



# Near-Miss Reporting to Protect Patient Safety

About Patient Safety
Reporting Experiences &
Reflections of Tzu Chi Nurses



Within Tzu Chi Hospitals' medical information system, "Patient safety reporting system" is anonymous, voluntary, confidential, open and transparent. Tzu Chi Hospitals encourage and advocate the reporting of any abnormal and/or near-miss events related to patient safety. Through the "Patient safety incident reporting", we can identify problems and make diligent improvements to ensure patients' safety and quality of nursing care.





# By Lin Tzu-Chun, Head Nurse, Taichung Tzu Chi Hospital Liao Wei-Hsin, Deputy Head Nurse, Taichung Tzu Chi Hospital

"Patient safety" is the fundamental principle that all medical practitioners should follow. No medical personnel would want to endanger patients' safety. Therefore, standard operating procedures along with the medical care environment are constantly scrutinized, revised, and improved.

The "Taiwan Patient Safety Reporting System" of the Joint Commission of Taiwan features anonymity, voluntary, confidentiality, non-accountability, and joint learning as the starting point. Since 2004, it has been implemented for 15 plus years to establish a platform for experience sharing and information exchange between medical institutions to further create a safe medical environment. Tzu Chi Hospitals also encourage and advocate to report any problems related to patient safety. In addition to discovering the problems through the "patient safety incident reporting", we can learn from the problems and improve on the processes.

Nursing staff are the first line of clinical practice, and the medical profession that has the most frequent contact with patients should be the occupational category where disease safety notifications are most frequently performed. According to the 2018 annual report of the Taiwan Patient Safety Notification System, a total of more than 630,000 notifications were reported from 2005 to 2018. According to an informant's analysis, the nursing staff scored the highest ranking.

However, if we equate the medical safety reporting with "I did something wrong," the reporter may find it difficult to forgive himself/herself. Will this end the nursing career? If it is hidden and not reported, it may be like an unexploded bomb, which brings greater worries to the medical environment. The establishment of a patient safety notification culture is an optimization process to improve the quality of medical care. This article hopes to explore the experience and feelings of the nursing staff among the seven Tzu Chi Hospitals tasked with patient safety incidents.

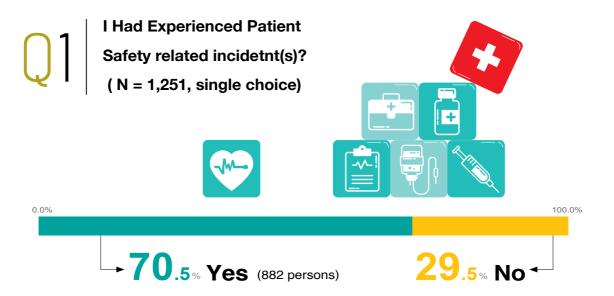
# When an Incident Occurs, Report Immediately

A total of 1,251 valid questionnaires were collected in this survey. First of all, 70.5% of nursing staff had a patient safety incident at work, and 29.5% did not. In fact, only a very small number of incidents caused harm to patients in clinical practice. Most incidents were discovered in advance, but they were still reported. Even if the incident did not cause harm to the patient, for the nurse, it might be a big test for her/his career.

Then we inquired about the immediate response to those who had an incident. 92.0% of the nurses "worried about the safety of the patient and actively intervened in the treatment". The second response was "informed the supervisor or team leader immediately orally or by phone" with 72.9%. The third response was "immediately

