

## Executive Summary

### Study on the consumer and healthcare professionals' perceptions of safety in hospitals

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#### □ Introduction

##### I. Study background and objectives

There has been an ongoing global effort to place “risk” and “safety” at the center of all levels of healthcare systems, institutions, and service management. Leading nations in safe medicine such as Australia, United States, the United Kingdom, and Denmark have been emphasizing patient safety since the 1970s. Especially, US Institute of Medicine emphasized the meaningful use of technology and information in progressing from “To Err Is Human,” a 1999 report, to “Health IT and Patient Safety,” a 2011 report. At the core of this meaningful use lies patient safety.

South Korea has fallen behind for studies on risk or safety in healthcare. Although there is no doubt that recent efforts placing greater importance on patient safety and quality improvement in health care since hospital accreditation program has led the expansion of related activities, they are still in their infancy. This is evidenced by the fact that the academic society regarding patient safety was not founded till March 2013. Legal standards, the “Patient Safety Act” built on the establishment of a patient safety system and prevention of recurrence of patient safety incidents, only passed the Korean National Assembly in December 2014.

Effective communication is especially important in patient safety. Experts in

patient safety need to answer not about what people have to know but about what people want to know based on the public's concerns, awareness, and experience-based knowledge.

A review of studies related to patient safety perception in Korea showed that most of studies performed focused on the perception of health professionals working in the hospitals, especially nurses. However, most of these studies only identified levels of awareness regarding patient safety culture or analyzed the relationships between variables related to patient safety culture. Studies on the differences in awareness between medical professionals and actual hospital users in regards to hospital safety are still lacking.

Therefore, the present study considered it problematic that studies on healthcare users to this point have been limited only to satisfaction or intention surveys, as compared to those conducted on healthcare providers. This study aimed to provide more comprehensive information by also investigating awareness in the context of the environment in which healthcare is being provided and utilized. The study also aimed to unravel the implications of the study by taking surveys performed on the general public and health professionals coincidentally for comparing and reviewing the difference between two groups. This could identify response strategies and resolution measures for hospital safety risk awareness.

In order to achieve the study objectives, the following goals were set.

First, consider a general model of risk epistemology to develop a model questionnaire and survey tool for analysis of hospital safety awareness.

Second, conduct investigations to test the validity of the developed tool and to identify safety awareness.

Third, analyze the survey results to identify the current state of patient safety awareness of users and workers in hospitals.

Fourth, provide discussion points through the survey results for increasing

acceptance by hospitals and society.

## II. Methods

In the present study, a survey was conducted using a tool developed to investigate awareness of “safety in hospital”; the survey results were then analyzed. Questionnaires on hospital safety were developed by reviewing the outcomes and models in existing studies. Separate questionnaires were developed for hospital workers and hospital users.

Using the developed questionnaires, surveys were conducted in five hospitals located in Seoul area. The users included hospitalized patients and family. Doctors, nurses, and pharmacists from each hospital were surveyed. A total of 958 questionnaires were retrieved, 490 from users and 468 from workers.

The collected data were analyzed by frequency analysis for survey participants’ response distributions. Chi-squared test, independent t-test analysis, and ANOVA were used for differences in responses between users and workers and between subgroups within users and workers.

## □ Results

### I. Questionnaires

The basic questionnaire categories were composed of personal characteristics, patient safety awareness, and influence factors. Personal characteristics included personal experience, inclination, and general information. Patient safety awareness included general incidents, individual incident, and comparison among them. The questionnaires were developed by dividing the categories into general awareness, awareness of causes, and awareness of influence.

### II. Survey results

- Results of comparative analysis between users and workers

In the word association frequency analysis, the images most often associated with safety in hospital were fall, infection, accident, fire, and drug administration. In each hospital, users frequently mentioned misdiagnosis, whereas workers frequently mentioned educational content related to patient safety and quality improvement tools. In conclusion, analysis showed images users often mentioned were related to experiences, expectations, relationships, and roles, whereas workers' images were biased toward clinical care.

