

# Roles and Impact of Healthcare Technicians at King Faisal Hospital Complex, Al-Taif

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## Abstract

The functionality of health services would not be as effective without the contribution of technicians. This research examines the role and contributions of nursing, pharmacy, social services, health assistants and laboratory specialists in King Faisal Hospital Complex Al taif. It also studies the association between job satisfaction and efficiency using a sample of 100 healthcare technicians and survey method. The results show a statistically significant positive relation between job satisfaction and efficiency and more concentrated on the significance of the factors such as workload, professional status, and age. The research gives recommendation on how to achieve the objectives of the hospital in terms of job satisfaction which enhance care of patients.

**Keywords:** Healthcare technicians, job satisfaction, efficiency, nursing technicians, pharmacy technicians, social services technicians, health assistants, laboratory specialists, workload management, King Faisal Hospital Complex, Al-Taif, patient care, healthcare workforce.

## 1. Introduction

The health industry is complex as it consists of different practitioners working together towards the same goal which is the provision of better healthcare to patients. In this integrated system, healthcare technicians are critical in ensuring that operations run smoothly, various services are offered, and even the work of clinicians and administrators is supported. And that many essential and routine, as well as technical operations, bring a lot of value to the routine processes and simpler tasks help in resolving more complex cases.

In this case, King Faisal Hospital Complex in Al-Taif emerges as a major medical center in Saudi Arabia. Well-known for its large clientele, it also has a sizable number of healthcare professionals. In this regard, health care technicians that include those working in nursing, pharmacy, social services, health assistants, and provincial laboratory specialists perform important functions and assist in the day to day running of the hospital.

This exploration intends to put the accent on understanding and appreciating what all of these roles uniquely and synergistically contribute to an organization, how job satisfaction relates to job efficiency and understanding how these pieces of residue can help improve an employee's life, practice within the hospital, and patient care.

The paper employs a quantitative methodology using survey and statistical data to further advance the discussion. Stressing on both the technical and relational aspects of the healthcare technicians' roles, this study gives a holistic view of their impact in the hospital surroundings.

## **2. Roles of Healthcare Technicians**

### **2.1 Nursing Technicians**

Nursing technicians are vital personnel in ensuring that wards in hospitals operate seamlessly. They perform essential supportive functions such as taking vital signs, administering medications upon a directive, and other forms of routine bedside care to patients alongside registered nurses and doctors [1]. In King Faisal Hospital Complex, such functions are extended to handling medical instruments, documenting the treatment-related information, and assisting with emergency procedures.

In addition to technical functions, nursing technicians are also involved in provision of emotional and psychological care. We directly interact with patients and their families and therefore we are the link between a clinical approach and a personal one. It has been reported that this facet of their practice greatly facilitates achieving patient satisfaction [2].

As for Saudi Arabia, the healthcare system has started to appreciate the need to continuously educate and train nursing technicians at a greater level. Such efforts are geared towards ensuring that their skills are at par with the demands of contemporary health care systems. The introduction of new information technologies like electronic health records and telemedicine into practice at King Faisal Hospital Complex has increased the scope of nursing technicians' functions and role in healthcare delivery to patients [3].

### **2.2 Pharmacy Technicians**

Pharmacy technicians are said to be the right hand of patients who need to get the right medication, at the right time. Their main job responsibilities involve the dispensing and preparation of medicine, stock control, and educating patients on how to take their medication properly. At King Faisal Hospital Complex, pharmacy technicians are core towards addressing the issue of medication errors which are one of the common causes of adverse events in hospital settings around the globe. [4].

Besides, the pharmacy technician's role is distinct in that they work side by side with pharmacists in streamlining the work processes as well as the care provided to the patients. Their functions have grown due to the increased use of automated dispensing units and electronic prescription systems. Such systems enhance efficiency and decrease human error, shifting the focus of pharmacy technicians to providing influx care to patients. [5].

In addition to that, pharmacy technicians are considered to be part of quality control in the hospital. In King Faisal Hospital Complex for example, participatory pharmacovigilance takes the form of reporting adverse effects of drug use and monitoring prescribing patterns; these are carried out by pharmacy technicians. This type of focus certainly goes beyond seeing them as simple task performers, but to seeing them at the center of change and progress in healthcare safety. [6].

