

Treat Fire with Love



Chao You-Chen, M.D., Superintendent of Taipei Tzu Chi Hospital

On the eve of June 27, 2015, the ravaging fire from the dust explosion at the Formosa Fun Coast injured many young partygoers, sending panic and confusion across the waterpark. The injury toll continued to mount with each breaking news. Although we were informed by the relevant authority that there were many hospitals nearby the incident site, which should be able to accommodate all injured patients, my intuition told me otherwise. I wanted our staff at Taipei Tzu Chi Hospital to be prepared should any situation arise. The emergency mobilization was issued at 10pm, 126 hospital staff returned to the hospital from the dormitory or their residences, medical volunteers awoken from their slumber to standby at ER. It was not before long when ambulances began cruising in, transporting 13 young patients with severe burn.

The situation was critical. The surface of 2nd and 3rd degree burn on these patients averaged around 60%, or 90%

in the most severe case. Our medical staff crowded at the patients' bedside, busy intubating, infusing, cleaning wounds, and contacting family members. Once conditions stabilized, these patients were immediately transferred to ICU. Firefighters soaking in their sweat, volunteers consoling the young, pain-stricken patients, cleaning staff delivering oxygen tanks and dressing carts, nurses divided into two teams treating patients transferred to ICU at 3rd and 6th floor. By the time the final patient was treated, it was long past midnight.

June 28 was a Sunday. A letter of condolence from Master Cheng Yen and emergency relief money were delivered by the Religious Department of the Foundation. I hand it over in person to the anxious family members, tears were clearly visible in their eyes. The plastic surgeons estimated, according to past medical literature, the mortality rate for our patients with large body surface burn would

exceed 50%. To build a stronger support for our medical team, I acquired the assistance of the Burn Center in Hualien Tzu Chi Hospital, and Nurse Chen Wen-Chun and Wang To-Jung, experienced in burn care, arrived in Taipei by an overnight train. Plastic Surgeon Chuang Chun-Chi, Nurse Chen Huai-Yu, Yu Wan-Ju, and Lai Hsiao-Fan from Hualien Tzu Chi Hospital; Plastic Surgeon Hsu Honda, Nurse Anesthetist Lin Hui-Mei, Huang She-Fen, and Su Shih-Yun from Dalin Tzu Chi Hospital; Supt. Chien Sou-Hsin, Plastic Surgeon Yang Chou-Chih, Chang Pi-Shan, and Nurse Chang Hua-Ju from

Taichung Tzu Chi Hospital; and Dir. Peng Tai-Chu, Asst. Prof. Hsieh Mei-Lin, and Ass. Prof. Yi-Maun Subeq from Dept. of Nursing, Tzu Chi University all came to assist.

After the dust explosion incident, 14 patients were admitted to Taipei Tzu Chi Hospital, and 12 of them stayed for treatment. To ensure that all our patients receive quality care and to eliminate risk of infection, we isolated a positive pressure ventilation burn section inside ICU to centralized all the burn patients, regulate in and out traffic, setting up video calls to replace face-to-face visit, and



During the care period, Chao You-Chen, Superintendent of Taipei Tzu Chi Hospital had been visited the burn patients at the ICU every early morning.

hold daily interdisciplinary meeting every 8am and 12:30pm, discussing in detail the conditions of each patient. After a two month long treatment, most of our patients were successfully transferred out of ICU or discharged, except for Huang, who suffered a 95% body surface burn, succumbed to her injury. A group of heroes and heroines that occupied a majority of the staff devoted to the rescue deserves a proper recognition. This group is known as nurses.

Every patient required wound dressing at least twice a day, last an hour or two each time, with the assistance

of at least 6 to 8 nurses working in collaboration. From preparing medicine, undressing, unpacking, clean, dressing, apply crepe bandage, apply gauze, change bed sheets, to cleaning the patient's body, every single procedure is critical. In response to the high demand of dressing staff, nurses who were experienced in intensive care or burn care teamed up into what was called a "dressing team", with seven nurses a team, two teams in rotation (day shift and night shift). Before each dressing session, the team would hold a meeting, discussing the dressing methods and



On August 26, 2015, Taipei Tzu Chi Hospital hosted a farewell party for two burn victims, everyone was happy for them.

wound conditions of each individual patient. With each surgery, wound debridement, grafting, and dressing methods change accordingly. With the end of each shift, team members would again gather together to discuss wound conditions and dress techniques. To shorten dressing time and minimizing patient pain, the nursing team developed their own dressing manual, documenting in detail the conditions, burned areas, and dressing procedures of individual patient. It is a perfect example of the mindfulness and patience of our nurses.

What the patients and their families looked forward to each day was the video chat twice a day after wound dressing. Some patients had trouble speaking, our nurses would accompany them and report to the family members on the other side of the screen how the patient was doing. As the burn patients have elevated metabolism rate, adequate nutrition is vital to accelerate wound healing and to build immunity. Most patients had burns to the extremity, and the thick gauzes wrapped around the limbs limited their mobility. The nurses had to feed them spoon by spoon with occasional words of encouragement.

Wound dressing already demanded a great deal of nursing staff. Starting week two, the burn patients would require intensive debridement and grafting, the additional tasks further strained the nurses

in the operating room. In response, nurses from all departments came to assist, either during off-hours, cutting short vacation time, or postponing resignation.

Many young nurses in Taipei Tzu Chi Hospital care were thrown into the fray without any experience. They faced burn patients for the first time, and the inexperience translated to stress and fear of inability to care for these critical patients. As they watched the large surface burn on these patients, listened to their cry and plea when dressing, and the empathy from age similarity, many of the young nurses burst into tears on several occasions. Thanks to the guidance, comfort, and encouragement from senior nurses, together with the assistance of psychologists, these young nurses gradually adapted to the stress. The frequent “thanks” from the patients and their families also revitalized our medical staff.

Under the attentive care and treatment of the medical team and volunteers, the conditions of these burn patients finally stabilized, and many were discharged. No matter where they live, in Taipei, Yilan, Hsinchu, or Yunlin, the community volunteers are there to assist with the follow-up care. I would like to thank all our Hospital staff for their selfless dedication. We shall continue on the path of saving lives together and side by side.