In terms of general awareness related to safety, users recognized hospitals to be safer places than workers did. This led to differences in awareness of the possibility of patient safety incidents, with users believing there was lower likelihood of such incidents than workers did (3.7, 4.6). The users also believed there was less of a chance for safety related issues in crime and food poisoning than workers did.

Except anesthesia and procedure/surgery accidents did not show significant differences, users show significantly low possibility than workers in most of patient safety categories including medicine and medical equipment accidents, infection, pressure ulcer, bed fall, misdiagnosis, medical records errors, and food poisonings.

The users and workers also showed differences with respect to the causes of patient safety incidents. The patients recognized lack of staffing, lack of care time, lack of skills mastery, carelessness, and lack of patient information-sharing between medical personnel at a higher rate than workers. Workers showed high recognition rates for lack of staffing and weak safety management systems as the causes. As such, for importance of improvement, the users showed significantly higher level of agreement than workers for related laws and regulations, disclosure of patient safety incident information, restricted usage of medical technology, license suspension, legal proceedings, and fines. The workers showed high importance in expanding the number of medical personnel. The categories that did not show differences in importance

between two groups were expanding medical personnel training and education, mandatory accident reporting systems, increasing the care time per patient, reduction of medical personnel work hours, and computer use. The two groups also showed differences on the subject of efforts for improving hospital safety. The users showed a higher rate for noting hospital management and the Ministry of Health and Welfare, whereas the workers showed a higher rate for noting doctors, hospital management, and nurses.

Other hospital safety related knowledge, such as recognition of medical accident statistics and related laws and regulations, was clearly higher in the workers. Users (14.4%) and workers (35.5%) showed differences in level of recognition of the “Patient Safety Act” that passed the National Assembly toward the end of last year.

- Differences between user and worker subgroups

Among the users, the rate of those indicating direct experience as the information source for forming hospital safety images was 43.3%. For the overall awareness on the hospital safety level, patients responded mostly safer at a higher rate. Among the workers, doctors more than nurses or pharmacists often showed significant differences in awareness. There were differences in medicine, medical devices, bed falls, misdiagnosis, and medical records errors according to occupation type. For improvement measures for hospital safety, the doctors also showed significant differences in the levels of agreement, as compared to nurses or pharmacists. Awareness of passing the patient safety law was 37% in doctors, 34% in nurses, and 26% in pharmacists.

## □ Discussion

The development of a patient safety perception in hospital survey tool and subsequent measurements were attempted for the first time, meaning additional studies are needed in the future. The validity of the survey tool and method

needs to be supplemented with focus on some of the errors and improvement needs. Our survey results were similar to some, yet different from those of a couple of studies from the United States and other countries, which may be attributed to differences in medical culture and study participants. Most of all, since the results surveyed a small number of participants from few hospitals, caution should be taken when generalizing the survey results.

## □ Conclusions and recommendations

As a result of the study, differences in hospital safety awareness between hospital users and workers, as well as between their subgroups, were identified through qualitative (such as image survey) and quantitative (such as response rate) analysis. Overall, users recognized hospitals to be safer places than workers did and showed relatively higher demand for information. For causes of safety issues, both users and workers showed high agreement for expanding personnel and patient care time, whereas they showed different degrees of agreement for laws, regulations, penalties, and sanctions. The level of recognition in the workers for work association related to hospital safety was high. In comparison to having high recognition for the role of workers, users also showed a tendency to show high recognition for the roles of decision makers, such as hospital management and the Ministry of Health and Welfare.

Although the results of this study provided the basis for elevating the hospital safety awareness in our society as relates to passing of patient safety laws, in order to secure more generalized evidence, more expanded surveys need to be conducted.

**Keywords:** safety in hospital, perception, awareness, image, hospital user, hospital worker, patient safety