### **2.3 Social Services Technicians**

Social services technicians take care of the patients' experientially non-clinical needs but those who are social, mental and economic in nature. They conduct people on the need for some facilities like financial support, scope for therapies, and local assistance. King Faisal Hospital Complex experiences patients' discharge and post-hospital care coordinated by social services technicians during the normal course of events [7].

When treating patients at the King Faisal Hospital Complex, caregivers leverage the significant role played by social services technicians in all spheres of their interaction with patients. For instance, they coordinate with the multi-disciplinary groups during the formulation of the care plans to ensure that apart from medical needs, other areas like food and housing [8].

Also, social services technicians are normally active in the management of crisis situations resulting from abuse, domestic violence or child neglect. With the help of their social and legal contacts, they protect at-risk patients and ensure their future safety by referring them to the necessary authorities [9].

#### **2.4 Health Assistants**

The core of patient care involves health assistants who help in hygiene, moving about, feeding, and other tasks. These health assistants are often the first people most patients see and recognize when they need the most primary attention. Health assistants at the King Faisal Hospital Complex are directly employed by nurses and medical doctors as meaningful members of the hospital's daily activities. [10]

One of the many roles performed by health assistants is that of flexibility in their capabilities. Due to the nature of their positions, they can cover many departments from the general floors to the ICUs as necessary. In addition to providing physical care, their roles encompass psychosocial support as well since their deployment entails spending a good chunk of time interacting with the patients and their families due to the extent of care, they are required to provide [11].

The functionality of health assistants also involves helping in the control of infections in high-risk areas particularly in surgery units. In the King Faisal Hospital Complex, they are well-trained, ensuring that stringent hygiene principles are applied in order to prevent the occurrence of hospital-related infections and enhance security for patients [12].

#### **2.5 Laboratory Specialists**

Healthcare operations are built upon the extensive labor performed by the laboratory specialists. Such specialized practitioners are responsible for a wide range of diagnostic tests including simple blood tests and complex genetic testing which allow proper decisions regarding treatment to be made. At King Faisal Hospital Complex, laboratory specialists have the exposure to advanced scientific investigations which have rather enhanced customer care within the institution [13].

Such individuals do not only specialize in performing tests. The laboratory specialists' duties also include reading results, providing solutions to any technical challenges or problems that arise, and safeguarding the necessary legislative documents. Their role is paramount when it comes to the effectiveness of the diagnostic processes in the organization [14].

As educators of implications of diagnostic results to various healthcare professionals, the laboratory specialists also have a more extensive convenience than unmarried clients as they can claim an education and technical work within one cycle without waiting a single extended period. At the King Faisal Hospital Complex, such a multidisciplinary approach improves the care offered [15].

### **3. Methodology**

This research implemented a quantitative research design to examine the correlation between healthcare technicians' job satisfaction and efficiency. A descriptive structured survey technique was utilized on a sample of 100 personnel from the nursing, pharmacy, and social services, health assistants, and laboratory technicians at the King Faisal Hospital Complex.

#### **Survey Design**

The survey research was divided into two parts:

1. Job Satisfaction which used a 5-point Likert scale.
2. Efficiency which relied on self-reporting and was measured on a scale of 1-10.

## Data Analysis

The second research question is answered by establishing a correlation between the level of job satisfaction and the level of efficiency. Pearson correlation was used for this case. Descriptive statistics provided additional role-specific insights into the observed trends and concisely summarized their content.

### 1. Results

According to the data in Table 1, there are noticeable differences in job satisfaction scores between health care technicians with various roles. The top most satisfaction score (mean: 4.8) was reported by the laboratory specialists and that can be explained by the fact that they are specialized in performing tasks that are automated and are also able to work independently. Such professionals are often appreciated and respected by both clinicians and patients, which seem to elevate their job satisfaction. Moreover, professional encroachment along with professional training could make them more professionally satisfied.

On the other hand, health aides recorded the least score mean: 3.2 for the satisfaction score. This difference is most probably having to do with the fact that this category of workers is involved in physically strenuous work which is not very rewarding and also does not have many opportunities to advance their career. Health assistants often have to carry out simple tasks such as helping with patients' basic needs and mobility, which, although very necessary, may be considered lower in the rank stratum of the hospital. In addition, their volume of work (shown in the following tables) may further contribute to dissatisfaction.

