

**PEOPLE'S COLLEGE OF MEDICAL SCIENCES & RESEARCH CENTRE,
BHANPUR, BHOPAL**

UNDERGRADUATE COURSE

MBBS: PHARMACOLOGY

Program outcomes	<p>At the end of the course the student shall be able to:</p> <p>(a) Comprehend the normal Sources, Kinetics, Therapeutics, Doses, Uses, Adverse effects, Relevant interactions, Functional utility of medicines and effects of medicines on the human body;</p> <p>(b) Identify the ADRs related to use of medicines and using it for ADR reporting under Pharmacovigilance Programme of India (PvPI);</p> <p>(c) Comprehend the basic knowledge of medicine(s) to analyze the effects on integrative and regulative functions at the organs and systems. He/She shall be able to suggest the medicine for the diseases / deficiencies/ replacements and needs encountered.</p> <p>(d) Demonstrate knowledge of the basic principles and clinical application of medicines; recognize the effects on human body, specific systems and organs. He/She shall be able to explain the beneficial and hazardous effects on the body.</p> <p>(e) Identify and locate all the toxicological effects of medicines to manage the ADRs competently and distinguish that ADRs arise as a result of use of medicines, to make the therapeutics safer.</p> <p>(f) Understand clinical basis of common therapeutic and clinical procedures like different routes of administration of medicines, formulations, rational medicine use, cost benefit and cost efficiency of therapy, patient compliance, patient safety, etc</p>
Program specific outcomes	<ul style="list-style-type: none">• Identify all the important medicines and tell about their justifiable use, effects on human body, expected changes, anticipated ADRs, ways to monitor and control the ADRs, ADR reporting, and follow ups.• Must know use of emergency medicines.• Able to perform computer aided exercises, monitor and assess change in effects with variation in medicine, formulation, dose and route.• Understand the principles of developing need based newer medicines, orphan medicines, Look Alike and Sound Alike (LASA) medicines, Essential medicines, Prescription analysis, Medicine Utilization, issues concerning availability and affordability of medicines.• Understand clinical basis of therapeutic utilization of the knowledge in providing safe, economical and best of medicine

	therapies. <ul style="list-style-type: none">• Using only Generic names of the medicines during prescription, using medicines from Essential Medicine List of hospital and India.
Course outcomes	At the end of the course the student should have a comprehensive knowledge of the medicines and their effects on human body to provide a basis for understanding the clinical correlation of medicine use for the disease conditions.

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POST GRADUATE COURSE

MD: PHARMACOLOGY

Program outcomes	<p>A student upon successfully qualifying in the M.D (Pharmacology) Examinations should be able to:</p> <ul style="list-style-type: none">• Be a competent Pharmacologist.• Teach the undergraduate students about the general principles of Pharmacology, systemic Pharmacology and Therapeutics,• Assess the students understanding of the Pharmacology• Assess the undergraduate teaching and training programmes. Plan and modify the undergraduate curriculum as per the need.• Conduct Computer aided teaching.• Be proficient in practical demonstrations in laboratories like Langendorff's assembly for isolated rabbit heart, use of Analgesiometer and Convulsiometer, isolated experiments on minor animals, Dog's Blood Pressure, Bioassay.• Design Experimental UG and PG research laboratories for teaching undergraduate and postgraduate students of Pharmacology.• Plan, guide and execute research programme.• Undertake animal studies and clinical trials. Write clinical protocols, Make funding applications to Indian and foreign funding agencies, Write ethics clearance applications, Get clearance from the regulatory bodies like Clinical Trial Registry of India (CTRI), making patent applications.
Program specific outcomes	<ul style="list-style-type: none">• A MD (Pharmacology) student be aware of contemporary recent advances and developments in the field of Pharmacology and therapeutics.• Has acquired the competencies pertaining to the subject of Pharmacology that are required to be practiced at all levels of health system.• Is able to discharge responsibilities and participate in National Health Education Programme.• Is oriented to the principles of research methodology.• Has acquired skills in educating medical and paramedical professionals.• Has acquired skills in effectively communicating with the

	<p>students and colleagues from various medical and paramedical fields.</p> <ul style="list-style-type: none"> • Has acquired skills of integrating Pharmacology with other disciplines as and when needed. • Has acquired qualities of a good teacher capable of innovations in teaching methodology. • Has been able to demonstrate adequate management skills to function as an effective leader of the team engaged in teaching, training and research.
Course outcomes	<ul style="list-style-type: none"> • At the end of the course the student, after undergoing the training, should be able to deal effectively with the needs of the medical community and should be competent to handle all problems related to the specialty of Pharmacology and recent advances in the subject. • The post graduate student should acquire skills in teaching Pharmacology to medical and paramedical students and be able to integrate teaching of Pharmacology with other relevant subjects, while being aware of her/his limitations. • Plan, and execute research projects; Present the research work in national conferences; Publish the research papers in reputed, indexed, subject specialty journals.

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