## **CURRICULUM VITAE OF DR.SABITA BASU-BISWAS**

NAME Sabita Basu Biswas

PRESENT DESIGNATION Senior Consultant

Department of Transfusion Medicine

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QUALIFICATIONS MBBS

M.D. (Pathology)

MNAMS

## PROFESSIONAL EXPERIENCE

Position	Year	Institution	Duration
Senior Consultant	April 2013 till date	Tata Medical Center, Kolkata	Over one year
Professor & Head, Transfusion Medicine	2.3.2009 till April 2013	Govt. Medical College & Hospital, Chandigarh	4 years
Reader and Head, Transfusion Medicine	13-11-2003 – 2.3.2009	Govt. Medical College & Hospital, Chandigarh	5 years 3 months
Senior Lecturer, Transfusion Medicine	27-11-97 – 12-11-03	Govt. Medical College & Hospital, Chandigarh	5 year 11 months
Senior Lecturer, Pathology	3-1-96 – 27-11-97	Govt. Medical College & Hospital, Chandigarh	1 year & 11 month
Assistant Professor, Hematology	24-03-94 — 2-1-96	Postgraduate Institute of Medical Education & Research, Chandigarh	1 year 8 months
Senior Resident Pathology	29-1-94 -14-2-94	Maulana Azad Medical College Delhi	3 year & 15 days
Junior Resident, Pathology (MD trainee)	1-1-1988 – 31-12-90	Postgraduate Institute of Medical Education & Research, Chandigarh	3 years
House job Pathology	20-8-87 -31-12-87	Postgraduate Institute of Medical Education & Research, Chandigarh	4 months & 10 days
Housejob, Gynaecology & Obstetrics	14-7-86 – 31-12-86	Maulana Azad Medical College Delhi	5 ½ months
Housejob, Medicine	1-1-86 – 30-6-86	Lady Hardinge Medical College, Delhi	6 months
Internship	1-1-85 – 31-12-85	Lady Hardinge Medical College, Delhi	1 year

#### **PUBLICATIONS**

- 1. Crystalloids in a cystic lesion of salivary parotid gland. Diag Cytopath 1993; 9:70-71, Jayaram G, Khurana N and Basu S.
- 2. Kala-azar with hemophagocytic syndrome a report of two cases. Ind. J Hemant.BI.Transf. 1995; 13:85-87. Basu S, Singh T and Tendulkar B.
- 3. Fanconi anemia. Ind J. Pediatar, 1996;73:399-402. Basu S, Trehan A, Marwaha R Garewal G.
- 4. Morphologic and arteriographic changes in the pulmonary vasculature in children with congenital heart diseases. Ind. Heart J 1996; 48:253-256. Basu S, Datta BN and Khandelwal N.
- Morphologic changes in pulmonary vasulature with arteriographic correlation. Angiology. J Vascular Dis. 1996;47:375-380. Basu S, Datta BN and Khandelwal N
- 6. Carcinocythemia-case report with review of literature. J Assoc. Phys.India 1996;44:502-503. Basu S, Garewal G and Day P.
- 7. Aids and blood donation. Current Med J.1996; II:35-37. Basu S, Mohan H and Chopra R.
- 8. Pathogenesis of aids. Current Med.J.1997;II35-37 Basu S, Chopra R & Mohan H.
- Mylodysplastic syndrome- A review.Ind.Pract.1997;50:905-908 Basu S and Mohan H.
- Gelatinous transformation of bone marrow. Acase report Ind. J. Pathol.Microbiol.1997;40:383-384. Basu S, Mitra S, Marwaha RK and Grewal G.
- 11. Aplastic Anemia associated with pregnancy a report of two cases. Ind.J.Hematol.Bl.Transf.1997;15:35-37. Nada R, Basu S, Marwaha N and Cruz SD'.
- 12. Myelofibrosis-A histopathologicasl study of 138 cases.Ind.J.Hematol.Bl Transf.1997;15:15-17. Basu S, Verma N, Marwaha N and Garewal G.
- 13. Fine needle aspiration cytology of angiomatoid malignant fibrous histiocytoma-A case report. Acta Cytol.1999;43:859-861.Basu S, Uma H and Mohan H.
- 14. Diagnosis of sepsis in the high risk neonate using a hematologic scoring system.Ind.J.Hematol.BI.Transf.1999;XVII:32-34, Basu S, Guruprasad, Narang A and Garewal G.
- 15. Childhood myelodysplastic syndrome-a case report.Ind.J.Hematol.Bl.Transf.1999;XVII:48-49. Basu S, Singh J, Mitra S and Parmar V.
- 16. Bone marrow trephine biopsy- A review.Ind.Pract. 1999;52:469-474. Tyagi S and Basu S.
- 17. Laboratory diagnostic approach in make infertility.Ind./Pract.1999;52:791-797, Chopra R, Basu S, Mohan H.