The nursing technicians' sample scored the highest on the satisfaction questionnaire (mean 4.7) due to high significance to patient care. Bringing over the sense of achievement as well, and directly interacting with the patients and families and working close with the registered nurses gives them a purpose. Moderately high satisfaction was also noted among pharmacy technicians and social services technicians (mean 4.5 and 4.3 respectively) because role's combination of technical and patient tasks.

These discrepancies in satisfaction assessment are a signal that the measures implemented should meet the peculiarities of a particular cadre of workforce. For example, seeking to address the issues and challenges of job dissatisfaction of health assistants by enhancing their support and recognition may yield considerable benefits.

**Table 1: Job Satisfaction Scores by Role**

Role	Mean Satisfaction Score (1-5)	Standard Deviation
Nursing Technicians	4.7	0.6
Pharmacy Technicians	4.5	0.7
Social Services	4.3	0.8
Health Assistants	3.2	0.9
Laboratory Specialists	4.8	0.5

**Table 1** and **Table 2** illustrate variations in job satisfaction and efficiency scores across the different roles. Laboratory specialists reported the highest satisfaction (mean: 4.8), while health assistants scored the lowest (mean: 3.2). Similarly, efficiency scores reflected the same trend, with laboratory specialists achieving the highest mean score of 9.4.

**Table 2: Efficiency Scores by Role**

Role	Mean Efficiency Score (1-10)	Standard Deviation
Nursing Technicians	9.1	0.8
Pharmacy Technicians	8.9	0.9
Social Services	8.4	1.0
Health Assistants	7.2	1.1
Laboratory Specialists	9.4	0.6

Table 2 shows the efficiency scores regarding job responsibility, thus attempting to expound how satisfaction with various job posts influences performance. As previously mentioned, laboratory specialists ranked highest with a mean efficiency score of 9.4 with nursing technicians closely following at 9.1. The reason for these high scores may be ascribed to the fact that these employee groups hold crucial hats in the hospital structure. The correct diagnosis is the work of laboratory specialists, who's the results will directly affect the practice. The laboratory specialists' high efficiency is probably because of their specialized training and better diagnostic equipment.

On the contrary, health assistants scored very low on efficiency (mean: 7.2). This finding conforms to their feeling of low satisfaction and can be affected by things like burden of work, lack of support or career prospects. A notable finding about pharmacy technicians and social services technicians is their strong efficiency scores of 8.9 and 8.4 respectively which indicates these employees are able to perform several tasks even at the patient service level.

The increase of satisfaction causes the growth of efficiency immediately follows with support from Tables 1 and 2. Satisfaction scores for these roles are higher and so are their efficiency levels say for nursing and laboratory technicians. There is a pattern and it is proved that a supportive work environment is a precondition for high performance levels in the organization.

**Table 3: Correlation Between Job Satisfaction and Efficiency**

Variable	Correlation Coefficient (r)	Significance (p)
Job Satisfaction	0.72	<0.01

Table 3 demonstrates the existence of a significant positive relationship between efficiency and job satisfaction ( $r = 0.72$ ,  $p < 0.01$ ). This comes as no surprise, since those employees who express contentment in their work tend to be motivated to perform better as such. The significance value ( $p < 0.01$ ) also helps to confirm that this relationship stands to be very strong and is not likely to have occurred by chance.

This correlation draws attention to the need to develop strategies that will enhance job satisfaction especially among healthcare technicians. For instance, providing career development opportunities, recognition, and dealing with workload problems may significantly increase satisfaction. These measures, as the data shows, are likely to have a knock on impact on effectiveness, and ultimately the quality of patient care and hospital functions.

The same strong correlation means that King Faisal Hospital Complex and probably other healthcare institutions should include regular employee satisfaction surveys as part of their performance evaluation framework. In such a way, hospitals would be able to enhance employee satisfaction by working on those factors that affect it.

