

# Competencies demonstrated by risk managers who hold a nursing qualification in responding to medical accidents: A narrative analysis

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## Abstract

**Background and Purpose:** When a medical accident occurs, risk managers must respond, and because there is no time for them to take adequate physical and mental rest, they become exhausted. On the other hand, risk managers with nursing experience perform their duties based on nursing management expertise and skills, using the ability to build interpersonal relationships that they have cultivated in the course of their nursing duties. However, the competency with which nurses perform their duties in response to accidents has not been clarified. The purpose of this study was to identify the types of competencies demonstrated by risk managers in responding to medical accidents.

**Methods:** We conducted unstructured interviews with seven nurse risk managers in seven acute hospitals, and their responses were reviewed. Narrative analysis was used in this study. Theme analysis was performed using structural analysis elements defined by Riessman.

**Results:** Six themes were identified as competencies used in responding to medical accidents, namely: “the ability to get to the heart of the problem,” “the ability to identify the lead clinician,” “the ability to have sympathy in responding to the patient and family members,” “the ability to arrange opportunities for all parties involved in saving the patient’s life,” “the ability to introduce the perspective of care in a situation in which all parties involved refuse to compromise, ” “the ability to not be controlled by emotions and maintain objectivity.”

**Conclusion:** The competencies demonstrated by nurse risk managers in responding to medical accidents were based on the nursing philosophy of responding to medical accidents with patient-centered care, and drew on nursing management skills accumulated through experience as a nurse manager. It is necessary to develop a training system for developing human resources capable of using nursing skills to respond to medical accidents.

## KEY WORDS

medical accident, risk manager, nurse, competency, narrative analysis

## Introduction

An important turning point for risk managers in Japan was the revision of the medical law in 2007<sup>1)</sup>. It became mandatory to assign risk managers to medical

facilities. The risk managers are recruited from a cohort of doctors, pharmacists, and nurses. They received more than 40 hours of training provided. Risk managers are in charge of various tasks such as facts and

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analyzing incidents, building a risk management system, evaluating medical accident (hereinafter referred to as an accident) responses and countermeasures, and developing a culture of sensitivity to the reality of risk<sup>2)</sup>. In a survey, 91% of risk managers reported holding a nursing qualification<sup>3)</sup>. However, only 3.0% of them had been assigned to serve as a risk manager at their own request<sup>4)</sup>.

Risk managers have been working in responding to accidents even if the accidents occur during their off-duty hours. Risk managers take initial measures such as preserving the scene of the accident, dealing with patients and their family members, and interviewing relevant stakeholders in detail. They are find it difficult to deal with patients and their family members. Once an accident has occurred, risk managers have to respond to the accident, and there is no time for them to take adequate physical and mental rest. If it takes a long time to deal with an accident, risk managers become exhausted. Risk managers are said to be in a state of burnout<sup>5)</sup>, and this issue should not be overlooked. The huge responsibility risk managers have to shoulder alone and they experience feelings of loneliness due to people's lack of understanding of their role and position<sup>6)</sup>. In such a severe situation, it is feared that few people would want to become a risk manager.

On the other hand, risk managers with nursing experience perform their duties based on the expertise and skills of nursing management, and the ability to build interpersonal relationships that they have cultivated in the course of their nursing duties<sup>7)</sup>. It is thought that they have their own competency as nurse risk managers who continue to struggle and overcome difficult situations in responding to accidents while experiencing physical and mental fatigue. The competencies for healthcare professionals to carry out medical care safely include: effective communication, error management, continuous learning, enforcing procedures around the issue of risk, adherence to medical ethics, proper use of information technology, and evidence-based medicine<sup>8)</sup>. However, the competency of nurses to perform their duties in their capacity as nurses in response to accidents has not been clarified.

A common definition of competency is that it

leads to high performance levels and the underlying characteristics that create them<sup>9, 10)</sup>. The definition of competency does not make it clear whether it refers to ability or action, and it is a complex and difficult-to-understand concept<sup>11)</sup>. Mirabile<sup>12)</sup> described competency as "knowledge, skill, ability, or characteristic associated with high performance in a job, such as problem-solving, analytical thinking, or leadership. Some definitions of a competency include motives, beliefs, and values." In this study, we will clarify how nurse risk managers deploy competency, as defined by Mirabile<sup>12)</sup>, to respond to accidents as nursing professionals. In this study could be used to assist nurse risk managers who have difficulty in responding to accidents, to educate risk managers. The purpose of this study was to clarify the competency of risk managers with nursing qualifications in responding to accidents.

