

**DIPLOMA IN PHARMACY – 1<sup>st</sup> YEAR**  
**LESSON PLAN**  
**SOCIAL PHARMACY – THEORY**

**Course Code: ER20-15T**

**75 Hours (3 Hours/week)**

**Name of Tutor/Teacher: Dr. Shiv Kumar, Lecturer in Pharmacy**

**Schedule of Classes: Theory:** Tuesday: 10.00 – 11.00 AM, Tuesday: 12.00 – 01.00 PM,  
Thursday: 12.00 – 01.00 PM, Monday: 12.00 – 01.00 PM (Tutorial)

**Scope:** This course is designed to impart basic knowledge on public health, epidemiology, preventive care, and other social health related concepts. Also, to emphasize the roles of pharmacists in the public health programs.

**Course Objectives:** This course will discuss about basic concepts of

1. Public Health and National Health Programs
2. Preventive healthcare
3. Food and nutrition related health issues
4. Health education and health promotion
5. General roles and responsibilities of pharmacists in public health

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

**CO1.5T.1:** Discuss about roles of pharmacists in the various national health programs.

**CO1.5T.2:** Describe various sources of health hazards and disease preventive measures.

**CO1.5T.3:** Discuss the healthcare issues associated with food and nutritional substances.

**CO1.5T.4:** Describe the general roles and responsibilities of pharmacists in public health.

Chapter	Topic	Date	Hour	CO	PO	Coverage	Reason for discrepancy	Plans for compensation in backlog	Taught by	Verified by
<b>1</b> <b>Introduction to Social Pharmacy</b>	<b>Definition and Scope:</b> Social Pharmacy as a discipline and its scope in improving the public health.		<b>1</b>							
	<b>Definition and Scope:</b> Role of Pharmacists in Public Health.		<b>2</b>							
	<b>Concept of Health</b> -WHO Definition, various dimensions		<b>3</b>							
	<b>Concept of Health-</b> determinants		<b>4</b>							
	<b>Concept of Health-</b> health indicators		<b>5</b>							
	<b>National Health Policy</b> – Indian perspective		<b>6</b>							
	<b>Public and Private Health System in India</b>		<b>7</b>							
	<b>National Health Mission</b>		<b>8</b>							
	<b>Introduction to Millennium Development Goals, Sustainable Development Goals, FIP Development Goals</b>		<b>9</b>							
<b>2</b> <b>Preventive healthcare – Role of Pharmacists in the following</b>	Demography and Family Planning		<b>1</b>							
	Demography and Family Planning		<b>2</b>							
	Demography and Family Planning		<b>3</b>							
	Mother and child health, importance of breastfeeding,		<b>4</b>							
	Ill effects of infant milk substitutes and bottle feeding		<b>5</b>							
	Overview of Vaccines,		<b>6</b>							
	types of immunity		<b>7</b>							
	Immunization		<b>8</b>							
	Immunization		<b>9</b>							
	<b>Effect of Environment on Health</b> – Water pollution		<b>10</b>							
	<b>Effect of Environment on Health</b> – Importance of safe drinking water		<b>11</b>							
	<b>Effect of Environment on Health</b> – waterborne diseases		<b>12</b>							

Chapter	Topic	Date	Hour	CO	PO	Coverage	Reason for discrepancy	Plans for compensation in backlog	Taught by	Verified by
<b>2 Preventive healthcare – Role of Pharmacists in the following</b>	<b>Effect of Environment on Health</b> – air pollution		<b>13</b>							
	<b>Effect of Environment on Health</b> – noise pollution		<b>14</b>							
	<b>Effect of Environment on Health</b> – sewage and solid waste disposal,		<b>15</b>							
	<b>Effect of Environment on Health</b> – occupational illnesses, Environmental pollution due to pharmaceuticals		<b>16</b>							
	<b>Psychosocial Pharmacy:</b> Drugs of misuse and abuse – psychotropics, narcotics, alcohol, tobacco products.		<b>17</b>							
	<b>Psychosocial Pharmacy:</b> Social Impact of these habits on social health and productivity and suicidal behaviours		<b>18</b>							
<b>3 Nutrition and Health</b>	<b>Basics of nutrition</b> – Macronutrients and Micronutrients		<b>1</b>							
	<b>Basics of nutrition</b> – Macronutrients and Micronutrients		<b>2</b>							
	<b>Basics of nutrition</b> – Macronutrients and Micronutrients		<b>3</b>							
	Importance of water and fibres in diet		<b>4</b>							
	Balanced diet, Malnutrition		<b>5</b>							
	nutrition deficiency diseases, ill effects of junk foods,		<b>6</b>							
	calorific and nutritive values of various foods, fortification of food		<b>7</b>							
	Introduction to food safety, adulteration of foods, effects of artificial ripening, use of pesticides, genetically modified foods		<b>8</b>							
	<b>Dietary supplements, nutraceuticals, food supplements</b> – indications, benefits,		<b>9</b>							
	<b>Dietary supplements, nutraceuticals, food supplements</b> – Drug-Food Interactions		<b>10</b>							