**Table 4: Impact of Workload on Job Satisfaction**

Workload Category	Mean Satisfaction Score (1-5)
Low	4.8
Moderate	4.2
High	3.5

Table 4 depicts the negative correlation between workload and job satisfaction, whereby the technicians with the most minimal, reported highest job satisfaction (mean: 4.8) scores. Whereas, individuals with high load reported a lower level of satisfaction (mean: 3.5), by contrast. Such observations are not in isolation as earlier studies have demonstrated that excessive work is a primary factor in lack of job satisfaction, burnout, and loss of productivity. It follows that health assistants whose work usually consists of certain major physically heavy tasks and with high patient load, will fall under the high volume of work category hence the low satisfaction scores. In contrast, the nursing technicians and the laboratory specialists, who normally work in organized setups with well-managed responsibilities, will have lower workload intensities hence the higher satisfaction scores.

It follows from the above discussions that managing the working load should be among the priorities of the hospital management. It is worth noting that the engagement in getting other persons to do the work as well as bringing in colleagues staffs or even technology that can assist in accomplishing one's tasks may bring down the amount of work needed to be done. Further, a strong team working culture can also assist so that responsibilities are more widely shared rather than overemphasis on a single technician's bulk of work.

**Table 5: Job Satisfaction by Age Group**

Age Group	Mean Satisfaction Score (1-5)
20-30	4.6
31-40	4.3
41-50	3.9
51+	3.7

Table 5 underlines the observation that younger professionals are more satisfied with their job compared with older professionally experienced individuals.

Table 5 underlines the analysis about the satisfaction and job satisfaction verifiably of middle aged and older age groups automating coworkers from the previous employment bases. Young technicians ages 20 whole to 30 years with highest satisfaction reports mean. This in particular explains why the older technicians 51 in age relied on lower as any. Such a trend may be a function of age in this active stage in particular movementsymbolizing different stage of more expectations and career growth progressed stages accompanied with report low levels of adaptability to one sworkplace.

There's also a possibility of younger technicians having increased levels of enthusiasm as well as engagement/deployment as they have just transitioned into the glories of exposure and potential advancement in their career. The opposite probably seems the case for older technicians where some might have even retired, physical stress for few, limited scope of growth in their career, shifts in workplace environment add onto low levels of satisfaction and adaptability.

In order to counter this problem, the hospitals can formulate specific support programs based on their subjects age. For campaigns/ advertised goals for older technicians that focus on using

ICs to supplement physical abilities as well as a change in working hours could lead to enhancement in fostering for older technologies, mentorship programs aimed at bridging generation gaps are more likely to enhancing workplace cohesiveness.

These findings emphasize the forms of workload and expectations linked with age that ought to be catered for as this would enable such people to enhance any job efficiency and punctuality to improve levels of job satisfaction.

## 5. Discussion

Based on the current findings, it can be concluded that the health care technicians are essential in any organization and that there is a connection between job satisfaction and their performance.

### Key Insights from Results

1. Role Specific Trends: Laboratory specialists and nursing technicians posted a higher satisfaction and efficiency scores than health assistants. This can be explained by the nature of their duties since they get more recognition and autonomy [16].

2. Impact of Workload: Heavy workload has an effect on job enjoyment and this is illustrated in table 4. This is also in agreement with past research which argued that burnout is a consequence of high job demands [17].

3. Age Factor: Younger technicians were reported to have higher levels of job satisfaction, this could be because they are gravely interested in career advancement as they have not been exposed to job fatigue or burnout. But older technicians are likely to be affected by issues such as career stagnation or physical stress [18].

### Practical Implications

The findings have several practical implications for hospital management at King Faisal Hospital Complex:

- **Workload Redistribution:** Introducing flexible scheduling and hiring additional staff could alleviate workload pressures, particularly for health assistants.
- **Career Development:** Offering training programs and professional development opportunities can enhance job satisfaction across all roles.
- **Recognition and Support:** Creating a supportive work environment that acknowledges the contributions of technicians is essential for improving morale and efficiency.

By addressing these factors, King Faisal Hospital Complex can foster a more motivated and productive workforce, ultimately improving patient care outcomes.

## 6. Conclusion

Skilled healthcare technicians form a vital part of King Faisal Hospital Complex's projects. Therefore, this paper describes their functions and their contributions to the nursing satisfaction, as a factor in efficiency, is also quite evident. Employees' job satisfaction as well as sick leave management can be improved by tweaking such variables as recognition or perceived workload.

Management of healthcare technicians' resources and investment in their well-being must be viewed as an objective rather than just an administrative concern aiming at maintaining quality standards in patient care. Subsequent studies should focus on aspects of a technician role which are rarely addressed specific to their views and instincts.

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