

Dr. Vikas Manchanda
MBBS, MD, MBA



PERSONAL INFORMATION

- Date of birth: September 17, 1973
- Place of birth: Delhi, India
- Marital status: Married, Two children
- Address: BM-149 (West), Shalimar Bagh, Delhi - 110088, India
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PRESENT POSITION

- Associate Professor, Microbiology, Maulana Azad Medical College and Associated Hospitals (*Jul 2016 to till date*)
- **Infection Control Officer, Lok Nayak Hospital, (2200 bedded hosp), Govt of NCT of Delhi** (*Jan 2014 till date*)
- Chair, Technical Committee, NABH

Experience

- Associate Professor, Microbiology, Maulana Azad Medical College and Associated Hospitals (*Jul 2016 to till date*)
- Assistant Professor, Microbiology, Maulana Azad Medical College, Delhi (*Jul 2014-Jul 2016*) (2 years)
- Assistant Professor, Microbiology & Head of Microbiology, CNBC (*Apr 2011 - July 14*) (4 years)
- Jr. Specialist, Microbiology, Chacha Nehru Bal Chikitsalaya, Delhi (*Feb 2007 to Apr 2011*) – 4 years 2 Months
- Senior Resident Microbiology, Maulana Azad Medical College, Delhi, (*Oct 2003 to Jan 2007*) – 3 years 3 Months
- Senior Resident Microbiology, Hindu Rao Hospital, Delhi (*July 2003 to Sep 2003*) – 2months

POSITIONS HELD

- Head of Department, Department of Microbiology, Maulana Azad Medical College, New Delhi (*Oct 2019- Jan 2020*)
- Vice-Chair, External affairs committee, Society of Healthcare Epidemiology of America (SHEA), USA (*2012 to 2016*)
- **Head of Department, Microbiology and Surveillance and Infection Control Division, CNBC** (*May 2008 to Dec 2015*)
- Quality Manager, Quality Management Division, CNBC (*May 2008 to Dec 2015*)
- Head of Office, Chacha Nehru Bal Chikitsalaya (*Nov 2013 to Jul 2014*) *At Children's: Chacha Nehru Bal Chikitsalaya (Govt. Of NCT of Delhi)*

KEY ACHIEVEMENTS

- **Accreditation Coordinator** of the hospital leading to successful accreditation process (National Accreditation Board of Laboratories, Quality Council of India). **First public sector hospital in the country to get accreditation.**
- **Successful placement of Hospital Infection Control Program** with effective monitoring tools with inculcation of hospital infection control practices in healthcare workers at 200 bedded children hospital and 2200 bedded multi-specialty, Medical college hospital.
- **Part of team for development of Global pathogen priority list development.**
- **Worked with WHO country office for drafting National AMR containment plan, its implementation plan, development of Indian Pathogen Priority list (IPPL) and establishment of National network for surveillance of AMR (WINSAR).**

- Worked with UNICEF for assessment of Infection prevention and control activities during labor and delivery in different tier of healthcare settings (community health center, district hospital and tertiary care center) in two states of India.
- Part of AMR surveillance network (INSAR) initiated by WHO.
- Developed accreditation standards for healthcare setting to be implemented by all those healthcare organizations across India that want accreditation with NABH for implementation of quality standards in healthcare setting.
- [Developed State Standard Operating Procedures for infection prevention and control, to be implemented in 35 state govt hospitals in Delhi.](#)
- Designed and implemented certification training program for infection control nurses.

ORGANIZATIONAL SKILLS

- Training program for Hospital infection control at Lok Nayak hospital for doctors and nurses of Govt hospital, 2020
- Conducted walkathon on awareness of AMR in Delhi, over 600 participants across Delhi participated, October, 2019
- Organized WHO-IAMM collaborative National AMR network initiation workshop, February 2019
- Conducted Webinar for Society of Healthcare epidemiology of America (SHEA) and taught SHEA ambassadors both in LIMC and resource rich countries for using ICAT tool for IPC assessment.
- Workshop of Hospital infection prevention and control – Implementation strategies at MAMC and associated hospitals. November 2017.
- Joint-Organizing Secretary: Annual Conference of Indian Association of Medical Microbiologists- Delhi Chapter. December 10-12, 2015
- Workshop Coordinator: for Hands on Workshop on Technical skills in Bacteriology laboratory Chacha Nehru Bal Chikitsalaya (CNBC), September 9, 2015.
- Organizing Secretary: An International Symposium and Hands-on Workshop on Designing, Implementation and Monitoring of an Infection Control Program with Dr. Vikas Manchanda as Organizing secretary. March 21, 2015
- Organized CME on Molecular Diagnosis of pediatric infectious diseases, October 2014, CNBC
- Organizing Joint secretary, Annual Conference, IAMM DC, MICRO-D-CON, October 2014, New Delhi
- Organizing Joint secretary, Annual Conference, IAMM DC, MICRO-D-CON, October 2013, New Delhi
- Organized CME on “Vaccines: Development to Delivery”, at India Habitat Center, Delhi, 2012
- Organized Preconference workshop “Molecular diagnosis of infectious diseases”, National Conf IAMM, 2012
- Organized HIV sensitization workshop for healthcare workers, at CNBC, 2012.
- Organized workshop on antimicrobial susceptibility testing and identification of special phenotypes in gram negative bacteria, Annual Conference, IAMM, BHU, Varanasi 2011
- Organized workshop of Bioinformatics in Clinical Microbiology – Annual Conference, IAMM Delhi Chapter, 2011
- Organized workshop of Use of computers in Microbiology – Annual Conference, IAMM Delhi Chapter, 2010
- Organizing Secretary, Chapter Meeting, Hospital Infection Society - India, Delhi Chapter, October 2009
- Organizing Secretary, Preconference workshop “Bench to Bedside - Pediatric Infectious Diseases”, IAMM Delhi, Annual Conference IAMM Delhi, March 2009.
- **Quiz master** for clinical microbiology quiz held quarterly at state level in New Delhi.
- Organizing Joint secretary, Annual Conference, Indian Association of Medical Microbiologists, March 2009, New Delhi
- Organizing secretary, CME Pediatric Infectious Diseases 2007, 2009 (CME credits of 9hrs + 8hrs by DMC)
- Organizing secretary, CME Laboratory safety and Biomedical Waste Management, 2008 (CME Credits - 3.5 hrs - DMC)

