Community Pharmacy and **Management**

Practical Notebook Course Code ER20-22P

for Second Year Diploma in Pharmacy

has been written and designed as per the latest Pharmacy Council of India's Education Regulation, 2020, for Diploma in Pharmacy course (Course Code ER20-22P). This practical notebook, is designed to fulfil the course objectives and also help the students in future needs of the society's expectations of the health care team and other stakeholders, taking careful feedback from the experts in the pharmacy sector and other healthcare professions.

This Practical Notebook will lead the pharmacy students in attaining the course outcomes and course objectives clearly which are well defined in field of community pharmacy with the following skills and competencies.

- Mandling and filling prescription
- Drug-drug interaction **£**22
- Preparation of dispensing labels and auxiliary labels
- Mealth screening survices
- Patient counselling on chronic diseases and minor ailments
- Handling of dummy dosage forms and their correct administration techniques **9**
- Use of community pharmacy software and digital health tools **9**
- 7 The Notebook contains 52 experiments as per guidelines of ER-2020. Some blank left handsided pages have been provided for making observations and calculations wherever required as also for labelling and recording other important information on the subject.

Varun Dutt Sharma MPharm

is ex-Principal, Janta Polytechnic, Jahangirabad, Bulandshahar, UP, and currently Consultant at VYDSAM Ayurveda PG College, Khurja, UP.

SK Pandey BPharm

is ex-Head, Department of Pharmacy, Janta Polytechnic, Jahangirabad, Bulandshahar, UP.







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Practical Notebook

As per the latest syllabus prescribed by Pharmacy Council of India

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Varun Dutt Sharma **SK Pandey**



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Varun Dutt Sharma MPharm

Ex-Principal Janta Polytechnic, Jahangirabad, Bulandshahar, Uttar Pradesh Consultant, VYDSAM Ayurveda PG College, Khurja, Uttar Pradesh

SK Pandey BPharm

Ex-Head, Department of Pharmacy Janta Polytechnic, Jahangirabad, Bulandshahar, Uttar Pradesh

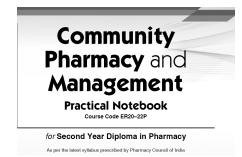


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 4819/XI Prahlad Street, 24 Ansari Road, Daryaganj, New Delhi 110 002, India

 Ph: 011-23289259, 23266861, 23266867
 Fax: 011-23243014
 Website: www.cbspd.com

Website: www.cbspd.com e-mail: delhi@cbspd.com

 Corporate Office: 204 FIE, Industrial Area, Patparganj, Delhi 110 092, India

 Ph: 011-49344934
 Fax: 011-49344935
 e-mail: publishing@cbspd.com; publicity@cbspd.com

Branches

- Bengaluru: Seema House 2975, 17th Cross, K.R. Road, Banasankari 2nd Stage, Bengaluru 560 070, Karnataka, India Ph: +91-80-26771678/79 Fax: +91-80-26771680 e-mail: bangalore@cbspd.com
 Chennai: 7, Subbaraya Street, Shenoy Nagar, Chennai 600 030, Tamil Nadu, India
- Ph: +91-44-26680620, 26681266
 Fax: +91-44-42032115
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 • Kochi: 42/1325, 1326, Power House Road, Opposite KSEB, Power House, Ernakulam 682018, Kochi, Kerala, India
- Ph: +91-484-4059061–67 Fax: +91-484-4059065 e-mail: kochi@cbspd.com
- Kolkata: 147, Hind Ceramics Compound, 1st Floor, Nilgunj Road, Belghoria, Kolkata 700056, West Bengal, India Ph: +91-33-25330055/56 e-mail: kolkata@cbspd.com
- Lucknow: Basement, Khushuma Complex, 7 Meerabai Marg (behind Jawahar Bhawan), Lucknow 226001, UP, India
 Ph: +91-522-40000032
 e-mail: tiwari.lucknow@cbspd.com
- Mumbai: PWD Shed, Gala No. 25/26, Ramchandra Bhatt Marg, Next JJ Hospital Gate No. 2, Opp. Union Bank of India, Noorbaug, Mumbai 400009, Maharashtra, India Ph: +91-22-66661880/89
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Representatives

