

# ADULT IMMUNIZATION

*Editors*

**S.K. Sharma, R.K. Singal, A.K. Agarwal**



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**Dr. R.K. Singal**

Past-President, Association of Physicians of India

For the Association of Physicians of India

Unit No. 6 & 7, Turf Estate, Opp. Shakti Mills Compound

Off Dr. E. Moses Road, Mumbai - 400 011

# ADULT IMMUNIZATION

## *Editors*

**S.K. Sharma**  
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**R.K. Singal**  
*New Delhi*

**A.K. Agarwal**  
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# ADULT IMMUNIZATION

## *Editors*

### **S.K. Sharma**

Chief, Division of Pulmonary, Critical Care and Sleep Medicine  
Professor and Head, Department of Medicine  
All India Institute of Medical Sciences  
Ansari Nagar, New Delhi - 110 029

### **R.K. Singal**

Past-President  
The Association of Physicians of India  
Senior Consultant, Internal Medicine  
BLK Memorial Hospital  
New Delhi - 110 005

### **A.K. Agarwal**

President  
The Association of Physicians of India  
Chief Consultant, Professor and Head  
Department of Medicine  
Postgraduate Institute of Medical Education and Research  
Dr. Ram Manohar Lohia Hospital  
New Delhi - 110 001

## *Associate Editors*

### **Alladi Mohan**

Chief, Division of Pulmonary, Critical Care and Sleep Medicine  
Professor and Head, Department of Medicine  
Sri Venkateswara Institute of Medical Sciences  
Tirupati - 517 507 (Andhra Pradesh)

### **Gautam Ahluwalia**

Professor, Department of Medicine  
Medical Officer Incharge, Emergency Services  
Dayanand Medical College and Hospital  
Ludhiana - 141 001 (Punjab)

*Published by*

Jitendar P Vij

**Jaypee Brothers Medical Publishers (P) Ltd**

**Corporate Office**

4838/24 Ansari Road, Daryaganj, **New Delhi** 110 002, India, +91-11-43574357

**Registered Office**

B-3 EMCA House, 23/23B Ansari Road, Daryaganj, **New Delhi** 110 002, India

Phones: +91-11-23272143, +91-11-23272703, +91-11-23282021,

+91-11-23245672, Rel: +91-11-32558559 Fax: +91-11-23276490, +91-11-23245683

e-mail: jaypee@jaypeebrothers.com, Website: www.jaypeebrothers.com

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- 4-2-1067/1-3, 1st Floor, Balaji Building, Ramkote Cross Road

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+91-40-24758498, Rel: +91-40-32940929

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- No. 41/3098, B & B1, Kuruvi Building, St. Vincent Road

**Kochi** 682 018, Kerala Phones: +91-484-4036109, +91-484-2395739,

+91-484-2395740 e-mail: kochi@jaypeebrothers.com

- 1-A Indian Mirror Street, Wellington Square

**Kolkata** 700 013 Phones: +91-33-22651926, +91-33-22276404,

+91-33-22276415, Rel: +91-33-32901926

Fax: +91-33-22656075, e-mail: kolkata@jaypeebrothers.com

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**Lucknow** 226 016 Phones: +91-522-3040553, +91-522-3040554

e-mail: lucknow@jaypeebrothers.com

- 106 Amit Industrial Estate, 61 Dr SS Rao Road, Near MGM Hospital, Parel

**Mumbai** 400012 Phones: +91-22-24124863, +91-22-24104532,

Rel: +91-22-32926896 Fax: +91-22-24160828, e-mail: mumbai@jaypeebrothers.com

- "KAMALPUSHPA" 38, Reshimbag, Opp. Mohota Science College, Umred Road

**Nagpur** 440 009 (MS) Phone: Rel: +91-712-3245220,

Fax: +91-712-2704275 e-mail: nagpur@jaypeebrothers.com

**North America Office**

1745, Pheasant Run Drive, Maryland Heights (Missouri), MO 63043, USA Ph: 001-636-6279734

e-mail: jaypee@jaypeebrothers.com, anjulav@jaypeebrothers.com

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# Contributors

---

**S.K. Acharya**

Professor and Head  
Department of Gastroenterology  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Gautam Ahluwalia**

Professor  
Department of Medicine  
Dayanand Medical College and Hospital  
Ludhiana - 141 001

**Nita Bhandari**

Joint Director  
Society of Applied Studies  
45, Kalu Sarai, New Delhi - 110 016

**Kaushik Bharati**

Scientific Consultant  
National Institute of Immunology  
Aruna Asaf Ali Marg, New Delhi - 110 067

**Neerja Bhatla**

Additional Professor  
Department of Obstetrics and Gynaecology  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**S.K. Bhattacharya**

Additional Director General  
Indian Council of Medical Research  
Ansari Nagar, New Delhi - 110 029