AWARDS

- **Meghna Krishan Baveja Award, 2017 - Best Paper on Pediatric Infectious Diseases Award:** Childhood pneumococcal disease: Disease burden, Serotype distribution, Clinical outcome, Antimicrobial resistance profile for invasive pneumococcal strains with its impact on Vaccine introduction in Indian setup. Saigal K, Manchanda V, Deepika, Saikia D, Manoharan A and Balaji V, IAMM Delhi, AIIMS, 2017.
- **Meghna Krishan Baveja Award, 2016, - Best Paper on Pediatric Infectious Diseases Award:** Non typhoidal Salmonellae: a neglected entity in pediatric population. Thakur P, Manchanda V, Saigal K, Tak V, Nayyar C, IAMM Delhi 2016.
- **Chief Guest,** CME on "Antibiotic selection in the era of drug resistance" at Bharti Vidhyapeeth Pune, 2013
- **IJMM Best published paper award for the Best published paper in Bacteriology for year 2010-11** for **Development of a TaqMan real time PCR for the detection of newly emerging form of carbapenem resistance gene in clinical isolates of E. coli, Klebsiella pneumoniae and Acinetobacter baumannii, 2012**
- **International Ambassador Award,** 2011, Society of Healthcare Epidemiology of America SHEA,
- **FICCI Best Paper award** - Medical team training in state run Delhi hospitals - getting the measure of patient safety culture, FICCI, 2011
- ICMR travel grant for presentation of three papers at SHEA Decennial, 2010
- **Meghna Krishan Baveja Award 2009 - Best Paper on Pediatric Infectious Diseases Award:** Prevalence And Spectrum of Health Care Associated Infections: An Experience At A Children's Hospital. : Aggarwal M, **Manchanda V**, Bornali Saikia, Sapna Makkar, Rajan Chopra. IAMM Delhi 2009
- **Best Free paper award: Manchanda V**, N. P. Singh, S.S. Thukral, A. Kumar & V. Talwar. *Comparative Evaluation of Phenotypic Methods Available for Detection of Extended Spectrum Beta - Lactamases among Clinical Isolates of K. pneumoniae.* In: IAMM-Delhi Chapter, September 2002.

SOCIETY MEMBERSHIPS AND OTHER PROFESSIONAL ACTIVITIES

- **MAMC**
 - Member, MAMC Research Cell (W.e.f. 01-01-2018, Letter dated 27-09-2018)
 - Member, Institutional Ethics Committee, MAMC (W.e.f July 2018)
 - Member, Website Committee, MAMC (w.e.f. July 2016)
- **Govt of NCT of Delhi**
 - Member, Institutional Ethics Committee, Chacha Nehru Bal Chikitsalya, Govt of NCT of Delhi (2018 – till date)
 - Member, State Adverse events following immunization (AEFI) committee (2017 – till date)
 - Member, Hospital Infection Control, SOP Committee, Delhi State Health Mission, 2018
 - Member, Technical Assessment Committee (TAC), Chacha Nehru Bal Chikitsalya
 - Member, Review Committee, Construction and designing Indira Gandhi Hospital, Dwarka, 2017
 - Member, Outsourcing of laboratory services of Aam Admi Mohalla Clinics and other Delhi Govt Health centers (2017)
 - Member, Review Committee, Construction and designing eight New Hospitals by Govt of NCT of Delhi 2016
 - Member, Hospital Infection Control, Standard Operating Procedure Committee, Delhi State Health Mission, 2016
- **Central Government, Quasi-Governmental and Autonomous bodies**
 - Expert Review meeting at National Center for Disease Control (NCDC) Delhi to update SOP for AMR surveillance (August 6, 2018)
 - Medical Biotechnology and Nano-technology, Sectional Committee, MHD 20
 - Member, Project Review Committee, ICMR (2014-onwards)
 - Member, Advisory Committee for Maternal and Child Health Projects in ICMR, 2017 onwards
 - Member, Advisory Committee, Indo-Norwegian Projects on AMR, ICMR, 2016 onwards

- Member, National Action Plan for Viral Hepatitis and formulation of strategic plan. 2017
 - Member, Expert group for standard treatment guidelines, DGHS, MoHFW, 2016
 - Member, Short term studentship Review Committee, ICMR , 2015-16
 - Assessor, NABH for NABH Accreditation of HCO, SCHO, Safe-I program
 - Member of committee revising 4th Edition of NABH Standards for Healthcare Organizations, 2015-16
 - Member, Task Force for strengthening of public Health Laboratories by MHFW, 2016
 - Member, Technical Assessment Committee (TAC), for microbiology equipment, MoHFW, 2016
 - Member, Technical Committee, NABH (2012-17)
 - Member, Expert group for standard treatment guidelines, DGHS, MoHFW, 2016
 - Member, Short term studentship Review Committee, ICMR
 - Assessor, NABH for NABH Accreditation of HCO, SCHO, safe I program, NABH
 - Member of committee revising 4th Edition of NABH Standards for Healthcare Organizations
 - Member, Laboratory Assessment Team for Tamilnadu, By MHFW
 - Member, Laboratory Assessment Team for Madhya Pradesh, By MHFW
- **Professional Medical bodies and Associations**
 - Executive member, IAMM National body
 - Executive member (*Treasurer*), IAMM Delhi Chapter
 - Associate Editor – Indian Journal of Medical Microbiology (IJMM)
 - Member of Editorial Board of following journals:
 - Journal of Patient Safety and Infection Control – Journal of Hospital infection Society of India (HISI)
 - Astrocyte – Journal by National Board of Examinations (NBE)
 - Jeevanu Times – Publication from Indian Association of Medical Microbiologists, Delhi Chapter
 - Web Editor - IAMM Delhi Chapter
 - Web Editor – Hospital Infection Society, India
 - Practical Examiner BSc (MLT), GGS University
 - Practical Examiner MBBS, Gujarat University
 - Formerly, Vice Chair, External Affairs committee, Society of Healthcare Epidemiology of America (SHEA), USA
 - Former Member Secretary
 - Hospital Infection Control Committee (HICC), CNBC
 - Continuous Quality Improvement Committee, CNBC
 - Continuing Medical Education Committee, CNBC
 - Formerly Editorial Board of IAMM DC newsletter – “Jeevanu Times”, Journal of Patient Safety and Infection Control.
 - Executive member of India Association of Medical Microbiologist – Delhi Chapter

PROFESSIONAL EXPERIENCE

Objectives:

- To be a leader in health care epidemiology and infection prevention & control
- Establish a state-of-the-art Diagnostic Microbiology laboratory in a tertiary care hospital
- Implement uniform standard in Infection Prevention adopting international guidelines in health care epidemiology across hospitals in India
- To participate and organize educational and awareness programs and research projects on healthcare-associated infections and its implications
- To work on Quality in Health care with an emphasis on patient safety and prevention of infections

Current Job Profile:

Infection Prevention & Control

- Lead, coordinate and implement activities necessary for the Infection Control Program at LNH, 2016-till date
- Lead, coordinate and implement activities necessary for the Infection Control Program at CNBC

2008-2015

- Coordination with clinical departments and support services for implementation of infection prevention policies at LNH, 2016 onwards.
- Drafting accreditation standards and developing tools for virtual assessment of the standards in various hospital across the country.
- Collaborate with administration, department heads, nursing and ancillary departments and medical staff to organize resources necessary for providing quality patient care services and safe environment for patients and healthcare workers at CNBC 2008-2015
- **Consultant to UNICEF** to improve infection control practices in labour and delivery. 2012
- Participation in multidisciplinary clinical rounds for infections, audit and implementation of policies and practices related to prevention of infections.
- Providing active support and advice on hospital activities related to all aspects of Infection prevention & control, risk assessments, management of occupational exposures to infections.
- Development of the Infection Control Manual, Antimicrobial Management Program, and investigation protocols related to infectious diseases, Sterilization, Disinfection SOP, occupational exposure prevention and HCW immunization guidelines.
- Serve as a response person to departmental heads and staff for providing guidance and direction related to Infection Control and education activities related to it.
- Develop educational programs for orientation, general information and for prevention and control of infection for hospital personnel and patients
- Teaching & training all categories of healthcare workers in all aspects of infection prevention.
- Routine audit of best practices, surveillance of HAIs', antimicrobial usage, epidemiological data collection and custodian of all data related to HAI and Microbiology

Operations

- Managing the operations including budgeting, personnel, PR, technology & spearheading teams for excelling business targets & service delivery metrics in the department
- Conceiving/implementing short/long-term plans for achievement of quality process both in the hospital, laboratory and hospital infection control
- Scrutinizing the working/performance of other functional groups and conducting internal process audits & process reviews for ensuring strict adherence to the process quality norms
- Day to day supervision of Clinical Microbiology department as well as participation in clinical rounds with the critical care team.

