



# Fostering Job Satisfaction and Sustainability in Allied Health Technician Roles in Saudi Arabia

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## ABSTRACT

Saudi Arabia faces staffing shortages and turnover among vital allied health technicians in pharmacy, laboratory, and radiology roles. This literature review synthesizes research on job satisfaction among these groups to inform sustainable workforce strategies. Findings show moderately high baseline satisfaction currently. Key drivers involve positive coworker relationships, professional autonomy, sense of achievement, and clear expectations from supervisors. However, heavy workloads, limited advancement opportunities, inconsistent roles, and work-life imbalance decrease satisfaction. A multidimensional approach is proposed combining tailored organizational initiatives like career development, balanced workloads, team building, empowerment, feedback systems, and work-life policies, alongside coordinated national policies addressing training capacity, incentives, standardization, compensation, recruitment, and ongoing skills development. Thoughtful change management can translate recommendations into measurable improvements. Further research should explore regional variations, gender differences, intervention impacts, career stage risks, cost-benefits, intrinsic motivations, and organizational culture. Fostering fulfillment and retention of these vital technicians through supportive practice environments and policies can strengthen healthcare service capacity in Saudi Arabia.

**Key words:** allied health technicians, job satisfaction, sustainability, retention, Saudi Arabia.

## 1. INTRODUCTION

Allied health professionals encompassing pharmacy, medical laboratory, and radiology technicians provide vital health services in Saudi Arabia supporting diagnosis, treatment, and patient care. However, Saudi Arabia faces increasing shortages and turnover among these crucial occupation groups, threatening healthcare service delivery capacity [1]. Understanding factors influencing job satisfaction and retention is key to addressing shortages. This article aims to provide a comprehensive synthesis of recent insights from research literature and evidence to inform multidimensional strategies for optimizing satisfaction and sustainability among Saudi allied health technicians.

Allied health technicians play an integral role in healthcare delivery, yet face challenges that undermine the stability and growth of these occupations in Saudi Arabia. If left unaddressed, staffing issues pose risks to patients and overall system capacity. A holistic, evidence-based approach is needed to strengthen these careers and support a skilled, sustainable workforce. This expansive review delves into research examining workplace satisfaction drivers and barriers among pharmacy, medical laboratory, and radiology technicians. Strategies are proposed drawing from organizational behavior and national policy perspectives. The article contributes vital knowledge for decision-makers seeking to foster supportive practice environments tailored to local needs.

## 2. BACKGROUND

A deeper examination of the roles and contexts of these allied health technicians provides important background. Pharmacy technicians assist pharmacists in medication dispensing and

supply management. Their day-to-day work entails tasks like filling prescriptions, compounding medications, maintaining accurate inventory records, processing insurance claims, and counseling patients on proper medication use [2]. These responsibilities require specialized technical skills and knowledge of pharmaceutical agents, therapeutic uses, regulations and safety protocols.

Medical laboratory technicians conduct routine diagnostic medical laboratory tests which support physicians and other providers in diagnosing, monitoring and treating illnesses or health conditions. Common duties performed by laboratory technicians involve operating complex automated analyzers and equipment, collecting and processing specimens like blood and urine samples from patients or health care facilities, conducting microscopic examinations, performing manual tests and culturing procedures, analyzing and evaluating test results, maintaining meticulous records, and reporting medical lab findings concisely to healthcare professionals [3]. Their work demands competence in subjects like clinical chemistry, hematology, microbiology, immunohematology and molecular pathology.

Radiology or medical imaging technicians aid radiologists by producing precise radiographic medical images which are essential for identifying injuries, diseases and other abnormalities within the body. Key responsibilities typically involve preparing patients for radiologic exams like X-rays, CT scans, MRIs, ultrasounds and mammograms, operating specialized imaging equipment to obtain high quality images, following stringent safety protocols to minimize patient radiation exposure, and assisting radiologists with invasive image-guided procedures [4]. They require qualifications in anatomy, positioning skills, equipment operation and safety, and communication to support imaging specialists.

These allied health technicians are integral members of multi-disciplinary healthcare teams working in various settings across Saudi Arabia such as hospitals, private clinics, medical laboratories, specialized centers and community health centers. Their concentrated skills make important contributions to the diagnosis, treatment and overall quality of patient care. However, allied health technician professions in Saudi Arabia have faced a growing shortage of qualified staff and high turnover rates threatening the sustainability of specialized services [1].

