

# Conceptual Framework and Policy Suggestions for Improving Worker Safety in Hospitals

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## Background

Since December 31, 2018, the day that Dr. Se-won Lim, a psychiatrist, was stabbed to death by his patient during a consultation, the National Assembly, medical communities and the Ministry of Health and Welfare have all been striving for ways to ensure the safety of healthcare professionals in hospitals. The death of Dr. Lim was a resounding warning call that violent assaults by patients on healthcare professionals, which at times had been reported to have occurred in emergency rooms, could in fact occur in any medical therapeutic settings.

The occurrence of violence in hospitals is a threat to healthcare professionals, patients and their families. The anxiety and the feeling of fear that healthcare providers have about their being exposed to potential violence could lead directly to a degradation of the services they provide and, in turn, of patient safety. A comprehensive set of measures is needed to foster hospital environments where all people have equitable, undiscriminating access to quality healthcare and where healthcare professionals can devote themselves to their duties without fear of potential assault. The environment of patient care occupies a central place in patient safety regulations. Ensuring safety for patients and healthcare professionals consists in making hospitals safe places for patients and those working in them.

There have been efforts in Korea to improve psychiatric care in particular and to lay the foundation for building safe healthcare environments in general. From the National Assembly emerged lately a series of proposals concerning safety in hospitals. On January 9, members of the National Assembly's Health and Welfare Committee, sharing their concerns about the need to make healthcare environments safer, discussed ways to increase investments in mental health care, with a view especially to improving inpatient care and post-discharge follow-up management for mentally-ill patients. Jeong Chun-Sook, a lawmaker affiliated with the ruling Democratic Party of Korea, presented on January 4 a proposal of a couple of partial amendments to the Act on the Improvement of Mental Health and the Support for Welfare Services for Mental Patients. On the same day, Kim Seung-hee, a lawmaker of the Liberty Korea Party, called for government support with which to install in hospitals escape outlets, emergency shelter space, and panic buttons. She also put forth a motion that penalties be increased for assaults on healthcare professionals, proposing elimination from the Medical Service Act of the provision that permits the perpetrator to go unpunished if the victim is not willing to press charges and allow reduced penalties for crimes committed while in a state of intoxication. Yun Il-gyu, another lawmaker of the Democratic Party of Korea, proposed on January 7 a similar revision to the Medical Service Act.

Meanwhile, the Ministry of Health and Welfare is at work to bring forward a new approach to protecting health care professionals "on duty" and to improving care for psychiatric patients. Kim Yong-Ik, President of the National Health Insurance Service, during his condolence call on the death of Dr. Se-won Lim, said to the press that he would do his utmost to introduce into the

current health service fee system a new a charge that would help promote the safety of healthcare professionals.

### **A conceptual framework for linking patient safety with safety of healthcare facilities**

Healthcare establishments are open spaces where anyone can come and go freely. Another way of saying this is that they are places where patients and their families and those who work in them all get exposed to the risks of healthcare-associated infections and violence stemming from various forms of interaction. Promoting the safety of patients requires institutional and physical means as well as a comprehensive set of policy instruments.

The US provides an example of efforts to link patient safety with occupational safety in hospitals. The Agency for Healthcare Research and Quality (AHRQ) defines patient safety as “freedom from accident or preventable injuries produced by medical care.” Policies in the US require that Medicare reimbursement be linked to the performance measures of, among others, healthcare-associated infections, hazard accidents, and avoidable deaths.

Improving patient safety consists in fostering a healthcare culture where patient safety matters. Since 2012, AHRQ’s National Healthcare Disparities and Quality Report has included patient safety culture metrics in its measurement of patient safety. Patient safety is a concern for not just individuals; it has become a top concern for organizations.

The Occupational Safety and Health Administration (OSHA)—of the US Department of Labor—has for many years taken the lead in policy efforts to link patient safety advancement with worker safety in healthcare facilities. Such efforts have been bolstered by the National Patient Safety Foundation.<sup>1</sup>

OSHA has developed safety guidelines aimed at preventing workplace violence in healthcare facilities (notable among which which are Preventing Workplace Violence: A Road Map for Healthcare Facilities and the Guidelines for Preventing Workplace Violence for Healthcare and Social Service Workers). OSHA’s efforts have been complemented by its collaboration with the Joint Commission, whose work focuses on the synergistic effect between patient safety and occupational safety. The list of activities that the Joint Commission recommends doing for the synergistic integration of patient and worker safety includes: setting patient and worker safety a core organizational value; identifying ways of integrating patient and worker safety activities across departments and programs; understanding and measuring performance on safety issues, and; instituting and maintaining successful worker and patient safety improvement activities.

