



# A Comprehensive Practical Manual of Hospital and Clinical **PHARMACY**



Mr. Subhasish Saha  
Dr. Saumendu Debroy  
Miss. Puja Saha  
Dr. Niladri Shekhar Dey  
Mr. Jagjot Gautam

# **A COMPREHENSIVE PRACTICAL MANUAL OF HOSPITAL AND CLINICAL PHARMACY**

**Mr. Subhasish Saha**

Assistant Professor,  
Mata Gujri College of Pharmacy,  
Kishanganj, Bihar.

**Dr. Saumendu Debroy**

Professor and Principal,  
Mata Gujri College of Pharmacy,  
Kishanganj, Bihar.

**Miss. Puja Saha**

Associate Professor,  
Mata Gujri College of Pharmacy,  
Kishanganj, Bihar.

**Dr. Niladri Shekhar Dey**

Professor and HOD,  
Department Of Pharmaceutics Mata Gujri College of  
Pharmacy, Kishanganj, Bihar.

**Mr. Jagjot Gautam**

Lecturer,  
Mata Gujri College of Pharmacy,  
Kishanganj, Bihar.

**Kripa-Drishti Publications, Pune.**

**Book Title: A Comprehensive Practical Manual of Hospital and Clinical Pharmacy**

**Authored By: Mr. Subhasish Saha, Dr. Saumendu Debroy, Miss. Puja Saha, Dr. Niladri Shekhar Dey, Mr. Jagjot Gautam**

**Price: ₹425**

1<sup>st</sup> Edition

**ISBN: 978-81-19149-38-4**



**Published: July 2023**

**Publisher:**



**Kripa-Drishti Publications**

A/ 503, Poorva Height, SNO 148/1A/1/1A,  
Sus Road, Pashan- 411021, Pune, Maharashtra, India.

Mob: +91-8007068686

Email: [editor@kdpublications.in](mailto:editor@kdpublications.in)

Web: <https://www.kdpublications.in>

© Copyright Mr. Subhasish Saha, Dr. Saumendu Debroy, Miss. Puja Saha, Dr. Niladri Shekhar Dey, Mr. Jagjot Gautam

All Rights Reserved. No part of this publication can be stored in any retrieval system or reproduced in any form or by any means without the prior written permission of the publisher. Any person who does any unauthorized act in relation to this publication may be liable to criminal prosecution and civil claims for damages. [The responsibility for the facts stated, conclusions reached, etc., is entirely that of the author. The publisher is not responsible for them, whatsoever.]

## **PREFACE**

In the recent decade, there is a continuous development in the Indian pharmacy. But the maximum portion of it is inclined on industrial nature, and very little depended on the hospital pharmacy and its services. To recover this need, pharmaceutical educationist has included the new subject Hospital and clinical Pharmacy, in the course work of Diploma in Pharmacy. This book is a source of practical knowledge about administrations, precautions and clinical aspects of hospitals. It covers the syllabus of the diploma course in pharmacy as per Pharmacy Council of India (PCI) organized in 1993.

The study of hospital and clinical Pharmacy expose the perception of administration, techniques, principles, and working in hospitals. Comprehensive knowledge of this subject is crucial for the students working as a pharmacist in the hospitals. This book is a pursuit to deliver a unified analysis of different aspects of the hospital and clinical system of diagnosis.

The main advantage of this book is that it is written in very simple language and it will not be difficult for language students and others to understand. All topics in this subject such as Hospital Pharmacy, Sterilization, Demonstration, administration and identification of different types of Orthopaedical and Surgical Aids, Pharmacy Software and Digital Pharmaceutical App, Dressing Material, studying of different Drug-Drug Interaction, studying and filling the IPC's ADR Reporting Form and perform causality assessments using various scales, administrations of different kinds of vaccines, process of wound dressing, the interpretation of laboratory reports to optimize drug therapy, to handle drug information queries, etc. The current book stands out for its current information on the topic, thorough discussion, and insightful views.

The Principal of Mata Gujri College of Pharmacy, Dr. Saumendu Deboroy, the HOD of Pharmaceutics at Mata Gujri College of Pharmacy, Dr. Niladri Shekhar Dey, Miss Puja Saha, an associate professor at Mata Gujri College of Pharmacy and Mr. Jagjot Gautam, Lecturer at Mata Gujri College of Pharmacy is among the many individuals who have supported and encouraged me. Without their politeness, unwavering collaboration, support, and encouragement, the project could not have been finished. It is hard for me to adequately express my gratitude to the books and articles from which we gathered much too much information for the book's compilation. Finally, we want to express our sincere gratitude to our family members for supporting us during stressful moments when we were publishing this book. No significant professional endeavor can be started without the family's support.

We've done everything we can to prevent printing mistakes. Despite our best attempts, some crypt may have been included accidentally. If they are brought to our attention, we would appreciate it. Positive criticism, comments, and recommendations regarding the book's subject matter will be gratefully received because they will undoubtedly assist to improve subsequent printings of the book.

