Competencies of pharmacists

The required competencies should be aligned with the seven roles of pharmacists acknowledged by the International Pharmaceutical Federation (FIP) and the World Health Organization (WHO) as described in the “Seven Star Pharmacist,”i.e., care giver, decision maker, communicator, leader, manager, life-long learner, and teacher.

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| Domain | Competencies & Behaviors | Courses |
| 0 Fundamental knowledge | Competency: 0.1 Fundamental courses knowledge   * + 1. Understands basics of vegetal and animal biology, anatomy, physiology and microbiology     2. Understands basics of organic, inorganic and bio-chemistry     3. Understands basics of physics and biophysics     4. Understands basics of statistics, calculations and mathematical analysis     5. Understands and expresses himself in foreign languages | Fundamental courses  Laboratory work and application exercises |
|  | Competency: 0.2 Patient care courses knowledge  0.2.1 Understands mechanisms of patho-physiology, clinical nutrition and clinical microbiology  0.2.2 Understands mechanisms of pharmacology, pharmacognosy, and therapeutic chemistry  0.2.3 Has basic knowledge about disease diagnosis  0.2.4 Knows treatment guidelines of basic infectious and chronic diseases  0.2.5 Knows about drugs side effects, contraindications, interactions and dependence risks and consequences  0.2.6 Knows about pharmacokinetics and drug monitoring  0.2.7 Knows how to apply clinical information in patient care  0.2.8 Knows about drug use in special populations and pharmacogenetics  0.2.9 Knows basics of toxicology and clinical toxicology | Patient care courses  Practicum and application exercises |
|  | Competency: 0.3 Industrial courses knowledge  0.3.1 Understands pharmaceutical preparations principles and industrial applications  0.3.2 Knows about biopharmacy  0.3.3 Knows about analytical methods  0.3.4 Knows how to assess quality of pharmaceutical preparation  0.3.5 Knows principles of marketing and sales  0.3.6 Knows principles of economy, accounting and management | Industrial courses  Laboratory work, practicum and application exercises |
| 1 Professional Practice | Competency: 1.1 Professional practices  1.1.1 Carries out duties as a pharmacist in a professional manner  1.1.2 Treats others with sensitivity, empathy, respect and dignity  1.1.3 Takes responsibility for their own actions and for patient care  1.1.4 Maintains patient confidentiality  1.1.5 Obtains patient consent  1.1.6 Recognizes their scope of practice and the extent of their current competency and expertise and works accordingly  1.1.7 Maintains a consistently high standard of work | Practicum (all)  Pharmacy practice  Ethics  Deontology |
|  | Competency: 1.2 Ethical practices  1.2.1 Demonstrates awareness of national and international codes of ethics and acts accordingly  1.2.2 Demonstrates an understanding of ethical concepts related to pharmacy practice e.g. patient confidentiality, privacy, consent  1.2.3 Makes and justifies decisions in a manner that reflects the statutory code of conduct for pharmacists and pharmacy and medicines law  1.2.4 Recognizes ethical dilemmas in practice scenarios and reasons through dilemmas in a structured manner  1.2.5 Recognize own professional limitations | Ethics  Deontology  Legislation  Pharmacy practice |
|  | Competency: 1.3 Legal practices  1.3.1 Demonstrates an understanding of the Lebanese Pharmacy law  1.3.2 Demonstrates an understanding of and applies the requirements of FIP pharmacy practice foundations  1.3.3 Demonstrates an understanding of the roles and responsibilities of the supervising and superintendent pharmacists  1.3.4 Demonstrates an awareness of and adheres to professional indemnity requirements  1.3.5 Takes responsibility for own action and for patient care  1.3.6 Demonstrates an awareness of other relevant legislation including data protection law, health and safety law, employment law, consumer law, equality law and intellectual property rights  1.3.7 Demonstrates an understanding of the requirements of the regulatory framework to authorize a medicinal product including the quality, safety and efficacy assessment of the product | Practicum (all)  Legislation  Pharmacy practice |
|  | Competency: 1.4 Patient-focused practices  1.4.1 Demonstrates a patient-focused approach to practice  1.4.2 Ensures quality and patient safety are at the center of pharmacy practice  1.4.3 Educates and empowers the patient to manage their own health and medicines  1.4.4 Acts as a patient advocate to ensure that patient care is not jeopardized  1.4.5 Monitors the medicines and other healthcare needs of the patient on a regular basis and makes recommendations for improvement to the patient and other healthcare professionals as appropriate  1.4.6 Ensures that patient care delivered reflects best available evidence and high quality information | Practicum (clinical & officine)  Patient care courses  Health education  Patient education  Communication  Research methods  Bibliography  EBM |
