



The Keys to a Health- and Safety-Oriented Workplace: From the Perspective of Taiwan

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Abstract

Background Patient-centered care has long been advocated worldwide, but workplace health and safety remain an emerging issue drawing attention in Taiwan. The healthcare industry is a high risk workplace, hospital employees are possibly in an extremely vulnerable situation. Thus, collective efforts and joint forces are required to safeguard workplace safety and health. The Taiwan government is striving to form a friendly workplace in all industries, particularly in the healthcare sector. In fact, several hospitals are aware about the importance of putting a significant amount of work into this matter.

Methods The authors reviewed several studies concerning health- and safety-oriented workplace. In this review, we used an integrative approach as a starting point and combined the contextual factors of an organization, i.e., perceived organizational support, safety climate, and social influence, to address this issue from the perspective of Taiwan.

Discussions This review also indicated that these contextual factors influence health and safety of a workplace. Subsequently, the implication of these factors on achieving a sound work place in terms of health and safety was studied. We hope this review will provide some insights and foresights to practitioners and researchers to better understand the importance of these issues.

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Introduction

Occupational safety and health (OSH) is generally defined as “the science of anticipation, recognition, evaluation and control of hazards arising in or from the workplace that could impair the health and well-being of workers, taking into account the possible impact on the surrounding communities and the general environment” (1). The primary goal of OHS programs is to foster a safe and healthy work environment (2). In addition, OSH may protect coworkers, family members, employers, customers, and other related individuals possibly affected by work environment (3). In occupational health, the main focus is on three objectives: (i) maintenance and promotion of employee health and working capacity; (ii) improvement of work environment conducive to safety and health; and (iii) development of organizational cultures in a direction that supports healthy workplace and promotion of a positive social climate and smooth operation, which may enhance productivity in undertakings. In this context, the concept of work culture is intended to imply a reflection of the essential value systems adopted by the

concerned authority. Such a culture is reflected in practice in the managerial systems, personnel policies, principles for participation, training policies, and quality management of the undertaking (4). Although work provides several benefits such as economic benefits, a wide array of workplace hazards present risks to the health and safety of individuals at work. These hazards include, but are not limited to, “chemicals, biological agents, physical factors, adverse ergonomic conditions, and allergens, representing a complex network of safety risks” and a broad range of psychosocial risk factors. Accordingly, personal protective equipment can facilitate protection against many of these hazards (5).

The World Health Organization (WHO) has revealed that approximately 122 million people die annually of noncommunicable diseases (1). Most of these people live in developing countries and are of working age (i.e., 15–64 years). Work-related health problems cause economic loss of approximately 4%–6% of the gross domestic product in most countries. Some



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occupational risks such as injuries, noise, and exposure to carcinogenic substances and anthropogenic risk factors are the primary causes of chronic diseases: 37% low back pain; 16% hearing loss; 13% chronic obstructive pulmonary disease; 11% asthma; 8% injuries; 9% lung cancer; 2% leukemia; and 8% depression (4). Hence, considerable attention needs to be paid to workplace safety and the overall well-being of workers while transforming and developing Taiwan's economy by government agencies and business enterprises.

The starting point of this study was OSH. First, we investigated the concept of safety climate, which is a particular form of organizational climate. Essentially, it refers to employees' perceptions of safety-related policies, procedures, practices, and rewards in a workplace (6;7). In recent years, an increasing number of reports have stated that safety climate is the key antecedent of safety performance and its significance is self-evident (8;9).

On a personal level, the workplace is not only a physical environment but also includes the social environment in which employee behaviors are governed by special norms (10). Therefore, social influences can predict the establishment of a friendly and high-quality work environment and contribute to socialization among employees. On the other hand, input from employees may influence the administration process of implementing OSH-related management such as regulations and operations. Rome was not built in a day; an environment with excellent occupational safety cannot be created within a short time. Business operators and managers must strive to establish policies and allocate resources to support innovative and transformative opinions and practices. For example, it is often considered helpful for the staff to follow managers to get hands-on experience in an industry. Additionally, such new ideas and practices should be incorporated during policy implementation, thereby forming social norms and safety climate integrated into daily routines. Taken together, this information defines organizational support (11).

Based on the mentioned perspectives, the authors reviewed several studies concerning OSH, safety climate, social influence, and perceived organizational support (1-11). Also, we addressed the effects of critical factors such as perceived organizational support, safety climate, and social influence on OSH-related preventive actions and employee satisfaction related to safety. We hope this review can serve as a reference to practitioners and researchers in related fields, hospital executives, and work unit managers.

