipendra, Mittal Vishakha, Saxena, Sunita, Kapur Sujala. Association of GST, EPHX and p53 codon gene polymorphism with adult acute myeloid leukemia. Accepted for publication in DNA and Cell Biology. 2010
 5. **AK Mishra**, Dilip C Nath, Uttam Singh, Kashi N Prasad, Rakesh K Gupta, Chandra M Pandey. The Epidemiological Aspects of Taenia solium Infection in a Rural Community of Northern India. Accepted for publication in Demography India.
 6. Dharendra Singh. Yadav, Thoudam Regina Devi, Rakhshan Ihsan, **AK Mishra**, Mishi Kaushal, Indranil Chattopadhyay, Pradeep Singh Chauhan, Jagannath Sharma, Eric Zomawia, Yogesh Verma, A. Nandkumar, Jagadish Mahanta, Rupkumar Phukan, Sujala Kapur, Sunita Saxena. Polymorphisms of Glutathione-S-transferase (GST) genes and the risk of aerodigestive cancers in Northeast Indian population. *Genetic Testing and Molecular Biomarker* 2010
 7. Usha Agrawal, **AK Mishra**, Payal Salgia, Saurabh Verma, Nayan K Mohanty, Sunita Saxena Evaluation of the predictive role of P53, P21Waf1, VEGF and CD105 for Recurrence of Non Muscle Invasive Bladder Cancer. *Pathol Oncol Res*. 2010 Jun 23
 8. Rakhshan Ihsan, Indranil Chattopadhyay, Rupkumar Phukan, **AK Mishra**, Joydeep Purkayastha, Jagannath Sharma, Eric Zomawia, Yogesh Verma, Jagadish Mahanta, Sunita Saxena, Sujala Kapur. Role of EPHX1 gene polymorphisms in esophageal cancer of high-risk area in India. *J Gastroenterol Hepatol*. 2010; 25(8):1456-62.
 9. Pradeep S Chauhan, Bharat Bhushan, **AK Mishra**, L.C Singh, Sumita Saluja, Saurabh Verma, Dipendra K Gupta, Vishakha Mittal, Sumita Chaudhry, Sujala kapur. Mutation of FLT3 gene in acute myeloid leukemia with normal cytogenetics and its association with clinical and immunophenotypic features. *Medical Oncology*. 2010 March 31. PMID: 20354824
 10. Thoudam Regina Devi, Dharendra Singh. Yadav, **AK Mishra**, Rakhshan Ihsan, Mishi Kaushal, Indranil Chattopadhyay, Pradeep Singh Chauhan, Jagannath Sharma, Eric Zomawia, Yogesh Verma, A. Nandkumar, Jagadish Mahanta, Rupkumar Phukan, Sujala Kapur, Sunita Saxena. Distribution of GSTT1 and GSTM1 polymorphisms in North East Indians. *Genet Test Mol Biomarkers*. 2010;14(2):163-9
 11. Bharat Bhushan, Pradeep S Chauhan, Sumita Saluja, Saurabh Verma, **AK Mishra**, Saeed Siddiqui, Sujala Kapur. Aberrant Phenotypes in childhood and adult acute leukemia and its association with adverse prognostic factors and adverse outcomes. *Clin Exp Med*. 2010; 10(1):33-40

12. Anurupa Chakraborty, **AK Mishra**, Abha Soni, Thodum Regina, R.Mohil, D Bhatnagar, A Bhatnagar, Chintamani Chintamani, P. C. Sharma, Sunita Saxena. Vitamin D Receptor gene polymorphism(s) and breast cancer risk in north Indians. *Cancer Detection and Prevention*, 2009; 32:386-394
13. Avninder Singh, Sujala Kapur, Indranil Chattopadhyay, Joydeep Purkayastha, Jagannath Sharma, **AK Mishra**, Stephen M. Hewitt, Sunita Saxena Cytokeratin immunoexpression in esophageal squamous cell carcinoma of high risk population in North East India. *Applied Immunohistochemistry & Molecular Morphology*, 2009;17(5):419-424. PMID: 19417629
14. G Fochsen, K. Deshpande, V. Diwan, **AK Mishra**, V.K. Diwan, A. Thorson. Health Care seeking among individuals with cough and Tuberculosis: a population based study from rural India. *The International Journal of Tuberculosis and Lung Disease*, 2006; 10(9): 995-1000.

