Most patients are triaged using the emergency severity index

Dear Editor

I read the recent publication from DeLaney et al. entitled “*Chest pain triage: Current trends in the emergency departments in the United States*” in *Journal of Nuclear Cardiology*.¹

The study is remarkable because it reviews clinical scoring systems and highlights the important role of risk stratification among patients with chest pain in the emergency department (ED). Chest pain is a hallmark in triaging patients at risk for acute myocardial infarction (AMI), so it is critical to manage cardiac patients effectively.

I would like to bring your attention to additional aspect of triage scales, which may add further perspectives to the conclusions in the current study. In fact, the study missed out to consider the emergency severity index (ESI) in the review. The ESI was the most commonly used triage system (70% of hospitals).² Patients are triaged mostly using the ESI than any other triage acuity system in the United States, so the ESI as a risk stratification tool cannot be overlooked and ignored.

The ESI is a five-level triage scale which was developed in 1999 in the United States.³ The ESI asks which patient should be seen first and resources are necessary to move the patient to a final disposition. ESI triage scale showed a substantial level of overall reliability 0.791 (95% confidence interval: 0.787-0.795).⁴ The original ESI handbook (2012) states that each patient with chest pain must be assessed on the basis of the level-1 criteria. Patients with chest pain who are pale, diaphoretic, and hypotensive may require immediate life-saving intervention such as oxygen administration, cardiac monitoring, and IV access. Most patients with complaints suspicious for acute coronary syndrome (ACS) may not need immediate life-saving intervention until ESI level 1 criteria are not present (such as acute respiratory distress or hemodynamically unstable). Thus, the presence of

high-risk criteria for myocardial ischemia will be categorized into ESI level 2.

Patients with recent upper respiratory symptoms, productive cough, and chest pain, and no other cardiovascular risk factors will be allocated to ESI level 3.⁵

For the reader, it would have been helpful to read further details on the ESI triage system as the most used triage scale in the United States.

Amir Mirhaghi, PhD, MSN, RN
Assistant Professor
Evidence-Based Caring Research Center,
Department of Medical-Surgical Nursing,
School of Nursing and Midwifery,
Mashhad University of Medical Sciences,
Chaharrahe-Doktorha, Mashhad,
Razavi Khorasan 9137913199, Iran;
mirhaghi@mail.com.

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