**Rakesh Bhatnagar**

Professor  
Room No. 102, School of Biotechnology  
Jawaharlal Nehru University  
New Delhi - 110 067

**Swati Y. Bhawe**

Senior Consultant  
Indraprastha Apollo Hospital and Max Health Care  
New Delhi

**Jaya Chakravarty**

Department of Medicine  
Institute of Medical Sciences  
Banaras Hindu University, Varanasi - 221 005

**U.C. Chaturvedi**

Former Professor and Head  
Department of Microbiology  
King George Medical College  
Lucknow - 226 003

**Virander Singh Chauhan**

Director  
International Centre for Genetic Engineering and  
Biotechnology  
P.O. Box No. 10504  
Aruna Asaf Ali Marg  
New Delhi - 110 067

**Anil Chawla**

Vice-President  
Panacea Biotech Limited  
New Delhi - 110 044

**Kamlesh Gidwani**

Institute of Medical Sciences  
Banaras Hindu University  
Varanasi - 221 005

**Vinay Gulati**

Assistant Professor  
Department of Medicine  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Pranav Gupta**

Department of Pathology  
All India Institute of Medical Sciences  
Ansari Nagar, New Delhi - 110 029

**Umesh Datta Gupta**

Scientist E  
Experimental Animal Facility  
National JALMA Institute for Leprosy and Other  
Mycobacterial Diseases (ICMR)  
Miyazaki Marg, Taj Ganj  
Agra - 282 001

**Sunil Gupta**

Joint Director  
Division of Microbiology  
National Institute of Communicable Diseases  
22, Sham Nath Marg, Delhi - 110 054

**R.L. Ichhpujani**

Additional Director  
National Institute of Communicable Diseases  
22, Sham Nath Marg, Delhi - 110 054

**Sanjay Jain**

Professor  
Department of Internal Medicine  
Postgraduate Institute of Medical Education and Research  
Chandigarh - 160 012

**Premashish Kar**

Director-Professor  
Department of Medicine  
Maulana Azad Medical College and Lok Nayak Hospital  
University of Delhi  
New Delhi - 110 002

**T. Kadhiraavan**

Assistant Professor  
Department of Medicine  
Jawaharlal Institute of Postgraduate Medical  
Education and Research  
Dhanvantri Nagar, Puducherry - 605 006

**V.M. Katoch**

Director General, Indian Council of Medical Research  
Secretary, Department of Health Research  
V. Ramalingaswami Bhawan  
Ansari Nagar, New Delhi - 110 029

**Shashi Khare**

Consultant and Head  
Division of Microbiology  
National Institute of Communicable Diseases  
22, Sham Nath Marg, Delhi - 110 054

**Prasad S. Kulkarni**

Serum Institute of India Ltd.  
212/2, Hadapsar  
Pune - 411 028

**Manoj Kumar**

Assistant Professor  
Department of Hepatology  
Institute of Liver and Biliary Sciences  
D-1, Vasant Kunj  
New Delhi - 110 070

**Samir Lakhashe**

National AIDS Research Institute  
Plot No.73, 'G'-Block, MIDC  
Bhosari, Pune - 411 026

**Shiv Lal**

Special Director General of Health Services and  
Director, National Institute of Communicable Diseases  
22, Sham Nath Marg, Delhi - 110 054

**Dipendra K. Mitra**

Associate Professor  
Department of Transplant Immunology and  
Immunogenetics  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Veena Mittal**

Joint Director and Head  
Zoonosis Division  
National Institute of Communicable Diseases  
22, Sham Nath Marg, Delhi - 110 054

**S.K. Panda**

Professor and Head  
Department of Pathology  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Ramesh Paranjape**

Director  
National AIDS Research Institute  
Plot No.73, 'G'-Block, MIDC  
Bhosari, Pune - 411 026

**Madhukar Rai**

Professor  
Department of Medicine  
Institute of Medical Sciences  
Banaras Hindu University, Varanasi - 221 005

**Reeta Rasaily**

Assistant Director General  
Division of Reproductive Health and Nutrition  
Indian Council of Medical Research  
Ansari Nagar, New Delhi - 110029

**Shiv K. Sarin**

Director Professor and Head  
Department of Gastroenterology  
Room No. 201, Academic Block  
G.B. Pant Hospital, New Delhi - 110 002

**Nitin Shah**

Consultant Paediatrician  
P.D. Hinduja National Hospital and Medical Research  
Centre  
Veer Savarkar Marg, Mahim, Mumbai - 400 016



**S.K. Sharma**

Chief, Division of Pulmonary, Critical Care and Sleep Medicine

Professor and Head, Department of Medicine  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Pooja Sharma**

Scientist  
Society of Applied Studies  
45, Kalu Sarai, New Delhi - 110 016

**Prabhat K. Sharma**

Department of Transplant Immunology and Immunogenetics  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Smrita Singh**

