Abstract

INTRODUCTION:

Emergency doctors must make decisions for many patients in a limited time. Various emergency cases are not compatible with routine conditions as described in textbooks, so doctors use clinical decision making (CDM) processes to act in the best possible way. In the present work, these processes and some of the related factors were assessed.

METHODS:

Decisions made by doctors were studied via patient medical records, doctors' notes and interviews with decision-making doctors from the Emergency Department of Rasul-Akram Hospital, Tehran, Iran. All doctors were unaware of this research, and they had previously studied CDM processes as part of their training curriculum. A total of 10 day and 10 night shifts (240 h) between 1 March 2010 and 30 May 2010 were considered for the study.

RESULTS:

Rule-based, event-driven, knowledge-based and skill-based decisions, respectively, were the most frequent processes used by doctors in 726 first visits. It was also found that 7% of decisions were not made on a known CDM basis, that all of them were for non-urgent and 'standard' patients, and that most patients who were non-urgent were referred to first-year postgraduates. Skill-based decisions were not applied in very urgent cases; 107 out of 726 decisions on first visits had shifted to knowledge-based process by the time of final treatment decisions. For final treatment decisions, rule-based and knowledge-based processes were more frequently used than other CDM processes.

CONCLUSIONS:

The rule-based process is the most common CDM process used by emergency doctors, perhaps because of the minimisation of human error in this process. CDM choice may be influenced by triage level, treatment room and doctors' educational levels. Revealing and studying these factors may help shift decisions to the best possible decision making levels, defining a model in future research.