# **Basic Statistics**

| Gender                       | Number of People | %     |
|------------------------------|------------------|-------|
| Female                       | 1,191            | 95.2  |
| Male                         | 60               | 4.8   |
| Total                        | 1,251            | 100.0 |
| Age                          | Number of People |       |
| under 20                     | 21               | 1.7   |
| 21~25                        | 413              | 33.0  |
| 26~30                        | 211              | 16.9  |
| 31~35                        | 162              | 12.9  |
| 36~40                        | 194              | 15.5  |
| above 40                     | 250              | 20.0  |
| Total                        | 1,251            | 100.0 |
| Job Title                    | Number of People | %     |
| Registered nurse             | 973              | 77.8  |
| Deputy head nurse            | 54               | 4.3   |
| Head nurse                   | 63               | 5.0   |
| Supervisor                   | 20               | 1.6   |
| Functional unit/case manager | 46               | 3.7   |
| Nurse practitioner/senior RN | 95               | 7.6   |
| Total                        | 1,251            | 100.0 |
| Department                   | Number of People | %     |
| Internal Medicine            | 209              | 16.7  |
| Surgery                      | 195              | 15.6  |
| Pediatrics                   | 49               | 3.9   |
| Obstetrics & Gynecology      | 47               | 3.8   |
| Intensive Care & ER          | 253              | 20.2  |
| Functional Unit              | 19               | 1.5   |
| Kidney Dialysis              | 45               | 3.6   |
| Operating Room               | 86               | 6.9   |
| Outpatient Clinic            | 189              | 15.1  |
| Palliative Care              | 21               | 1.7   |
| Administration               | 30               | 2.4   |
| Psychiatry                   | 45               | 3.6   |
| Others                       | 63               | 5.0   |
| Total                        | 1,251            | 100.0 |



logged in the reporting system and wrote down what happened," accounted for 64.4%. In clinical practice, the immediate response of nursing staff to a patient safety incident is mostly to actively intervene in treatment, and patient safety is our top priority. After preliminary treatment, nurses would immediately notify the attending physician and the unit supervisor, and complete the medical safety report on the day when the medical incident occurs.

In the questionnaire, the proportion with "No need of reporting. Patients' safeties weren't compromised" had a 1.7% response. It is believed that the nursing staff who answered the question had their own judgment. However, sometimes the occurrence of safety incidents is a systemic problem. Perhaps there is no systematic notification, but it should be raised for discussion in the unit or team, which will help the process to be more complete and prevent the same incident from happening.

"When I assisted one particular patient with blood work at a time when barcode system was not in place, I labeled a blood drawing tube with the patient's name. However, the person in charge of the blood drawing did not verify patient's identity and drew blood on the wrong patient." This incident review resulted in the adoption of barcode blood sampling operation system, which greatly reduced the error rate of abnormal blood sampling. After this "memorable" experience, the unit nurses understand the importance of complying with the standard operating procedures (SOP), and no matter how busy they are, they will follow the SOP.

As a senior staff with nearly 30 years of nursing experiences said, every nurse encounters the challenge of "patient safety near-miss" before they elevate their profession to the next level. But no one likes the process of being scared and guilty bound during an incident.

## 50% Near-Miss Are Patient Factors

The first cause of safety incidents encountered by nursing staff is "Patient factors" 51.8%, followed by "Non-compliance with SOP" 31.3%, and "Not paying attention to medication precautions" 22.0%, "Communication factor" 20.4%, "Treatment interrupted" 16.9%, "Error in interpretation of doctor's order" 13.4% and "Dose calculation error" 13.3%.

Among them, "patients' factors" accounted for more than half. In the Taichung Tzu Chi Hospital, the nursing staff reported that the common conditions of safety incidents were mainly patients falling out of bed and their removal of tubing.

Patients are assessed when they are first admitted to the hospital. In addition, patients are identified with a red hand ring to indicate high-risk falling category.

To raise awareness fall prevention aids are provided based on individual's needs which include four-legged walkers and warning devices for getting out of bed. With regards to the removal

What's my immediate response to that patient safety incidetnt(s)?
( N = 882, multi-choice)



I worried about the safety of the patient and actively intervened in the treatment

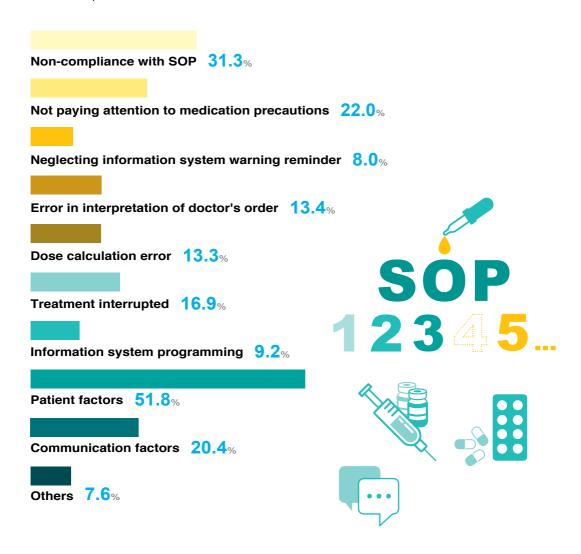
I immediately logged in the reporting system and wrote down what happened 64.4%

