

Allied Health Professionals in Pakistan: Challenges, Progress, and the Road Ahead

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ABSTRACT

Allied Health Professionals (AHPs) are integral to the modern healthcare system, contributing significantly to diagnosis, treatment, and patient care across diverse clinical settings. This article explores the evolving role of AHPs in Pakistan, encompassing their educational development, current challenges, regulatory needs, and future potential. AHPs include a wide range of professionals such as Medical Laboratory Technologists, Medical Imaging Technologists, Clinical Psychologists, Dietitians, Physiotherapists, Speech Therapists, Anesthesia Technologists, and others who are vital for a functional and efficient healthcare delivery model. Historically, Pakistan's healthcare system relied on inadequately trained paramedical staff. Over the decades, significant advancements have been made in formal education and training programmes, with more than 50 institutions now offering BS (Hons) degrees in allied health sciences. However, the absence of a unified regulatory framework has resulted in inconsistencies in training standards and professional recognition. The establishment of the Allied Health Professional Council (AHPC) in 2023 is a promising step toward addressing these gaps. This article also highlights the strategic initiatives by the Government of Punjab to enhance the AHP workforce through structured recruitment, training, and integration into the healthcare system. It advocates for strengthened leadership development, expanded research capacity, and continuing professional development (CPD) to improve service quality. By overcoming current challenges such as limited resources, infrastructure deficits, and lack of recognition, AHPs can play a transformative role in bridging the healthcare service demand gap and ensuring high-quality, patient-centered care in Pakistan.

Keywords: Allied Health Professionals, Healthcare System in Pakistan, Professional Regulation

Introduction

Allied Health Professionals (AHPs) face both challenges and rewards in the ever-evolving field of medicine. As one of the most dynamic and rapidly advancing areas in healthcare, the modern healthcare system would be incomplete without the essential contributions of AHPs. They play a pivotal role in the development, management, and delivery of healthcare services.¹ AHPs are expected to be proficient in handling complex equipment and remain updated with rapidly advancing technologies. They are often regarded as the "detectives" of the healthcare system, searching for evidence that supports accurate diagnosis and effective treatment.²

Educational programmes have been established to train competent AHPs who can perform effectively in demanding clinical environments.³ An AHP typically holds a four-year Bachelor of Science (Honours) degree in their

respective field from a Higher Education Commission (HEC)-recognized institution. The wide range of AHP roles includes, (but not limited to):

- Medical Laboratory Technologists (MLTs), also known as Medical Laboratory Scientists (MLSs), who ensure quality management of pathology laboratories. They perform diagnostic tests, analyses, and experiments that aid in the detection of diseases.
- Medical Imaging Technologists (MITs), who operate radiological equipment to produce diagnostic images, working alongside radiologists.
- Emergency Medical Technologists (EMTs), who provide critical pre-hospital care and initial assessment in emergency situations.
- Dental Technologists (DTs), who fabricate dental prostheses and assist dentists in oral health restoration.

- Dietitian & Nutrition Technologists (DNTs), who plan and implement dietary programmes and provide therapeutic nutritional care in healthcare settings.
- Speech and Language Therapists (SLTs), who diagnose and treat speech, voice, and communication disorders.
- Operation Theater Technologists (OTTs), who manage sterilization procedures and surgical instruments in operation theatres.
- Clinical Psychologists (CPs), who assess and treat emotional and mental health disorders using psychological methods rather than medication.
- Optometry Scientists (OSs), who offer primary eye care including vision correction and diagnosis of visual impairments.
- Audiology Technologists (ATs), who support hearing assessments, device fittings, and repairs.
- Renal/Urology Technologists (RTs), who operate dialysis machinery and train patients for self-dialysis.
- Anesthesia Technologists (ATs), who assist anesthesiologists in administering and monitoring anesthesia during surgeries.
- Physiotherapists, who use physical therapy interventions to improve mobility, function, and quality of life.
- Respiratory Therapists, who treat patients with pulmonary conditions using specialized therapies.

National Scenario

At the time of independence, Pakistan inherited a basic healthcare infrastructure that lacked trained AHPs. Instead, low-educated paramedical staff filled these roles. The West Pakistan State Medical Faculty was established in 1957 as the first diploma-awarding body, followed by the "School of Medical Technology" in 1961 at the National Health Laboratories in Karachi.⁴

Multiple paramedical schools were subsequently founded across Pakistan, offering training in fields like Laboratory Technology, Anesthesia, Dialysis, Operation Theatre, Radiography, ECG, Physiotherapy, Dispensing, and Dental Technology.

However, existing paramedical staff, especially in primary and secondary care settings, had limited access to continuous professional development. Technological advancements further widened the skills gap.

Today, more than 300 institutions across Pakistan offer BS (Hons) degrees in various allied health fields, affiliated with ~ 32 universities recognized by HEC. Despite this progress, a standardized regulatory and accreditation framework lacked, unlike the well-established councils for medicine, nursing, and pharmacy.

Government-Level Initiatives

Despite improvements, numerous gaps continue to affect the allied health profession in Pakistan. These included the absence of standardized training programmes, limited job availability, and inconsistent professional recognition.⁵ While the Pakistan Nursing Council (established in 1948), the Pakistan Medical and Dental Council (PMDC, 1962), and the Pharmacy Council (1967) have long been operational, the Allied Health Professional Council (AHPC) was only established in 2023.⁶ To empower this rapidly growing field, the AHPC must be strengthened to standardize curricula for all AHPs, monitor and accredit training institutions, license practitioners, serve as an advisory body at both provincial and federal levels, and register and license clinics and laboratories.

Provincial Efforts: Government of Punjab

Historically, AHPs were not recognized as integral healthcare contributors due to limited public awareness. However, recent efforts by the Government of Punjab such as workforce expansion, training programmes, and institutional development have elevated their role. Hundreds of posts have been created in the Primary & Secondary Healthcare and Specialized Healthcare & Medical Education departments to utilize AHP expertise more effectively.⁷

Future Scenario and Bridging the Healthcare Service Gap

The government envisions AHPs working in partnership with physicians to deliver high-quality

care despite limited resources. This collaborative approach aims to uplift standards in primary and secondary healthcare. The global visibility of Pakistani AHPs will further help policymakers understand and utilize their services for addressing healthcare challenges.

Well-trained AHPs can improve healthcare efficiency while reducing costs. Their services improve community well-being by promoting health education, reducing disease burden, and addressing social determinants such as obesity and emotional instability. By leveraging their clinical competencies, AHPs are closing the gap between healthcare demands and available services.⁸

AHPs are expected to deliver patient-centered, evidence-based care using modern methodologies and tools. Commitment, professionalism, and coordination across healthcare systems are necessary to improve health outcomes. A patient-first approach ensures AHPs make meaningful contributions to a

sustainable and quality-driven healthcare system. Continuing Professional Development (CPD) is vital for the clinical governance strategy. AHPs, as crucial members of healthcare teams, must receive leadership training to ensure service excellence. The Health Departments should establish district-level leadership platforms led by senior technologists to promote mentorship and system-wide collaboration. AHPs must be encouraged to participate in and lead research initiatives. Strengthening research opportunities will expand evidence-based practices and foster innovation in allied health sciences.^{9,10}

To maximize the effectiveness of AHPs, the governments, both federal and provincial, must evaluate current practices, define clinical roles, standardize service delivery, and ensure professional licensing.¹¹ Enhancing academic placements, promoting allied health as a viable career path, and promoting collaboration across institutions are critical steps for advancing the profession.

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