- Transient Myeloproliferative disorder-A distinct entity?
   Ind.J.Haematol.BL.Transf.1999;XVII:99-100. Basu S, Mitra S, Parmar V.
- 19. Pancytopenia due to hemphagosytic syndrome as the presenting manifestation of tuberculosis.J. Assoc. Phys.India 2000;45:845-846.Basu S, Mohan H, Malhotra H.
- 20. Filaria induced hemolysis in pregnancy.Intl.J.Gynic.Obst.2000;66:51-52. Basu S, Wanchoo M, Aggarwal A, Malhotra S.
- 21. Sickle cell Hb-D Punjab disease (Compound heterozygous stgate). Ind.J.Haematol.Bl.Transf.2000;XVIII:31-32. Tyagi S, <Marwaha N, Parmar V, Basu S.
- 22. Salmonella infantis osteomyelities in sickle cell disease. J of Infection 2000;41:111-112. Gupta V, Poddar B, gupta RK, Isaivanan M, Basu S et al.
- 23. Gelatinous transformation of bone marrow. J. Assoc.Phys. India 2001; 49:674-675.Basu S, Marwaha N, Ahluwalia M.
- 24. Microcytic hypochromic anemias-Problems in diagnosis. Journal of internal Medicine of India 2001;4:58-62, Basu S and Marwaha N.
- 25. Fresh frozen plasma-Indications and patterns of usage.Ind.J.Haematol BI.Transf. 2001;XIX:51-52, Basu S, Marwaha N.
- 26. Prevalence of transfusion transmitted diseases among voluntary and replacement donors Ind.J.Haematol Bl.Transf. 2001;XIX:105-105. Nanda A, Tyagi S, Basu S,Marwaha N.
- 27. Replacement of massive blood loss. Nat Acad Med Sci 2001;37:63-68. Basu S and Marwaha N.
- 28. Blood Transfusion trends.Indian Journal of Hematol. & Blood Transfusion. 2002;XX:28-29. Basu S, Marwaha N.
- 29. Bone marrow trephine biopsy as an adjunct to bone marrow aspiration.J.Assoc.Phys.India 2002;50:893-895. Nanda A, Basu S and Marwaha N.
- 30. Approach to a case of hupercoagulable state. Journals of Internal Medicine of India. Sept. 2002;5:124-127. Basu S.
- 31. IgA myeloma presenting as diabetes mellitus with refractory anemia.J.Assoc.Phys.India 2002; 50: 981- 982. Basu S. Gupta N and Malhotora H.
- 32. Neomercazole induced aplastic anemia-A case report. Journal of Internal Medicine of India 2002; 5:91-92. S Basu, N Marwaha and R Bedi.
- 33. Screening for HBsAg, Anti HIV, Anti HCV and syphilis amongst blood donors in a teaching hospital. J. Commun. Dis.2002;34(2):157-159. Joshi RM,Gupta V, Jain B, umar S, Basu S.
- 34. A reappraisal of underlying causes in donor deferral. Annals of National academy of Medical Sciences. Kaur R, Basu S, and Marwaha N. 2002; 38(2): 93-99.

- 35. Bone marrow cryptococcosis in an HIV-negative patient. British Journal of Hematology. 2003;2:120. Basu S, Marwaha N and Aggarwal V.
- Autoimmune hemolytic anaemia associated with benign ovarian cyst: A case report and review of literature. Ind.J.Med.Sci.2003;57:496-498. Aggarwal V, Sachdev A, Singh R, Lehl S, Basu S.
- 37. Quality assessment of random donor platelet concentrates. Indian J Hematol BI Transf.2003; XXI:71-72, Marwaha N, Basu S, Kumar R.
- 38. Plasmacytosis in acute myeloid leukemian A case report. Indian J Hematol BL Transf.2003;XXI:60-61. Kaur P, Basu S.
- 39. Granulocytic sarcoma in acute mycloid leukemia involving the orbit. Indian Journal of Hematology and Blood Transfusion. 2003;XXI;97-98.
- 40. Solitary plasmacytoma of bone : Fourteen year disease free survigval. J.Assoc.Phys.India 2004;52:161-162. Basu S, Kaur P, Singh S.
- 40. A case of sudden onset loss of vision, fever weight loss and pancytopenia. J. Indian Rheumatol Assoc. 2004;12:31-34. Aggarwal V, Sachdev A, Singh R, Basu S.
- 41. Unusual hematologic alterations in rheumatoid arthritis. J. Postgrad. Med.2004;50:60-61. Aggarwal V, Sachdev A, Lehl S, Basu S.
- 42. Hepatitis B-A threat to the patients of leukemia and lymphoma. Current Medical Journal 2004;X:23-26. Basu S and Kaur P.
- 44. Carcinoma cervix presenting as bone marrow metastases a case report. 2004;25(3):76-77, Kaur G, Kaur P, Basu S and Goel P.
- 45. Visual inspection of blood units-a necessary practice at blood centers. 2005;45:459.Transfusion Kaur R, Basu S, Kaur P, and C Arijit
- 46. Prevalence of anemia among school going adolescents of Chandigarh, Indian Pediatrics 2005; 42:593-597 Basu Sabita, Basu S, Hazarika R, Hazarika, Parmar V.
- 47. Transfusion transmitted infections Existing and emerging pathogens. J. Postgraduate Med 2005;51:146-151 Kaur P and Basu S.
- 48. Metastatic Bone marrow tumors: Study of nine cases and review of literature Indian Journals of Hematology & Blood Transfusion (accepted for publication)
- 49. Bombay phenotype in two North Indian brothers; a case report 2007; 50: 919-921. Kaur P, Basu S, Bedi R, Kaur G. Ind.J Pathol & Microbiol
- 50. Evaluation of iron stores in blood donors by serum ferritin. 2006; 124:641-646. Mittal R, Marwaha N, Basu S, Mohan H and Ravi K. Ind J Med Res
- 51. Red cells indices and iron studies: what do they really mean? Newsletter of Medical Laboratory Sciences in Oman. 2007;12:20-21. Sabita (Biswas)Basu.
- 52. Coombs positive hemolytic anemia due to insect bite. Oman Med J 2007; 22: 62-63 Biswas (BasuS), Chandrashekhar P, Varghese M

- 53. Dietary habits and nutritional status in mentally retarded children and adolescents: a study from North West India. J. Indian Assoc. of Child and Adolesc. Ment. Health. 2007; 392: 18-20 Mathur M, Bhargava R, Benipal R, Luthra, N, Basu S, Kaur J, Chavan BS.
- 54. Severe ABO hemolytic disease of newborn with a positive direct antiglobulin test . Ind J Path Microbiol (letter) 2009; 52(2) : 292 Marwaha N, Dhawan H, Thakral B, Kaur R, Basu S, Parmar V.
- 55. Transient cold agglutinin disease with Mycoplasma infection.

