

# Emergency Medicine in Japan

JMAJ 52(4): 211–213, 2009

Masami ISHII,\*<sup>1</sup> Takashi NAGATA\*<sup>2</sup>

## Overview

In 2007, we stand at a crossroad for Japan's emergency medical system. Over the last decades, the central government developed a high standard healthcare system for emergency medicine, pediatric care and perinatal care throughout Japan, achieving one of the lowest perinatal mortality rates and the highest life expectancies in the world. Japan's high quality healthcare system is the foundation for the social security and well-being of the Japanese people.

However, due to recent healthcare budget cut initiated by the central government, especially by the Ministry of Finance, the emergency medical system in Japan is seriously suffering because the healthcare system is considered unprofitable. At the same time, there are issues of payment for hospital night-duty and hospital doctors working too much time. In addition, the new post-graduate medical training system has led to an uneven distribution of the new generation of physicians. Unfortunately, emergency medicine is not popular for them, and this new training system has made it more difficult for the older generation doctors who are responsible for the current emergency medical system to hand over to the next generation. As a result, maintaining the emergency medical system in Japan will be difficult in the near future.

## History

The increasing number of road traffic injuries in the 1950s and 60s triggered the implementation of an emergency medical system in Japan. In 1964, the ordinance for emergency hospital designation and notification was issued by the

Ministry of Health and Welfare, and in 1977, emergency and critical care centers as tertiary emergency medical institutions were established nationwide based on the national project to establish an emergency medical system. The Emergency Life-Saving Technician's Act was enacted in 1991 to enhance pre-hospital care.

The demand for emergency medical care has risen year by year over the last 40 years. The statistical data from the Fire and Disaster Management Agency, the national headquarters of the pre-hospital system in Japan, shows that the number of emergency cases transported by ambulance was 215,000 in 1963, and then grew to 2,468,000 in 1988 and 4,958,000 in 2005. The breakdown by reason for ambulance transport shows: illness was 38.9% and injury was 42.5% in 1966, and illness was 60% and injury was 25.4% in 2005. To see the details of age distribution for ambulance transport, 48.7% were people aged 65 years old and over, and 43.2% were people aged between 18 and 64 years old, and adults including these two patient groups accounted for over 90% of the total number of emergency cases transported by ambulance.

## Present

Recently, the needs for the emergency medical system have changed as Japan becomes an aging society with a low birth rate and improved traffic safety.

There have also been quantitative and qualitative changes in the emergency medical system in Japan. While the mortality due to traffic injuries and work-related injuries have decreased recently, there is a huge increase in the number of mild emergency cases transferred by ambulance and overuse of the emergency medical system, or

\*1 Executive Board Member, Japan Medical Association, Tokyo, Japan (jmaintl@po.med.or.jp).

\*2 Director, Department of Emergency Medicine, Himeno Hospital, Fukuoka, Japan (nagata.takashi@gmail.com).

so-called “convenience store emergency.” This has led to an increased number of people seeking after-hours medical treatments, and also disturbs the activities of medical staffs and paramedics. As a result, emergency medical treatment for seriously injured or ill patients is delayed. Traffic injuries tend to be polarized either to minor and severe/complex conditions because of the strengthening of government commitment and improvement of safety devices.

The present situation of pediatric emergency medicine is becoming complicated. The birth rate is declining and parents do not have sufficient knowledge about child care. Additionally, parents are socially isolated, and they lack confidence in taking care of their children. As a result, there are an increasing number of minor cases in pediatric visits including consultation for child care. At the same time, serious pediatric cases need to be identified from these minor cases of pediatrics.

The present situation of prenatal care and obstetrics is becoming critical because of the imbalance between the number of hospitals available for prenatal care and increased demand from patients, and the number of physicians working for prenatal medicine and obstetrics is decreasing dramatically.

More than 30,000 people commit suicide every year, and this high death rate has continued for years. Reconstruction of the emergency medical system for psychiatric patients and their social support system is mandatory.

Japan’s society is rapidly aging, and the number of elderly patients with multiple comorbidities is increasing in the emergency medical system in addition to the increased number of difficult elderly cases caused by a lack of welfare and social support. Elderly patients in the terminal stage are often handled by the emergency medical system.

In addition to these factors described above, establishment of long-term care insurance and the new health insurance program especially focused on the elderly aged 75 years old and over makes the present emergency medical system in Japan even more complex. And much more effort and attention should be paid to informed consent and medical practice. The aging of society has led to a change of disease structure, which will lead to new demands on the emergency medical system. Now it is time to consider how the emer-

gency medical system should be adapted in the future to take these situations into account. Moreover, we should also discuss with the government and the people about how to build a nation-wide emergency medical system including disaster medical response and laws to protect the people.

### Issues of the Current Emergency Medical System in Japan

The current emergency medical system consists of three layers; clinics are defined as primary, small hospitals as secondary and large hospitals with emergency and critical care centers as tertiary emergency medical institutions. Nowadays, this three-layered emergency medical system is not working appropriately, and is going to fail. To maintain the quality of service provided by emergency and critical care centers, serious or critical patients should be intensified to these institutions. This condition is guaranteed by an appropriate pre-hospital triage. In case of traffic injuries, the judgment of severity is possible in the pre-hospital setting; however, the illness severity of the elderly is quite difficult to judge for the following reasons: 1: the elderly have many complications, 2: the elderly have reduced reserved physical capacity, 3: the elderly have uncured chronic illnesses, 4: the elderly have social issues, 5: the symptoms are not always typical, 6: the elderly have many complaints, 7: the variety of diseases other than central nerve system diseases can cause consciousness disturbance, etc. Another issue regarding Japan’s emergency and critical care medical centers is that they were designed to provide medical services mainly for adult critical illness and injury, and the emergency medical system focusing on pediatrics, prenatal medicine, and psychiatry is handled by a different framework. As a result, emergency patients for pediatrics, prenatal medicine, and psychiatrics have often difficulties in accessing appropriate hospitals.

### Solutions

To solve these issues, a tight and mutual network among the primary, secondary and tertiary emergency medical institutions must be established, and this networking should be strengthened in local areas to improve the capability to respond to medical emergencies. There are several types of emergency medical system networking including

---

pediatrics in the local areas in Japan. The solution should be based on self-reliance and mutual agreement among people, authority, and medical professions in the local area should be accomplished. The current administrative and bureaucratic system in Japan is vertical and inflexible, and this system should be converted to a more flexible, mutual and horizontal style. Additionally, a network to overcome the gaps between public and private sectors should be established. Also, we should ensure that people are satisfied with the quality of current medical service, and no patients are disadvantaged whilst the system is being upgraded.

Hospitals used to have capability to accept and sort many different kinds of patients; however, the functions of hospitals have become segmented, and emergency departments have also become stratified according to primary, secondary, and tertiary. In the present healthcare policy,

which focuses on reducing the expense, medical resources both for patients and equipment will be scarce and establishing hospital networking will be difficult in some local areas. The United States “ER” or emergency room style medical system, which can accept all kinds of emergency patients and then they are triaged and sorted appropriately according to medical conditions, is one of the solutions in Japan, and worthwhile considering.

The methods of providing terminal care must also be reconsidered as immediately as possible to reduce the burden on the frontline emergency medical system in Japan.

#### **Acknowledgements**

The authors would like to thank for Ms. Mieko Hamamoto, an editorial staff of the JMA Journal for her assistance in developing the manuscript.