## Methods

### 1. Study design

In fact, risk managers perform their competency to the fullest extent when dealing with serious accidents. In the case of an accident, it is assumed that various competencies that the individual possesses, such as knowledge, experience, ability to judge the situation, nursing values and beliefs in work, are utilized to solve the problem. In this study, we attempted to clarify the competencies that can be deployed when completing duties as a nurse risk manager in difficult situations when responding to accidents. It is necessary to understand how individual study participants are aware of the specific situation in responding to accidents, and what competencies are exercised when completing their duties. Therefore, the narrative research method is considered to be the most suitable method for the present study as it can be analyzed without compromising the totality of the narrative of experiences in responding to accidents, and the meaning of experience for the study participants.

### 2. Study participants

We requested the cooperation of 10 acute care hospitals, each with over 200 beds, because acute care hospitals often experience serious medical accidents<sup>13)</sup>. Although we explained the study in writing, it was difficult to secure research participants due to the

sensitive nature of responding to accidents. Consent for the participation in this study was obtained from only seven nurses at seven of the acute care hospitals.

The inclusion criterion was working as a full-time risk manager with experience in dealing with serious accidents who could speak knowledgeably about competency. The exclusion criteria were those who applied for an internal transfer after responding to the accident. The date and time of the accident was not asked for as it could identify the case.

### 3. Data collection method

Data collection was performed using an unstructured interview method. Participants were asked to focus on the thoughts and intentions of the response itself. "Please tell me about what you deal with difficult situations when responding to the medical accidents, but do not discuss the accident in detail." The interview was recorded with permission. It was conducted with each person for about 60 minutes in a room experienced in where privacy was ensured. The interviewer was a risk manager of nurse manager with experience in medical accident response. The survey was conducted from January to December 2016.

### 4. Data analysis method

The analysis procedure was following. We referenced, an analysis method of Robichaux CM, et al.<sup>14)</sup> which defined from the narrative analysis method of Riessman's<sup>15)</sup>.

First, researchers read the transcript carefully and understood the context while preserving the integrity of each narrative. Narratives not related to accident response were deleted. Second, the narrative was divided into "clauses," confirming which of each "clause" was composed of a structural **summary** (narrative summary), an **orientation** (time, place, characters and situation), and an **action development** (action), a turning point or crisis, **evaluation** (evaluation of action development), **consequence** (resolution), and **conclusion** (ending the narrative). Third, as the plotted story was read many times, what competencies the nurse risk managers exerted in the development and evaluation of actions in responding to the accident were discovered. In such a situation, to identify the competency themes in the content repeatedly spoken

of by nurse risk managers, was performed, and the different cases were compared to clarify common points and elements of similar themes. Specific nouns and accident details that would identify the accident were not described. The researchers proceeded with the analysis with the consent of the co-investigators who were nursing researchers with expertise in medical risks and who specialize in narrative and qualitative research methods regarding the interpretation of competencies in accident response narratives, and whether their meanings were consistent.

### 5. Ethics

This study was approved by the Kanazawa University Medical Ethics Review Committee (Approval Number: 648-1). The signature on a consent form were obtained from participants after facility managers and participants were explained in writing the purpose and method of the research, that the research is voluntary participation, that anonymity at the time of publication is maintained, and protection of personal information. Participants were explained that consideration should be given so that accidents and individuals cannot be identified in publishing the research. They were also explained that they do not have to talk about things they do not want to because talking about difficult situation of responding to the accident may recall them of emotional distress, and that they had the right to withdraw from research at any time.

## Results

### 1. Participant Characteristics

All participants were female and had experience as a nurse manager. They were 50-62 years old with 29-38 years of nurse experience and over a year and up to 8 years of risk manager experience. The duration of the interview was 45-70 minutes.

### 2. Competencies demonstrated by nurse risk managers in responding to medical accidents

Participants' narratives have been written in double inverted commas (" ") and single inverted commas (' ') were used for what another person said in the narrative. In the narrative of the accident response, six competencies demonstrated by nurse risk managers were found.

### 1 ) Theme 1. The ability to get to the heart of the problem

Regardless of the occurrence of sudden accidents, risk managers were within the paradigm of motivation of getting to the heart of the problem. They made full use of the knowledge, skills, and experience to assess and evaluate the situation objectively, while capitalizing on their strengths as a nurse who is professionally calm and considerate. The risk managers suggested improvement measures after they established that perceptions of the cause of the accident differed between patients, family members, and doctors.