I informed the supervisor or team leader immediately orally or by phone 72.9%

No need of reporting. Patients' safeties weren't compromised

Others 0.5%

# The patient safety incidetnt(s) I've encountered were mainly about? ( N = 882, multi-choice)



of nasogastric tubes, health education is provided to patients and main caregivers. Taichung Tzu Chi Hospital innovated on the placement of nasogastric tube and found that the rate of self-extraction has reduced significantly. The downward trend has been promoted in the clinical care of various units. It is hoped that it will reduce the incidence of nasogastric tube slippage.

# **Establish a Culture of Positive Near-Miss Reporting,** Counseling to Improve Professional and Psychological Power

What are the immediate concerns of the nurses when a medical safety incident must be notified? When an incident occurs, nursing staff must face psychological pressure. The highest proportion of the questionnaire results is that "Patients are harmed because of me" accounted for 73.4%, followed by "Worry about being blamed by the team" 27.8%, and the third is "Fear of being punished" accounted for 23.0%.

While the patient safety incidetnt happened and should be reported, my concern(s)?( N = 882, multi-choice)

Patients harmed because of me 73.4% Done nothing wrong & fear being involved 10.4% Fear of being punished 23.0% Worry about being blamed by the team 27.8% Would impact my image 15.5% Afraid of being asked to be responsible 11.1% Supervisor(s) couldn't handle fairly 7.4%No resource to assist me for solution 18.8% Others **4.5**%

When the patient safety incident occurred, some nursing staff even said, "I feel uncomfortable because my negligence may have caused injury to the patient", "I have this patient safety incident, how will others think of me", and even in serious cases, medical staff may even consider leaving this occupation.

We know that the medical safety incident has already occurred, and the follow-up counseling and care for the nursing staff at the moment of the incident is also needed.

Some nurses who just started their post went to supervisors to contemplate quitting. After cordial discussions with the instructor and the unit supervisor, it turned out that my colleague had remorse about the patient safety incident caused by providing the wrong medication, and she constantly blamed herself. The feeling that "I am not qualified for clinical nursing work often comes up between jobs, so I simply say that I am leaving the job, and leaving the job will no longer be a psychological torture". After comfort and guidance of the senior colleagues and supervisors, she reflected on her mistakes, improvement, and progress after the patient safety incident and decided to stay. In fact, patient safety incidents may also be the result of the systems or processes in addition to human factors. The main purpose of the safety incident notification is to understand the root cause of the incident; to further discuss and improve; and to avoid similar incidents from happening again. More importantly, it reminds us to be more careful and not to repeat the same mistakes.

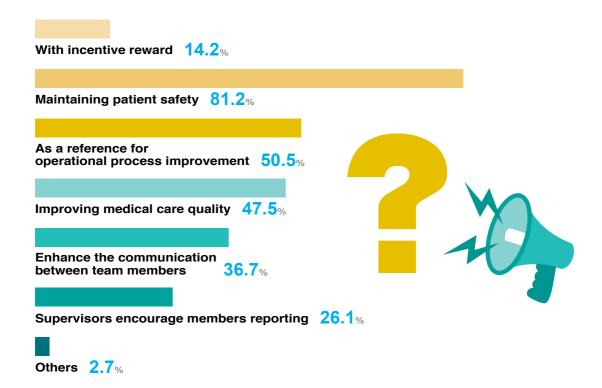
# All for Patients' Safety, Improving Procedure and Quality

"Maintaining patient safety" accounts for 81.2% as the motive for notification, the second is "As a reference for operational process improvement" 50.5%, and the third is "Improving care quality" 47.5%. It can be seen that the main motivation of nursing staff to report on the incident is to maintain patient safety and improve the safety of the medical environment.

A nurse once disclosed that she almost gave the wrong medication in an emergency. It turns out that there are two different injections with similar packaging, and they were placed adjacent to each other. She felt that it was necessary to propose improvement so she notified her leadership about the incident. After the reporting, the Nursing Department conducted a review and separated the two medicines in the ambulance and strengthened reminders to avoid the risk of providing wrong medicine. This is a medical safety report for early prevention, which is worthy of praise, to remind colleagues to remain alert and diligent.