Assistant Director  
Division of Microbiology  
National Institute of Communicable Diseases  
22, Sham Nath Marg, Delhi - 110 054

**Meera Singh**

National AIDS Research Institute  
Plot No.73, 'G'-Block, MIDC, Bhosari  
Pune - 411 026

**Rajiv Singla**

Department of Medicine  
Maulana Azad Medical College and Lok Nayak Hospital  
University of Delhi  
New Delhi - 110 002

**Jaya Prakash Sugunaraj**

Department of Medicine  
All India Institute of Medical Sciences (AIIMS)  
Ansari Nagar, New Delhi - 110 029

**Shyam Sundar**

Professor, Department of Medicine  
Institute of Medical Sciences  
Banaras Hindu University  
Varanasi - 221 005

**Vikas Suri**

Assistant Professor  
Department of Internal Medicine  
Postgraduate Institute of Medical Education and Research  
Chandigarh - 160 012

**Molly M. Thabab**

Assistant Professor  
Department of Medicine  
Postgraduate Institute of Medical Education and Research  
Chandigarh - 160 012

**Sudhanshu Vrat**

Scientist  
National Institute of Immunology  
Aruna Asaf Ali Marg  
New Delhi - 110 067

**Subhash Varma**

Professor and Head  
Department of Medicine  
Postgraduate Institute of Medical Education and Research  
Chandigarh - 160 012



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# Foreword

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*The scientists all over the world in their conquest against infective disorders, discovered immunization as a useful way to prevent some of these disorders before even the Koch's Principle was enunciated and the first anti-infective agent sulphonamide discovered.*

*A little over 300 years ago, Edward Jenner, a country doctor in England, started the concept of immunization which was to become one of the major and landmark discoveries in the field of Medicine. Not to take away even an iota of credit from the discovery of Edward Jenner, it would be pertinent to mention that the process of "variolation" was being practised much earlier in China, India, and Persia. The scientific growth in the process of immunization has advanced very significantly and vaccines and sera are available for prevention of various infective disorders including some of the viral disorders for which no definitive treatment is available till date. From the time in the year 1903 smallpox vaccine was licensed for use for general public, nearly 45 other vaccines and toxoids, apart from several immunoglobulin preparations, were introduced to fight some of the most dreaded medical conditions.*

*The importance of paediatric immunization is well-established and the immunization schedule has been well-documented as well as propagated. However, adult immunization has failed to elicit the required enthusiasm as well as practice by the practitioners of the modern system of medicine. In a country like USA, it is observed that only two percent of the adult population is immunized against various infective disorders against which we have effective vaccines, sera and toxoids available.*

*Dr. R.K. Singal, before relinquishing as the President of API, suggested and emphasized the importance of focusing the attention of Indian physicians to the importance of Adult Immunization. He was thus requested and entrusted the responsibility of editing and bringing out a monograph on the benefits of adult immunization and to focus on some of the newer vaccines which are in the pipeline. These newer vaccines when available shall also be able to prevent morbidity and mortality against very serious diseases like malaria and human immunodeficiency virus (HIV), not only benefiting the people in the subcontinent but globally. In this endeavour, he was associated with two stalwarts, Prof. S.K. Sharma and Prof. A.K. Agarwal who have very meticulously planned the contents of this monograph. The authors who were invited to contribute have immense practical experience and enough academic expertise to give a balanced view about the benefits of immunization in adults to physicians at large.*

*On going through this book, one is singularly impressed by the information provided in an encapsulated manner and the utility of various vaccines has been very well dealt with. However, it also focuses on vaccines which are under the process of investigation and may become available for human use in day-to-day clinical practice – especially malaria and HIV.*

*Before I conclude, I would once again compliment the Editors of this useful monograph because it is a timely and will act as a ready reckoner for students, teachers and practising physicians.*

**Dr. Y.P. Munjal**  
Editor-in-Chief  
API Textbook of Medicine



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# Preface

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*Immunization of adults against several diseases that are still a major public health problem in the developing countries, such as India, is a controversial issue. Reliable epidemiological data regarding the burden of diseases in general, and infectious diseases in particular, from India are lacking. Sparse published data are available regarding the efficacy and safety of various adult immunization strategies. Furthermore, there is paucity of data regarding objective monitoring of the adequacy of immunization (e.g. optimal antibody titre) against various infectious diseases.*

*Keeping these issues in mind, the present monograph has been conceived to give a balanced overview regarding the current state-of-the-art evidence on various aspects related to adult immunization and to provide a basis for rational scientific practice. It is hoped that practising clinicians and postgraduate students will find this monograph a valuable reference manual.*

**S.K. Sharma**  
**R.K. Singal**  
**A.K. Agarwal**



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