

## Implementing Improvement Projects on the (HR5) Standard for the Basic Standards of Patient Safety (ESR) in the Quality and Human Resources Department at the Children's Hospital

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### Abstracts

The healthcare facilities in the Kingdom of Saudi Arabia (KSA) have come a long way. The number of hospitals has continued to increase since the establishment of the first public healthcare facility in Mecca in 1954. The government has also shown its commitment to improving the health of the people of Saudi Arabia and has shown a priority in the development of tertiary, primary, and secondary levels healthcare services (Al-Hanawi et al., 2019). The government has also introduced different health standards meant to regulate the operations of all private and government hospitals in the country. The health and safety practices in hospitals help to prevent incidences and accidents at the workplace and to protect employees from occupational diseases and injuries due to the risks and hazards present at the workplace. Inadequate safety practices lead to workplace accidents putting employees under stress and pressure hence the introduction of the essential safety requirements (ESR) in all Saudi hospitals not only to safeguard the healthcare providers but the patients as well. However, research shows that ESR affects the job performance and productivity of healthcare employees.

## **1. Introduction**

### **1.1 Background of the study**

The healthcare facilities in the Kingdom of Saudi Arabia (KSA) have come a long way. The number of hospitals has continued to increase since the establishment of the first public healthcare facility in Mecca in 1954. The government has also shown its commitment to improving the health of the people of Saudi Arabia and has shown a priority in the development of tertiary, primary, and secondary levels healthcare services (Al-Hanawi et al., 2019). The government has also introduced different health standards meant to regulate the operations of all private and government hospitals in the country. The health and safety practices in hospitals help to prevent incidences and accidents at the workplace and to protect employees from occupational diseases and injuries due to the risks and hazards present at the workplace. Inadequate safety practices lead to workplace accidents putting employees under stress and pressure hence the introduction of the essential safety requirements (ESR) in all Saudi hospitals not only to safeguard the healthcare providers but the patients as well. However, research shows that ESR affects the job performance and productivity of healthcare employees.

### **1.2 Justification for the Study**

Health and safety requirements at the workplace are a moral responsibility in a society that can have serious consequences on patients, individual workers, institutional management, and the nation as a whole. In their line of duty, healthcare providers are exposed to numerous risks and hazards such as chemicals, radiation, and body fluids. While the goal of a healthcare organization is to optimize its human

resource to achieve its objectives, issues of health and safety requirements are significant in the accomplishment of employee tasks. Notably, some of these requirements may have consequences on the performance of the organization. While the impact of these consequences on job performance and productivity of healthcare employees have been largely studied in different parts of the world, research shows that there are only a few studies that have been conducted in Saudi Arabia on this topic and thus the need for conducting this study to bridge the existing gap.

### **1.3 Study Objectives**

The aims of the study were:

- To assess the Essential Safety Requirements (ESR) of Taif Children's Hospital
- To assess the impact of ESR on productivity and job performance of healthcare employees in the hospital.
- To examine the role of the hospital in ensuring the safety and health of employees
- To examine the inadequacies in the safety requirements of the hospital

Project importance:

The traditional method of preserving and archiving papers is surrounded by the difficulty of accessing them in the paper work environment at times and its vulnerability to damage or loss in the event of any human errors or natural dangers and disasters.

In order to implement the Human Resources Standard (HR5), one of the basic standards for patient safety (ESR) and follow it digitally, the hospital must have an appropriate process for approving employee documents and licenses to provide patient care, which contains nine sub-standards as follows:

Standard	Description
HR5.1	The hospital must have a written policy describing the process used to verify certificates
HR5.2	The hospital collects, verifies, and evaluates credentials (licensing, training, education, and experience) for employees responsible for providing health care to patients.
HR5.3	Know your identity from the origin of your photos
HR5.4	Clinical work privileges
HR5.5	Ensuring the registration of all health practitioners with the Saudi Commission for Health Specialties
HR5.6	Health Secrets: Most of your stomach needs to be cleaned by a professional to clean your pool and then wash it with a sponge.
HR5.7	The hospital maintains an up-to-date record of current professional licensure
HR5.8	Credentials are verified by a third party and the hospital must obtain confirmatory documents
HR5.9	The verification process applies to all clinical staff categories (part-time, full-time, guest, locum).