|  | Competency: 1.5 Continuing professional development (CPD)  1.5.1 Understands and accepts the importance of life-long learning for pharmacists  1.5.2 Demonstrates the ability to critically reflect on their own practice and skills to identify learning and development needs  1.5.3 Takes personal responsibility for engaging in CPD and achieving learning and professional development goals  1.5.4 Identifies and undertakes appropriate learning activities and programs that meet identified learning needs  1.5.5 Keeps knowledge and skills up to date | Practicum (all)  Pharmacy practice  Bibiography  Continuous education |
| 2 Personal Skills | Competency: 2.1 Leadership skills  2.1.1 Applies assertiveness skills as appropriate and inspires confidence  2.1.2 Provides leadership in the workplace to ensure quality and patient safety in the pharmacy environment  2.1.3 Builds credibility and portrays the profession in a positive light by being professional and well informed  2.1.4 Demonstrates determination and initiative to achieve results and improve service for patients  2.1.5 Inspires and motivates others to work to high standards by being enthusiastic about the profession and the service provided  2.1.6 Provides appropriate supervision | Practicum (all)  Personal skills |
|  | Competency: 2.2 Decision-making skills  2.2.1 Demonstrates the ability to take accurate, evidenced based and timely decisions  2.2.2 Makes decisions and solves problems in a timely manner  2.2.3 Gathers information from a number of reliable sources and people to enable them to make well-founded decisions.  2.2.4 Communicates decisions comprehensively including the rationale behind decisions  2.2.5 Ensures that relevant professional, ethical and patient safety factors are fully considered in decisions into which they have an input  2.2.6 Distinguishes between important and unimportant issues  2.2.7 Recognizes when it is appropriate to refer decisions to a higher level of authority or to include other colleagues in the decision | Practicum (all)  Patient care courses  Industrial courses  Personal skills  Communication |
|  | Competency: 2.3 Team working skills  2.3.1 Recognizes the value of the pharmacy team and of a multidisciplinary team  2.3.2 Participates, collaborates and advises on therapeutic decision-making and uses appropriate referral in a multi-disciplinary team  2.3.3 Demonstrates a broad understanding of the services delivered by other healthcare professionals and disciplines  2.3.4 Collaborates with other healthcare professionals to manage care of patient  2.3.5 Ensures effective handover between team members or to another healthcare professional to ensure continuity of patient care | Practicum (all)  Patient care courses  Industrial courses  Personal skills  Deontology  Communication |
|  | Competency: 2.4 Communication skills  2.4.1 Uses effective verbal, non-verbal, listening and written communication skills to communicate clearly, precisely and appropriately  2.4.2 Communicates effectively with patients and their carers, with other healthcare professionals, other support staff, and other relevant third parties  2.4.3 Uses appropriate language and checks understanding  2.4.4 Demonstrates respect, cultural awareness, sensitivity and empathy when communicating  2.4.5 Demonstrates influencing and negotiation skills to resolve conflicts and problems  2.4.6 Demonstrates the ability to build positive relationships with patients, carers, colleagues and other healthcare professionals  2.4.7 Listens to patients and respects their views about their health and medicines | Communication  Patient care courses  Industrial courses  Personal skills  Pharmacy practice  Ethics  Deontology |
|  | Competency: 2.5 Information technology skills  2.5.1 Knows how to use internet and perform basic search  2.5.2 Knows how to use software of Microsoft office (Word, Excel, Power Point, Access)  2.5.3 Knows how to use some management software | Practicum (all)  Computer courses  Thesis  Projects |
| 3 Supply of medicines | Competency: 3.1 Manufacture and compounding of medicines  3.1.1 Demonstrates knowledge of the requirements for the formulation and compounding of pharmaceutical preparations  3.1.2 Demonstrates the ability to perform pharmaceutical calculations accurately  3.1.3 Applies pharmaceutical knowledge to select the appropriate route of administration and dosage form for the medicine  3.1.4 Applies pharmaceutical knowledge to select appropriate high quality ingredients and excipients for manufacture and compounding  3.1.5 Uses technical skills to prepare pharmaceutical products as appropriate to their practice setting  3.1.6 Prepares pharmaceutical medicines (e.g. extemporaneous, cytotoxic medicines) appropriately  3.1.7 Determines the requirements for preparation (calculations, appropriate formulation, procedures, raw materials, equipment etc.)  3.1.8 Prepares pharmaceutical products according to the standards required including local standard operating procedures (SOPs), guidelines, or good manufacturing practice (GMP) as appropriate  3.1.9 Applies knowledge to ensure the appropriate quality controls and monitoring are in place  3.1.10 Maintains appropriate records and documentation on procedures  3.1.11 Demonstrates an understanding of the legislative framework and requirements that govern the manufacture of medicinal products including GMP | Practicum (industrial; hospital)  Fundamental sciences  Industrial courses  Pharmaceutical calculations  Patient care courses  Quality control  Management |