  J Assoc Phys India 2009; 57: 653- 654. Basu S, Saifudeen A, and Kaur P.
- 56. Immune hemolytic anemia: a report of two cases . J Lab Physicians 2009; 1 :22-24. Kaur P, Basu S, Kaur R, Kaur G.
- 57. Patterns of infections in blood donors in a tertiary care centre : a restrospective study. Kaur G, Basu, Kaur R, Kaur P, Garg, S. Natl. Med J India 2010 ; 23: 147-149
- 58. Red cell alloimmunisation in paroxysmal nocturmal hemoglobinuria. Basu S, Tahlan A, Kaur G, Kaur R, Garg S and D. Cruz S. J Assoc Phys India 2011; 59: 128
- 59. Severe haemolytic disease of new born due to non-Rh D antibody. Basu S, Kaur R, Kaur G and Jain S. Ind J Paediatr 2011; 78: 366-67
- 60. Transfusion protocol in trauma. Kaur P, Basu S, Kaur G, Kaur R. Journal of emergencies, trauma and Shock, 2011; 4:103 108.
- 61. Fourth generation enzyme immunoassays for screening of blood donors: need of the hour. Ind J Pathol Microbiol 2011; 54(2): 433-434 Kaur R, Basu S, Kaur G, Singh D
- 62. Hemolytic disease of fetus and newborn : current trends and perspectives. Basu S, Kaur R, and Kaur G. Asian Journal of Transfusion Sciences 2011 ; 5 : 3-7
- 63. Non-specific red cell aggregation interferes in the interpretation of gel test Results. Asian Journal of Transfusion Science. 2012; 6:44-45 Basu S, Kaur R, Kaur G, Kaur P and Tahlan A
- 64. Delayed hemolytic reaction due to anti Jk<sup>a</sup> alloimmunisation IJBTI 2011; 1: 16-19 Malhotra S, Kaur G, Singh L, Basu S, Lehl SS.
- 65. Subgrouping of A and AB blood groups in Indian blood centres: is it required?

  J Ind Med Assoc 2011; 109: 561-2 Hazarika R, Basu S, Kaur P
- 66. Alloimmunisation to Kell blood group antigen due to unmatched blood transfusion in a resource poor setting. Immunohematology 2012; 28(2):45-8 Malhotra S, Kaur G, Basu S, Kaur R, Geetanjali J.
- 67. Autoimmune hemolytic anemia due to auto anti-N in a patient with sepsis. Transfusion and Apheresis Sci 2012;47(3): 269-70 L.Singh, Malhotra S, Kaur G, Basu S and Kaur R.
- 68. Clinically significant anti M antibodies a report of two cases Transf and Apheresis Sci 2012;47(3): 259-61 Kaur G, Basu S, Kaur P, Kaur R

- 69. Transfusion issues in surgery. Internet journal of medical update. 2013; 8 :46 50 Kaur P, Basu S, Kaur G, Kaur R.
- 70. An analysis of the pattern of blood requisition and utilization pattern of blood requisition and utilization in a tertiary care centre. Accepted for publication in national journal of integrated research in medicine NJIRM
- 69. Transfusion issues in surgery. Internet journal of medical update. 2013; 8 :46 50 Kaur P, Basu S, Kaur G, Kaur R.
- 70. An analysis of the pattern of blood requisition and utilization pattern of blood requisition and utilization in a tertiary care centre. National journal of I Integrated research in medicine 2013;4 March-April Kaur P, Basu S, Kaur G and Kaur R.
- 71. Assessment of factors affecting the platelet yield using continuous flow cell separator. International J Biomed Research 2014; 5: 196-99 Sachdeva P, Kaur G, Basu S and Tahlan A.
- 72. Clinically significant minor blood group antigens amongst north indian blood donor population. Advances in Hematology 2013 article ld 215454 <a href="http://dx.doi.org/10.1155/2013/2154454">http://dx.doi.org/10.1155/2013/2154454</a> Lamba DS, Kaur R and Basu S
- 73.. Anti N in a patient of renal failure on hemodialysis. Indian Journal of Hematology and Blood Transfusion DOI 10.1007/s 12288 013 0313-9 Kaur P, Basu S, Kaur G, Kaur R and Das B
- 74.. Anti S enigma in a pregnant patient Transfusion and Apheresis science Article in press