Participant B commented, "I was consulted by a doctor in my first year as a risk manager when I still did not fully understand my job. The doctor asked me how she should respond, saying, 'It happens.' When I hurried to the place and looked at the patient's medical record, I noticed that there was no record of the doctor explaining the treatment complications to the patient. Family were very resentful." This event revealed that there was a discrepancy in understanding between the patient, family members and the doctor due to the absence of a record that the doctor had previously explained the risk to the patient. The risk manager requested the medical department through the facility manager to make sure that the informed consent form is always completed. Participant A said, "The patient was discharged without noticing a rib fracture during hospitalization. The fracture was found at another hospital. The patient told the doctor about this at the regular postnatal visit. The doctor said, 'Are you okay? It must have been tough.' Risk manager found this in a nurse's report. I called the patient. I reported the incident to the hospital director and then processed it so that the patient would not be charged for the treatment. Since this hospital is a general hospital and has orthopedic surgery, I wanted the doctor to ask the patient, 'Would you like to be treated at our hospital?' The doctor let the patient go without asking the patient to have a medical consultation at our hospital. I felt that there was the difference in perception of accidents between doctors and ourselves." The risk manager reassured the patient after she clarified the issues in responding to the accident arising.

### 2 ) Theme 2. The ability to identify the lead clinician

The risk manager thought that she was unable to cope with it by herself, so she searched for medical expertise that could solve the problem without exacerbating the situation, and requested cooperation in solving the problem.

Participant E asked the supervisor of the attending physician to attend the meeting for explaining to the patient. "If only I and the attending physician were present, I thought the attending physician could be anxious. You don't know who will be the key person and come to the hospital to hear the explanation. Anyway, I asked the line manager of the attending physician to be present. ... After the explanation, the attending physician said, 'I was really grateful that my line manager was there.'" This participant shared the story about a way of handling the situation by identifying locating the best person to alleviate the anxiety of the patient.

### 3 ) Theme 3. The ability to have sympathy in responding to the patient and family members

Risk managers were struggling with the lack of understanding of their role by their patients, family members and doctors, and were asking themselves what the significance of their role is. However, the risk manager responded based on the belief that a nurse has instinctive sympathy for patients and family.

Participant B asked herself, "What is my role when acting as a mediator between doctors and the patient's family? Doctors expected risk managers to reassure patient's family members. Family was completely unconvinced and asked 'what is going on here?' I wondered what the role of a risk manager is. The risk manager belongs to the hospital and desires to help patients' families as well as doctors at the same time. As a nursing manager, I found the situation difficult as I really want to help all of them since the patient has been hospitalized. Although there was a time when I was just avoiding patients, I found the best way to help the patient was to go and stay beside snuggle up to the accident victim." She talked about the changes in her feelings of having sympathy for patients while worrying about her position as a risk manager. Participant E commented, "What I found the most difficult was the position as a risk manager and how to maintain a

reasonable distance from all the parties involved. At first, I was next to the doctor, but I felt something was wrong. I found it difficult to be in my position and to interact with all parties involved. Later, when the patient's family came to me and said, 'We still have a lot of troubles, and it's tough' I felt that I was glad that I talked to this family at the time of the accident." Participant E was visited by the patient's family following their discharge, and she was convinced of the importance of involvement with patients and family members at the time of the accident.

#### **4) Theme 4. The ability to arrange opportunities for all parties that are involved in saving the patient's life**

A risk manager had an insight into the patients' ability to live as well as their suffering allows through applying the observational skills of experienced nurses. In addition, based on the philosophy of nursing that captures and cares for the needs of the patient's family, the nurse selected the bedside as a place of opportunity to work on the emotions of the patient's family and healthcare professionals and bring them closer together.

Participant B said "I feel this way maybe because I am a nurse risk manager, but when I look at the patient's face, the patient is peaceful. Sometimes they open their eyes or react with jerks. They shed tears as usual and their hands are warm if I hold their hands. I realized that even in the midst of such problems, patients were still trying to live. Patient's was not always present whenever healthcare professionals and patient families have a discussion. Without a patient's presence, the patient's family and healthcare professionals were talking about the patient's problem. I told the patient's family and doctor to come near the bedside to talk to the patient who was on a ventilator. The patient was not able to make any statement, but I have set up the opportunity where all parties could be involved to think of something really important." Participant B arranged a meeting at the bedside where the family member could speak up for the patient's wishes to the attending physician, in order to rebuild the relationship between the family members and healthcare professionals. "The patient's family said to the patient, 'you [patient] must be disappointed. You can't even eat a rice cake on New Year's because of

such a painful situation. I guess you can't say who's at fault and you can't say it's a doctor's fault.' It really hurt my heart. The attending physician and nurses are there. I think the family also felt responsible. It was really hard for all parties to be involved in this situation. The attending physician also looked as if he was in pain. Somehow, you have to be in the same position and in the same place. We shared the time and the attending physician said sincerely, 'I'm sorry for this situation.'" The risk manager described that the feelings of the family members and the healthcare professionals got closer through the experience.