Extramural - Research and Educational Projects

Ongoing

1. Antimicrobial resistance (AMR) trends and serotype characterization of Streptococcus pneumoniae causing Pneumonia and Invasive Pneumococcal Disease (IPD) in Indian children. Funded by ICMR. (yet to be initiated).
2. Evaluating Pneumococcal Conjugate Vaccine (PCV) Impact on Pneumonia and Pneumococcal carriage Outcomes in India in Children 1-35 Months in India - Pneumonia REsearch and VAccine Impact League (PREVAIL) Project. (Initiated January 2020) *In collaboration of IVAC, JHU, USA funded by Pfizer.*
3. Development of "MAMC COVID INFORMATION PORTAL" to enhance Decision Making at different levels using an Artificial Intelligence (AI) based information dissemination system (Initiated June 2020)
4. Point-of-Care (POC) devices for bedside diagnosis of bacteremia and neonatal sepsis (Initiated Dec 2018) *funded by DST*, IMPRINT-2 funds (Approx Budget 29.57 Lakhs)
5. Development of a point-of-care (POC) diagnostic panel for rapid detection and stratification of bacterial septicemia in critically-ill patients. (Initiated Dec 2018) *funded by DST* under nanomission grant (Approx Budget 31.26 Lakhs)

Completed

1. Evaluating PCV impact on invasive pneumococcal disease, pneumonia, pneumococcal carriage, and health economic outcomes in India. (Initiated Oct 2018) *funded by Bill Gates Melinda Foundation and Pfizer.*
2. WHO project entitled "Development of an Indian Priority Pathogen List (IPPL) of antibiotic-resistant bacteria to guide research, discovery and development of new antibiotics, from the national perspective" (Oct 2018-Feb 2019). (Approx Budget 4.5 Lakhs).
3. Rapid diagnosis of candidemia through a novel, rapid and cost-effective spot immunomagnetic enrichment device (SiMED) Initiated July 2018, *funded by DBT* (Approx Budget 33Lakhs)
4. A Study of a new diagnostic approach iMC² for early diagnosis of typhoid fever. Initiated Aug 2017 Completed March 2019, *funded by DBT* (Approx Budget 13Lakhs)
5. *Baseline Assessment for Streptococcus pneumoniae of India Serotypes (BASIS), June 2015-Dec 2017, Site PI, CNBC; funded by Bill Melinda Gates foundation.*
6. Hospital Based Sentinel Surveillance of Bacterial Meningitis in India (HBSSBM), 2013-Sep 2016, *Site PI, CNBC funded by NIE, ICMR Project*
7. Population based surveillance of *S. pneumoniae* (ASIP) (November, 2011 - March 2015) (*Project with CMC, Vellore; Completed March 2015*)
8. Neonatal sepsis registry project, funded by ICMR (September, 2011 – March 2015) (*Project with Newborn Knowledge Center, AIIMS; Completed March 2015*)
9. Molecular diagnosis and characterization of drug resistance genes in *M. tuberculosis* from patients of tuberculous meningitis and its correlation with underlying host factors. (*Site PI, Project funded by ICMR, in collaboration with IHBAS completed March 2015*)
10. Antimicrobial resistance in South East Asia Region. Funded by WHO, (*August 2010*)
11. Clinico-bacteriological profile of acute bacterial meningitis in children (October, 2010)
12. Management of enteric fever in children (October 2010)
13. The epidemiological surveillance of *N. meningitidis* in children in Delhi, India. Funded by WHO, India (*April 2009*)
14. Member, Indian Network of Surveillance of Antimicrobial Resistance (INSAR), WHO (*Sept 2009, 2010*)
15. CME Pediatric Infectious Diseases, 2009, in Collaboration with WHO, India (*17-18 January 2009*)

Thesis/Dissertation Guided

a. MD/MS Thesis

i. Ongoing:

1. Guide: To determine role of virulence factors and antimicrobial resistance in treatment outcomes in *Acinetobacter baumannii* infections
2. Guide: To determine role of virulence factors and antimicrobial resistance in treatment outcomes in *Staphylococcus aureus* infections
3. Co--Guide: Bacteriological profile of serous otitis media and efficacy of boric acid in these bacterial infections. as a part of MD Thesis with Department of ENT, MAMC
4. Co--Guide: Detection of anti-HBs, measles, mumps and rubella antibodies in diabetic children. as a part of MD Thesis with Department of Pediatrics, MAMC
5. Co--Guide: Detection of lipoarabinomannan in urine for diagnosis of pulmonary tuberculosis
6. Co--Guide: Proportion of syphilis, hepatitis B and C virus infections among the integrated counselling & testing center attendees of a tertiary care hospital.

ii. Completed:

1. Co--Guide: Comparison of performance of immunoassay based "celiac card" and human anti-tissue transglutaminase antibody ELISA kit for celiac disease as a part of MD Thesis with Department of Pediatrics, UCMS & GTB Hospital (Shall be submitted in April 2017)

2. Co-Guide: Celiac disease in children with moderate to severe iron deficiency anemia: A hospital based study. (2015) as a part of MD Thesis with Department of Pediatrics, UCMS & GTB Hospital
 3. Co-Guide: Socio-demographic, clinical and microbiological profile and risk factors for major amputation in patients with diabetic foot (2012) as a part of MS Thesis with Department of Surgery, UCMS and GTB Hospital
- b. DNB Thesis
- i. Ongoing: NIL
 - ii. Completed:
 1. Co-Guide: Clinico-bacteriological profile and outcome of empyema thoracis in children. As a part of DNB Thesis with Department of Pediatrics, CNBC (Shall be submitted between April 2014 - 2017)
 2. Co-Guide: To study the clinic-etiological profile of liver abscess admitted at tertiary care hospital in North India. As a part of DNB Thesis with Department of Pediatrics, CNBC (Shall be submitted between April 2015 - 2017)
 3. Co-Guide: Prevalence of urinary tract in febrile children under two years of age. As a part of DNB Thesis with Department of Pediatrics, CNBC (submitted in July 2016)
 4. Co-Guide: Pattern and incidence of infections in children with idiopathic nephrotic syndrome as a part of DNB Thesis with Department of Microbiology, CNBC (Submitted in April 2015)
 5. Co-Guide: Comparative study of efficacy of Ceftriaxone and chloramphenicol in the management of Typhoid fever (2013)
 6. Co-Guide: Clinico-bacteriological study in children with acute bacterial meningitis in a tertiary care hospital (2013)
 7. Co-Guide: Clinico-Microbiological profile of Healthcare associated infections in PICU in a tertiary care hospital (2012)
 8. Co-Guide : "Etiological diagnosis of severe pneumonia in PICU" (2011)
 9. Co-Guide: Bacteriology of neonatal sepsis (2010)
- c. Supported MD Thesis
- i. Completed:
 1. Occurrence of *Propionibacterium acnes* in children with acne (Department of Microbiology, VMMC, Safdarjung Hosp) (2013)
 2. Clinical correlation and role of PCR in bacterial meningitis in children (Department of Microbiology, UCMS) (2013)
 3. Role of MP64 gene PCR in diagnosis of extra-pulmonary tuberculosis. (Department of Microbiology, UCMS) (2013)
 4. Molecular basis of antimicrobial resistance in *Acinetobacter baumannii* (Department of Microbiology, UCMS) (2012)
 5. Role of HIV Viral load testing in newborns with HIV positive mothers (Department of Pediatrics, UCMS) (2012)
 6. Molecular diagnosis of typhoid fever (Department of Microbiology, UCMS) (2011)