Submitted

1. Chintamani Chintamani, Megha Tandon, Usha Agrawal, **AK Mishra**, Sunita Saxena. Sentinel lymph node biopsy can be a reliable alternative to axillary dissection after neo-adjuvant chemotherapy in patients with locally advanced breast cancer-a prospective study. Submitted in the *World Journal of Surgical Oncology*
2. Soni, Abha, Saxena Sunita, Bansal Anju, Singh, LC, **AK Mishra**, Majumdar Mainak, Regina Thoudam, Mohanty Nayan. Gene expression profile and mutational analysis of DNA mismatch repair genes in carcinoma prostate in Indian population. Submitted in *OMICS, Journal of Integrative Biology*.
3. Abha Soni, Anju Bansal, Ashwani Kumar Mishra, L C Singh, Anurupa Chakraborty, N K Mohanty, Sunita Saxena. Gene expression and polymorphisms in androgen signalling (AR,PSA) and metabolizing (CYP19) genes in prostate carcinoma in Indian Subcontinent
4. **AK Mishra**, Usha Agrawal, Shivani Negi, Anju Bansal, Amar Bhatnagar, Dinesh Bhatnagar, Chintamani Chintamani, Ravindra Mohil, Sunita Saxena. Study on expression of AR in Breast Cancer and its correlation with other steroid receptors and growth factors. *Submitted in Indian Journal of Medical Research*

Proceedings (International)

1. **AK Mishra**, CM Pandey Some Epidemiological Models for parasitic Infections: Comparison between traditional and hierarchical logistic regression methods. *Bulletin of the International Statistical Institute-LXII* (2007), 5776-5779.

Book Chapters

1. **AK Mishra**, Anurupa Chakraborty, Sunita Saxena. Significance of Vitamin D receptor polymorphisms in Breast Cancer-Multinomial Logistic Regression Analysis. Submitted as a chapter in book to NOVA Publishers, USA.
2. Shivani Negi, **AK Mishra**, Anju Bansal, Amar Bhatnagar, Dinesh Bhatnagar, Chintamani, Sunita Saxena. Statistical Considerations in Breast carcinoma-A Study on Association of Androgen Receptors with Clinical Response. Shivani Negi, *Population, Poverty and Health: Analytical Approaches*. Chapter 20:277-284. Proceedings of the 29th National Conference of the Indian Association for the Study of Population and National Seminar on Recent Statistical Technique for Data Analysis” at Banaras Hindu University (B.H.U.), Varanasi, 26th – 28th October, 2007.

Newsletter

1. **AK Mishra**. Research Methodology-Its Essence from Author's perspectives. Newsletter. Institute of Pathology (ICMR). Vol. 7. No 3,4. pp 1-3.

Abstracts (International/National)

International

1. A Soni, A. Bansal, LC Singh, **AK Mishra**, NL Mohanty, S.Saxena. Expression Profile of MMR Genes in Carcinoma Prostate in Indian Subcontinent. Abstract Published in Cellular Oncology. Special issue: Abstracts of the ISCO Congress 2010, Volume 32, Number 3, 2010.
2. **AK Mishra**, CM Pandey, Dilip C Nath, KN Prasad, RK Gupta, Uttam Singh. Some Epidemiological Models for parasitic Infections: Comparison between traditional and hierarchical logistic regression methods. Book of Abstracts of 56th convention of International Statistical Institute held at Lisboa, Portugal from 22nd – 29th August, 2007.