### 3. JOB SATISFACTION AMONG ALLIED HEALTH TECHNICIANS

Job satisfaction, defined as an individual's positive emotional state resulting from an appraisal of their work or work experiences, is a key consideration influencing factors like commitment to an organization or field, motivation and engagement, performance effectiveness, absenteeism, and retention within roles and careers [5]. As such, examining satisfaction levels among pharmacy, laboratory and radiology technicians in Saudi Arabia is particularly salient.

Overall, research analyzing job satisfaction among allied health technicians in the country has found moderately high current satisfaction across groups [6,7]. While this baseline level may seem positive, studies emphasize there remains

significant room for improvement to optimize recruitment and sustainability challenges. Key factors positively correlating with higher reported satisfaction among Saudi technicians involved having meaningful interpersonal relationships with coworkers, a sense of professional autonomy utilizing specialized skills and training, achieving a sense of achievement from work contributions, and having clear performance expectations set by supervisors [7,8].

However, numerous environmental and workplace factors have also been shown to negatively impact satisfaction. Heavy workloads or unbalanced schedules without sufficient support were noted deterrents, as well as a lack of opportunities for career advancement within organizations or professions, undefined or inconsistent job roles and responsibilities, and inadequate work-life balance policies exacerbating burnout risks [9,10]. Importantly, multiple studies demonstrated stronger intentions by Saudi allied health technicians to remain within their careers positively correlated to higher reported levels of job satisfaction overall [11,12].

Deeper examination confirms satisfaction holds meaningful implications in these fields, and optimizing the key drivers while addressing detractors could enhance sustainability through reduced turnover and strengthened intrinsic motivation. However, individual-level factors alone may be insufficient without complementary organizational and policy interventions. A multi-pronged approach across settings will likely maximize impact.

## 4. STRATEGIES TO INCREASE SATISFACTION

To comprehensively foster job satisfaction optimizing recruitment and long-term retention among allied health technicians occupying integral Saudi healthcare roles, an integrated suite of workplace strategies across organizational environments alongside supportive national policies are recommended. A focus on both positively reinforcing satisfiers as well as mitigating key dissatisfiers through evidence-based initiatives tailored to local contextual needs will realize maximum benefits.

### 4.1 Organizational Strategies

At the direct practice level, healthcare employers like hospitals, medical centers and clinics can adopt policies and work redesign strategies to positively shape technicians' work experience and appraisal. Examples of key organizational approaches cited in relevant research literature as promising satisfaction drivers include:

- Clarify and enhance long-term career development pathways through continuing education, certificates, advanced training programs or mentorship to encourage professional growth and opportunities for upward mobility within and between organizations. Providing prospects for advancement counters dissatisfaction from role stagnancy or limited progression [13].
- Evaluate workload distribution, annual work schedules including on-call duties or shift rotations, and measures workload indicators like number of tests processed per day to ensure sustainable, balanced working conditions mitigating

burnout risks. Adjust practices where those responsibilities are deemed inappropriate by staff [8].

- Cultivate collegial relationships and sense of team through ongoing team-building activities and peer support initiatives reinforcing interpersonal bonds strengthened by remote work during COVID-19 pandemic. Positive coworker dynamics enhance satisfaction [14].

- Empower staff clinical autonomy and participation in quality improvement by actively seeking input on policies and soliciting suggestions to refine scope of practice using specialized skills productively. Autonomy outweighs dissatisfaction from roles perceived as menial tasks [7].

- Implement consistent performance management and career guidance emphasizing clear expectations, regular feedback, recognition of achievements to bolster staff engagement and sense of contribution value. Lack of direction decreases motivation [10].

- Offer flexible scheduling options like partial shift work or work from home arrangements integrating personal life responsibilities, particularly for female technicians who bear disproportionate family duties. Work-life balance policies reduce burnout risk [9].

- Provide professional development training, continuing education support and skills refreshers or certifications to maintain competence, mastery and career marketability. Lack of learning opportunities breeds dissatisfaction and disengagement over time [4].

#### 4.2 National and Regional Policy Strategies

Beyond practice settings where technicians are directly employed, broader initiatives at the national and regional policy level can also shape an environment optimizing attraction, preparation, support and retention within allied health careers. Examples of macro-level strategies suggested by experts include:

- Increase availability and access to accredited allied health sciences education programs tailored to national workforce needs. Insufficient specialty training capacity contributes to staffing shortages [12].

- Provide government subsidized scholarships or tuition assistance for students pursuing pharmacy, laboratory and radiology technician qualifications to incentivize field entry. High education costs deter some candidates [3].