Chapter	Topic	Date	Hour	CO	PO	Coverage	Reason for discrepancy	Plans for compensation in backlog	Taught by	Verified by	
4	Introduction to Microbiology and common microorganisms		1								
	Introduction to Microbiology and common microorganisms		2								
	Introduction to Microbiology and common microorganisms		3								
	<b>Epidemiology:</b> Introduction to epidemiology, and its applications.		4								
	<b>Epidemiology:</b> Understanding of terms such as epidemic, pandemic, endemic, mode of transmission, outbreak, quarantine, isolation, incubation period, contact tracing, morbidity, mortality.		5								
	Causative agents, epidemiology and clinical presentations and Role of Pharmacists in educating the public in prevention of the following communicable diseases: <b>Respiratory infections</b> – Chickenpox, measles, rubella, mumps		6								
	<b>Respiratory infections</b> – Influenza (including Avian-Flu, H1N1, SARS)		7								
	<b>Respiratory infections</b> – Influenza (including MERS, COVID-19)		8								
	<b>Respiratory infections</b> – Diphtheria, Whooping cough, Ebola		9								
	<b>Respiratory infections</b> – Meningococcal meningitis		10								
	<b>Respiratory infections</b> – Acute Respiratory Infections		11								
	<b>Respiratory infections</b> – Tuberculosis		12								
	<b>Intestinal Infections</b> – Poliomyelitis, Amebiasis		13								
	<b>Intestinal Infections</b> – Viral hepatitis		14								

Chapter	Topic	Date	Hour	CO	PO	Coverage	Reason for discrepancy	Plans for compensation in backlog	Taught by	Verified by
4	<b>Intestinal Infections</b> – Cholera		15							
	<b>Intestinal Infections</b> – Acute diarrheal diseases		16							
	<b>Intestinal Infections</b> – Typhoid		17							
	<b>Intestinal Infections</b> – Worm infestations		18							
	<b>Intestinal Infections</b> – Food poisoning		19							
	<b>Arthropod-borne infections</b> - Dengue		20							
	<b>Arthropod-borne infections</b> - Malaria		21							
	<b>Arthropod-borne infections</b> - Filariasis		22							
	<b>Arthropod-borne infections</b> – Chikungunya		23							
	<b>Surface infections</b> – Trachoma, Tetanus		24							
	<b>Surface infections</b> – Leprosy		25							
	STDs		26							
	STDs		27							
	HIV/AIDS		28							
5	<b>Introduction to Health Systems</b>		1							
	<b>All ongoing National Health programs</b> in India, their objectives, functioning, outcome, and the role of pharmacists.		2							
			3							
			4							
			5							
			6							
			6							
	8									
6	<b>Pharmacoeconomics</b> – Introduction, Basic terminologies		1							
	<b>Pharmacoeconomics</b> – Importance of Pharmacoeconomics		2							

## SOCIAL PHARMACY – PRACTICAL

**Course Code: ER20-15P**

**75 Hours (3 Hours/week/Batch)**

**Name of Tutor/Teacher: Dr. Shiv Kumar, Lecturer in Pharmacy**

**Schedule of Classes: Practical:** Tuesday: 02.00 – 05.00 PM, Wednesday: 02.00 – 05.00 PM,  
Friday: 02.00 – 05.00 PM

**Scope:** This course is designed to provide simulated experience in various public health and social Pharmacy activities.

**Course Objectives:** This course will train the students on various roles of pharmacists in public health and social pharmacy activities in the following areas:

1. National Immunization Programs
2. Reproductive and Child Health Programs
3. Food and Nutrition related Health Programs
4. Health Education and Promotion
5. General roles and responsibilities of the Pharmacists in Public Health
6. First Aid for various emergency conditions including basic life support and cardiopulmonary resuscitation

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

**CO1.5T.1:** Describe the roles and responsibilities of pharmacists in various National Health programs.

**CO1.5T.2:** Design promotional materials for Public Health awareness.

**CO1.5T.3:** Describe various health hazards including microbial sources.

**CO1.5T.4:** Advice on preventive measures for various diseases.

**CO1.5T.5:** Provide first aid for various emergency conditions

### Practical

**Note:** Demonstration/Hands-on experience/preparation of charts/models/promotional materials/roleplays/enacting/e-brochures/e-flyers/podcasts/video podcasts/any other innovative activities to understand the concept of various elements of social pharmacy listed here. (At least one activity to be carried out for each one of the following):

