## Abstracts of Scientific Papers-WADEM Congress on Disaster and Emergency Medicine 2017

## A National Survey of Emergency Departments Triage Systems in Thailand

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Study/Objective: A National Survey of Emergency Departments Triage Systems in Thailand. The aim of this study is to assess the current status and illustrate the problems of the Thailand Emergency Department triage systems.

Background: Because the volume of patient admissions to an Emergency Department (ED) cannot be precisely planned, the available resources may become overwhelmed at times, "crowding," with resulting risks for patient safety.

Methods: A cross-sectional, descriptive study design. The participants were 178 registered nurses working in emergency departments within the Unitary Care Hospitals of the Ministry of Public Health and University Hospitals. The research instruments were: personal information, a survey questionnaire, and structured interview questions. The data were analyzed using Chi-square test, Fisher Exact Probability Test, and content analysis.

Results: Almost all hospitals have a triage zone (87.9%) where the assignment was mainly done by a nurse (98.3%). In order to assess and identify the priority of the patient's need for medical treatment, most hospitals (75.8%) use the Emergency Severity Index (ESI) approach to classify patients into five levels with different colors. Following the ESI approach, some hospitals (15.2%) may also classify the triage into three, fpur, or five levels with different conventional classifications, both symbols and colors. When inspecting the triage system of the emergency department services, the triage system in regions were significantly different (P < .05). The difference in the staff knowledge and experience influences the triage quality; both under and over triages were observed among experienced nurses and related health care personnel.

Conclusion: It is recommended that the ESI approach should be announced as the national policy by National Institute of Emergency Medicine. This approach should be clearly identified and promoted to use for patient triage. Quality improvement projects, as well as evaluative research, are recommended to strengthen the quality of triage among nurses in the emergency room.

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Do Physicians Triage Patients more Reliably than Nurses in the Emergency Departments? A Meta-analysis Amir Mirhaghi<sup>1</sup>, Elham Pishbin<sup>2</sup>

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Study/Objective: The aim of this study is to compare, meta-analytically, the inter-reliability of physicians and nurses triage decisions in the emergency departments (EDs).

**Background:** Few studies compared effectiveness of physicians and nurses triage decisions in the emergency departments. It's not clear whether physicians triage patients more reliably than nurses in EDs.

Methods: Electronic databases were searched up until March 1, 2014. Studies were only included if they had reported sample sizes, reliability coefficients, and adequate description of the reliability assessment. The Guidelines for Reporting Reliability and Agreement Studies (GRRAS) were used. Two reviewers independently examined abstracts and extracted data. The effect size was obtained by the z-transformation of reliability coefficients. Data were pooled with random-effects models, and meta-regression was performed based on the method of moments estimator.

Results: Thirty studies were included. The pooled coefficient for the physicians, nurses, and experts were 0.770, 0.733, and 0.944, respectively. Agreement was fairly higher for the homogenous raters, in comparison with heterogeneous raters (0.770 vs 0.765).

Conclusion: The physicians and nurses showed a substantial level of overall reliability in the emergency departments. However, physicians showed higher agreement than nurses; the difference is not significant.

Group by	Statistics for each study					Correlation and 95% CI		
Raters	Correlation	Lower	Upper limit	Z-Value	p-Value			
EE	0.944	0.818	0.984	5.568	0.000	T	4	i i
NE	0.758	0.671	0.824	10.844	0.000		•	
NN	0.733	0.687	0.774	19.377	0.000		•	
NP	0.758	0.550	0.877	5.224	0.000		•	
PP	0.770	0.428	0.919	3.558	0.000			
Overall	0.796	0.773	0.816	36.677	0.000		1	
						0.00	1.00	2.

Figure 1. The pooled coefficients estimates of triage reliability coefficients based on ED raters. EE: expert-expert, NE: nurse-expert, NN: nurse-nurse, NP: nurse-physician, PP: physician-physician.

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