

TEXTBOOK OF SOCIAL PHARMACY

For Diploma in Pharmacy First Year

Education Regulation 2020 (New PCI Syllabus)

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Mrs. Vijaylaxmi Rathore working as Research Analyst in Intellectual Property Management Team at Singh & Associates, Gurugram. She completed her M.Pharm (Pharmacology) in the year 2013 and her B.Pharm in the year 2011 from Chhattisgarh Swami Vivekananda Technical University, Bhilai, and Chhattisgarh. She is a GPAT qualified and has 06 years of Pharma regulatory & research experience, and 03 years of intellectual property prosecution and management experience. She was a university topper and received gold medal for her academic excellence in her post-graduation. She has several awards in her credits. She has published various research and review papers in reputed journals and published many articles and expert opinion on professional forums. Her area of interest is in the medical writing, clinical trial regulation, intellectual property management, retrospective survey on neurodegenerative diseases, and role of immunomodulators on pain & inflammation management.

Dr. Akanksha Jain joined as Assistant Professor in Department of Biotechnology, at Shri Shankaracharya Mahavidyalaya, Junwani, Bhilai. She completed her B.Sc. Biotechnology in the year 2009 from Govt. Digvijay autonomous P.G. College Rajnandgaon, Chhattisgarh. Her M.Sc. (Biotechnology) in the year 2011 from Pandit Ravishankar Shukla University, Raipur (C.G.) and Ph.D. Biotechnology in the year 2020 from Guru Ghasidas Vishwavidyalaya, Bilaspur India. She is a GATE and CGSET qualified and has 06 years of teaching and research experience. She is recipient of Start-up India (Abhinav RABI-RAFTAAR IGKV Raipur, IARI Government of India) In addition, she was a university merit (forth rank) holder and received gold medal for her academic excellence in her under graduation. She has several awards in her credits. She is also an approved

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Dr. Pritt Verma completed Ph.D. in Pharmaceutical Sciences (Pharmacology) jointly from Department of Pharmacology CSIR-National Botanical Research Institute and Amity Institute of Pharmacy, Amity University Uttar Pradesh, Lucknow Campus Lucknow, India, with focus to the ethno medicinal value of medicinal plants in hepatotoxicity with keen interest in molecular biology (In-vitro study) on cell lines. She was involved to evaluate the antiulcer activity of the medicinal plants using pylorus ligation, paracetamol and indomethacin induced ulcer model. She is Graduate member of The American Society of Pharmacology and Experimental Therapeutics, Member of International Society of Ethno pharmacology UK, Life time member of National Society of Ethno pharmacology, Kolkata, India with interest in evolution and application of sophisticated and modern technologies in early diagnosis and treatment of different liver fibrosis and liver toxicity; from lung cancers to pulmonary hypertension, lung disease and development of some novel pathway related to reduce the liver fibrosis.

Acknowledgment

We are thankful to Ms. Varsha Yadav, Assistant Professor at Shri Shankaracharya Mahavidyalaya, Juwani road, Bhilai for the Hindi translation of this book. She completed her M.Sc. (Botany) in the year 2016 from Pandit Ravishankar Shukla University, Raipur, Chhattisgarh, India. She is a CGSET (Life Science) qualified and has 05 years of teaching experience. In addition, she was a university Third Merit Holder and received medal for her academic excellence in her graduation and post-graduation. She is a board member of Shri Shankaracharya University (Bhilai). She has several awards in her credits. Her area of interest is in the field of Plant Physiology, Microbiology and Genetics.

Preface

The textbook of Social Pharmacy has been written for students of diploma in pharmacy first-year students keeping in mind specific requirements of the Pharmacy Council of India (PCI), Education Regulation - 2020. This is a bilingual book in both English and Hindi for easy understanding to students. This book is covering the entire syllabus as per new PCI norms including practicals and previous year question papers.

This book containing ten chapters with an introduction to social pharmacy. In preceding chapters role of pharmacists, environment and health, psychosocial pharmacy, nutrition and health, epidemiology, national health program and pharmacoeconomics have discussed. This book is basically health education and community pharmacy.