National

1. **AK Mishra**, Anurupa Chakraborty, Abha Soni, Thodum Regina, R.Mohil, Dinesh Bhatnagar, Amar Bhatnagar, Chintamani Chintamani, PC Sharma, Sunita Saxena. Vitamin D Receptor gene polymorphism(s) and its association with breast cancer risk in north Indian population- A Multinomial logistic regression approach. 27th Annual Conference of Indian Society for Medical Statistics held at Banaras Hindu University (BHU), Varanasi, from 27th-29th November 2009. Page 120
2. **AK Mishra**, Anurupa Chakraborty, Abha Soni, Thodum Regina, R.Mohil, Dinesh Bhatnagar, Amar Bhatnagar, Chintamani Chintamani, PC Sharma, Sunita Saxena. Regression approaches in understanding the role of Vitamin D Receptor gene polymorphism(s) in breast cancer risk in north Indian population. 31st Annual Conference of the "Indian Association for the Study of Population" held at Tirupati from 3rd-5th November 2009
3. D.S.Yadav, Th. Regina Devi, **AK Mishra**, J. Sharma, Y. Verma, E. Jamoivia, S. Kapur, S. Saxena "Genetic polymorphisms of CYP1A1 genotypes in various ethnic groups of India". In "International symposium on Ethics Culture and population genomics & 34th annual conference of the Indian society of Human Genetics" organized by ISHG and ASI in New Delhi from March 17-20, 2009
4. Immunophenotypic and clinical findings in adult Acute Myeloid Leukemia with FLT3 Internal Tandem Duplication. Chauhan P S, Bhushan B, Verma S, Saluja S, Sharma M, **AK Mishra**, Mittal V, Kabra M, Kapur S. Proceedings of 13th Human Genome Meeting (HGM 2008), Hyderabad, India, September 27th -30th, 2008. Page 94
5. Bharat Bhushan, Pradeep Singh Chauhan, Sumita Saluja, **AK Mishra**, Sumita Bhasin, Dipendra Kumar Gupta, Saeed Siddiqui, Sujala Kapur. NF-kB signaling pathway in acute leukemia: A study on expression of cell survival and proliferative genes by Real Time RT-PCR. Proceedings of 13th Human Genome Meeting (HGM 2008), Hyderabad, India, September 27th -30th, 2008. Pg: 192
6. Rakhshan Ihsan, M Kaushal, **AK Mishra**, J Sharma, D Behera, A Jaiswal, K Gupta, E Zomawia, Sujala Kapur, Sunita Saxena. Significance of TP53 codon 72 polymorphism in

breast cancer showing different xenobiotic potential spectrum. Proceedings of 13th Human Genome Meeting (HGM 2008), Hyderabad, India, September 27th -30th, 2008. Pg: 198

7. Kaushal Mishi, Chakraborty, Bagadi SA Raju, Ihsan R, Regina T, Yadav DS, Chatterjee I, Zomawia E, Kataki AC, Sharma J, Verma Y, **AK Mishra**, Kapur Sujala, Saxena Sunita. Assessment of breast cancer risk: Genotype polymorphism in estrogen synthesizing and metabolizing genes and their contribution in breast cancer susceptibility. Conference proceedings of the 27th Annual Convention of Indian Association for Cancer Research-Networking Research to Applications and International Symposium on Frontiers in Functional Genomics at Ahmedabad from 7th-9th February, 2008. Page 113
8. Ihsan Rakhshan, kaushal M, Th. R. Devi, Yadav DS, Soni A, **AK Mishra**, Katakai AC, Sharma J, Behera D, Jaiswal A, Gupta K, Kapur Sujala, Saxena Sunita. Study of Interactions between Glutathione-S-transferase Metabolic Enzymes and Smoking in Lung Cancer. Conference Proceedings of 27th Annual Conference of Indian Association for Cancer Research Networking Research to Applications and International Symposium on Frontiers in Functional Genomics, 7th-9th February, 2008. Page 125
9. Shivani Negi, **AK Mishra**, Anju Bansal, Amar Bhatnagar, Dinesh Bhatnagar, Chintamani, Sunita Saxena. Statistical Considerations in Breast carcinoma-A Study on Association of Androgen Receptors with Clinical Response”. Souvenir of the 29th National Conference of the Indian Association for the Study of Population and National Seminar on Recent Statistical Technique for Data Analysis” at Banaras Hindu University (B.H.U.), Varanasi, 26th – 28th October, 2007
10. Some Predictors of Pregnancy outcome and utilization of health care facilities among women seeking Ante Natal Services in Uttar Pradesh. 19th Annual Conference of Indian Society for Medical Statistics held at Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow during Dec.1-3, 2001

Training/Workshop/Seminars Attended

International

- Workshop on “Molecular and GIS based Epidemiology of Leprosy”, at the Institute of Pathology, Indian Council of Medical Research (ICMR), New Delhi, India 2010
- Attended one day workshop on Integration of Microbicides into Social Sciences Research organized by Family Health International a division of National Institute of Health (NIH), USA, at Hyatt, New Delhi, India 2008
- Attended Postgraduate Education Certificate course in “Advanced Research Methods in Epidemiology and Biostatistics”, held in Ujjain (M.P.), at R.D.Gardi Medical College in Collaboration with Nordic School of Public Health, Goteborg, Sweden 2003