|  | Competency: 3.2 Supply chain management  3.2.1 Demonstrates knowledge of the medicinal products supply chain to select reliable and appropriately authorized suppliers of medicinal products  3.2.2 Ensures that medicines are stored in appropriate facilities and environmental conditions to ensure stability, quality and safety of the medicinal product over its shelf life  3.2.3 Stores medicines in an organized, systematic and secure manner, to minimize errors and maximize efficacy  3.2.4 Implements an effective stock management and rotation system and ensures its logistics  3.2.5 Demonstrates an understanding of systems for forecasting patient needs and demands  3.2.6 Manages recall of medicines  3.2.7 Develops and implements a contingency plan for shortages and discontinuations  3.2.8 Ensures there is no conflict of interest or inappropriate inducements in the sourcing and supply of medicines  3.2.9 Demonstrates an understanding of the legislative framework and requirements that govern the distribution of medicinal products including Good Distribution Practice (GDP)  3.2.10 Accesses reliable information to ensure the most cost-effective medicines in the right quantities with the appropriate quality  3.2.11 Selects reliable supplies of high quality products, including appropriate selection process, cost effectiveness and timely delivery  3.2.12 Efficiently links procurement to formulary, supply chain management and payment mechanisms  3.2.13 Supervises procurement activities  3.2.14 Understand the tendering methods and evaluations of tender bids  3.2.15 Implements a system for documentation and record keeping  3.2.16 Takes responsibility for quantification of forecasting | Practicum (industrial, hospital, community)  Fundamental sciences  Industrial courses  Quality control  Management  Economics  Pharmaco-economics  Ethics  Legislations |
|  | Competency: 3.3 Dispensing medicines  3.3.1 Validates prescriptions ensuring that prescriptions are authentic, correctly interpreted and in line with legal requirements  3.3.2 Applies knowledge in undertaking a therapeutic review of the prescription to ensure pharmaceutical and therapeutic appropriateness of the treatment for the patient. Appropriately validate prescriptions, ensuring that prescriptions are correctly interpreted and legal.  3.3.3 Screens the prescription for any potential therapy problems including therapeutic duplication, interaction with other medicinal products (including interactions with non-prescription medicinal products, herbal products or foods), incorrect dosage or duration of treatment, allergic reactions and clinical abuse and/or misuse  3.3.4 Selects the correct medicine(s), strength and pharmaceutical form for minor ailments (e.g. diarrhea, constipation, cough, hay fever, insect bites, etc.)  3.3.5 Accurately dispenses medicines in an organized, safe and systematic way according to procedures and monitors the dispensing process  3.3.6 Ensure appropriate medicines, route, time, dose, documentation, action, form and response for individual patients  3.3.7. Identifies the interchangeability and bioequivalence of different proprietary products where applicable  3.3.8 Demonstrates full knowledge of dispensary practice software and an appreciation of the potential and limitations of systems  3.3.9 Monitors the dispense in case it was made by non pharmacists (re-checking the medicine)  3.3.10 Labels medicines with all the required clinical information and in line with legal requirements  3.3.11 Packages medicines to optimize safety and stability including any appropriate re-packaging and inclusion of patient information  3.3.12 Uses patient counseling skills to provide all the required information to ensure safe and rational use of the medicines  3.3.13 Advise patients on proper storage conditions of the medicines and ensure that medicines are stored appropriately (e.g. humidity, temperature, expiry date, etc.)  3.3.14 Accurately reports defective, counterfeit or substandard medicines to the appropriate authorities  3.3.15 Dispenses devices and educates patients about their use (e.g. Inhaler, blood pressure device or a blood glucose meter) | Practicum (community, clinical, hospital)  Patient care courses  Industrial courses  Dossier du patient  Health education  Patient education  Dispensing laboratory |