# PAPERS PRESENTED AT CONFERENCES/ ABSTRACTS PUBLISHED IN PROCEEDINGS OF CONFERENCES/ SEMINARS- WORKSHOPS ATTENDED

- 1. Morphologic and arteriographic changes in the pulmonary vasculature in children with congenital heart disease. Annual conference of Indian Association of Pathologists and Microbiologist- November 1990, Chandigarh.
- 2. Carcinoid tumours at atypical sites Indian Association of Pathologists and Microbiologists- Delhi regional chapter meet, April 1992.
- 3. Hemophagocytic syndrome with kala-azar- A case report Indian Association of Pathologists and Microbilogists- Delhi regional chapter meet, April 1993.
- 4. Fine needle aspiration cytology of angiomatoid malignant fibrous histocytoma. Annual conference of Indian Academy of Cytologists- Calcutta, November 1996.
- 5. a comparison of hemoglobin estimation by four methods. Annual conference of Indian Society of Hematology and Blood Transfusion. Post Graduate Institute of Medical Education and Research, Chandigarh, November 1996.
- 6. Laboratory evaluation of Coulter T-890, automated hematology analyzer. Annual conference of Indian Academy of Cytologists, AIIMS Delhi,October 1997.
- 7. Fine needle aspiration cytology of nasopharyngeal carcinoma- A case report.
  Annual conference of Indian Academy of Cytologists, AIIMS Delhi, October 1997.
- 8. Pancytopenia due to cytology of nasopharyngeal carcinoma- A case report. Annual conference 38<sup>th</sup> Annual Conference of Hematology and Blood Transfusion, Calcutta, November 1997.
- Hematology slide seminar. North West chapter. IAPM at DMC, Ludhaina, October 1997.
- Hematology slide seminar. North West chapter, IAPM at Dmc, Ludhaiana, October 1998.
- 11. Seminar on voluntary blood donation. 23 <sup>rd</sup> national conference of Indian Society of Blood Transfusion and Immunohaematology, Pinjore, Haryana, November 1998.
- 12. Prevalence of HCV among blood donors in Chandigarh. 23 <sup>rd</sup> National conference of Indian Society of Blood Transfusion and Immunohaematology, Pinjore, Haryana, November 1998.
- Transient myloproleferative disorder- A distinct entity? 39<sup>th</sup> Annual conference of Indian Society of Hematology and Blood Transfusion Chennai, 27<sup>th</sup> -29<sup>th</sup> November.1998.
- 14. Childhood myelodysplastic syndrome. 39<sup>th</sup> Annual conference of Indian Society of Hematology and Blood Transfusion Chennai- 27<sup>th</sup> 29<sup>th</sup> November 1998.
- 15. Seminar of medical laboratory instruments & their maintenance. Centeal Scientific Instruments Organization, Chandigarh. 5<sup>th</sup> December 1998.

- 16. workshop on quality control in blood banking (WHO sponsored) sanjay Gandhi Post Graduate Institute, Lucknow, August 1999.
- 17. Hematology slide seminar. North West chapter, IAPM at DMC, Ludhiana, October, 1999.
- 18. Seminar on medical laboratory instrumentation, Central Scientific Instrument Organization, Chandigarh, 26<sup>th</sup> November, 1999.
- 19. Platelet aggregation in patient with systemic lupus erythematosis, Annual conference of Indian Society of Hematology and Blood Transfusion, Pune, 1999.
- 20. Autonatibodies associated with immune hemolytic anemia, Annual conference of Indian Society of Hematology and Blood Transfusion, Pune 1999.
- 21. Gelatinous transformation of bone marrow, Annual conference of Hemalology and blood Transfusion, Pune 1999.
- 22. Incidence of positivity of transfusion transmitted diseases among the blood donors, 40<sup>th</sup> Annual conference of Indian society of Hematology and Blood Transfusion, Pune, 1999.
- 23. Frequency of anemia in patients with acute leukemia, Annual conference of Hematology and Blood Transfusion, Pune, 1999.
- 24. Autoimmune hemolytic anemia in a patient with acute leukemia, Annual conference of Hematology and Blood Transfusion, Pune, 1999.
- 25. Aggressive therapy in acute disseminated intravascular coagulation, Annual conference of Indian Society of Hematology & Blood Transfusion, Pune, 1999.
- 26. Haemoglobin SD disease- A case report, Annual conference of Hematology and Blood Transfusion, Pune, 1999.
- 27. Blood transfusion trends in Govt,. Medical College & Hospital, Chandigarh, Annual conference of Hematology and Blood Transfusion, Pune, 1999.
- 28. Screening of HbsAg, Anti HCV and RPR amongst blood donors in a teaching hospital. Annual Conference of Indian Society of Microbiologists PGIMER, Chandigarh, November,1999.
- 29. CME in Transfusion Medicine September 1999, Department of Transfusion Medicine, Postgraduate Institute of Medical Education and Researc, Chandigarh.
- 30. Workshop on testing for hepatitis C sponsored by National Institute of Biogicals at Postgraduate Institute of Medical Education and Research, Chandigarh. 15<sup>th</sup> to 17<sup>th</sup> May 2000.
- 31. National course on Educational Technology for Teacher health Professionals at Postgraduate Institute of Medical Education and research, Chandigarh.
- 32. Fresh frozen plasma- indications and patterns of usage. Annual conference of Indian Society of blood Transfusion and Immunohaematology, Tirupati, November 2000.
- 33. Quality control measures of random donor platelet concentrates. Annual Conference of Indaian Society Of Blood Transfusion and Immunohaematology, tirupati, November 2000.