Project idea

The idea of the project came to automate work procedures and operations and facilitate the registration and access of human resources specialists to data on licenses, documents and certificates of health practitioners, follow up and update them, and ensure their validity and practice within the specialty on a periodic basis after verifying their credentials

Project goal:

- 1- Data and documents must be constantly updated
- 2-Ease of access to data when needed
- 3-Emphasizing the application of basic patient safety standards

Systems and programs used to implement the project:

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- Excel program

Collecting and recording the documents, licenses and certificates of all health practitioners, including: (Saudi Commission for Health Specialties - Cardiopulmonary Resuscitation - Medical Insurance - Clinical Privileges for Doctors - Job Description) via the Excel program, including the expiration date and linking them to an interactive program.

- Electronic archiving program:

After completing all requirements in Excel, they are integrated into the electronic archiving program for human resources.

#### 1.4 Research Questions

The study helped in answering the following questions:

- What are the national essential safety requirements (ESR)?
- Does Taif Children's Hospital has ESR in place?
- What are the effects of ESR on the job performance and motivation of employees?

## 2. Literature review

The Essential Safety Requirements (ESR) were established by Saudi Central Board for Accreditation of Healthcare Institutions (CBAHI) and were put in place with the intention of putting hospitals in Saudi Arabia in line with nationally accepted standards on safety, welfare, and health of employees. ESR requires all hospitals have systems of safety in place not only to protect the patient but also the healthcare providers. Workers in any healthcare organization are the most valuable assets meaning that organizations must do everything within their means to protect them (Onoh, 2021). It is, therefore, necessary that a lot of attention is paid to the occupational health and safety of employees than ever before. According to Olonade et al. (2022), the health and safety of employees is a major concern for management. However, the management's approach and attitudes towards safety are often reflected in the values, perceptions, beliefs, and attitudes shared by the employees. Thus, if an employer is not interested in safety of the organization then it will be reflected in the employees and their patients.

Ullah et al. (2021) Further, emphasize that the heart of safe management is a healthcare facility's commitment to comprehensive safety efforts. This effort should include all members from top-level management to lower-level employees. Putting in place safety requirements in organizations such as installing fire alarm systems and ensuring proper management of equipment can help make a safer work environment. Designing a job requires the management to consider its physical setting. Notably, the safety of the work environment influences how well a worker performs the job. The safety of a work environment is determined by different factors which should be considered when designing safety policies and requirements in hospitals.

Notably, every employee has the right to work in a secure and safe environment. It is therefore the prime duty of an employer to give the workforce a safe, friendly, and healthy environment. Since human resources are the greatest asset of any organization, the health and safety of workers should be a primary concern for all employers (Onoh, 2021). Adequate protective equipment and safe work practices affect employees' performance and productivity. A Poor work environment is associated with a lot of stress for workers leading to lower business performance.

Chesro (2018) observed that the costs of unsafe and unhealthy workplaces have been well documented and the costs are related to employee absenteeism. Research by the world health organization indicates that work-related stress is the main cause of an increase in ill-mental health cases. Excessive stress can be in the form of absenteeism, fatigue, reduced productivity, impaired decision-making, and an increase in staff turnover. Therefore, occupation health and safety practices at the workplace have a positive relationship with organization performance.

### **3. Methodology Materials and Method**

Data for the study was collected from 350 out of 850 employees representing 50% of physicians, nurses, pharmacists, lab technical administrative employees, and infection control departments of the Taif Children's Hospital. Ethical clearance was obtained from the hospital's ethical committee through the Regional Research Committee Board with an IRB No: HAP-02-T-067 Approval No: 733 and an additional permission was obtained from the heads of the different departments involved in the study.