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to our Parents

Preface

The Pharmacy Council of India made regulations under Section 10 of Pharmacy Act, 1948 called "The Education Regulations, 2020, for diploma course in pharmacy." It was approved by Government of India, Ministry of Health and Family Welfare which was notified in October, 2020, and implemented in the year 2021 for diploma in pharmacy students.

The subject "Community Pharmacy and Management—Practical" in ER-20 will bring about revolutionary. Changes that will uplift the knowledge and skills of the students on par with the contemporary and future professional demands in the field of pharmaceutical care services which will certainly redefine the roles of the diploma holder qualified pharmacists in both community and hospital settings. The curriculum of community pharmacy and management PR (ER-91) was newly introduced in ER-20 keeping in view of future needs of the society expectations of the health care team and other stakeholders, taking all feedback from the experts in the pharmacy and other healthcare professions.

It is the era of digital India, so it becomes essential to keep the practice of pharmacy profession up-to-date as per global demand and the latest community pharmacy software solutions being equipped and implemented with modern digital health tools.

The course outcomes and course objectives clearly well defined in the field of community pharmacy with the following skills and competencies in respect of handling and filling prescriptions, patient counselling on diseases and minor ailments, drug–drug interactions, dispensing and auxiliary labels, health screening tests, handling and their correct administration techniques for dummy dosage forms including modern involvement of software in community pharmacy which is the demand of the time.

The practical notebook contains 52 experiments as per guidelines of ER-2020.

The left blank page is provided for making observations, labels and calculations wherever applicable. We shall be gratefully acknowledged the comments, suggestions and criticism by respected teachers and students for improvement of future edition. We express sincere thanks to Mr Satish Kumar Jain, CMD, and Mr YN Arjuna, Vice President—Publishing, Editorial, and Publicity, CBS Publishers and Distributors, for their cooperation, encouragement and assistance in bringing out this practical notebook. Finally our gratitude is to our colleagues for their inspiration and motivation.

Varun Dutt Sharma SK Pandey

Syllabus

Community Pharmacy and Management—Practical

Course Code: ER20-22P

75 Hours (3 Hours/Week)

Scope: The course is designed to train the students and improve professional skills to provide various pharmaceutical care services in community pharmacy.

Course Objectives: This course will train the students in the following:

- 1. Professional handling and filling prescriptions
- 2. Patient counselling on diseases and minor ailments
- 3. Patient counselling on prescription and/or non-prescription medicines
- 4. Preparation of counselling materials such as patient information leaflets
- 5. Performing basic health screening tests

Course Outcomes: Upon successful completion of this course, the students will be able to:

- 1. Handle and fill prescriptions in a professional manner
- 2. Counsel patients on various diseases and minor ailments
- 3. Counsel patients on prescription and/or non-prescription medicines
- 4. Design and prepare patient information leaflets
- 5. Perform basic health screening tests

Note: The following practicals shall be carried out in the model community pharmacy with appropriate simulated scenarios and materials. Students shall be trained through role plays wherever necessary. The activities of the students shall be assessed/evaluated using a structured objective assessment form.

Practicals

- 1. Handling of prescriptions with professional standards, reviewing prescriptions, checking for legal compliance and completeness (minimum 5).
- 2. Identification of drug-drug interactions in the prescription and follow-up actions (minimum 2).
- 3. Preparation of dispensing labels and auxiliary labels for the prescribed medications (minimum 5).
- 4. Providing the following health screening services for monitoring patients/detecting new patients (one experiment for each activity).