Occupational safety and health

The International Occupational Hygiene Association defines OSH as "the science of anticipating, recognizing, evaluating, and controlling health hazards in work environment" and consider the potential effects of these hazards on the work environment (12). The White House National Security Council suggested that effective occupational safety measures include elimination or control of recognized occupational hazards to an acceptable risk level to increase the well-being of workers. Optimal occupational safety is established through a constant responsive process that involves anticipating, identifying, designing, implementing, and evaluating risk-reduction practices (13).

Amponsah-Tawiah suggested that OSH relates not only to employees' overall well-being at work but also to their overall physiological, psychological, and sociopsychological safety and well-being (14). The WHO uses the term "healthy workplace" to describe OSH and defined it as a workplace in which improvements are continually made to ensure workers' safety, health, and well-being. The sustainability of workplace is closely related to capital and labor; work safety and health, health resources in the workplace, and community participation measures are necessary to improve the health of all workers (15).

The factors affecting OSH are not limited to deadly hazards but include all vulnerable conditions in hospitals. By anticipating and recognizing hazards and evaluating and controlling operations, practices, and preventive measures in hospitals, the goal of constant improvement of workers' safety, health, and well-being can be achieved. Therefore, the Joint Commission of Taiwan launched a policy to supervise WHS and stipulate measurable elements in hospital accreditation. On the other hand, increasing industrial disputes in Taiwan have enabled several hospitals to focus on OSH-related issues. The Taiwan government is striving to implement stern measures to prevent occupational injuries and provide high-quality patient service. In Taiwan, improvement of the morale of medical teams is an emerging issue that needs to be addressed to increase employee productivity. Several healthcare institutions pledge to acquire ISO 45001 (OHSAS 18001) certification to oversee workplaces through a trusted and credited third party. On the contrary, the Health Promotion Administration in Taiwan has revised the HPH standards and integrated age-friendly, smoke-free, and low-carbon policies to establish an initiative for health hospitals to follow. In fact, Taiwan has prepared collective efforts to make the country a benchmark in terms of WHS worldwide.



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Safety climate

The safety climate concept was proposed by Zohar who considered safety climate to be a specific form of organizational climate. Essentially, work climate can be regarded as employees sharing their overall perceptions of work environment. In addition to the factors and dimensions of safety climate, the relationship between safety climate and its outcome variables is the current focus of research. Griffin and Neal found that workplace safety climate directly influences workplace safety motivation, which indirectly influences safety behavior (16).

Several studies have revealed that safety climate affects various crucial outcomes including the performance of safety-related work practices, success of safety-related behavior, accident frequency, and injury incidence. Most hospitals attempt deflecting industrial disputes on priority and ensuring a stronger workforce power. Indeed, the organizational climate affects work adjustment at a psychological level through work design; reciprocally, psychological work adjustment has been attributed to work satisfaction and stress, organizational commitment, and effectiveness (17). Hofmann and Mark suggested that safety climate affects satisfaction among nursing staff in healthcare sectors (7). Cheah et al. investigated the hospital staff in Sabah (Malaysia) and found that the hospitals' OSH management practices (preventive action) had positive effects on safety satisfaction and feedback among the nursing staff (8). Forging of an ambience of WHS that employees may perceive and enjoy is of utmost importance. Increasingly, employees are becoming aware of the issue's importance and consider it a process to protect themselves. In Taiwan, hospital accreditation involving following of regulations and processes is a stern challenge for healthcare services. Recently, a number of fire disasters in healthcare facilities sparked outrage in Taiwan and took a heavy toll. These incidences promoted a heightened awareness of risk management, particularly of the development of safety climate within institutions. Hospital staff must be educated on risk management techniques for firefighting through education, training, and exercises using a fire drill.

Social influence

Behavioral intention is determined by personal attitude and subjective norms regarding the behavior. For example, if employees do not believe that managers and colleagues are concerned about OSH, they are extremely unlikely to believe the importance of safety. An empirical study on the subjective norms that influence safety behavior revealed that safety behavior is significantly affected by the attitudes and subjective norms of employees (18).

Therefore, social influence has a positive effect on safety satisfaction, which may create a good organizational citizenship.

In Taiwan, rampant accreditation, external auditing, and on-site survey have been noted, which are considered inconvenient by hospitals and create an imbalance of job strain among hospital employees. The Taiwan government is well-informed about the existence of this complicated situation in the healthcare industry and is attempting to ease work strain and reduce workload to obtain higher employee satisfaction and eventually generate higher productivity. On a global level, a high-tension work environment may result in exhaustion among employees, incurring flaws in some processes. The government is facing the dilemma of loosening healthcare-related regulation or maintaining higher standards of healthcare. Evidently, these two aspects are contradictory. However, some hospitals are scrambling to pursue the Joint Commission International (JCI) accreditation on account of social influence and recognition, which addresses healthcare without harm using several measurable elements.