Laboratory

- Publish annual antibiograms, cumulative laboratory data for important diagnostic tests and recommendations.
- Managing new projects / initiatives for restructuring of basic medical and lab facilities, and establishing state-of-the-art infrastructure.

- Monitoring project planning and execution, resource administration and allocation among team members for successful completion of the projects. Establishing and streamlining clinical microbiology services across tertiary care hospitals of the current organization
- Initiation of new diagnostic methods for improvement of patient care and procurement of the required equipment, kits and other infrastructure

Administration/ Quality

- Member of committee for outsourcing of Laboratory Diagnostic Services (non-Radiological) of Polyclinics, Mohalla Clinics, Delhi Govt Dispenseries and Seed PUHCs (July – Nov 2017)
- Established a Clinical Microbiology and Infectious Control Division for 216 bedded Children Hospital
- Was Member Secretary of Infection Control Committee, Convener of Pharmacy & Therapeutics Committee, and Member of the Quality Steering Committee, Safety Committee, and Sentinel Events Committee at CNBC 2008-2015.
- Responsible for reporting of all communicable diseases and outbreaks within the hospital and serving community to the Public Health Authority as required by the State Regulatory Units.
- **Member Task force for development of minimum requirements for registration of laboratories under Clinical Establishment Act, 2010**
- **Expert Group for formulating National Treatment Guidelines Under Antimicrobial Surveillance Program, MoH FW, 2015-16.**
- **Development of NABH standards for Clinical Laboratories 2015.**
- **Member Project Review Committee, ICMR 2014- till date**
- SOP designing Committee, Hospital Infection Control, Govt of NCT of Delhi, May-Jun 2016
- SOP designing committee, Laboratory services, Govt of NCT of Delhi, May-Jun 2016
- Committee on designing of eight healthcare units, Govt of NCT of Delhi, May-Jun 2016
- Member Expert group for preparation of Training Module for “Training of Trainers” for Antimicrobial Stewardship Program, Prepared by Hospital Infection Society of India, May 2016

Documentation

- Preparation of Hospital manual, Infection Control Manual, Antimicrobial Guidelines (Antibiotic policy), Safety manual and SOPs for Clinical microbiology.
- Maintenance of all records pertaining to quality assurance of clinical microbiology and surveillance of infection, audit reports
- Using WHONET, EPI net for documentation and analysis of infection and occupational safety data.

PUBLICATIONS

A. Peer Reviewed Publications in Scientific Journals

a. Published:

1. **Manchanda V**, Prasad D, Randive B, Gerhardt A, Huskins WC, Singh N. Infection control practices at facilities providing monetary incentives for facility births: An assessment at selected labour and delivery rooms in two states of India. *J Patient Saf Infect Control* 2019;7:25-30.
2. Sardana R, Mandal AK, Nair D, Mendiratta L, Butta H, Jain T S, Kapil A, Wattal C, Hans C, Mani R K, Sagar G, Jaggi N, Khilnani P, Mathur P, Jasuja S, Kansal S, **Manchanda V**, et al. Preventing infection from indwelling intravascular devices: Hospital infection society India consensus group recommendations for Indian healthcare. *J Patient Saf Infect Control* 2019;7:31-47.

3. Jajoo M, **Manchanda V**, Chaurasia S, Sankar MJ, Gautam H, Agarwal R, et al. Alarming rates of antimicrobial resistance and fungal sepsis in outborn neonates in North India. **PLoS ONE** 2018 13(6): e0180705. <https://doi.org/10.1371/journal.pone.0180705>.
4. Jayaraman Y, Mehendale, Jayaraman R, et al. Immunochromatography in CSF improves data on surveillance of *S. pneumoniae* meningitis in India. **J Infect Public Health**. 2018 <https://doi.org/10.1016/j.jiph.2018.01.002>
5. Sharma S, Uppal B, **Manchanda V** & Sud A. Diagnostic utility of procalcitonin as biomarker of sepsis in children. **Infectious Diseases**, 2018; 50(7):567–568.
6. Singh NP, Choudhury DD, Gupta K, Rai S, Batra P, **Manchanda V**, et al. Predictors for gut colonization of carbapenem-resistant Enterobacteriaceae in neonates in a neonatal intensive care unit. *American journal of infection control* 2018;46 (6): e31–e35.
7. **Manchanda V**, Suman U, Singh N. Implementing Infection Prevention and Control Programs When Resources Are Limited. **Curr Treat Options Infect Dis** 2018; 10(1):28-39.
8. Choudhury DD, Singh NP, Rai S, Batra P, **Manchanda V**. Carbapenem resistant Enterobacteriaceae neonatal gut colonization: A future concern in healthcare settings. *Indian Journal of Microbiology Research* 2018;5 (3):348-354.
9. Gupta R, Thakur R, Kushwaha S, Jalan N, Rawat P Gupta P, Aggarwal A, Meena Gupta M, **Manchanda V**. Isoniazid and rifampicin heteroresistant *Mycobacterium tuberculosis* isolated from tuberculous meningitis patients in India. *Ind J Tuberculosis*. 2018;65(1):52-56.
10. Narang M, Natarajan R, Shah D, Puri AS, **Manchanda V**, Kotru M. Celiac Disease in Children with Moderate-to-Severe Iron-deficiency Anemia. **Indian Pediatrics** 2018;55:31-34.
11. Kumar P, Singh MJ, **Manchanda V**, Kumar R, Deep Inder. Awareness, perceptions and practices about childhood blindness among parents visiting a tertiary level children hospital in Delhi. *Research & Reviews: A Journal of Health Professions*. 2018; 3(3):6-10.
12. Tacconelli E, Carrara E, Savoldi A, et al. Discovery, research, and development of new antibiotics: the WHO priority list of antibiotic-resistant bacteria and tuberculosis. **Lancet Infectious Diseases** 2017; 18(3):318-327.
13. Nayyar C, Saksena R, **Manchanda V**. Prevalence of transfusion-transmitted viral pathogens among health-care workers and risk mitigation programme in a paediatric tertiary care hospital. **Indian J Med Microbiol**. 2017;35(2):296-298.
14. Udawat P, Gupta S, **Manchanda V** and Saikia D. Clinico-microbiological profile of health-care associated infections in a paediatric intensive care unit of tertiary care hospital. *Int J Contemp Pediatr*. 2017 Mar;4(2):577-585.
15. Srivastava N, Kumar A, Singh NP, **Manchanda V**. Diagnostic Dilemma in Typhoid Fever-Real Time PCR, Need of the Hour. *Int J Curr Microbiol App Sci*. 2017;6(9): 3012-3017.
16. Kushwaha S, Gupta R, Thakur R, Jalan N, Rawat P Gupta P, Aggarwal A, Meena Gupta M, **Manchanda V**. Predictors of adverse outcome in patients of tuberculous meningitis in a multi centric study from India. In press. *Ind J Tuberculosis*. 2017; 64:296–301.
17. Singh N, **Manchanda V**. Control of multi-drug Gram-negative bacteria in Low and middle-income countries-high impact interventions without much resource. **Clin Microbiol Infect** 2017;23 (4): 216-18.
18. Manoharan A, **Manchanda V**, Sundram B, Lalwani S, Modak M, Bai S, Vijayan A, Nagraj S, Shet A, Karande S, Natraj S, Yewale VN, Iyer RN, Santosham M, Kahn G, Knoll M. Multicentre Surveillance of Invasive Pneumococcal Disease in India- Alliance for Surveillance of Invasive Pneumococci (ASIP). **Lancet Infectious Diseases** 2017; 17(3):305-312.
19. Watal C, Javeri Y, Goel N, Dhar D, Saxena S, Singh S. Oberoi JK, Rao BK, Mathur P, **Manchanda V**, et al., Convergence of Minds: For Better Patient Outcome in Intensive Care Unit Infections. **Indian J Crit Care Med** 2017;21:154-9
20. Biswal I, Gaiind R, Kumar N, Mohanty S, **Manchanda V**, Khunger N, V R, Deb M. In vitro antimicrobial susceptibility patterns of *Propionibacterium acnes* isolated from patients with acne vulgaris. **J Infect Dev Ctries**. 2016 Oct 31;10(10):1140-1145.