Blood pressure recording, capillary blood glucose monitoring, lung function assessment using peak flow meter and incentive spirometer, recording capillary oxygen level using pulse oximeter, BMI measurement.

- Providing counselling to simulated patients for the following chronic diseases/disorders including education on the use of devices such as insulin pen, inhalers, spacers, nebulizers, etc. where appropriate (one experiment for each disease).
 Type 2 diabetes mellitus, primary hypertension, asthma, hyperlipidaemia, rheumatoid arthritis.
- 6. Providing counselling to simulated patients for the following minor ailments (any three). Headache, GI disturbances (nausea, vomiting, dyspepsia, diarrhoea, constipation), worm infestations, pyrexia, upper respiratory tract infections, skin infections, oral and dental disorders.
- 7. Appropriate handling of dummy dosage forms with correct administration techniques—oral liquids with measuring cup/cap/dropper, eye drops, inhalers, nasal drops, insulin pen, nebulizers, different types of tablets, patches, enemas, suppositories.
- 8. Use of community pharmacy software and digital health tools.

Assignment

The students shall be asked to submit the written assignments on the following topics (one assignment per student per sessional period, i.e. a minimum of three assignments per student)

1. SOPs for various activities in community pharmacy (as discussed in theory and practical)

Syllabus

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- 2. List out the various abbreviations, short forms used in prescriptions and their interpretation.
- 3. Patient Information Leaflet for a given chronic disease/disorder
- 4. Patient Information Leaflet for prescription/non-prescription medicines.
- 5. Preparation of window/shelf display materials for the model community pharmacy.
- 6. Overview of software available for retail pharmacy management including billing, inventory, etc.
- 7. Dosage/medication reminder aids.
- 8. Overview on the operations and marketing strategies of various online pharmacies.
- 9. Overview on the common fixed dose combinations.
- 10. Overview on the medications requiring special storage conditions.
- 11. Role of community pharmacists in preventing antimicrobial resistance.
- 12. Jan Aushadhi and other generic medicine initiatives in India.
- 13. Global overview of online pharmacies.
- 14. Community pharmacy practice standards: Global Vs. Indian scenario.
- 15. Overview of pharmacy associations in India.

Field Visit

The students shall be taken in groups to visit community pharmacies and medicine distributors to understand and witness the professional activities of the community pharmacists, and supply chain logistics. Individual reports from each student on their learning experience from the field visit shall be submitted.

Instructions

- 1. In the laboratory student must be in uniform and should maintain strict discipline.
- 2. Always put on neat and clean white apron whenever you are working in laboratory.
- 3. Always bring practical notebook for viva and counter signature.
- 4. The practical notebook should be completed same day in every respect and should be submitted on the same day to the teacher concerned for the marking and signature.
- 5. Procedures are written in the language of students and procedure written should be strictly followed.
- 6. Actual observations and readings should be recorded in the practical notebook; calculations and conclusions should be based on the actual observations.
- 7. Practical must be performed individually.
- 8. Safety rules must be followed strictly and student must know emergency treatment for accidents, laboratory infections, etc.
- 9. Keep your working place neat and clean.
- 10. Student must handle equipment, glassware and appliances carefully. Thoroughly clean the apparatus required in the practical work.
- 11. After the work is finished, the student should clean the apparatus and other articles.
- 12. Never take or use any chemical or reagents without the prior permission of teacher or lab technician.
- 13. The physiological solution and working solution of drug should be prepared freshly at the time of conducting experiment.
- 14. The stock solution of the drugs can be stored under conditions specified individually.
- 15. Do not weigh less than 10 mg on a high quality analytical balance. For less than 10 mg of weighing of any drug, it is advisable to prepare its solution by dilution method.
- 16. Never throw waste papers and burnt matchsticks in the sink; this will block the sink that may lead to overflowing. Put the waste materials in the dustbin.
- 17. The water taps and gas taps should be tightly closed after the work is over.
- 18. Electrical switches should be put off before leaving the laboratory.

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