National

- Attended five day workshop on ‘Bioinformatics’ at the Maulana Azad National Institute of Technology (MANIT), organized under the infrastructure facility of the Department of Biotechnology (DST) 2008
- Training workshop on Classification and Segmentation techniques using SPSS 16.0 at Institute for Integrated Learning and Management (IILM), New Delhi, India 2008
- Attended three days workshop on “First Indo US Summit on Healthcare” at Hyatt, New Delhi, India 2007

- Attended four day Training programme on “Biomedical Information Retrieval” at National Informatics Centre, Ministry of Science of Technology, New Delhi, India 2007
- Attended one week workshop on “Bio-Informatics” at Department of Biophysics, All India Institute of Medical Sciences (AIIMS), New Delhi 2007
- Attended Pre-Conference Workshop in “Statistical Methods in Epidemiology”, organized by the ‘Institute for Research in Medical Statistics (Indian Council of Medical Research) and Department of Biostatistics, All India Institute of Medical Sciences, New Delhi 2002

Scientific Meetings

- Attended Project Review Meeting on project entitled “Comparative study on HIV/AIDS with ART with add-on Homoeopathic drugs” approved by Centre Council for Research in Homoeopathic and Siddha, AYUSH, Ministry of Health and Family Welfare, New Delhi, India 2010
- Attended one day conference on “SPSS 17.0 users” at Parahrpur Business Centre”, Nehru Place, Nehru Place on 6th March 2009. 2009

Scientific Presentation (International/National)

International

- Presented the “Techniques of Data Management and Data Aggregation for GIS Mapping” at the International Workshop on “Molecular and GIS based epidemiology of Leprosy” at Institute of Pathology, Indian Council of Medical Research (ICMR), New Delhi, India 2010
- Presented the research paper entitled “Some Epidemiological Models for the Parasitic Infections: Comparison between Traditional and Hierarchical Logistic Regression Methods” at the “56th International Statistical Institute Conference” at Lisboa-Portugal 2007
- Contributed to the course “Planning Health Intervention Studies-Part 2” by delivering one hour presentation on different aspects of “Statistical Fallacies”, held at R.D. Gardi Medical College, Ujjain (Madhya Pradesh) in Collaboration with Nordic School of Public Health, Goteborg, Sweden 2005
- Contributed to the course “Planning Health Intervention Studies-Part 1” by delivering one hour presentation of the Palwa Field Laboratory describing the work on health and data collection in 60 villages under the project entitled ‘Longitudinal Demographic, Socioeconomic survey and analysis in 60 villages of three different administrative blocks in Ujjain district namely Mahidpur, Tarana and Ghatiya’ at R.D.Gardi Medical College, Ujjain (Madhya Pradesh) in Collaboration with Nordic School of Public Health, Goteborg, Sweden, 2004

National

- Presented paper entitled “Vitamin D Receptor gene polymorphism(s) and its association with breast cancer risk in north Indian Population-A Multinomial Logistic Regression Approach” at the 27th Annual National Conference of Indian Society for Medical Statistics, held at Banaras Hindu University, Varanasi 2009
- Presented paper entitled “Regression approaches in understanding the role of Vitamin D Receptor gene polymorphism(s) in breast cancer risk in north Indian population” at the 31st

Annual Conference of the Indian Association for the Study of Population (IASP)” held at Tirupati 2009

- Presented paper entitled “Statistical Considerations in Breast carcinoma-A Study on Association of Androgen Receptors with Clinical Response” at the 29th National Conference of the “Indian Association for the Study of Population and National Seminar on Recent Statistical Technique for Data Analysis” at Banaras Hindu University (B.H.U.), Varanasi 2007
- Presented paper “Some Predictors of Pregnancy outcome and utilization of health care facilities among women seeking Ante Natal Services in Uttar Pradesh”, at 19th Annual Conference of Indian Society for Medical Statistics held at Sanjay Gandhi Postgraduate Institute of Medical Sciences, Lucknow 2001