

Abstract

Delay factors of prehospital and inter-hospital transfer of acute stroke patients: Results from a nationwide survey by EMS and stroke physicians.

Mi-sun Oh, Minwoo Lee and Kyung-Ho Yu*

Department of Neurology, Hallym Neurological Institute, Hallym University, Korea

Sang-Moon Yun, Won-Ho Kim

Division of Cardiovascular Disease Research, Department of Chronic Disease Convergence Research, National Institute of Health (NIH), Korea Disease Control and Prevention Agency (KDCA)

Cerebrovascular disease causes not only high mortality rates, but also functional impairments of patients, resulting in huge family and social burdens. In particular, it is well known that timely transfer within the golden time is required for the optimal treatment of patients with acute stroke. Thus, a rapid response must be effectively performed from the pre-hospital stage, but a specialized stroke patient transfer system has not been established in the existing emergency medical system. Therefore, the necessity of systematic and integrated establishment of an emergency medical system for stroke patients within the framework of the existing emergency medical system has emerged.

The purpose of this study is to identify the current status of the emergency transfer system of patients with acute stroke and develop a transfer network system at the pre-hospital and inter-hospital stages that reflects the local status to present strategies to improve the implementation of the stroke emergency treatment capacity in the community. To this end, two questionnaire surveys targeted 119 paramedics and stroke physicians were conducted regarding the recognition and status of the pre-contact system and the inter-hospital transfer system for stroke patients. Through the result of survey, it was revealed that the state of the nationwide systemized advance contact system has not been properly established, and that there is a demand from paramedics and stroke physicians in the field to the better system.

Therefore, the clinical application of the stroke pre-contact system and the inter-hospital transfer system with continuous education of 119 paramedics that will be developed through this study will serve as a platform for stroke patients to receive faster and more accurate treatment, as a basic model for a nationwide pre-contact program for 119 paramedics.

Keywords: Stroke, Emergency transfer system, Network, Clinical application

Reasons for not conducting pre-hospital notification

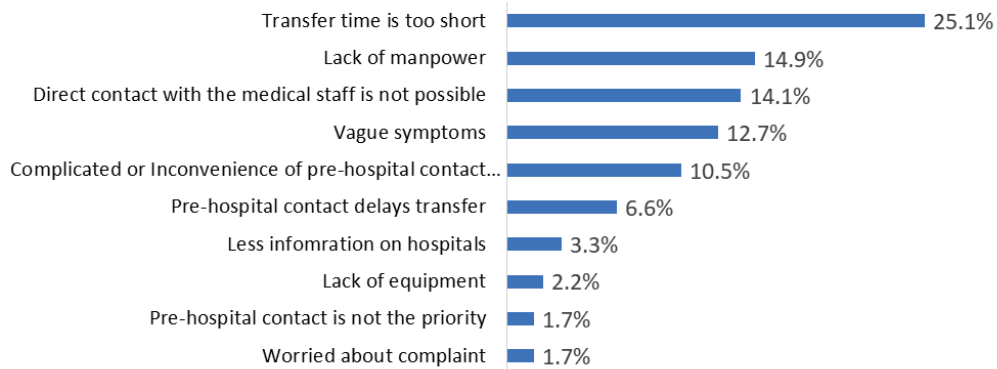


Figure 1. Reasons for not conducting pre-hospital notification

Current Status of Pre-hospital Notification System for Stroke Patients

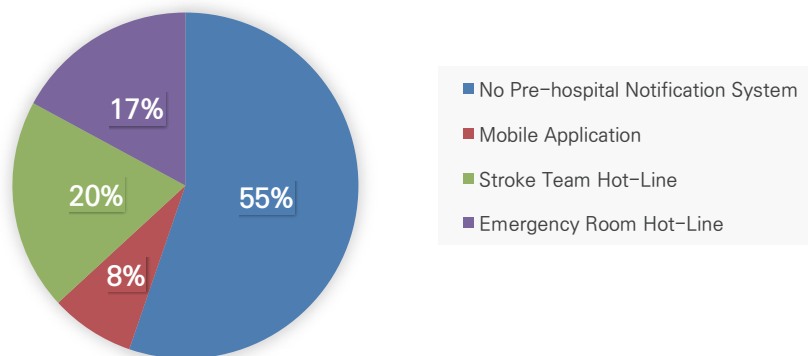


Figure 2. Current status of pre-hospital notification system for stroke patients

Unmet factors of inter-hospital transfer system for acute stroke patients.

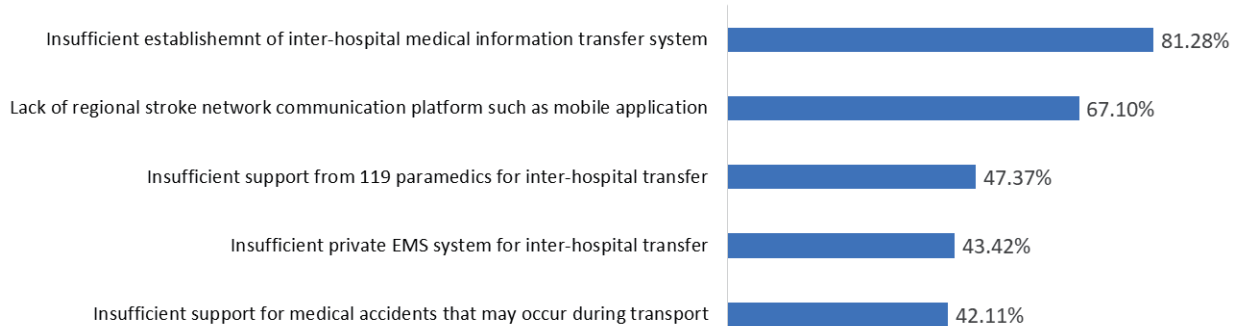


Figure 3. Unmet factors of inter-hospital transfer system for acute stroke patients