

Viewpoint

Clinical pharmacy practices in Pakistan: a system-level approach beyond curriculum reforms

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Extract

Pharmacy worldwide has moved steadily away from a product-centered trade toward a patient-centered profession in which pharmacists interact directly with patients, contribute to prescribing decisions and give clinical advice. In keeping with this shift, the Pharmacy Council of Pakistan (PCP) and the Higher Education Commission (HEC) have revised the Doctor of Pharmacy (PharmD) curriculum over successive versions. These reforms are welcome, yet translating them into competent clinical practice within the healthcare system remains a considerable task. The updated curriculum now allocates clinical and hospital practice hours for undergraduates in real settings; however, the small number of clinical pharmacists working in the health system makes it difficult to supervise and deliver this training so that the intended outcomes can be achieved. The extent to which pharmacy schools are meaningfully integrated with community pharmacies, hospitals and manufacturing units and how far students are actually absorbed into these settings also need careful evaluation. A further concern is the heavy course load: students must complete extensive theory and laboratory hours for every subject, which can crowd out genuine participation in clinical practice. If the reforms are to produce professionally mature pharmacists equipped with clinical skills, the PCP and the HEC will need to address these structural barriers and evaluate the outcomes of the revised PharmD curriculum in a timely way.

Keywords

Healthcare education system; Pharmacy education; Undergraduate training; PharmD curriculum; Clinical pharmacy; Pharmacy practices

The practice of pharmacies across the globe has gradually shifted from a product-dominated occupation to one that places the patient at the center of clinical decision-making. Pharmacists are now expected to contribute directly to patient care, take part in multidisciplinary ward rounds alongside physicians, and offer evidence-based advice on medication therapy [1,2]. Pakistan has sought to keep pace with these international developments, and recent revisions to the Doctor of Pharmacy (PharmD) curriculum by the Pharmacy Council of Pakistan (PCP) and the Higher Education Commission (HEC) reflect an intention that professional degree programmes should do more than transmit theoretical knowledge—they should also allow students to develop professional competencies in real settings. Two changes stand out: the move to a semester examination system and, more recently, the addition of supervised clinical practice hours for PharmD students. Together, these signals lead to a deliberate turn toward practical learning, with the goal of familiarizing students with hospital workflows, patient assessment and therapeutic decision-making [3].

The healthcare system in Pakistan is largely oriented toward curative care and focuses on clinical decision-making in the hands of physicians. As a result, it is only partly

equipped to absorb undergraduate pharmacy students for clinical training because dedicated clinical-pharmacy structures are scarce and traditional practice patterns still predominate in most facilities [4,5,6]. Compounding this, the shortage of trained clinical pharmacists across the health system leaves few qualified preceptors to supervise students and narrows the opportunities for genuine, competency-based skill development [3,7]. In practice, many students are likely to spend their placement hours on administrative work or observing routine dispensing rather than joining structured ward rounds or taking part in activities such as dose determination, clinical reasoning, therapeutic drug monitoring, pharmacovigilance and patient counseling. Without deliberate change, the practical component of the updated curriculum risks becoming symbolic rather than transformative for PharmD students [8,9].

Universities offering the PharmD program often operate in relative isolation and are not well connected in practice with other healthcare institutions, hospitals in particular. Although many universities have affiliated hospitals, the degree of partnership varies widely, and the affiliation is frequently limited to satisfying regulatory requirements rather than supporting hands-on teaching [10]. An effective practical-education model of the kind envisaged in the updated curriculum depends on active collaboration between academia and hospitals, underpinned by clear guidelines, well-defined learning objectives and trained supervisors [11]. Where this linkage is weak—and where the quality of clinical pharmacy care actually delivered in hospitals is itself limited—the depth of practical training in clinical pharmacy is likely to suffer, making it more difficult to produce pharmacists with real clinical proficiency.

The PharmD program in Pakistan comprises numerous subjects, each demanding extensive lectures, laboratory work, assessments, presentations, quizzes and tutorials, with fixed benchmarks that students must meet every semester [12]. Adding clinical practice hours on top of this workload places further pressure on students who are already stretched, and this can translate into shallow clinical exposure, absenteeism, or the completion of placement hours merely to satisfy formal semester requirements [13]. Unless the practical component is introduced with careful planning and ongoing assessment, there is a real risk that the revised curriculum will overload students without equipping them with the competencies the reforms were meant to deliver.

In summary, the revision of the PharmD curriculum in Pakistan is a promising but still incomplete step toward strengthening clinical pharmacy education and the quality of pharmacy graduates. The systemic barriers that hold back clinical practice—chief the shortage of trained clinical pharmacists, a weak academic–practice linkage and a heavy student workload—must be addressed if these reforms are to translate into better pharmacy practice and patient care. The central challenge is to create the conditions for genuine competency-based learning, and doing so will require a coordinated, multisectoral effort to ensure that students gain the practical exposure they need to contribute meaningfully to the country's health system.

Abbreviations: HEC, Higher Education Commission; PCP, Pharmacy Council of Pakistan; PharmD, Doctor of Pharmacy.

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