I would like to acknowledge the invaluable contributions provided by the Probecell Press editorial team. I give great thanks to the graphic designers who were instrumental in preparing much of the artwork for this text. I would also like to acknowledge my colleagues and students for their willingness to serve as test subjects for many of the useful contents in this book. Finally, I would like to thank my teachers and parents for their guidance, support, and encouragement throughout the process of completing this book.

“One individual may die for an idea, but that idea will, after his death, incarnate itself in a thousand lives”
— Subhas Chandra Bose

We expect to bring out new editions in the coming years. Suggestions to improve the content are welcome from the teachers and students.

Raipur
11 September 2021

Monika Bhairam
Rameshroo Kenwat
Tarun Chaudhary
Vijaylaxmi Rathore
Akanksha Jain
Pritt Verma

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CHAPTER 1

INTRODUCTION TO SOCIAL PHARMACY

Definition

The social pharmacy may be defined as the discipline dealing with the role of medicines from the social, scientific and humanistic perspectives. Social pharmacy can be considered to consist of all the social factors that influence medicine use, such as medicine-related beliefs, regulations, policy, attitudes, medicine information, ethics and behaviour. Research in social, economic and policy aspects related to the appropriate use of medicines can provide innovative methods and effective mechanisms to overcome determinants of health and pharmaceutical problems.

परिभाषा

सामाजिक फार्मसी को सामाजिक, वैज्ञानिक और मानवतावादी दृष्टिकोण से दवाओं की भूमिका से निपटने वाले अनुशासन के रूप में परिभाषित किया जा सकता है। सामाजिक फार्मसी में दवा के उपयोग को प्रभावित करने वाले सभी सामाजिक कारकों जैसे दवा से संबंधित मान्यताओं, विनियमों, नीति, दृष्टिकोण, चिकित्सा जानकारी, नैतिकता और व्यवहार को शामिल करने पर विचार किया जा सकता है। दवाओं के उचित उपयोग से संबंधित सामाजिक, आर्थिक और नीतिगत पहलुओं में अनुसंधान स्वास्थ्य और दवा समस्याओं के निर्धारकों को दूर करने के लिए अभिनव तरीके और प्रभावी तंत्र प्रदान कर सकता है।

Scope

Social pharmacy enables the pharmacy profession to act and take responsibility in its full scope with the problems of pharmacy and medicines in society. Social pharmacy is a discipline driven by social needs. By studying the relationship between pharmacy and society, particularly through case studies, the impact of drugs and changes in societal expectation of them, as well as through historical background studies and surveys of current trends, this discipline acts to determine the roles of pharmacists and pharmacies expected by society.

- Social pharmacy requires a basic knowledge of pharmaceutical science, but an understanding from economic viewpoints of the current systems and structures in which healthcare functions is important as well.
- Once these are understood, the goal is to identify social problems and to create and apply models for their resolution which connect pharmacy and society.
- Social pharmacy has played an important role in training programs for community-based pharmacists essential for a hyper-aged society, for community pharmacies' health management programs aimed at promoting the health of residents, and educational programs for elementary and middle school children.

स्कोप

सामाजिक फार्मसी फार्मसी पेशे को समाज में फार्मसी और दवाओं की समस्याओं के साथ अपने पूरे दायरे में कार्य करने और जिम्मेदारी लेने में सक्षम बनाती है। सामाजिक फार्मसी सामाजिक जरूरतों से प्रेरित अनुशासन है। फार्मसी और समाज के बीच संबंधों का अध्ययन करके, विशेष रूप से केस स्टडीज के माध्यम से, दवाओं के प्रभाव और उनकी सामाजिक अपेक्षा में परिवर्तन, साथ ही ऐतिहासिक पृष्ठभूमि अध्ययन और वर्तमान रुझानों के सर्वेक्षणों के माध्यम से, यह अनुशासन समाज द्वारा अपेक्षित फार्मासिस्टों और फार्मसियों की भूमिकाओं को निर्धारित करने के लिए कार्य करता है।

- सामाजिक फार्मसी के लिए भेषज विज्ञान के बुनियादी ज्ञान की आवश्यकता होती है लेकिन वर्तमान प्रणालियों और संरचनाओं के आर्थिक दृष्टिकोण से एक समझ जिसमें स्वास्थ्य संबंधी कार्य भी महत्वपूर्ण हैं।