Many healthcare forerunners have been striving to foster a safety culture as a way to reduce the occurrence of injuries for both patients and workers. Safety culture refers to a composite of factors—such as commitment, values, attitudes, perceptions and behavior that an organization and the individuals working in it hold toward safety and healthcare quality—that together determine the extent to which an organization’s atmosphere promotes healthcare safety and quality enhancement. The essential qualities of a hospital safety culture include: healthcare staff and directors who value transparency, responsibility, and mutual trust; safety as a first priority for all; staying away from behaviors that are detrimental to the culture of safety; a shared priority on identifying hazards before they result in injuries; an emphasis on reporting of, and learning from, mistakes, and; conversations and communicative exchanges through

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<sup>1</sup> AHRQ Patient Safety Network (2017). Workplace Safety in Health Care. <https://psnet.ahrq.gov/perspectives/perspective/214/Workplace-Safety-in-Health-Care>

considerate language use.

Good communication between healthcare professionals and patients is pivotal to preventing assaults by the latter on the former. To help healthcare professionals build and maintain a relationship with their patients would require policy support that encourages hospitals to spend time and resources on educating their staff. Having communication on a regular basis with patients can help them reduce anxiety and hold realistic expectations about what they and their families can expect.<sup>2</sup>

### **Integrated policy approach to fostering safe healthcare environments**

An integrated approach to patient and worker safety requires three elements: strong legal control and law enforcement on violence; a stable intra-organizational culture, and; extra-organizational interventions that stimulate healthy changes.

The leniency of legal response and the indifference of the public have together made for a culture of tolerance for violent attacks against healthcare professionals. Korea's current circumstances signal a need for national measures that reinforce security in hospitals and penalize interference with healthcare providers on duty as a criminal offence.

Hospitals in Korea need to foster a culture of safety for patients and workers. OSHA's Guidelines may provide a useful point of reference in this effort. Building a safety culture of effective hazard control requires clear and meaningful measurement of performance on safety-related issues, research, understanding and capability for improvement.<sup>3</sup> The main factors of safety culture include:

- Committed management and involved employees
  - Directors should: manage performance; work in close communication with employees; provide an impetus for workplace violence prevention by placing a top priority on safety; allocate appropriate resources and support to safety management, and; create a motivating force by appointing individuals with authority and knowledge to lead safety programs.
- Workplace analysis and hazard identification
- Hazard prevention and control: technical and administrative controls
  - Technical control involves: providing easy exit access and better visibility for employees; ensuring good lighting in isolated indoor areas and outside; placing mirrors; installing such security devices as metal detectors, surveillance cameras and panic buttons; controlling access to certain areas (ICUs, EDs, newborn nurseries, and pediatric care units), and; anchoring furniture items to the floor that could potentially be used as weapons.
  - Administrative control is about bringing changes to staffing and workplace practice with a view to reducing worker exposure to hazards.
- Safety education and training
- Recordkeeping and program effectiveness evaluation

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<sup>2</sup> Kim Krisberg. (2017. 1. 9). Keeping Everyone Safe: Violence Prevention in Hospitals. AAMCNews, Retrieved from <https://news.aamc.org/patient-care/article/violence-prevention-hospitals-keeping-everyone-safe/>

<sup>3</sup> Gandhi TK, Kaplan GS, Leape L, et al. *BMJ Qual Saf* 2018;27:1019-1026.doi:10.1136/bmjqs-2017-007756.

Extra-organizational, institutional approaches may include: developing improved education programs; expanding relevant research and development programs; implementing healthcare organization accreditation programs, providing financial and policy support for capacity building in healthcare organizations, and; encouraging behavior changes by aligning payment with quality.

