

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

Sukyeong Kim¹, Myoungsoon You^{1,2}, Jeongsu Park¹, Eunbi Ko¹, Hajin Tchoe¹

1 National Evidence-based Healthcare Collaborating Agency NECA

2. Seoul National University

Introduction

1. Study background and objectives

There has been an ongoing global effort to emphasize “risk” and “safety” at all levels of healthcare treatment and service management. The leading nations in patient safety, such as Australia, United States, the United Kingdom, and Denmark, have been emphasizing patient centered care since the 1990s. In particular, the US Institute of Medicine has published the 1999 report “To Err Is Human: Building a Safer Health System” which shows that at the core of patient-centered care is patient safety. Based on this report, many countries including US, UK, Australia and other countries started to build patient safety system for promoting patient safety.

In South Korea, only small number of studies evaluating either risk or safety in healthcare services had been published even though there is no doubt that the more efforts have been placing emphasis on patient safety and quality improvement in health care since the introduction of hospital accreditation programs. There has been further space remained for improvement in patient safety.

This is evident by the fact that the academic society on patient safety was not established until March 2013. The legal standards, the “Patient Safety Act” built on the establishment of a patient safety system, and the prevention of repeat patient safety incidents, only passed suddenly the Korean National Assembly in December 2014.

Effective communication is especially important in patient safety. Experts in patient safety are required to employ their experience-based knowledge to respond to, and provide essential and requested information for patients on various healthcare-related topics that addresses the public’s concerns, and raises awareness.

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

Therefore, the present study considered it problematic that the studies concerning the safety of healthcare consumers to have only been limited to patient 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. In addition, the implications of the study will also be examined by considering the surveys performed on the general public and on healthcare professionals, simultaneously, for

the comparison and review of the differences between the two groups. This could identify response strategies and resolution measures for hospital safety.

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

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

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

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

Fourth, discussion points were made by the survey field for improving questionnaire acceptance by hospitals for their information.

2. Methods

In the present study, a survey was conducted using a tool developed to investigate the awareness of “safety in hospital”; the survey results were subsequently 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 the Seoul area. The users included hospitalized patients and family. Workers are doctors, nurses, and pharmacists from each hospital. A total of 958 questionnaires were retrieved, 490 from users and 468 from workers.

The collected data were analyzed by frequency analysis for the survey participants’ response distributions. Chi-squared test, independent t-test analysis, and analysis of variance were used to evaluate the differences in the responses between users and workers and between the subgroups among users and workers.

Results

1. 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 the comparison among them. The questionnaires were developed by dividing the categories into general awareness, awareness of causes, and awareness of influence.

2. Survey results

- Results of the 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, the analysis of the patient’s perception of hospital safety was often related to the experiences, expectations, relationships, and roles, whereas those of the workers were biased toward clinical care.

In terms of general awareness of safety, users had a more favorable perception of hospital safety compared to the workers. This led to awareness-related differences in the understanding of patient safety incidents, with users believing that there was a lower risk factor for such incidents occurring in hospitals compared to the workers (3.7, 4.6). The users also believed that

there was also a lower likelihood of safety-related issues, such as crime and food poisoning, occurring in the hospital setting compared to the workers.

The users were likely to show lower risk awareness associated with most of the patient safety categories, including medicine and medical equipment accidents, infection, pressure ulcer, bed fall, misdiagnosis, medical records errors, and incidence of food poisonings, compared to the workers. But, no significant differences in the risk perceptions of the user and the worker were observed for the categories of anesthesia and procedure/surgery-related accidents.

The users and workers also showed different perceptions with respect to the causes of patient safety incidents. The users give more rates to the risk factors of patient safety incidents, such as the lack of staffing, lack of care time, lack of proficiency, carelessness, and the lack of patient information-sharing between medical personnel, compared to the workers. Workers showed high rates for the lack of staffing and weak safety management systems as being responsible for patient safety incidents. And there were big and significant differences between users and workers perception on the measures for improving patient safety of hospitals like laws and regulations, disclosure policies of patient safety incident information, restricted usage of medical technology, license suspension, legal proceedings, and fines. The categories that did not show differences in the rated importance between the two groups were for 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 with regard to the efforts for improving hospital safety. The users had a higher tendency for attributing credit to hospital management and the Ministry of Health and Welfare, whereas the workers had a higher tendency for attributing credit to the doctors, hospital management, and nurses.

Other hospital safety-related knowledge, such as the recognition of medical accident statistics and related laws and regulations, was clearly ranked higher among the workers than the users. Users (14.4%) and workers (35.5%) differed in the degree of familiarity and understanding of, “The Patient Safety Act,” which was passed by the National Assembly toward the end of 2014.

- Differences between user and worker subgroups

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

Discussion

Patient perceptions on hospital safety were assessed for the first time with this hospital survey tool; nonetheless, additional studies are still warranted in the future. The validity of the survey tool needs to be supplemented with a focus on the expressions and understandability. Although our survey results were consistent with some other studies, they differed to a couple of studies from the United States and other countries, which may be attributed to the differences in medical system, culture and study participants attribute. Most importantly, as the study only surveyed a small number of

participants from a few hospitals, the survey results should be generalized cautiously.

Conclusions and recommendations

As a result of the study, differences in hospital safety awareness between hospital users and workers, as well as among the subgroups, were identified through qualitative (such as image survey) and quantitative (such as response rate) analyses. Overall, users identified the hospitals to be safer places compared to the workers and demonstrated a relatively higher demand for information. For the causes of safety issues, both users and workers agreed that an increase in personnel and patient care time was warranted; whereas, a low agreement was noted for the survey items of law, regulation, penalties, and sanctions. There was a high level of recognition among the workers for work association related to hospital safety. In comparison to having high recognition for the role of the workers, patients also tended to attribute high recognition to decision makers, such as hospital management and the Ministry of Health and Welfare.

Although the results of this study provided the basis for elevating hospital safety awareness in our society, as related to the passing of patient safety laws, in order to increase the generalizability of the results, further expanded surveys need to be conducted.

Keywords

safety in hospital, perception, awareness, image, hospital user, hospital worker, patient safety