## **INDEX**

<b>Experiment 1: To Know your Hospital and Clinical Pharmacy Laboratory...</b>	<b>1</b>
<b>Experiment 2: To Study and Report the Use of Hospital Pharmacy Software</b>	<b>6</b>
<b>Experiment 3: To Study and Report the Various Digital Health Tools. ....</b>	<b>14</b>
<b>Experiment 4: To Study and Report the Vaccination Process. ....</b>	<b>30</b>
<b>Experiment 5: To Perform and Report the Injecting Techniques of Intravenous (IV) Route. ....</b>	<b>37</b>
<b>Experiment 6: To Perform and Report the Injecting Techniques of Intramuscular (IM) Route ....</b>	<b>41</b>
<b>Experiment 7: To Perform and Report the Injecting Techniques of Subcutaneous (SC) Route.....</b>	<b>46</b>
<b>Experiment 8: To Perform and Report the Process of Wound Dressing. ....</b>	<b>50</b>
<b>Experiment 9: To Study and Report the Identification of Drug-Drug Interaction (Activity Increase) In the Prescription. ....</b>	<b>54</b>
<b>Experiment 10: To Study and Report the Identification of Drug-Drug Interaction (Activity Decrease) In Prescription. ....</b>	<b>59</b>
<b>Experiment 11: To Study and Report Drug Information Queries (Orthopedics and General Medicine).....</b>	<b>64</b>
<b>Experiment 12: To Study and Reports the Interpretation of Laboratory Reports to Optimize Drug Therapy.....</b>	<b>72</b>
<b>Experiment 13: Demonstration, Administration and Identification of Various Types of Orthopaedical and Surgical Aids Such as Knee Cap. ....</b>	<b>82</b>
<b>Experiment 14: Demonstration, Administration and Identification of Different Types of Orthopaedical and Surgical Aids Such as Abdominal Belt. ....</b>	<b>90</b>
<b>Experiment 15: Demonstration, Administration and Identification of Different Types of Orthopaedical and Surgical Aids Such as LS Belt. ....</b>	<b>94</b>

<b>Experiment 16: Demonstration, administration and identification of different types of Orthopaedical and Surgical Aids such as Sterile Gauze .....</b>	<b>97</b>
<b>Experiment 17: Demonstration, administration and identification of different types of Orthopaedical and Surgical Aids such as Sterile Cotton .....</b>	<b>99</b>
<b>Experiment 18: Demonstration, Administration and Identification of Different Types of Orthopaedical and Surgical Aids Such as Crepe Bandage .....</b>	<b>102</b>
<b>Experiment 19: Demonstration, administration and identification of different types of Orthopaedical and Surgical Aids such as Needles and Syringes.....</b>	<b>106</b>
<b>Experiment 20: Demonstration, Administration and Identification of Different Types of Orthopaedical and Surgical Aids Such as Catheters, Urine Bag, Urine Pots, Colostomy Bags. ....</b>	<b>114</b>
<b>Experiment 21: Demonstration, Administration and Identification of Different Types of Orthopaedical and Surgical Aids Such as IV Set, RYLE's Tube and Various Types of Oxygen Mask .....</b>	<b>124</b>
<b>Experiment 22: To Study and Fill the IPC's ADR Reporting Form and Perform Causality Assessments Using Various Scales (Orthopedics).....</b>	<b>141</b>

## ABOUT THE EDITORS



**Mr. Subhasish Saha** is currently Assistant Professor at Mata Gujri College of Pharmacy, Kishanganj, Bihar. He has been teaching since 2021 in Pharmacy field. Before that had worked as a pharmacist in Apollo Multispecialty Hospitals, Kolkata. He has two national and one international research publications to his name. Mr. Saha did his M. Pharm in Pharmaceutics from Guru Nanak Institute of Pharmaceutical Science and Technology in 2021, his research was based on Structural Development, Synthesis and Evaluation of Porous Nanoparticles. He achieved his Bachelors from Bharat Technology in 2019.



**Dr. Saumendu Debroy** has done his Graduation from Himalayan Pharmacy Institute, Sikkim, his Masters from Gayatri College of Pharmacy, Orissa and he did his PhD from Gauhati University. He has worked with WHO for four and a half years, he also has worked in Pharmaceutical Manufacturing and Marketing before joining Teaching. He has been in teaching for last 18 years and served various Colleges and Universities in various capacities.



**Miss. Puja Saha** is currently working as Associate Professor with Mata Gujri College of Pharmacy, Kishanganj, Bihar. She has been teaching since 2017 in Pharmacy field. She has three national and six international publications to her credit she also has one Indian patent on Formulation Development and Evaluation of Topical Liposomal Gel in Treatment of Melanogenesis.



**Dr. Niladri Shekhar Dey** is Professor, HOD (Department of Pharmaceutics), Mata Gujri College of Pharmacy. He has more than eleven years teaching experience in field of pharmaceutical sciences, among then six years research experience. His area of research oriented specially on nanomedicine and targeted drug delivery, also in nano-drug delivery technology in cancer chemotherapy. He has twelve international publications with high impact factor of journal reputed and two book chapters in international field of pharmacy.



**Mr. Jaggot Gautam** is presently working as Lecturer, Mata Gujri College of Pharmacy, he has been teaching since 2020 in Pharmacy field. Before that has worked as pharmacist in Mata Gujri Memorial and LSK Hospital, Kishanganj, Bihar. He has one international publication to his credit.



**Kripa-Drishti Publications**  
A-503 Poorva Heights, Pashan-Sus Road, Near Sai Chowk,  
Pune - 411021, Maharashtra, India.  
Mob: +91 8007068686  
Email: editor@kdpublications.in  
Web: <https://www.kdpublications.in>

Price: ₹ 425

ISBN: 978-81-19149-38-4



9 788119 149384