### **Inducing behavioral changes via National Health Insurance reimbursement**

In implementing integrated approaches to improving safety in hospitals, roles should be divided and coordinated between hospital directors, the government and insurers. Korea's single public payer system may serve as a source of financial incentives that nudge hospitals toward the behavior changes they need to make to build a safety culture. Also, ways should be considered of providing financial support for hospital security enhancements and of introducing hazard pay for healthcare professionals.

The designing of a reimbursement scheme should be based on a clear identification of the relationship between reimbursement policies and physician behavior changes. A reimbursement system that favors a certain group of services may run the risk of reducing access of some patients to proper treatment and referral services. For example, selective cuts in reimbursement for certain services may make it difficult for some patients with severe conditions—among whom those with a tendency toward violence—to have access to services they need at specialized healthcare facilities, leading to an increased use of emergency departments and, in turn, possibly to a degradation of safety in hospitals.

Strategies should be pursued in an integrated way to further synergistic improvements in healthcare, with priority given to linking hospital security with physician safety, and reimbursement with performance on patient safety. Regulations, licensing standards and accreditation concerning healthcare facilities, and reimbursement mechanisms all need to be considered in an integrated framework. Financial incentives should be tied to investments that are made to design, build and enhance safe healthcare facilities.

The National Health Insurance's reimbursements to providers are calculated based on service fees. The fee for a certain service is determined by multiplying the relative value of the service by a conversion factor.

In a relative value fee system, investment costs can be accounted for in the practice expense relative value, while risk-bearing costs involved with the provision of services to patients with severe conditions can be incorporated into either the work relative value or the malpractice relative value. A relative value—determined based on work expense, practice expense and malpractice cost—refers to the value of a given service relative to the amount of resources used in providing the service.

The work expense relative value represents a healthcare professional's workload in terms of physical and technical effort and stress involved in providing a given healthcare service. The practice expense relative value takes into account both direct expenses (labor, material, and equipment) and indirect costs (administrative staff, supplies, communications, utilities, and building depreciation cost). The malpractice relative value, a numerical representation of the relative risk of each specialty, is determined via a number of steps, including data interpretation on the frequency of malpractice cases and the calculation of the average cost of malpractice

premium for each medical specialty.

In a relative value system, the cost of security staff and safety-related equipment can be incorporated into the practice expense relative value. Added stress associated with performing a medical procedure on a patient with a severe condition have to do with the safety of physicians and, thus, may need to be taken account of in the work relative value or in the malpractice relative value. However, increasing reimbursement rates for some procedures in certain specialties would require broad consensus across medical communities, as Korea's current relative fee schedule is such that it assigns a fixed relative value for each medical procedure across all specialties. On the other hand, in order for the malpractice relative value to factor in the costs of safety risks taken by physicians, the cost of medico-legal claims should be normalized and consideration should be given for modifying the method used to determine specialty-specific risk factors.

Another way of promoting safety in hospitals is by linking financial incentives to performance on physician-patient communication. The current reimbursement system has as its component a healthcare quality improvement fund that attaches financial incentives (or disincentives) to provider performance on certain quality measures. One of these measures, the "ratio of inpatients to registered nurses," is an indicator of worker safety to such an extent that it is a representation of the association between anxiety and stress in nurses and the likelihood of seeking new positions. The fund is linked also to measures that reflect how well hospitals do in implementing controls to prevent violence. Currently applied to general hospitals and higher-tier healthcare institutions, the quality-linked fund program, which to an extent is intended for promoting the safety of healthcare professionals, can be used to further strengthen worker safety in hospitals, by simply adding some additional metrics to the existing measures of patient safety or, in an indirect way, by quantifying accreditation standards.

The problem that there is no mechanism for measuring and reimbursing hospital performance on worker safety in lower-tier healthcare providers (smaller hospitals and clinics)—that is, apart from the regulations concerning the registration and licensing of healthcare establishments—may be addressed in part by assigning work relative value units to the amount of extra time physicians spend communicating with patients. Policymakers may consider broadening the application of the graduated overtime rates they introduced in 2018 for psychiatric consultations. Policymakers may also consider introducing a new "fee for continued outpatient care," one similar to the existing "fee for chronic disease management," with a view to designing assessment-based financial incentives that promote community-based primary care in outpatient psychiatric consultation.