- Develop centralized statewide frameworks for consistent, competency-based technician scope of practice, credentialing, licensing requirements and career ladders to enable mobility between organizations and regions [11].

- Implement competitive compensation benchmarking ensuring salaries and benefits match market value and cost of living. Low pay disproportionately decreases satisfaction and retention [7].

- Launch nationwide campaigns and recruitment strategies promoting positive perceptions of sustainability and career opportunities as an allied health technician to attract youth and career changers. Negative stereotypes deter new entrants [1].

- Provide business incentives for healthcare organizations implementing work redesign, professional development and satisfaction optimization policies. Environmental enhancements require investment [13].

- Establish formal continuing education, skills updating requirements and training subsidies to ensure practitioners remain current within their fields over time. Lack of learning opportunities breeds dissatisfaction and disengagement [10].

- Develop regional collaboratives and committees of employers, educators and technicians to guide evidence-based policies and share best practices. A coordinated approach ensures reforms meet actual needs [3].

- Implement exit interview protocols tracking reasons for turnover to identify dissatisfiers needing attention. High attrition signals suboptimal environments [11].

- Conduct annual technician job satisfaction surveys and use results to tailor organizational initiatives and benchmark progress over time. Regular feedback is imperative for ongoing improvements [7].

#### 4.3 Addressing Implementation Barriers

While research clearly articulates evidence-based strategies with potential for optimizing allied health technician satisfaction and sustainability in Saudi Arabia, thoughtful change management will be imperative to realize success. Leaders driving satisfaction initiatives should proactively assess and address foreseeable implementation barriers.

Potential challenges could include initial resistance to change, lack of perceived value in reform, competing organizational priorities like cost controls, or insufficient technician involvement in policy decisions affecting their roles. Securing buy-in and participation from all stakeholders through transparent communication and education on evidence underlying interventions will be key [9]. Providing resources and support for adoption, allowing sufficient transition timelines, and incorporating feedback loops to refine approaches can also counter barriers [10].

Since enhancing career pathways, education and mobility options involves national coordination, policy reforms may face bureaucracy or jurisdictional issues if responsibilities are unclear. Ensuring collaborative governance with empowered central oversight will maximize coherence [11]. Campaigns improving public perceptions require careful messaging informed by market research to resonate. Lastly, leaders must demonstrate a sustained commitment over the long-term. Isolated initiatives often fail to shift entrenched satisfaction deterrents built into systems and cultures [13].

#### 5. FUTURE RESEARCH DIRECTIONS

While this article synthesized meaningful evidence on allied health technician satisfaction drivers, additional research can provide further insights to strengthen initiatives. Areas warranting deeper exploration highlighted in the literature include:

- Regional differences in satisfaction levels based on variations in culture, employer types, remuneration or career development access to inform localized solutions [3].

- Distinctions in factors affecting men versus women given gender imbalances in fields. Designing family-friendly policies responsive to females is vital [9].

- Relative impact of discrete interventions through controlled trials to refine best practice recommendations and identify most potent levers of change [7].
- Longitudinal studies tracking satisfaction trajectories across technicians' careers from entry to senior stages to pinpoint risks at different tenures [10].
- Cost-benefit analyses quantifying turnover reductions from investments in satisfaction strategies to demonstrate value. Data can catalyze leadership commitment [4].
- In-depth qualitative insights on meaning technicians derive from work to understand intrinsic motivations and purpose beyond surface satisfaction ratings [8].
- Case studies of organizations with positive cultures cultivating fulfillment versus problematic environments allowing dissatisfaction to fester [6].

As findings accumulate, updated systematic reviews will be warranted to periodically re-evaluate implications for policy and practice.

## 6. CONCLUSION

In conclusion, allied health technicians delivering vital services across pharmacy, laboratory and radiology roles are integral to Saudi Arabia's healthcare capacity, yet face rising staffing challenges. There is a timely need to stabilize these occupations by fostering greater workplace satisfaction and strengthening long-term retention. Recent research offers useful insights on drivers, deterrents and evidence-based strategies worthy of implementation in a cohesive national campaign. A multidimensional approach combining organizational initiatives, regional coordination and supportive public policies tailored to local needs shows promise for creating optimal practice environments where technicians feel fulfilled and able to sustain productive careers supporting patient care. However, thoughtful change management and ongoing evaluation will be imperative to translate recommendations into measurable improvements. Investment in these valuable personnel who make up the backbone of the healthcare system can ensure continued access, quality and positive outcomes as Saudi Arabia evolves to meet the needs of its citizens.

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