- 34. The indirect coomb's test in hemolytic disease of newborn. Annual Conference of Indian Society of Blood transfusion and Immunohaematology, Tirupati, November, 2000.
- 35. Perceptions and views of Blood donors at Govt. Medical College & Hospital, Chandigarh, Blood Centre. Annual conference of Indian Society of Blood Transfusion and Immunohaematlolgy, Tirupati, November 2000.
- 36. Secondary myelodysplastic syndrome. Annual Conference of Indian Society of Hematology and Blood Transfusion, Mumbai 2000.
- 37. Hematology slide seminar on myelodysplastic syndrome, North West chapter IAPM, Govt. Medical College & Hospital, Chandigarh, September 2000.
- 38. HIV/AIDS Sensitization Programme at PGIMER, Chandigarh, September2001.
- 39. Hematology slide seminar, North West Chapter of IAPM at PGIMER, Chandigarh, October 2001.
- 40. Fresh frozen plasma- indications and patterns of usage. National conference of Indian Society of Hematology and Blood Transfusion, Mumbai, 2000.
- 41. The indirect Coomb' test in hemolytic disease of newborn. National Conference of Indian Society of Hematology and Blood Transfusion, Mumbai, 2000.
- 42. Secondary mylodysplastic syndrome. National Conference of Indian Society of Hematology and Blood Transfusion, Mumbai, November, 2000.
- 43. Clinico-hematologic profile in patients with reactive marrow plasmacytosis. National Conference of Indian Society of Hematology and Blood Transfusion, Bhubaneshwar, November 2001.
- 44. Bone marrow involvement in Hodgkin's disease. National conference of Indian Society of Hematology and Blood Transfusion, Mumbai, Bhubaneshwar, November 2001.
- 45. Effect of blood donation on serum ferritin. National conference of Indian Society of Hematology and Blood Transfusion Bhubaneshwar, November 2001.
- 46. Analysis and efficacy of platelet transfusion. National conference of Indian society of Hematology and Blood Transfusion, Bhubaneshwar, November 2001.
- 47. Marrow involvement in pyrexia of unknown origin. National conference of Indian Society of Hematology and Blood Transfusion, Bhubaneshwar, November 2001.
- 48. Recovery of Neomercazole induces aplastic anemia using G-CSF. National conference of Indian Society of Hematology and Blood Transfusion, Bhubaneshwar, November 2001.
- 49. CME in Transfusion Medicine. 15<sup>th</sup> March 2002. Govt Medical College & Hospital, Chandigarh.
- 50. CME in Transfusion Medicine at at Post Graduate Institute of Medical College & Hospital, Chandigarh
- 51. Bone Marrow cryptococosis in non –HIV patient. North West chapter, Indian Society of Hematology and Transfusion Medicine at PGIMER, Chandigarh, November 2002.

- 52. Analysis of transfusion reactions. Chapter meet of Indian society of Hematology and Transfusion Medicine at PGIMER, Chandigarh, September 2003.
- 53. Incidence of D<sup>u</sup> antigen among blood donors at GMCH Blood centre. Chapter meet of Indian Society of Hematology and Transfusion Medicine at PGIMER, Chandigarh, September 2003
- 54. Northwest Chapter, IAPM, Govt. Medical College, Patiala, April 2003.
- 55. 7<sup>th</sup> International CME in Hematology & Transfusion Medicine, 6<sup>th</sup> -8<sup>th</sup> February 2004. at PGIMER, Chandigarh.
- 56. Quality Control workshop-cum-CME in Transfusion Medicine, September 2004. at PGIMER, Chandigarh.
- 57. Quality control workshop-cum-CME in Transfusion Medicine, September 2004. at PGIMER, Chandigarh.
- 58. Workshop on thalassemia and multiple myeloma. 16<sup>th</sup> March2006, Sultan Qaboos Hospital, Sultanate of Oman.
- 59. Workshop on molecular aspects of sickle cell disease and thalassemia 11<sup>th</sup> and 12<sup>th</sup> March 2007.
- 60. Annual conference of IMA Haryana state and ISBTI Haryana state held at Sirsa (Haryana) 6<sup>th</sup> July,2008, delivered talk on 'Clinical aspects of transfusion practice'.
- 61. 12<sup>th</sup> National CME-cum-Workshop in Transfusion medicine, 13<sup>th</sup> and 14<sup>th</sup> September,2008 atPost Graduate Institute of Medical Education & Research, Chandigarh.
- 62. CME in Transfusion Medicine on April 26<sup>th</sup> , 2008, Deptt. of Transfusion Medicine, Government Medical College, Chandigarh.
- 63. Transcon-2008,33<sup>rd</sup> National conference of Indian Society of Blood Transfusion & Immunohematology held on December 5-7, 2008 at Sanjay Gandhi Postgraduate Institute of Medical Education and Research, Lucknow.
- 64. Sensitization programme on AIDS, delivered talk on Universal Precautions delivered at ESIC Hospital Chandigarh on World AIDS day.
- 65. Invited talk on 'Blood collection & processing equipment' delivered at Central Scientific Instruments Organization, Chandigarh during management development programme.
- 66. Visited Japanese Red Cross metropolitan Blood Center, Tokyo 21st June to 23rd June 2009
- 67. Guest talk at Alchemist Hospital 12.7.09, in the Red cell serology update on the topic- Blood group antigens beyond ABO and D.
- 68. Delivered talk on Rationale use of Blood for Clinicians, organized by Haryana State Aids Control Society 14-15 July 2009.
- 69. National CME cum Workshop in Transfusion Medicine, September 12,13 2009. Guest speaker for assessment of Quality control ob blood components.