Data was collected using a self-administered questionnaire written in English and divided into three sections. The first section recorded demographic data such as age, gender, and employment status. The second section assessed the knowledge of respondents on the ESR such as do you think the hospital's fire alarm system is effective, etc.. The last section assessed the impact of these safety practices on employees' job performance by asking questions such as: "does adherence to ESR such as do the hospital's process of preventing wrong patient, wrong side, and wrong surgery/procedure engender the accountability of healthcare workers? etc , have an impact on the quality of job performance?"

### **4. Data Analysis**

Data analysis of this study involved processing both qualitative and quantitative data. Quantitative data was analyzed using the Statistical Package for Social Sciences (Tukey Post Hoc Multiple comparisons and Anova) Alpha Cronbach Equation Quantitative data analysis and Chi-Square Test which involved calculating frequencies and descriptive statistics.

### **5. Results**

According to Table 1, a total of 350 employees representing 50% of physicians, nurses, pharmacists, lab technical administrative employees, and infection control departments of the

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Taif Children's Hospital were interviewed. 42.9% of the participants were between 36-45 years, 36.6% between 26-35 years, 15.1% between

45-55 years, and those above 56 years were 4.3%. 198 (56.6%) were females while 152 (43.4%) were males. Table 1 further shows that most of the employees interviewed (40.9%) had an experience of more than 10 years. 44.6% of the respondents had a bachelor's degree, 37.7% had a diploma, and the rest were equally distributed between masters and postgraduates. The highest percentage of respondents were nurses (36.6%).

Reliability and validity were done to check whether the items explain the performance measures of the health providers at Taif Children's Hospital. The reliability value was 0.78 while the alpha correlation was 0.01. Most of the respondents responded yes to the different items on adherence of the hospital to ESR. The chi-square of the seven items on "adherence of the hospital to ESR" came significant at the 0.01 level in the direction of selection (Table 2-7). The 8 items on "effects of safety practices on job performance" were significant at the 0.01 level in the direction of selection (yes) (Table 8- 15).

It is also evident that there are significant differences according to the years of experience (Table II). The employees who are having lesser experience at work (5-10 years) are more adherent in following the Standards and policies of ESR and has the perception of having an effects of safety practices on their job performances while (Table V) shows that Females by gender are more adherent than the male employees. (Table I, III and IV) which are the age, education and job description of the employees has no significance.

## 6. Discussion

This study explored the impact of Essential for Safety Requirement (ESR) on the job performance and productivity of healthcare employees in Taif-Children's Hospital. The results of the study showed that there was a correlation between hospital safety and the performance of employees. The adherence of a hospital to ESR largely affects their job performance. Having standards and policies assure employees of their safety while at work thus increasing their morale which in return improves their performance. The findings of this study are consistent with the findings of other studies that indicate that safety requirements in a hospital affect the job performance of its healthcare providers. Mardani et al. (2017) also reported that the quality and safety of workplaces have a strong positive correlation with nurse staff work commitment.

There is no evidence of correlation between the level of education and job performance (Table III) regardless of the presence or absence of safety measures. Most employees believe that the hospital's training programs on safety measures have improved their job performance. They believe that the hospital is committed to safety training and this gives the urge to do better in terms of adhering to safety in the hospital. Ashour & Hassan (2019) also reported the importance of implementing a safety management program on increasing the performance, knowledge, and attitude of the medical staff.

Findings of this study support the hypothesis that the extent to which health care providers perceive safety procedures as suitable to their daily work processes and demands, the higher the

extent to which are perceived to be unambiguous and clear in their work thus leading to lower clinical incidences. It is also evident that a management's safety practices reflect the employees' adherence to safety measures as supported by the study Teuma Custo et al. (2019). They further show that healthcare providers will ensure that they improve safety at the workplace when they know that the management support safety activities. Increased safety in hospitals results in increased quality of staff performance. The improvement in the quality of lifelong programs increases the productivity of employees. It is therefore evident that the presence of training programs on safety offers employees the relevant knowledge in matters relating to safety thus giving them confidence when performing their duties.