21. Investigators of the Delhi Neonatal Infection Study (DeNIS) collaboration. Characterization and antimicrobial resistance of sepsis pathogens in neonates born in tertiary care centers in Delhi, India: a cohort study. **Lancet Global Health** 2016; 4:e752-60.
22. Mahana S, Tomar R, Agrawal R, Saksena R, **Manchanda V**, Gupta R. Tuberculous lymphadenitis: Comparison of cytomorphology, Ziehl-Neelsen staining, and rapid mycobacterial culture at a pediatric superspecialty hospital. **CytoJournal** 2016;13:17.
23. Rai S, Rani M, Choudhury DD, Singh NP, Gupta A, **Manchanda V**. Failure to decolonize mupirocin and linezolid resistant MRSA from a patient with necrotizing soft tissue infection. **Journal of Infection and Public Health** 2016. <http://dx.doi.org/10.1016/j.jiph.2015.12.020>.
24. Saksena R, **Manchanda V**, Mittal M. *Bordetella trematum* bacteremia in an infant: A cause to look for. **Ind J Med Microbiol** 2015; 33(2):305-307.
25. Jajoo M, Kapoor K, Garg LK, **Manchanda V**, Mittal SK. To Study the Incidence and Risk Factors of Early Onset Neonatal Sepsis in an Out born Neonatal Intensive Care Unit of India. **J Clin Neonat** 2015; 4(2):91-95.
26. Gupta R, Thakur R, Gupta P, Jalan N, Kushwaha S, Gupta M, Aggarwal A, **Manchanda V**. Evaluation of Geno Type MTBDRplus Line Probe Assay for Early Detection of Drug Resistance in Tuberculous Meningitis Patients in India. **J Global Infect Dis** 2015; 7(1): 5-10.
27. Kapoor K, Jain S, Jajoo M, Dublish S, Dabas V, **Manchanda V**. Risk Factors and Predictors of Mortality in Critically ill Children with Extensively-Drug Resistant *Acinetobacter baumannii* Infection in a Pediatric Intensive Care Unit. **Iranian Journal of Pediatrics** 2014. 24(5):569-574.
28. Mittal SK and **Manchanda V**. Preventing meningococcal infections in India. **Indian pediatrics** 2014; 51(6):446-8.
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37. **Manchanda V**, Rai S, Chopra R, et al. Development of TaqMan Real Time PCR for detection of newly emerging form of carbapenem resistance gene in clinical isolates of *Escherichia coli*, *Klebsiella pneumoniae*, and *Acinetobacter baumannii*. **Ind J Med Microbiol** 2011; 29(3):249-53.
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B. Book chapters, newsletters, concept papers

a. Published

1. Manchanda V. and Farooqi FH. Antimicrobial Resistance: Current Scenario. In IAP Speciality Series on Rational Antimicrobial Practice in Pediatrics. Editors Tanu Sigal, Nitin Shah, Suhas Prabhu and Vijay Yewale. Jaypee Publishers, Edn 3rd. 2018 pp14-24.
2. Standard operating procedure for infection prevention and control. Delhi State Health Mission.
<http://health.delhigovt.nic.in/wps/wcm/connect/caf5be0040aa7770b3e1f30d0d3667b7/MBW.pdf?MOD=AJPERES&Imod=1023392687&CACHEID=caf5be0040aa7770b3e1f30d0d3667b7>
3. Part of the Expert Committee who contributed to “National Antibiotic Treatment Guidelines” released by Ministry of Health and Family Welfare, Govt of India. Available at: http://pbhealth.gov.in/AMR_guideline7001495889.pdf
4. Antibiotic policy and stewardship Program CNBC, Jan 2016. Available at: <http://cnbchospital.in/UploadedData/UploadedFile/130978258957811454.pdf>
5. Part of the Expert Committee who revised 4th Edition of NABH Standards for Healthcare Organizations
6. Antibiotic policy CNBC, May 2014.
7. **Manchanda V**. Meningococcal Infections: Clinical forms, Microbiology, Pathogenesis, Diagnosis, Clinical Course and Outcome. In: Invasive meningococcal disease. ECAB Clinical Update: Pediatrics. Elsevier India. 2013, p37-63. ISBN 978-81-312-3386-3.
8. **Manchanda V** and Singh N. Laboratory diagnosis of osteoarticular infections in children. In: Pediatric osteoarticular infections. Jaypee Brothers, India. 2013, p10-20.
9. **Manchanda V** (co author), Step-by-step approach for development and implementation of hospital antibiotic policy and standard treatment guidelines. WHO (SEARO), 2011
10. **Manchanda V** (co author). Establishment of National laboratory-based surveillance of antimicrobial resistance. WHO (SEARO), 2011
11. **Manchanda V**, Singh N, Gordon S. **National Infection Control Policy**. Concept Paper. 2010
12. **Manchanda V**. Molecular Epidemiology of AmpC enzymes. In: Current trends in antibiotic resistance in Infectious Diseases. Asad U Khan. 2009. IK International Publishing House Pvt Ltd. New Delhi, India.
13. Editor Souvenir & Abstract Book, Annual Conference, IAMM Delhi, March 2009, 2010, 2011, 2013
14. Editor Clinical Microbiology Newsletter, CNBC, 2007, 2009, 2012, 2013, 2014

C. Online Teaching Modules

1. An online training on surgical site Infections (Set of 11 modules) developed for NABH for training of doctors and nursing staff. 2015-16.

b. Under Publication

- i. Chief Editor for a multi-authored book entitled “ Vaccines: Edward Jenner to Future” a multi-authored books with all chapters submitted to Publisher (Elsevier) for consideration of publication.