- 70. National CME cum Workshop in Transfusion Medicine, Sept 12,13 2009 chaired session on donor notification and TTI testing: Elisa Vs. Rapid.
- 71. Indian Society of Hematology and Transfusion Medicine Golden Jubilee Conference 19-22 November 2009, organized by Department of Hematology, All India Institute of Medical Sciences, New Delhi, chaired session on platelet transfusion practices.
- 72. TRANSCON 2009, 34<sup>th</sup> National conference of Indian Society of Blood Transfusion and Immunohematology, 20-22 November 2009. Delivered talk on : Rare blood group donor registry.
- 73. CME cum Workshop on Blood components for clinicians, Dept. of Transfusion Medicine, Govt. Medical College, Patiala, 27.3.2010; delivered talk on Transfusion practices in clinical Medicine.
- 74. Participated in Evidence based Health care management Workshop, organised by Singapore Indian Group Networking for Empowerment Training, 11 13 May 2010
- 75. Invited faculty for National Seminar on Recent Advancements in Platelet transfusions at Indraprastha Apollo Hospitals, New Delhi on 24<sup>th</sup> May 2010
- 76. National CME in Transfusion Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh; September 2010. Chaired session on Paediatric transfusion and transfusion support in oncology.
- 77. Annual National conference of Indian Society of Blood transfusion and Immunohematology, Hyderabad, November 2010, Delivered talk on: Should we use anti AB, anti A1 and anti H lectin in routine ABO typing?
- 78. CME in Transfusion Medicine, Government Medical College and Hospital, Chandigarh, April 2010. Chaired session on: Quality control in the serology laboratory.
- 79. Invited as Resource faculty by JSACS, March 2011, for Blood safety training programme, Jamshedpur.
- 80. Participated in ICMR-WHO-PGIMER Workshop on Clinical Trial Registry India (CTRI) at Postgraduate Institute of Medical Education and Research, Chandigarh, July 2011
- 81. Chaired session in the Pre-conference CME of Annual National conference of Indian Society of Blood transfusion and Immunohematology, at Panchkula, October- November 2011, on Total Quality Management.
- 82. Annual National conference of Indian Society of Blood transfusion and Immunohematology, at Panchkula, October-November 2011, delivered talk on: Strategies to achieve self sufficiency in voluntary blood donation in U.T. Chandigarh.
- 83. Chaired session on donor notification in CME in Transfusion Medicine held in the department of Transfusion Medicine, Govt Medical College Hospital Chandigarh, on 31st March 2012
- 84. Chaired the session on newer techniques in blood grouping and their applications in the Seminar on Recent advances in Immunohematology at Indraprastha Apollo Hospitals , New Delhi on 5<sup>th</sup> April 2012

85. 32<sup>nd</sup> International Congress of the ISBT Cancun, Mexico July 7-12, 2012; presented a poster entitled 'Profile of maternal red cell alloantibodies in pregnancy: report from a developing country.'

## **GUEST LECTURES / SESSIONS CHAIRED**

- 1. Haematology slide seminar on bone marrow trephine biopsies. North West Chapter IAPM, October 1997, Ludhiana.
- 2. Haematology slide seminar, North West Chapter IAPM, April 1998, Chandigarh.
- 3. Chaired Free paper session 39<sup>th</sup> Annual conference Indian Society of Haematology and Transfusion Medicine, November 1998.
- 4. Seminar on Voluntary blood donation, 23<sup>rd</sup> National conference Indian Society of Blood Transfusion and Immunahaematology, Pinjore Haryana, November 1998.
- 5. Haematology slide seminar on Nutritional anemias. North West Chapter IAPM, October 1999, Ludhiana
- 6. Invited talk on Massive Transfusion, at 25<sup>th</sup> Annual Conference of Indian Society of Blood Transfusion and Immunhaematology, Tirupati, November 2000.
- 7. Chaired symposium on 'Platelet serology' at 25<sup>th</sup> Annual Conference on Indian Society of Blood Transfusion and Immunohaematology, Tirupati, November 2000.
- 8. Haematology slide seminar on 'Myelodysplastic syndromes'-10<sup>th</sup> North West IAPM, Govt. Medical College & Hospital, Chandigarh, September2000.
- 9. Hematology slide seminar on Nutritional anemias. North West IAPM at PGIMER, Chandigarh, October 2001.
- 10. Indian Medical Association, Haryana Chapter, Sirsa- 10<sup>th</sup> February 2002, talk given on 'Judicious use of blood'.
- 11. Invited speaker for seminar on 'HIV /AIDS training' as part of National AIDS Control Programme (NACP-II). Talk given on Laboratory diagnosis of HIV and blood safety.
- 12. Chaired free paper session at North West Chapter Indian Society of Hematology and Transfusion Medicine at PGIMER, Chandigarh, November 2002.
- 13. Chaired poster session at chapter meet of Indian Society of Haematology and Transfusion Medicine at PGIMER, Chandigarh, September 2003.