The goal of the Ministry of Health and Welfare mentioned that "patient safety" is the foundation of medical quality, which is the most basic common goal between medical

# The motive(s) for my patient safety incidetnt reporting? ( N = 882, multi-choice)



care providers and patients. Thus, the ministry is working together to improve the quality of medical care in Taiwan and build a safe medical environment. The results of the questionnaire show that nurses in Tzu Chi Hospitals understand the goals of patient safety in Taiwan and implement them in clinical care.

In order to reduce safety incidents and promote patient safety, what measures do nurses hope the hospital will take?

According to the results of the questionnaire, the highest proportion is "Replenish nursing manpower," accounted for 67.8%; the second is "Improve standard operating procedures (SOP) to make it easier to implement" accounting for 37.2%; and the third is "Increase patient safety education and training" accounting for 34.5%. The hospital management and various teams regard patient safety as an important task and continue to improve.



# To reduce the patient safety incidetnt occurance, things I wish the hospital would do?( N = 882, multi-choice)

Hold related competition and quality control activities 11.7%

Do surveys to examine patient safety and improve if necessary 25.6%

Provide legal assistance and consultation while an incident occurs 24.5%

Increase patient safety education and training 34.5%

Set up patient safety IT platform to improve knowledge and skills 29.3%

Improve standard operating procedures (SOP) to make it easier to implement 37.2%

Enhance monitoring mechanism for prevention 28.3%

Replenish nursing manpower 67.8%

Others 2.3%



For example, nursing supervisors can share cases of safety incidents anonymously; strengthen the promotion of the importance of observing the operating procedures at the morning meeting/rounds; and actually participate in the workflow, which encourages nursing staff to raise discussions when encountering difficulties, and jointly improve and simplify the procedures. The care process can not only implement patient safety care, but also improve job satisfaction.

Long-term bedridden patients are a high-risk group for pressure wounds. In order to actively prevent the occurrence of patient pressure injuries, the nursing team of

Taichung Tzu Chi Hospital designed a "turnover clock" after brainstorming and provided it to nursing units as a tool for turning education. The "turnover clock" method utilizes the circular clock face and has staff stick a position (left or right) onto the clock every two hours. This will help colleagues and family members to immediately know when and where to turn by looking at the clock. The use of "visual management" to simplify the process, not only can quickly know whether the patient has actually been turned can also reduce the incidence of pressure ulcers.

In addition, there were also cases of safety incidents caused by communication factors. After discussion, it was discovered that the newly hired Indonesian foreign caregiver failed to implement the correct nursing due to language barrier, and thus the nasogastric tube feeding method was not operated correctly. The countermeasure is to translate the relevant common care technology into English, Vietnamese, and Indonesian health education leaflets to reduce language barrier; improve the knowledge of foreign caregivers; and greatly reduce the foreign caregivers' new challenge: anxiety to communicate on the job, under the new environment and language barrier.

Taichung Tzu Chi Hospital analyzes the causes of patient safety incidents every year. Quality control circle techniques and case discussions are adopted to improve standard operating procedures and simultaneously incorporate patient safety education and training into E-learning. Now the staff can learn about continuous improvement in knowledge and skills of patient safety. For example, a project to improve the quality control circle was set up due to the high rate of wound infections in patients after surgery. It was found that the main reason being the inconsistent wounds dressing. After the wound dressing procedures were revised and the E-learning course was recorded, wound infection incidents were significantly reduced.

The reporting of near-miss incidents is like a warning sign to flag the problem early and improve it as soon as possible. Nursing staff should be mindful of the situation at the moment of the incident. Being alert and mindful is the right mentality but to be overcome with defeat. Learn the lesson and abide by the SOP. Establish a correct mentality and report to make the entire care system better, and turn crisis into progress for improvement.

In clinical practice, nursing supervisor encourages nursing staff to interact with patients and their families. Through observation and communication, they can understand the needs of patients and provide individual care. This not only improves care satisfaction, reduces the occurrence of patient accidents, but also improves the sense of accomplishment. This allows our original resolve of nursing profession and continues to shine.