#### **5) Theme 5. The ability to introduce the perspective of care in a situation in which all parties involved refuse to compromise**

A risk manager was asked by a doctor and Intensive Care Unit (ICU) nurse director to convince a patient's family to agree to transfer the patient to a general ward. However, the family did not agree. Risk manager carefully explained to the family that the current treatment needed by the patient was nursing care. The explanation by the risk manager changed the perception of the family members and enabled the patient to be transferred to a general ward.

Participant B talked about the patient's transfer from the ICU to the general ward, "From the patient's family, I was told that 'I want to make sure that my family receives the best treatment, and I think he can't receive adequate care when he is transferred to the general ward.' Then, I had to be involved with more people, including patients, family members, doctors, and ICU staff. ... I was heartbroken. A nurse in a general ward said to me, 'It is difficult to accept patients whose family members have not agreed.'" B was exhausted in the situation where the patient could not be transferred easily. On the other hand, B told the patient's family, "Patients cannot take a bath in the ICU. I wanted her to be talked to by people and listen to music. I told them that I wanted the patient to receive such care in a general ward. The family then agreed that 'it's okay for that reason.' I felt better when I was able to take good care of the patient. In terms of care, I found that I was able to maximize patient-centered nursing care as a nurse risk manager." As a nurse, B improved the situation.

## 6) Theme 6. The ability not to be controlled by emotions and be objective clearly

Risk managers responded to the accidents diligently and worked on their duties under varied circumstances. On the other hand, during the interview, a risk manager demonstrated the competency of observing and analyzing patients objectively. The risk manager listened to the patient while maintaining an appropriate distance. The risk manager listened analytically to the patient's complaints and tried to determine what was actually happening.

Participant E described how she tried to respond calmly to an accident that occurred during her first year working as a risk manager, "I didn't really know what to do at that time. When I went to the site, everyone was really anxious and waiting for me. A doctor desperately told me about the circumstances of the accident, but since it was about medical practice, it was difficult for me to understand, so I just wanted to calm myself down and listen to the doctor." Participant G, who has a long experience as a risk manager, said, "I didn't feel as if I had to respond or answer on behalf of the hospital. It was not like that at first. When they told me something, I thought I had to answer or do something for them. Risk managers should only listen and should not take it personally. I felt better once I realized that I just need to listen to complaints. ... It may be as if I were a third person looking at the situation from a reasonable distance or seeing it from outside. I was assuming that what this patient is saying is not directed to me personally but to the hospital. It is like someone else's problem. I wanted to listen first because I knew the situation. First of all, I was questioning myself, asking, what does this person want to say?" The risk manager expressed the view that she tries to calmly determine the facts.

## Discussion

### 1. Competencies performed by nurse risk managers

In this study found that nurse risk managers demonstrated six competencies when completing accident response. It was confirmed that the competency of risk managers based on experienced nursing or nursing management experience is indispensable for dealing with medical accidents.

The ability to get to the heart of the problem was

found to be a competency needed for initial response to the accident. Accidents occur unexpectedly. Risk managers were required to identify the cause of the accident accurately in a situation where mental trauma to the parties involved had occurred<sup>2)</sup>. First response in the event of an accident is a difficult skill to acquire<sup>6)</sup>. However, the participants in this study responded by utilizing their problem-solving skills, including the analytical thinking cultivated as a nurse before taking on the role of a risk manager and the experience in various situations as a nurse manager. One of the competencies that led to positive outcomes was self-control, which is necessary in order to stay calm and respond constructively in stressful situations<sup>16)</sup>.