ABSTRACT AND PRESENTATIONS

1. Nagi N, **Manchanda V**, Yadav A, Aggarwal A, Jhamb U, Baveja CP. Mechanisms of antimicrobial resistance (AMR) and their attributable mortality in paediatric sepsis – A pilot study. July 2019, IAMM Delhi Chapter
2. Nagi N, **Manchanda V**, Arora N, Hasan F, Jhamb U, Baveja CP. To study the effect of use of air purifiers on microbial load in a Pediatric Intensive Care Unit of a tertiary care hospital. April 2019, IAMM Delhi Chapter
3. Suman U, **Manchanda V**, Sarin YK, Jyotsana, Andrews SR, Shashibala, Baveja C.P. Paediatric surgical wound infections and its microbiological spectrum over a period of two years in a tertiary care hospital. April 2019, IAMM Delhi Chapter
4. **Manchanda V**, Deepika, Saigal K, Saikia D, Manoharan A, Chandy S, Balaji V, Shet A, Santosham M. Clinical presentation and emerging penicillin resistant invasive pneumococcal disease among <5 years old children. At International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD), Melbourne, Australia, 2018.
5. Gupta S, **Manchanda V**, Baveja CP, Sachdeva P. A study of incidence density and risk factors for surgical site infection (SSI) in lower segment caesarean section surgeries (LSCS) of tertiary care hospital of North India. IAMM Delhi, AIIMS, 2017.
6. Yadav A, **Manchanda V**, Faria Hasan F, PS Bhandari PS, Baveja CP. Impact of implementation of Levine technique for specimen collection from wounds in burns patients. IAMM Delhi, AIIMS, 2017.
7. Saigal K, **Manchanda V**, Deepika, Saikia D, Manoharan A and Balaji V. Childhood pneumococcal disease: Disease burden, Serotype distribution, Clinical outcome, Antimicrobial resistance profile for invasive pneumococcal strains with its impact on Vaccine introduction in Indian setup. IAMM Delhi, AIIMS, 2017.
8. **Manchanda V**, Manoharan A, Deepika, Balaji V. Incidence density of penicillin resistance and the therapeutic options for the management of invasive pneumococcal disease in India. At International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD), Glasgow, UK, 2016.
9. **Manchanda V**, Manoharan A, Deepika, Balaji V. Clinical profile, serotype distribution and outcomes of invasive pneumococcal serotypes in under-five children and its relevance to pneumococcal conjugate vaccine - a four years experience. At International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD), Glasgow, UK, 2016.
10. Thakur P, **Manchanda V**, Saigal K, Tak V, Nayyar. Non typhoidal Salmonellae: a neglected entity in pediatric population. IAMM Delhi 2016.
11. Nayyar C, Saksena R, **Manchanda V**, Vashisht A, Kachuthan A. Impact of Hospital infection control programme on incidence of Hospital associated infections and their clinical outcomes in a tertiary care pediatric hospital. At IFIC-HISICON, New Delhi, March 2015.
12. Saksena R, Charu N, **Manchanda V**, Jobin M, Sapna M, Neeta. Sharp injuries and other occupational exposures to blood and body fluids among Healthcare workers in a tertiary care pediatric hospital in India. At IFIC-HISICON, New Delhi, March 2015.
13. Saksena R, Nayyar C, **Manchanda V**, Vashisht A, Mathews J, Achuthan A, Neeta, Makkar S. Hand hygiene practices and associated factors in intensive care units (ICUs) in a paediatric tertiary care hospital in India. At IFIC-HISICON, New Delhi, March 2015.
14. Vashist A, Kachuthan A, Mathews J, Makkar S, Neeta, **Manchanda V**. Monitoring of pre-surgical prophylaxis and Post surgical antimicrobial therapy and its effects on formulation of antibiotic policy. At IFIC-HISICON, New Delhi, March 2015.
15. Saksena R, **Manchanda V**, Sinha N, Manchanda V, Mohta A. Compliance to appropriate pre-surgical prophylaxis and post-surgical antimicrobial therapy in pediatric surgery patients and its effect on the burden of Surgical Site Infections (SSIs). IAMM- Delhi Chapter. First Chapter Meeting, Maulana Azad Medical College, March 29, 2014.
16. Saksena R, **Manchanda V**, Kinha P, Mittal M. Clinical and etiological profile of bacterial meningitis in a tertiary care pediatric hospital. IAMM- Delhi Chapter. First Chapter Meeting, March 29, 2014. Maulana Azad Medical College
17. Saksena R, Satia S, **Manchanda V**. Formulation of antibiotic management guidelines for sepsis in paediatric patients – guidelines to usage of local antibiogram. IAMM- Delhi Chapter. Second Chapter Meeting, Max Super Speciality Hospital, Saket, August 30, 2014.
18. Nayyar C, Saksena R, **Manchanda V**. Prevalence and types of ESBLs in Shigella spp. and its clinical implications. IAMM- Delhi Chapter. Second Chapter Meeting, Max Super Speciality Hospital, Saket, August 30, 2014.