| 4 Safe and rational use of medicines | Competency: 4.1 Patient consultation skills  4.1.1 Consults with the patient to obtain relevant patient medication and disease history  4.1.2 Uses different types of questions to gather information  4.1.3 Structures consultation against a protocol when appropriate in the patient consultation area  4.1.4 Assesses symptoms and diagnoses based on objective and subjective measures if appropriate using appropriate diagnostic aids and tests  4.1.5 Selects, discusses and agrees with patients upon appropriate non-prescription medicines for minor ailments, taking into account patients’ preferences  4.1.6 Advises patients when and in what circumstances to seek further medical intervention  4.1.7.Identifies, prioritizes and acts upon medicine-medicine interactions; medicine-disease interactions; medicine-patient interactions; medicines-food interactions  4.1.8 Applies first aid when required and acts to arrange follow-up care  4.1.9 Maintains, reviews and updates patient medication history and records in a manner respectful of the confidentiality of patient information  4.1.10 Ensures medicines selection and advice reflects best evidence and guidance in the relevant area  4.1.11 Obtains, reconciles, reviews, maintains and updates relevant patient medication and disease history  4.1.12 Documents all interventions and maintains appropriate records, including patient’s medical, medication histories and allergies on medicines or food | Practicum (community, clinical, laboratory)  Patient care courses  Communication  Bibliography  Management  Dispensing laboratory |
|  | Competency: 4.2 Patient counseling skills  4.2.1 Discusses and agrees with the patients the appropriate use of medicines  4.2.2 Provides the patient with sufficient information to assure the safe and proper use of the medicine  4.2.3 Counsels patient in a manner respectful of the privacy of the patient including use of the patient consultation area when appropriate  4.2.4 Maximizes opportunities for counseling and providing information and advice to patients  4.2.5 Assesses patients’ needs and knowledge of the medicines  4.2.6 Counsels patient in a structured and logical manner  4.2.7 Uses language the patient is likely to understand  4.2.8 Demonstrates usage and reviews patient usage of devices  4.2.9 Uses counseling aides to help the patient understand the information  4.2.10 Responds appropriately to more challenging or complex scenarios | Practicum (clinical, community)  Patient care courses  Communication  Dispensing laboratory |
|  | Competency: 4.3 Monitor medicines use  4.3.1 Monitors medicines use and compliance as appropriate, to ensure positive clinical outcomes are achieved and patient needs are met  4.3.2 Maintains a reporting system of pharmacovigilance  4.3.3 Reports adverse drug reactions and quality defects to the authorities  4.3.4 Contributes to strategies on monitoring and improving medicines use  4.3.5 Apply guidelines, medicines formulary system, protocols and treatment pathways  4.3.6 Ensure therapeutic medicines monitoring, impact and outcomes (including objective and subjective measures)  4.3.7 Identify, prioritizes and resolve medicines management problems (including errors) | Practicum (clinical, hospital, community, industry)  Patient care courses  Bibliography  EBM  Pharmacovigilance |
|  | Competency: 4.4 Monitor Medication safety  4.4.1 Identifies medication safety as a priority  4.4.2 Identifies, prioritizes and resolves medicines management problems  4.4.3 Takes action to prevent, minimize, resolve and follows up medicines related problems  4.4.4 Takes steps to improve the safe use of medicines for patients in all practice settings  4.4.5 Encourages patients to be knowledgeable about their medication  4.4.6 Document and act upon dispensing errors  4.4.7 Implement and maintain a dispensing error reporting system and a ‘near misses’ reporting system  4.4.8 Implements and manages risk management to avoid adverse events with medication  4.4.9 Implements and maintains a ‘near misses’ reporting system and error reporting system  4.4.10 Documents and acts upon errors to include clear and open communication with patients  4.4.11 Learns from and acts upon previous ‘near misses’ and ‘dispensing errors’  4.4.12 Implements, conducts and maintains a reporting system of pharmacovigilance | Practicum (clinical, hospital, community, industry)  Patient care courses  Pharmacovigilance  Management |
| 5 Pharmaceutical Public Health Competencies | Competency: 5.1 Population health  5.1.1 Identifies the primary healthcare needs of patients taking into account the cultural and social setting of the patient  5.1.2 Engages with and implements health and medicines policies and guidelines  5.1.3 Identifies the need for, plans and implements new services according to patients needs  5.1.4 Engages in research | Practicum (PHC, NGOs, hospital, clinical)  Public health  Management |
|  | Competency: 5.2 Health promotion  5.2.1 Provides information, advice and education for patients and public on health awareness, disease prevention and control, and healthy lifestyle and wellness  5.2.2 Identifies opportunities to engage in health promotion  5.2.3 Demonstrates support for initiatives in relation to health promotion  5.2.4 Identifies and utilizes evidenced based sources of information on health | Practicum (Community, NGO, PHC, clinical, hospital)  Patient care courses  Patient education  Health education & promotion |
|  | Competency: 5.3 Medicines information and advice  5.3.1 Provides accurate, quality and safe information and advice to patients and public regarding medicines  5.3.2 Advises patients and public on the safe and rational use of medicines and devices including the use, contraindications, storage, and side effects of non-prescription and prescription medicines  5.3.3 Identifies and utilizes evidenced based sources of information on medicines  5.3.4 Provides medicines information in response to queries in a manner appropriate to recipient  5.3.5 Manages information appropriately including documentation  5.3.6 Accesses reliable information to ensure cost effective use of medicines | Practicum (all)  Patient care courses  Patient education  Communication  Dispensing laboratory |