It is only the nurse risk manager who actually manages the medical risks in the clinical setting. The position of risk managers is not widely known in Japan by patients and family members. As a result, risk managers were seen by family members as being in a position of medical professionals when responding to accidents. Risk managers struggled with the significance of their role without being able to support patients. However, nurse risk managers who have been working closely with patients and family members for many years have demonstrated **the ability to have sympathy for the patients and family members** if they are in situations where there is lack of understanding from patients' families. The work of risk managers was qualitatively different from patient care in nursing practice. However, risk managers believed in reverting to the perspective of nursing where they had practiced patient-centered care, and in their emotional ability to put themselves in the midst of what was happening and to sense the distress of all parties involved. On the other hand, they used their intellectual ability to maintain a distance from the event and analyze it calmly. Emotional and intellectual abilities based on such nurses' beliefs enabled them to demonstrate the six competencies. Nurses' competencies include professional ethical practice<sup>17)</sup>. For risk managers who have provided nursing care to patients and family members as a nurse, the competency was based on nursing and ethical perspectives that underlie their nursing care.

**The ability to arrange opportunities for all parties that are involved in saving the patient's life** was

developed for the patient's family and healthcare professionals to communicate and understand each other. The risk manager assessed the patient's will to live utilizing high observation skills. In addition, the risk manager enabled all parties involved to actually feel the suffering of the patient and worked on their emotions to restore their relationship. Emotional involvement in problems and building a relationship with patients and family members require a keen perception<sup>18)</sup>. In a disastrous accident, the nurse risk manager determined that the solution could not be resolved while ignoring the feelings of the patient and family members. It is considered that such a judgment of the risk manager was a competency evidenced by the sensitivity of nurses who can share the grief and distress of patients and their families. It was considered a competency<sup>16)</sup> that grasps the situation of family members and healthcare professionals, and implies that their actions would change the situation.

When the patient with the ventilator was transferred from the ICU to the general ward, the family was worried that the patient would not be treated properly in a general ward. Risk managers demonstrated the **ability to introduce the perspective of care in a situation in which all involved parties refuse to compromise**. Only experienced nurses are equipped with this ability. It is the ability to explain based on the other person's interest, the coordinating ability necessary for problem solving<sup>19)</sup>, and creative ability<sup>20)</sup>. The risk manager understood the family's wish and made the problem clear and a convincing alternative solution was found. It was carefully shown to the family members that listening to music and reading for people with impaired consciousness lead to recovery<sup>21)</sup>. This problem solving process is influenced by the ability to analyze and understand the situation of patients, family members, and healthcare professionals<sup>22)</sup>. The explanation of nursing care based on the patient's condition by the nurse risk manager can be best practiced only by professionals who are familiar with medical knowledge and the situation of patients and families. This phenomenon was thought to be the use of competency supported by knowledge and skills cultivated in nursing practice by skilled nurses grasping the situation intuitively.

## **2. Challenges for human resource development of nurse risk managers**

Nurse risk managers were involved with stakeholders of accidents throughout the course of the accident, from initial response to resolution. It is necessary to train nurse risk managers who can respond to accidents from the perspective of care using nursing knowledge and skills, as well as problem-solving skills and leadership through analytical thinking provided by experiences as nurses. However, in the current training of risk managers, the content is the same as the training of other medical professionals who are responsible for managing medical risks. There is no specific training content for nurses. It is important that nurse risk managers need to shift their thinking through the recovery of patients who had an accident from a perspective of care. In addition, nurse risk managers are required to receive education to engage in patients' life and nurture the sensitivity to feel their distress.

Also, it is important to develop the ability of risk managers to assess the situation calmly and get to the heart of the problem in the event of a sudden accident. To do so, it is desirable to have personnel who have experience in nursing management. In the training of nurse risk managers, it is desirable to include content focusing on the reflection of management skills and educate reliable practitioners to respond to accidents are desired. The development of educational content and securing the time for training are considered issues that need to be addressed.

### **Study limitations**

There was limitations to the possibility of restricting the details of the narrative because the risk manager was speaking so as not to identify the details of the accident. In addition, since the narrative recalls the past, the limitations of the research are that it may be different from the competency that was actually deployed, and that it is not possible to grasp the competency that the individual exerts unintentionally.

### **Conclusion**

Nurse risk managers played their roles in responding to accidents while controlling their own emotions when they faced with the afflictions. The competencies demonstrated by nurses as risk managers in responding

to accidents were founded on the nursing philosophy of responding to accidents by developing expertise on the basis of the nursing belief of reverting to patient-centered care, as well as on nursing management skills accumulated as the product of experience as a nurse manager. It is necessary to develop a training system for human resources who can respond to accidents by

utilizing the competencies of nurses.

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