- 14. Invited speaker for panel discussion on 'Clinical use of Blood' during CME in Transfusion Medicine at PGIMER, Chandigarh, September 2003.
- 15. 7<sup>th</sup> International CME in Hematology & Transfusion Medicine, 6<sup>th</sup> -8<sup>th</sup> February 2004. PGIMER Chandigarh- chairperson for session on 'Artifacts in hematology Laboratory'.
- 16. Quality Control Workshop-cum-CME in Transfusion Medicine, September 2004. PGIMER Chandigarh- Invited speaker for talk on Quality control protocol for whole blood and blood components.
- 17. Quality Control Workshop-cum-CME in Transfusion Medicine, September 2004. PGIMER Chandigarh, chaired session on Blood component Therapy.
- 18. Workshop on Thalassemia and Multiple myeloma, 16<sup>th</sup> March 2006, Sultan Qaboos Hospital, Sultanate of Oman.
- 19. Workshop on molecular aspects of sickle cell disease and thalassemia 11<sup>th</sup> and 12<sup>th</sup> March 2007. Royal Hospital, Muscat, Sultanate of Oman.
- 20. Guest speaker for workshop on Blood component Separation at 49<sup>th</sup> Annual conference of Indian Society of Hematology and Transfusion Medicine, held at Jawahar Lal Institute of Post Graduate Medical Education and Research, Puducherry on 18<sup>th</sup> September,2008. Delivered talk on Modified red cells, their preparation and uses.
- 21. Guest speaker for Annual Conference of IMA Haryana state and ISBTI Haryana held at Sirsa (Haryana) on 6<sup>th</sup> July,2008, delivered talk on 'Clinical aspects of transfusion practice.' Invited as chairperson for the scientific session 'Recruitment and retention of voluntary blood donors' and 'Organisation of voluntary blood donation camps' in the 12<sup>th</sup> National CME-cum-workshop in transfusion medicine, 13<sup>th</sup> and 14<sup>th</sup> September 2008 at Post Graduate Institute of Medical Education & Research, Chandigarh.
- 22. Organising chairperson for the CME in Transfusion Medicine held on 26<sup>th</sup> April 2008, held by Deptt. of Transfusion Medicine, Govt. Medical College and Hospital Chandigarh. Delivered talk on- Direct antiglobulin test: its interpretation and evaluation.
- 23. Annual National conference of Indian Society of Blood transfusion and Immunohematology, SGPGI, Lucknow,2008. Delivered talk on 'Monitoring Platelet transfusion therapy in clinical practice'
- 24. Sensitization programme on AIDS, at ESIC Hospital, Chandigarh, December 2009, delivered talk on 'Universal precautions in AIDS'
- 24. Management development programme- Central Scientific Instruments Organisation, Chandigarh, April 2009. Delivered talk on Blood collection and processing equipment and their quality control..
- 25. Seminar on Red cell serology update, at Alchemist Hospital, July 2009 on the topic- Blood group antigens beyond ABO and D.
- 26. Delivered talk on Rational use of Blood for clinicians, organized by Haryana State Aids Control Society 14-15 July 2009.

- 27. National CME cum Workshop in Transfusion Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh, September 2009. Delivered talk on: Assessment of Quality control of blood components.
- 28. National CME cum Workshop in Transfusion Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh, September 2009. Chaired session on donor notification and TTI testing: Elisa vs. Rapid.
- 29. Indian Society of Hematology and Transfusion Medicine Golden Jubilee Conference 19-22 November 2009, organized by Department of Hematology, All India Institute of Medical Sciences, New Delhi, chaired session on - Platelet transfusion practices.
- 30. Annual National conference of Indian Society of Blood transfusion and Immunohematology, Delhi, November 2009. Delivered talk on: Rare blood group donor registry.
- Resource faculty for CME cum training of resident doctors on HIV/Aids and NACO protocols, Government Medical College and Hospital, Chandigarh, 25.02.2010 Delivered talk on: Blood screening and safe blood transfusion practices.
- 32. CME cum Workshop on Blood components for clinicians, Department. of Transfusion Medicine, Government Medical College, Patiala, March 2010; delivered talk on Transfusion practices in Clinical medicine.
- 33. Participated in Evidence based health care management Workshop, May 2010, Chandigarh, organised by Singapore Indian Group Networking for Empowerment Training (SIGNET)
- 34. Invited faculty for National Seminar on Recent advancements in platelet transfusions, at Indraprastha Apollo Hospitals, New Delhi, May 2010
- 35. National CME in Transfusion Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh; September 2010. Chaired session on Paediatric transfusion and transfusion support in oncology.
- 36. Annual National conference of Indian Society of Blood transfusion and Immunohematology, Hyderabad, November 2010, Delivered talk on: Should we use anti AB, anti A1 and anti H lectin in routine ABO typing?
- 37. CME in Transfusion Medicine, Government Medical College and Hospital, Chandigarh, April 2010. Chaired session on: Quality control in the serology laboratory.
- 38. Invited as Resource faculty by JSACS, March 2011, for Blood safety training programme, Jamshedpur.
- 39. Participated in ICMR-WHO-PGIMER Workshop on Clinical Trial Registry India (CTRI) at Postgraduate Institute of Medical Education and Research, Chandigarh, July 2011
- 40. Chaired session in the Pre-conference CME of Annual National conference of Indian Society of Blood transfusion and Immunohematology, at Panchkula, October- November 2011, on Total Quality Management.
- 41. Annual National conference of Indian Society of Blood transfusion and Immunohematology, at Panchkula, October-November 2011, delivered talk on:

Strategies to achieve self sufficiency in voluntary blood donation in U.T. Chandigarh.

- 42 Chaired session on donor notification in CME in Transfusion Medicine held in the department of Transfusion Medicine, Govt Medical College Hospital Chandigarh, on 31st March 2012
- 43. Chaired the session on newer techniques in blood grouping and their applications in the Seminar on Recent advances in Immunohematology at Indraprastha Apollo Hospitals , New Delhi on 5<sup>th</sup> April 2012
- 44. Participated in the IHBT Workshop to modify the MD Transfusion medicine curriculum and make recommendations to the Medical Council of India, held at Ahmedabad, 28<sup>th</sup> and 29<sup>th</sup> August 2012.