- एक बार इन्हें समझ लेने के बाद लक्ष्य सामाजिक समस्याओं की पहचान करना और उनके समाधान के लिए ऐसे मॉडल बनाना और लागू करना है जो फार्मसी और समाज को जोड़ते हैं।
- सोशल फार्मसी ने एक अति-वृद्ध समाज के लिए आवश्यक समुदाय-आधारित फार्मासिस्टों के लिए प्रशिक्षण कार्यक्रमों में निवासियों के स्वास्थ्य को बढ़ावा देने के उद्देश्य से सामुदायिक फार्मसियों के स्वास्थ्य प्रबंधन कार्यक्रमों और प्राथमिक और माध्यमिक विद्यालय के बच्चों के लिए शैक्षिक कार्यक्रमों में महत्वपूर्ण भूमिका निभाई है।

Social pharmacy as a discipline

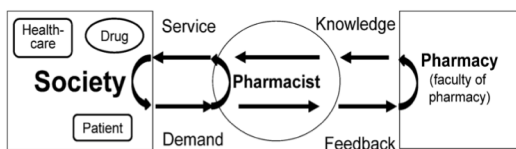
- Social pharmacy draws on the theories and methodologies of the social and behavioural sciences.
- Social pharmacy can thus be conceived of as part of a socio-environmental or bio-psycho-social approach to understanding health and illness as distinct from the commonly accepted biomedical approach.
- The social pharmacy might include for example theories and concepts from the areas such as communication, public health, sociology, ethics and behaviour.
- Social science-based understandings are utilised to improve clinical practice, promote informed - political awareness and develop professional and managerial competencies.

अनुशासन के रूप में सामाजिक फार्मसी

- सामाजिक फार्मसी सामाजिक और व्यवहार विज्ञान के सिद्धांतों और कार्यप्रणाली पर आधारित है।
- स्वास्थ्य और बीमारी को सामान्य रूप से स्वीकृत बायोमेडिकल दृष्टिकोण से अलग समझने के लिए सामाजिक-पर्यावरणीय या जैव-मनोवैज्ञानिक-सामाजिक दृष्टिकोण के हिस्से के रूप में सामाजिक फार्मसी की कल्पना की जा सकती है।
- सामाजिक फार्मसी में उदाहरण के लिए संचार, सार्वजनिक स्वास्थ्य, समाजशास्त्र, नैतिकता और व्यवहार जैसे क्षेत्रों से सिद्धांत और अवधारणाएं शामिल हो सकती हैं।
- सामाजिक विज्ञान-आधारित समझ का उपयोग नैदानिक अभ्यास में सुधार, सूचित राजनीतिक जागरूकता को बढ़ावा देने और पेशेवर और प्रबंधकीय दक्षताओं को विकसित करने के लिए किया जाता है।

Pharmacist's roles in public health

The scope of pharmacy practise encompasses areas of compounding and dispensing medications, services related to patient care including clinical services, reviewing medications for safety and efficacy, and providing drug information. The following are the other activities where pharmacists can play an important role to promote public health:



सार्वजनिक स्वास्थ्य में फार्मासिस्ट की भूमिका

फार्मसी अभ्यास के दायरे में दवाओं के संयोजन और वितरण, नैदानिक सेवाओं सहित रोगी देखभाल से संबंधित सेवाएं, सुरक्षा और प्रभावकारिता के लिए दवाओं की समीक्षा करना और दवा की जानकारी प्रदान करना शामिल है। निम्नलिखित अन्य गतिविधियाँ हैं जहाँ फार्मासिस्ट सार्वजनिक स्वास्थ्य को बढ़ावा देने में महत्वपूर्ण भूमिका निभा सकते हैं:

1. Population-based care

- Pharmacists are involved in both patient-based and population-based care.
- In the past twenty years, health-system pharmacists can support public health efforts using designing and providing disease management programs.
- The health-system pharmacists with their health care colleagues can contribute to population health care using tools such as medication-use evaluation, evidence-based