19. **Manchanda V**, Kinha P, Gautam H, Manoharan A. Invasive pneumococcal disease serotypes and penicillin resistance among under-five children and implications to choice of polysaccharide conjugate vaccines for India. International Symposium on Pneumococci and Pneumococcal Diseases. Hyderabad, March, 2014.
20. Manoharan A, **Manchanda V**, Knoll M, Brien KO and Kahn G. Invasive Bacterial Disease (IBD) in Children <5 years at CNBC, Delhi, India. International Symposium on Pneumococci and Pneumococcal Diseases. Hyderabad, March, 2014.
21. Gupta D, **Manchanda V**, Gautam H, Jajoo M and Investigators of ICMR Centre for Advanced Research (CAR) in Newborn Health. Bacteriological profile, risk factors and outcome of neonatal septicaemia in an outborn nursery in India. At 5th Congress of European Microbiologists, (**FEMS**), Germany, July 2013.
22. Huskins WC, **Manchanda V**, Singh N. Infection Control Practices During Labor and Delivery and Newborn Care in Resource Limited Settings: Assessment and Recommendations for Improvement. International Conference on Prevention and Infection Control. ICPIC, Geneva, Switzerland. June 2013. Abstract#P269.
23. Kinha P, **Manchanda V**, Gautam H, Manoharan A. Prevalent Serotypes and clinical presentation of Invasive Pneumococcal Disease in under five children in India. National Conference IAMM, 2012, Abstract # BP247.
24. Neha, Gautam H, **Manchanda V**. Clinical profile of children with *Sphingomonas paucimobilis* bacteraemia. National Conference IAMM, 2012, Abstract # BP15.
25. Aggarwal M, **Manchanda V**, Gautam H. Seroprevalence of viral hepatitis among paediatric population - A hospital based study. National Conference IAMM, 2012, Abstract # VP 56.
26. Saksena R, **Manchanda V**, Gautam H.. Effect of revised CLSI breakpoints (2012) for ciprofloxacin susceptibility on role of nalidixic acid as predictor of fluoroquinolone susceptibility in typhoidal salmonellae. National Conference IAMM, 2012, Abstract # BP233.
27. Jajoo M, **Manchanda V**, Dabas V, Mittal D, Deepika, George J, Sebastian P, Bhutta ZA, Yadav A, Wadhwa A. Systemic infections in outborn neonates at a networking site of ICMR Centre for Advanced Research in Newborn Health: preliminary results from 'Prevent Sepsis-related Neonatal Mortality' program
28. Jajoo M, **Manchanda V**, Dabas V, Mittal D, Deepika, George J, Sebastian P, Bhutta ZA, Yadav A, Wadhwa A. Profile of home delivered neonates admitted at a tertiary care neonatal unit.
29. **Manchanda V**, Singh N, Verma N, Chopra R. New Delhi Metallo-Beta-Lactamases -1 in a tertiary care pediatric center. SHEA 2011, Abstract # 4846.
30. **Manchanda Vikas** et al Emergence of Invasive Fungal Infections (IFI) as Healthcare-Associated Infections (HAI) in Hospitalized Neonates. The Society for Healthcare Epidemiology of America, Atlanta Georgia, 2010: 226
31. **Manchanda Vikas** Hospital-Associated Infections (HAI) in Children a Resource Limited Setting. The Society for Healthcare Epidemiology of America, Atlanta Georgia, 2010: 428
32. **Manchanda Vikas** Prevalence and Spectrum of Healthcare-associated Infections (HAI) in Critical Care Units of a Pediatric Tertiary Care Hospital in India. The Society for Healthcare Epidemiology of America, Atlanta Georgia, 2010: 835
33. Meenakshi Aggarwal, **Vikas Manchanda**, Bornali Saikia, Sapna Makkar, Rajan Chopra. Prevalence And Spectrum Of Health Care Associated Infections: An Experience At A Children's Hospital. IAMM Delhi. June 2009
34. **Manchanda Vikas**, Swastika Agarwal, Rajan Chopra et al. Clinical presentation of children with positive antinuclear antibodies and evaluation of Line Immunoassay and IFA as diagnostic techniques in such cases. IAMM Delhi Chapter March 2009
35. Swastika Agarwal, **Manchanda Vikas**, Rajan Chopra et al. Clinical Significance of Yeast Infections in Children in a Paediatric hospital. IAMM Delhi Chapter March 2009
36. **Manchanda Vikas**, Bhalla P, Sharma VK. *Current trends of antimicrobial susceptibility of Salmonella enterica Seroovar Typhi causing bacteremia and therapeutic options for treatment of typhoid fever in children..* Delhi Chapter IAMM, 2005.
37. **Manchanda Vikas**, Sharma VK. *Bacterial Agents Causing Urinary Tract Infections in Children in Community and correlation of Urine Microscopy.* Delhi Chapter IAMM, 2005.
38. **Manchanda Vikas**, Krishna Prakash, Sharma VK. *A study on Pyoderma in children.* Delhi Chapter IAMM, 2005.

39. Singh N.P., Renu Goyal and **Manchanda Vikas**. *Occurrence and Detection of Clindamycin Susceptibility in Erythromycin Resistant Phenotypes of MRSA*. National Conference IAMM September 2002.
40. **Manchanda V**, Singh NP, Kothari A, Kumar A, Arora V, Talwar V. *Prevalence and detection of AmpC beta-lactamases among clinical isolates at Guru Tegh Bahadur Hospital*. Abstract Silver Jubilee Congress IAMM November 2001; PB-55: pp 141.
41. Khillan V, Kaur IR, Thukral SS, Singh NP, **Manchanda V**, Talwar V. *Phenotypic characterization and resistiogram of 50 clinical isolates of Acinetobacter spp.* Abstract Silver Jubilee Congress IAMM November 2001; PB-63: pp 143.
42. **Manchanda V**, Arora V, Kaur IR, Mathur M, Talwar V. *Evaluation of SDS-PAGE as an epidemiological tool for enteric pathogens*. Abstract 9th Asian conference on diarrheal diseases and nutrition. September 2001; P111:pp67
43. Arora V, **Manchanda V**, Mathur M, Talwar V. *Comparative evaluation of transport media and enrichment broths for stool pathogens*. Abstract 9th Asian conference on diarrheal diseases and nutrition. September 2001; P110:pp67.

INVITED GUEST LECTURES

- Role of Microbiology Automation in countering Anti-Microbial Resistance Burden." Meerut, April 20, 2019
- Microbiology and automation, February 2019
- Care Of Systems and devices and hospital infection prevention, RGSSH, January 2019
- Transmission based Precautions, and infection prevention and control, RGSSH, January , 2019
- Newer Horizons in Diagnostic Bacteriology, PSSH, NOIDA, November 2018
- Conducted Microbiology Quiz at MICROCON 2018, Bengaluru, November 2018
- Community acquired MRSA: role of antimicrobial stewardship. PCNI, New Delhi, Nov 11, 2018
- Online resources for Antimicrobial resistance and Antimicrobial stewardship. HISICON, Oct 3, 2018
- Strengthening and Integrating Infection control and prevention in the Postgraduate Medical Microbiology Curriculum. HISICON, Oct 4, 2018
- Diagnosis of Infectious Diseases, DSPRUD, October, 2018
- Implementing Infection Control Practices in a Hospital: Challenges and solutions, Mid-term CME, MAMC, October 28, 2018
- Antibiotic stewardship "Empiric therapy in pediatric sepsis., at Pediatric sepsis - cause to treatment!" May 4, 2018
- Hospital Infection Control Program Surveillance at Delhi State Health Mission, April 26 and May 2, 2018
- An overview of biological agents for risk of public health emergencies. DRDO, under MoD, GOI, Feb 5, 2018
- Hospital Antibiotics Stewardship Program: the core elements. UPMICROCON, Feb 3, 2018
- Bioterrorism – Role of Disaster management teams, INMAS January 2018
- infectious diseases- Recent advances in staining and techniques. MICRO-D-CON 2017, December 2017
- Moderator for session of pediatric infectious diseases- Pneumonia, meningitis and encephalitis, IAMM, MICROCON November 2017
- Surveillance of antimicrobial resistance and antibiotic use , DSPRUD, Delhi, November 2017
- Molecular diagnosis: heralding the end of 'culture' era. IAP NCPID, Bengaluru, October 2017
- How to measure success of ASP? IAP NCPID, Bengaluru, October 2017
- MDR microbes a Biothreat challenge: Prevention and management. Specialized training Course on CBRN emergency Management for Medical Officers, INMAS, Delhi, February, 2017, October 2017
- Influenza virus : The villain, National Consultative Meeting on Influenza September, 2017
- PK/PD for the beginners. PG Assembly, SGRH, Delhi, August 2017

