

Accuracy of a Simple Clinical Assessment Compared to Structured Triage Protocol in Detecting Priority Category in Emergency Department, Teaching Hospital, Kurunegala

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Rapid triage of patients in an emergency department is essential and has a significant impact on patient outcomes. This study was designed to assess the agreement between eyeball triaging and a formally structured triage system and to compare the short-term (48hrs) outcome of the patients with each triaging method. Study was designed as a prospective cohort study in teaching hospital, Kurunegala. All un-booked patients with age >16 who came to the emergency treatment unit, except those who had a pregnancy >24 weeks or required anti rabies vaccination were included. Structured triage was performed by trained triaging personal. Eyeball triaging was a non- systematic clinical assessment based on clinical assumption, performed by admitting medical officer. Both methods triaged patients as red (Emergent), Orange, yellow and Green (Non urgent). Primary analysis assessed the accuracy of eyeball triage level compared to the structured triaging model. Short-term mortality (48hrs) of the Red and Orange categories were assessed secondarily. A total of 1100 patients were included. Eyeball triage was performed for 1087 (98.8%) patients. Structured triage performed for 1004 (91.2%). Patients who had both triage assessments n=1004. Agreement between two triage methods was fair (kappa 0.2). The PPV, NPV and sensitivity and specificity of the eyeball method compared to structured method in most urgent group and non-urgent groups were 66.7%, 84.7%, 79.6% and 73.9% respectively. 48-hour mortality category 1 patients was approximately 5% in both methods. Agreement between eyeball triage and structured triage is fair. Short-term mortality of the category 1 patients appeared to be the same for both methods. Therefore eyeball triage could be used in emergency departments when necessary with no increase in patient mortality.

Key words: Triage, Emergency department, Hospital