#### **PROJECTS**

- 1. Diagnosis of sepsis in the high risk neonate using a hematologic scoring system.
- 2. Status of Hepatitis C virus among blood and their families.
- 3. A comparative study of serum ferritin in blood donors.
- 4. Prevalence of anemia amongst urban and rural school children of Chandigarh.
- 5. Patterns of FFP usage amongst ICU patients.
- 6. Dietary status and nutritional status of mentally retarded children.
- 7. Prevalence of anti HBc and its utility in detection of HBV infection in blood donors of Chandigarh
- 8. Factors affecting post transfusion rise in platelet count in critically ill patients.
- 9. Assessment of pattern and effectiveness of neonatal transfusion.
- 10. ICMR Project entitled "Irregular red cell antibodies in pregnancy and its risk for haemolytic disease of fetus and new born: implications for routine screening"

#### **THESES**

## A. Thesis submitted during post graduation

Morphologic and arteriographic changes in the pulmonary vasculature In infants and children at autopsy.

- B. Thesis supervised as guide / thesis in progress
- 1. Interaction of Iron status with beta thalassemia trait.
- 2. Effect of blood donation on serum ferritin in voluntary

blood donors.

- 3. Seroprevalance of cytomegalovirus amongst blood donors and transfusion recipients.
- Comparison of efficacy of various crossmatch techniques in detection of red cell antibodies.
- 5. Assessment of changes in plasma hemoglobin and potassium levels in red cell units during processing and storage.
- Evaluation of frequencies of clinically significant minor blood group antigens amongst Voluntary blood donors.
- Assessment of maternal red cell antibodies implicated in hemolytic disease of the new born.
- 8. Assessment of factors affecting the quality of Apheresis platelets using continuous flow cell separator.

#### **AWARDS AND FELLOWSHIPS**

- Awarded Indian National Science Academy (INSA) Visiting Fellowship at Institute of Immunohaematology (Mumbai).
- Elected Member National Academy of Medical Sciences (India).
- Dr.J.C.Patel Dr B.C.Mehta JAPI Award 2011 First prize for best publication for the article entitled: Red cell alloimmunisation in paroxysmal nocturmal hemoglobinuria.

## **EXAMINERSHIP**

- External examiner for DNB Transfusion Medicine under National Board of Examinations, at AFMC Pune, 2011.
- Examiner for MD Transfusion Medicine at AFMC Pune, Civil Hospital Ahmedabad, Government Medical College Hospital, Chandigarh
- Technical expert for inspection under Medical Council of India for starting of MD Transfusion Medicine

### **MEMBERSHIP OF SOCIETIES**

1. Life member – Indian Society of Hematology and Blood Transfusion.

- 2. Life member Indian Society of Blood Transfusion and Immunohaematology.
- Life member Pediatric Hematology-Oncology Chapter of Indian Academy of Pediatrics.
- 4. Life member North west chapter of Indian Society of Hematology and Transfusion Medicine.
- 5 Member South Asian Association of Transfusion Medicine.
- 6. Member Indian Society of Transfusion Medicine

## **ADMINISTRATIVE EXPERIENCE**

- Head Department of Transfusion Medicine, Govt. Medical College Hospital, Chandigarh since 2003, with administrative and academic responsibilities
- Established M.D Transfusion Medicine course in the department and the first batch of postgraduates have qualified in 2012
- Appointed by NACO, GOI as Technical expert for assessment of Blood Safety Training Centers—SMS Medical College Jaipur, Central Blood bank Kolkata, Blood bank Guwahati Medical College, Guwahati and various BCSUs in West Bengal state.
- Appointed as Technical Expert by National AIDS Control Organization, Delhi for the inspection for grant of license to Stand alone Blood Banks in Haryana and Model Blood Banks in Punjab.
- Appointed as Technical Expert by Director Health Services cum Licensing Authority UT Chandigarh for grant/renewal of license of Blood Banks in Chandigarh including Postgraduate Institute of Medical Education and Research, Chandigarh.
- Member of Executive Committee, State Blood Transfusion Council, U.T. Chandigarh.
- Member Technical Committee for procurement of Medical Equipment by Punjab Health Systems Corporation.
- Certificate of Participation in the Management Sensitization Programme conducted by Apex Institute of Entrepreneurship and Business Development, Punjab.

## **Professional positions held**

- Junior resident Pathology (MD trainee) Postgraduate Institute of Medical Education and Research, Chandigarh – 1988 to 1990
- Senior resident Pathology Maulana Azad Medical College, Delhi 1991 to 1993
- Assistant Professor, Hematology Postgraduate Institute of Medical Education and Research, Chandigarh 1993 to 1995
- Assistant Professor, Transfusion Medicine Government Medical College Hospital, Chandigarh 1996 to 2003
- Associate Professor and acting Head, Transfusion Medicine Government Medical College Hospital, Chandigarh - 2003 to 2009
- Professor and Head, Transfusion Medicine Government Medical College Hospital, Chandigarh - 2009 till date

## Other professional positions held include:

- NACO appointed Technical expert for inspection of Blood Component Separation Units and Private stand alone Blood Banks
- Appointed as Technical Expert by Director Health Services cum Licensing Authority UT Chandigarh for grant/renewal of license of Blood Banks in Chandigarh including at Postgraduate Institute of Medical Education and Research, Chandigarh.
- Member, Technical Resource Group on Blood Safety, NACO appointed
- Appointed as MCI inspector for inspection of Medical Colleges for starting M.D. Transfusion Medicine
- Advisory Board member of the Asian Journal of Transfusion Sciences
- Referee for reviewing manuscripts for publication in prestigious journals including Indian journal of medical research