Workplace safety and the health of the employee are crucial for an institution to accomplish its responsibility. Without safety and health, quality is just rhetoric. Furthermore, an increasing number of hospitals in Taiwan consider issuing of a report about a corporate social responsibility and sustainable development goal based on the BSI (British Standards Institution) standards.

Perceived organizational support

The perceived organizational support theory uses the perspective of social exchange theory and the norm of reciprocity to explain the relationship between employees and organizations (19). Social exchange tends to be intangible or symbolic, and its timeframe and future returns are uncertain. Thus, exchange of party returns is favorable in accordance with the norm of reciprocity (18). According to this theory, employees' perceived organizational support is higher among employees who tend to personify their organization. The favorable or unfavorable treatment that an employee receives is a sign of their organization's preference or non-preference for them. Spontaneous organizational support is highly valued by employees because it indicates that the organization has genuine respect for its employees and honors their contributions (19).

Studies have suggested, that a perception of support and concern from manager results in higher job satisfaction,



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they have higher job satisfaction and more pro-social behaviors including safety behaviors (20). Workers with positive perceived organizational support may contribute to the building of a positive workplace safety climate. Rhoades and Eisenberger observed that perceived organizational support increases employees' affective commitment by satisfying their socioemotional needs such as a sense of belonging and emotional support (21). This process of satisfying needs produces a strong sense of belonging to an organization including the integration of organizational and social identities. Therefore, perceived organizational support exerts the following influences: hospitals truly value employee contribution and it helps in creating good organizational citizenship behavior. Further, it results in collaborative efforts of employees and hospitals on this matter. Perceived organizational support essentially promotes social influence due to organizational identity (22).

Safety climate is an antecedent variable of the crucial indicators of sound performance. Therefore, managers must proactively modify and improve safety climate. Regarding medical institutions, an incidental report would be an important mechanism and protocol to deal with workplace safety issues. Subsequently, approaches for effective and constructive response to errors should be included. It is important to have guidelines and regulations for how to comply with safety regulations.

In the domain of healthcare, social influence has been emphasized as a useful approach to healthcare, as it involves patient safety (22). Studies have verified that social influence or norms are the key factors that affect the safety behavior of medical staff toward patients (23). In accordance with organizational norms, organizations must advocate occupational and patient safety and operation standards or guidance for each department and unit to follow by providing relevant education, training, and intervention. Hospitals can hold cross-division, cross-institution workshops or create a social networking with peers to share experiences. Moreover, several hospitals in Taiwan encourage their staff to take actions to follow health policies. Some good examples are as follows:

1. Female staff is encouraged to undergo breast ultrasound or mammography annually or biannually without charge.
2. A low-dose CT for early lung cancer detection is particularly offered to high-risk medical staff for free.
3. Pregnant women are exempted from night shifts.
4. Hospital-wide surveillance of the physical fitness of the staff is provided.

In this review, perceived organizational support was identified as the antecedent variable of two variables: safety climate and social influence. According to the perspective of reciprocity norms, when employees perceive that their organization supports relevant activities, values their contribution, and is concerned about their well-being, their obligation is triggered to conduct pro-social behaviors. Accordingly, when the high-level managers of an organization put greater emphasis on plans related to occupational safety and social influence and provide the necessary resources, rewards, and assistance, employees tend to value these measures. Subsequently, hospital employees would go an extra mile to safeguard the organization.

Conclusion

Hospitals have a highly complex structure and processes to serve people as their target who are more important than any other industrial products. To fulfill their social responsibility and ensure sustainable development, hospitals ought to emphasize WHS while providing high-quality services. Employees are the greatest assets of institutions who can pay the greatest attention to patients' health and safety. Hospital staffs are daily exposed to biological, chemical, and radioactive hazardous substances; thus, OSH represents the fundamentals of the environment that cannot be ignored. Meanwhile, medical staff should consider strategies for OSH and have proactively implemented behavioral habits. A good organizational approach for health and safety will form a cycle of team norms and organizational climate to create a favorable environment, achieving the goal of protecting patients and staffs and promoting health for all. Hospital should create a healthy workplace to achieve job satisfaction and organizational identification among employees. This would exert a synergistic effect on the empowerment of employees with the concept of safety and health, and it surely ushers in a brighter future.

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