Exp. No.	Experiment	Batch	Date	CO	PO	Coverage	Reason for discrepancy	Plans for compensation in backlog	Taught by	Verified by
1	National immunization schedule for children, adult vaccine schedule, Vaccines which are not included in the National Immunization Program.	A								
		B								
		C								
2	RCH – Reproductive and Child Health – Nutritional aspects, relevant national health programmes.	A								
		B								
		C								
3	Family planning devices	A								
		B								
		C								
4	Microscopical observation of different microbes (readymade slides)	A								
		B								
		C								
5	Oral Health and Hygiene	A								
		B								
		C								
6	Personal hygiene and etiquettes – hand washing techniques, Cough and sneeze etiquettes	A								
		B								
		C								
7	Various types of masks, PPE gear, wearing/using them, and disposal	A								
		B								
		C								
8	Menstrual hygiene, products used	A								
		B								
		C								
9	First Aid – Theory, basics, demonstration, hands on training, audio-visuals, and practice, BSL (Basic Life Support) Systems [SCA - Sudden Cardiac Arrest, FBAO - Foreign Body Airway Obstruction, CPR, Defibrillation (using AED) (Includes CPR techniques, First Responder).	A								
		B								
		C								

Exp. No.	Experiment	Batch	Date	CO	PO	Coverage	Reason for discrepancy	Plans for compensation in backlog	Taught by	Verified by
10	Emergency treatment for all medical emergency cases viz. snake bite, dog bite, insecticide poisoning, fractures, burns, epilepsy etc.	A								
		B								
		C								
11	Role of Pharmacist in Disaster Management.	A								
		B								
		C								
12	Marketed preparations of disinfectants, antiseptics, fumigating agents, antilarval agents, mosquito repellents, etc.	A								
		B								
		C								
13	Health Communication: Audio /Video podcasts, Images, Power Point Slides, Short Films, etc. in regional language(s) for mass communication/education/Awareness on 5 different communicable diseases, their signs and symptoms, and prevention.	A								
		B								
		C								
14	Water purification techniques, use of water testing kit, calculation of Content/percentage of KMnO <sub>4</sub> , bleaching powder to be used for wells/tanks	A								
		B								
		C								
15	Counselling children on junk foods, balanced diets – using Information, Education and Communication (IEC), counselling, etc. (Simulation Experiments)	A								
		B								
		C								
16	Preparation of various charts on nutrition, sources of various nutrients from Locally available foods, calculation of caloric needs of different groups (e.g. child, mother, sedentary lifestyle, etc.). Chart of glycemic index of foods.	A								
		B								
		C								
17	Tobacco cessation, counselling, identifying various tobacco containing products through charts/pictures	A								
		B								
		C								



## Assignments

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. An overview of Women's Health Issues
2. Study the labels of various packed foods to understand their nutritional contents
3. Breastfeeding counselling, guidance – using Information, Education and Communication (IEC)
4. Information about the organizations working on de-addiction services in the region (city / district, etc.)
5. Role of a pharmacist in disaster management – A case study
6. Overview on the National Tuberculosis Elimination Programme (NTEP)
7. Drug disposal systems in the country, at industry level and citizen level
8. Various Prebiotics or Probiotics (dietary and market products)
9. Emergency preparedness: Study of local Government structure with respect to Fire, Police departments, health department
10. Prepare poster/presentation for general public on any one of the Health Days. e.g. Day, AIDS Day, Handwashing Day, ORS day, World Diabetes Day, World Heart Day, etc. -
11. List of home medicines, their storage, safe handling, and disposal of unused medicines
12. Responsible Use of Medicines: From Purchase to Disposal
13. Collection of newspaper clips (minimum 5) relevant to any one topic and its submission in an organized form with collective summary based on the news items
14. Read a minimum of one article relevant to any theory topic, from Pharma/Science/ or other Periodicals and prepare summary of it for submission.
15. Potential roles of pharmacists in rural India

## Field Visit

The students shall be taken in groups to visit any THREE of the following facilities to witness and understand the activities of such centres/facilities from the perspectives of the topics discussed in theory and/or practical courses. Individual reports from each student on their learning experience from the field visits shall be submitted.

1. Garbage Treatment Plant
2. Sewage Treatment Plant
3. Bio-medical Waste Treatment Plant
4. Effluent Treatment Plant
5. Water purification plant
6. Orphanage / Elderly-Care-Home / School and or Hostel/Home for persons with disabilities
7. Primary health care centre

## SUGGESTED READINGS

1. Social Pharmacy – Innovation and development. Geoff Harding, Sarah Nettleton and Kevin Taylor. The Pharmaceutical Press.
2. Text Book of Community Pharmacy Practice. RPSGB Publication
3. Community Pharmacy Handbook- Jonathan Waterfield
4. S Khurana, P Suresh and R Kalsi. Health Education & Community Pharmacy. SVikas & Co
5. Social Pharmacy: Tayler, Geoffrey. Pharmaceutical Press. London.
6. Textbook by Dandiya PC, Zafer ZYK, Zafer A. Health education & Community Pharmacy. Vallabh Prakashan.
7. Websites of Ministry of Health and Family Welfare, National Health Portal
8. Where There Is No Doctor: A Village Health Care Handbook by David Werner ,2015 updated version
9. Various WHO publications [www.who.int](http://www.who.int)

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