|  | Competency: 5.4 Research and education  5.4.1 Educates patients, public, students and other healthcare professionals on medicines  5.4.2 Possesses the skills to initiate research and practice development activities  5.4.3 Applies principles of scientific enquiry to investigate a medicine or practice related issue  5.4.4 Understands and adheres to ethical research principles  5.4.5 Applies and communicates research findings  5.4.6 Understands the benefit risk (e,g, pre-clinical, clinical trials, experimental clinical-pharmacological research and risk management)  5.4.7 Identifies and evaluates evidence-based information to improve the use of medicines and services  5.4.8 Identifies, investigates, conducts, supervises and supports research at the workplace (enquiry-driven practice) | Practicum (all)  Patient education  Health education & promotion  Communication  Research methods  EBM |
| 6 Organization and Management Competencies | Competency: 6.1 Self-management  6.1.1 Demonstrates organization and efficiency in the workplace  6.1.2 Demonstrates the ability to prioritize work appropriately  6.1.3 Demonstrates awareness of responsibility of their position  6.1.4 Ensures punctuality and reliability  6.1.5 Reflects on and demonstrates learning from critical incidents  6.1.6 Apply assertiveness skills (inspire confidence)  6.1.7 Demonstrates leadership and practice management skills, initiative and efficiency  6.1.8 Implements innovative ideas | Practicum (all)  Personal development  Management  Thesis |
|  | Competency: 6.2 Work place management  6.2.1 Demonstrates an understanding of the principles of organization and management  6.2.2 Takes responsibility as appropriate in the workplace  6.2.3 Works effectively with the documented procedures and policies within the workplace  6.2.4 Understands his role in the organizational structure and works effectively within the management structure of the organization  6.2.5 Addresses and manages day to day management issues as required in the position of responsibility  6.2.6 Ensures the work time and processes are appropriately planned and managed  6.2.7 Identifies pharmacy resource requirements and manages effectively  6.2.8 Contributes to the management of the workplace in relation to medicines  6.2.9 Demonstrates the ability to take accurately and timely decisions and make appropriate judgments | Practicum (all)  Management  Personal development |
|  | Competency: 6.3 Human resources management  6.3.1 Identifies and manages human resources and staffing issues as required in the position of responsibility  6.3.2 Recognizes and manages the potential of each member of the staff and engages with systems for performance management  6.3.3 Supports and contributes to staff training and continuing professional development | Practicum (all)  Management  Continuous education |
|  | Competency: 6.4 Budget, reimbursement and administration  6.4.1 Effectively sets and applies budgets; acknowledges the organizational structure  6.4.2 Demonstrates awareness of the health service reimbursement schemes through which patients are entitled to receive medication  6.4.3 Submits appropriate and accurate claims for reimbursement  6.4.4 Ensures appropriate reference sources are used to support applications for service reimbursement  6.4.5 Understands the principles of pharmaco-economic assessment  6.4.6 Ensures financial transparency | Practicum (all)  Management  Economics  Pharmaco-economics |
|  | Competency: 6.5 Quality assurance  6.5.1 Has quality as a core principle of medicines management and healthcare provision  6.5.2 Understands the role of policies and procedures in the organizational structure and in the provision of healthcare  6.5.3 Develops, implements, maintains and trains staff on standing operating procedures (SOP’s)  6.5.4 Carries out regular audit activities, to make sure procedures meet local and national standards and specification; and then acts upon findings  6.5.5 Identifies and evaluates the evidence-base to improve the use of medicines and services including risk management  6.5.6 Uses feedback from complaints and audit to improve and develop services  6.5.7 Implements a system for documentation and record keeping  6.5.8 Ensure appropriate quality control tests are performed and managed appropriately  6.5.9 Ensures medicines and raw materials are of adequate standards  6.5.10 Identifies and implements new services according to the needs  6.5.11 Initiates and implements audit and research activities | Practicum (all)  Quality assurance  Management  Industrial pharmacy courses |
|  | Competency 6.6 Pharmaceutical product development  6.6.1 Understands the steps needed to bring a product to the market including safety, quality, efficacy and pharmaco-economic assessments of product | Practicum (industry)  Industrial courses  Pharmaco-economics |