- Diagnosis and management guidelines for Chikungunya in paediatric patients. IAP ID Chapter, Hyderabad, June 2017
- Infection Control Practices – Preventing patients from hospital acquired liabilities, Shroff's Quality Center, Delhi – May 2017
- Making a case for Injection Safety in India. HISICON 2017, Guwahati Medical College, Guwahati, February 2017
- Implementing SSI Prevention Program in India. HISICON 2017, Guwahati Medical College, Guwahati, February 2017
- Unresolved issues in BMW-2016. HISICON 2017, Guwahati Medical College, Guwahati, February 2017
- Bio-threats and Bioterrorism - Past to Future. Workshop on Biosecurity, Containment Strategies and Laboratory safety. HISICON 2017, Guwahati Medical College, Guwahati, February 2017
- Antivirulence Therapies. MICROCON 2016, Post Graduate Institute and Medical Research Center, Chandigarh, November 2016
- Evidence based management and rational use of Antimicrobials in Orthopedic Infections. Govt Medical College, Chandigarh, November 2016
- SOPs & practical approach to BMW Rules, Workshop on Biomedical waste management rules 2016, for medical officers, Delhi Health Services, Delhi, November 2016
- How to measure success of ASP?, National Conference of Pediatric Infectious Diseases, Pune, October 2016
- Case Scenarios – Antimicrobial Therapy in Bacterial infections in OPD/ICU/IPD, National Conference of Pediatric Infectious Diseases, Pune, October 2016
- Getting best of blood culture, National Conference of Pediatric Infectious Diseases, Pune, October 2016
- Principles and practices of safety in a clinical laboratory. International Patient Safety Conference, Chennai, October 2016
- "Biocontainment and Precautions during BioWarfare" at Specialized training Course on CBRN emergency Management for Medical Officers, INMAS, Delhi, October, 2016
- Biocontainment and Precautions during BioWarfare, Workshop on CBRN emergency Management for Parliament Security Service, INMAS, Delhi, October, 2016
- WHONET as a tool for antimicrobial susceptibility data analysis – user experience, WHONET training workshop, WHO, New Delhi, July 2016.
- Antimicrobial Stewardship in tertiary care setting, Sharda Medical College, Greater NOIDA, July 2016.
- Food borne fungal diseases, National Conference On Scientific Updates On Zoonotic Diseases Control, National AIIMS, July 07, 2016.
- Role of Hospital infection Control practices in limiting antimicrobial resistance, NCDC, New Delhi, May 2016
- MDR infections in ICUs – Need for Rapid diagnosis, CME, IAMM-DC and ICCM, New Delhi, May 2016
- Antibiotic prophylaxis and Stewardship in Immunocompromised, IAMMDC Meeting, April, 2016
- Hospital Infection Control and Quality Indicators Management, Assessor's Conclave, Kochi, Kerala, February 2016.
- Hospital Infection Control and Quality Indicators Management, Assessor's Conclave, New Delhi, February 2016.
- An infected Healthcare Worker, International Conference, ICCM, Agra, February, 2016
- Antimicrobial Stewardship and Rational Use of antibiotics, St Stephen's Hospital, New Delhi, January 2016
- Newer antimicrobials in Use, MICROCON 2015 at JIPMER, Puducherry, November 27, 2015
- Invasive pneumococcal disease in children: CNBC Experience, At Symposium, "Pneumococcal Conjugate Vaccines in India: A Roadmap for Introduction," on at New Delhi, India, 16-17 November 2015

- Patient safety – Opportunities, Implementation and monitoring in public sector hospitals, 5th International Patient safety congress, Bangalore, October, 2015
- Antimicrobial Stewardship and Rational Use of antibiotics, St Stephen's Hospital, New Delhi, May 2015
- Quality indicators and benchmarking, CAHO conference, New Delhi, April 2015
- Infection Prevention Laboratories, IFIC HISICON, New Delhi, March 2015
- Diagnostics in infectious Diseases, PEDICON, New Delhi, January 2015
- Microbiology and Diagnostic Issues in Antimicrobial Stewardship, PEDICON Workshop at University of Chicago Center, New Delhi, January 2015
- Quality Indicators for outcome of care in hospitalized patients, 10th Middle East Healthcare-Associated Infections Conference, Dubai, October 2014
- Treatment options for carbapenem resistant Gram Negative Infections, 10th Middle East Healthcare-Associated Infections Conference, Dubai, October 2014
- Interpretation of Cultures and MICs, NCPID, Raipur, September, 2014
- Antimicrobial Stewardship Program and antibiotic policy, St. Stephen Hospital, Delhi, 2014
- Role of Laboratory in diagnosis of Childhood Pneumonia. KC MICROCON, Manipal, 2014
- Role of Microbiology In Sepsis Management – Best Practices. SN Medical College, Agra, 2014
- Antimicrobial resistance in an era of drug resistance, Bharti Vidhyapeeth, Pune, 2013
- Penicillin Resistant *Streptococcus pneumoniae* - An emerging problem and prevalent serotypes, NBE, 2013
- Multi Drug Resistance- what is behind the report ?: MRSA, VISA, VRSA, VRE, HLAR, ESBL, ampC, NDM, Carbapenemases, NBE, 2013
- Managing MDROs in children in community and hospitals – cases based scenarios, NBE, 2013
- Epidemiology and Investigative pathway for bacterial meningitis, NBE, 2013
- Meningococcal Disease: Epidemiology and Vaccines. National Conference IAMM, 2012
- Vaccines in Newer Horizons, Pediatric Conference of North India, 2012
- Good Clinical and Laboratory Practices (GCLP), National Institute of Pathology (ICMR), 2012
- Finding Meaningful Matrices. Third National Quality Conclave, QCI, Delhi, 2012
- Molecular detection of ESBL and ampC beta-lactamases in gram-negative bacteria, BHU, 2011
- Modification of antibiotic prescription practices in community hospitals, CMC Vellore, 2011
- Implementing stewardship - challenges in the Indian healthcare, Global Forum on Bacterial Infections, 2011
- Surveillance of Antimicrobial Resistance, UCMS, 2011
- Bioinformatics in Microbiology, Annual Conference, HISI, 2011
- Hospital Infection Control in resource limited setting, Annual Conference, HISI, 2011
- Laboratory Diagnosis of *S. pneumoniae*, CMC, Vellore, January 2011
- Epidemiology of *N. meningitidis* in India, Meningococcal forum, December, 2010
- Infection Control Program in a resource limited setting, Ministry of Health & Family Welfare, Govt of India, 2010
- Implementation and monitoring of Antibiotic Policy, MoH, Govt of India, 2010
- Quality control in CSSD, HISI, 2010 (Panelist)
- Skin and soft tissue infections in ICU, ID Meet, 2010 (Chair person)
- Updates in CLSI 2010, JIPMER 2010
- Bacteria Harboring MBLs in children – Detection Methods and clinical implications, 2009
- Role of laboratory in diagnosis and management of pediatric HIV, 2009
- Laboratory safety in clinical Microbiology Laboratory, 2008
- AmpC enzymes epidemiology and detection methods, 2007
- Molecular epidemiology of ESBLs. At Banaras Hindu University, 2005

EDUCATION

- Aug '92 – Dec '97. M.B., B.S., University college of Medical Sciences (UCMS), Delhi University
- Jan '98 – Dec '98 Junior Resident, Anaesthesiology and Critical Care, (UCMS), Delhi
- Apr '99 – Mar 2000 Junior Resident, Anaesthesiology, Swami Dayanand Hospital (MCD hospital), Delhi
- Jul 2000 – Apr '03. MD, Clinical Microbiology, UCMS, Delhi University
- Sep '03 – Jan '07 Senior Resident, Clinical Microbiology and Infectious Diseases, Chacha Nehru Bal Chikitsalaya, Delhi
- Apr'09 – Mar'12 MBA (HCA), Faculty of Management Studies, Delhi University
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