



SILVER OAK UNIVERSITY
SILVER OAK COLLEGE OF PHARMACY (067)

Programme Name: D.Pharm (18)

Subject Name: Social Pharmacy

Subject Code: 1180672105

Year: I

Prerequisite:

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.

Objective: 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 & promotion
5. General roles and responsibilities of pharmacists in public health

Teaching Scheme:

Teaching Scheme				
L	T	P	Contact Hours	Credit
4	1	3	8	5

Content:

Unit No.	Contents	Teaching Hours	Weightage %
1	Introduction to Social Pharmacy <ul style="list-style-type: none">• Definition and Scope. Social Pharmacy as a discipline and its scope in improving the public health. Role of Pharmacists in Public Health.• Concept of Health - WHO Definition, various dimensions, determinants, and health indicators.• National Health Policy – Indian perspective• Introduction to Millennium Development Goals, Sustainable Development Goals, FIP Development Goals	7	9%
2	Preventive healthcare – Role of Pharmacists in the following <ul style="list-style-type: none">• Demography and Family Planning• Mother and child health, importance of breastfeeding, ill effects of infant milk substitutes and bottle feeding• Overview of Vaccines, types of immunity and immunization	18	24%

	<p>Effect of Environment on Health – Water pollution, importance of safe drinking water, waterborne diseases, air pollution, noise pollution, sewage and solid waste disposal, occupational illnesses, Environmental pollution due to pharmaceuticals</p> <ul style="list-style-type: none"> • Psychosocial Pharmacy: Drugs of misuse and abuse – psychotropics, narcotics, alcohol, tobacco products. Social Impact of these habits on social health and productivity and suicidal behaviours 		
3	<p>Nutrition and Health</p> <ul style="list-style-type: none"> • Basics of nutrition – Macronutrients and Micronutrients • Importance of water and fibres in diet • Balanced diet, nutrition deficiency diseases, ill effects of junk foods, calorific and nutritive values of various foods, fortification of food • Introduction to food safety, adulteration of foods, effects of artificial ripening, use of pesticides, genetically modified foods • Dietary supplements, nutraceuticals, food supplements – indications, benefits, Drug-Food Interactions 	7	9%
4	<p>Introduction to Microbiology and common microorganisms</p> <p>Epidemiology: Introduction to the terms Epidemiology, its applications, terms such as epidemic, pandemic, endemic, mode of transmission, quarantine, isolation, incubation period, contact tracing.</p> <p>Causative agents, epidemiology and clinical presentations and Role of Pharmacists in educating the public in prevention of the following communicable diseases:</p> <ul style="list-style-type: none"> • Respiratory infections – chickenpox, measles, rubella, mumps, influenza (including Avian-Flu, H1N1, SARS, MERS, COVID-19), diphtheria, whooping cough, meningococcal meningitis, acute respiratory infections, tuberculosis, Ebola • Intestinal infections – poliomyelitis, viral hepatitis, cholera, acute diarrheal diseases, typhoid, amebiasis, worm infestations, food poisoning • Arthropod-borne infections - dengue, malaria, filariasis and, chikungunya • Surface infections – trachoma, tetanus, leprosy • STDs, HIV/AIDS 	33	44%
5	Introduction to health systems and all ongoing National health	05	7%

	programs in India, their objectives, functioning, outcome and the role of pharmacists		
6	Role of Pharmacists in disaster management.	02	3%
7	Pharmacoeconomics - basics, Health Insurance, Health Maintenance Organizations (HMOs), Health spending, Out of-pocket expenses	03	4%

Course Outcome:

Sr. No.	CO statement	Unit No
CO-1	Describe various sources of health hazards and disease preventive measures	1,2,3
CO-2	Discuss about roles of pharmacists in the various national health programs	2,3
CO-3	To understand the healthcare issues associated with food and nutritional substances	3
CO-4	To have been introduced to epidemiology and Role of Pharmacists in educating the public in prevention of the different communicable diseases .	4
CO-5	To gain knowledge about national health programs of India	5
CO-6	To understand disaster management.	6
CO-7	Discussion about Pharmacoeconomics	7

Teaching & Learning Methodology: -

The various methods or tools follows by the faculties to teach the above subject are:

1. Chalk and board method
2. Experiential learning.
3. Power point presentation and slide show method

List of Tutorials/Experiments:

Students will perform following Experiments OR

The students will have to solve at least five examples and related theory from each topic as an assignment/tutorial.

1. National immunization schedule for children, adult vaccine schedule, Vaccines not included in the National Immunization Program.
2. RCH – reproductive and child health – nutritional aspects
3. Family planning devices
4. Microscopical observation of different microbes (readymade slides)
5. Oral Health and Hygiene
6. Personal hygiene and etiquettes – hand washing techniques, Cough and sneeze etiquettes. Various types of masks, PPE gear, wearing/using them, and disposal.
7. Menstrual hygiene, products used

8. Marketed preparations of disinfectants, antiseptics, fumigating agents, antilarval agents, mosquito repellents, etc.
9. 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
10. Water purification techniques, use of water testing kit, calculation of content/percentage of KMnO_4 , bleaching powder to be used for wells/tanks
11. Counselling children on junk foods, balanced diets – using Information, Education and Communication (IEC), counselling, etc. (Simulation Experiments)
12. 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
13. Tobacco cessation, counselling, identifying various tobacco containing products through charts/pictures
14. First Aid – Theory, basics, demonstration, hands on training, audio-visuals, and practices, BSL (Basic Life Support) Systems [SCA - Sudden Cardiac Arrest, FBAO - Foreign Body Airway Obstruction, CPR, Defibrillation (using AED) (include CPR techniques, First Responder)

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

16. Mental health and its significances among the various segments of the society
17. Potential roles of pharmacists in rural India

Field Visits

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

Books Recommended: - (minimum 3 books)

- 1) A Textbook of Social and Preventive Pharmacy, Sanjay Nagdev, Ashish Budhrani, , Nirali publication , Pune.
- 2) Social and Preventive Pharmacy Kindle Edition by K. Ravi Shankar, Sridevi M. A. ,Lakshmana Rao, BSP publication.
- 3) Textbook of Social Pharmacy by Monika Bhairam , Rameshroo Kewat, Tarun Chaudhary Probecell Press; 1st edition

List of Open Source Software/learning website:

- <http://silveroakuni.ac.in/video-lecture>
- <https://nptel.ac.in/>
- <https://nptel.ac.in/courses/112/105/112105124/>