This study manifest that safety standards and principles in the hospital reduce the number of injuries and accidents suffered by employees. Ashour & Hassan (2019) further shows that observing safety standards and principles in a hospital reduces the risks and number of accidents of both staff and patients while providing or receiving services thus improving the treatment and discharge services. This also improves the quality of services and productivity of nurses. An increase in the safety measures of a hospital increases the accountability of healthcare providers towards their clients and they become more responsible when performing their duties.

Basing from the result of Table II and Table V, the Administration should equally assess, and to keep track of the adherence of employees not only on the lesser experience (5-10 years) particularly to physicians and nurses who works collaboratively with their patients and to remonstrate the significance to both genders is an imperative factor to consider. This is supported by Tlili et al. (2020) findings regarding medication errors and safety climate which showed that safety climate is correlated with organizational outcomes such as patients' perception towards nurses in terms of accountability, discipline, time, quality, and quantity.

## 7. Conclusion

It is evident from this study that there is a significant relationship between work safety practices and improved productivity and job performance by healthcare employees. The study was important in shedding some light on the safety practices that can be adopted by hospitals to improve the performance of healthcare providers. The study proved that an increase in hospital safety ensures that healthcare providers are more attentive to the quality of services offered to their patients. It ensures that employees take their time when performing their duties at a reduced cost. ESR ensures that employees follow safety regulations and that they are more careful in their line of duties. Employees will become more accountable to clients and will be more responsible when finishing their assigned tasks. Again, ESR ensures that employees are also accountable to the Hospital Administration. With safety practices put in place, more employees can acknowledge their errors and faults.

Notably, as the safety of the hospital increases, the job performance of workers improves, and consequently, the quality of services also improves.

Improvement in the quality of services provided also reduces wastage of time thus translating to improved patient satisfaction. Importantly, the number of accidents concurred for healthcare

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providers and patients. Safety measures at a hospital will increase efficacy and productivity. Enhancing safety measures reduces the time required for timely completion of tasks and the probability of unwanted occurrences at the hospital which will in return reduce costs. By following the safety requirements, a hospital is able to ensure the safety of its patients, and its employees and also ensure their accountability. Therefore, according to the findings of this research, adhering to essential safety requirements is a necessity for every healthcare organization for improved job performance and productivity of employees. The study can therefore be used by hospital administrations to carry out upgrading of healthcare facilities.

## **8. Recommendations**

Based on the findings of this study, hospital administrations and management are recommended to ensure that employees perceive safety measures as suitable and ensure that safety information is unambiguous and clear. This can be achieved by regularly updating safety measures in line with up-to-date evidence, assessing the perception of employees, using technology to ensure employees can access safety information, encouraging discussions on safety, and creating education programs for the staff on risk management (Lin et al., 2017). Safety training ensures that employees understand their roles in ensuring quality services for patients and helps them to understand that they are change agents for safety at the workplace. Managers should also ensure that all employees prioritize safety over workload, pace, and pressures.

The behavior of the management should also reflect that safety at the workplace is valued, supported, and rewarded (Walston et al., 2019). Managers should advocate for safety standards at the workplace and engage other stakeholders in safety initiatives. Again, Taif Children's Hospital is hectic, which means that employees did not have enough time to answer questions it is therefore important to allocate more time to studies of such nature.

### **Competing Interests**

The Author and Co-authors of this study had no competing interests.

### **Ethical Consideration**

Ethical clearance was obtained from Taif Children's Hospital Research Ethics Committee in collaboration with the Taif Regional Directorate Research Committee, IRB NO: HAP-02-T-067 Approval No:733. The study was conducted ethically according to the principles of the Declaration of Helsinki.

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## WORKS CITED

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