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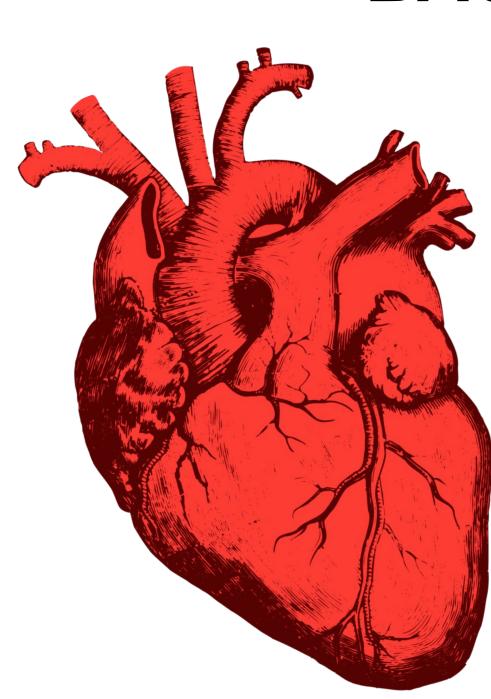
# Emergency Department Nurses' Triage and Prioritization Decisions in Patients Experiencing Acute Coronary Syndrome Symptoms: An Integrative Review

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## RESEARCH QUESTION

How do emergency department (ED) nurses make triage decisions and/or prioritize care for patients that are experiencing symptoms consistent with acute coronary syndrome?

#### **BACKGROUND**



- Acute Coronary Syndrome
   (ACS): 1) Unstable
   angina, 2) Non-ST-elevation
   myocardial infarction (MI), or
   3) ST-elevation MI
- Every 40 seconds in U.S., a person experiences ACS (Virani et al., 2020)
- Over 260,000 people seek care in ED for MI (Rui & Kang, 2017)
- Early identification of ACS = earlier interventions to reduce morbidity and mortality (e.g., Collet et al., 2020; Ibanez et al., 2018)

## PROBLEM & SIGNIFICANCE

- Little information on how nurses identify patients with ACS and triage them or make prioritization decisions related to their assessment and care
- In order to accurately triage, need to recognize indicators of ACS in diverse patients
- Understanding how nurses make decisions about ACS symptoms will support development of interventions that may improve accuracy of triage decisions and earlier workup and intervention for patients with ACS in the ED

#### **METHODS**

- Integrative review guided by Whittemore and Knafl (2005)
- Databases: CINAHL and PubMed
- Inclusion criteria:
  - a) ED nurses b) Patients presenting with ACS symptoms c) Any age
     d) published 2007 to 2021 e) discussed nurses' triage and/or prioritization decisions in context of ACS symptoms f) research
- Exclusion criteria:
- a) Not in English b) non-research articles
- Evaluation: Johns Hopkins Nursing Evidence-based Practice Model<sup>†</sup> (Dearholt & Dang, 2017)
- Data Analysis:
- a) Matrix method (Miles, Huberman, & Saldana, 2014)
- b) Constant comparative method (Lincoln & Guba, 1985)
- c) Generation of themes after discussion/agreement (Whittemore & Knafl, 2005)

## RESULTS

PubMed Hits: 179 CINAHL Hits: 153

Total Hits	<u>Duplicates</u> <u>Removed</u>	Records Screened	Full-text Reviewed	Included in Review	
332	68	264	17	4	

ARTICLE	LEVEL/ QUALITY	SETTING	SAMPLE	STUDY DESIGN
Arslanian- Engoren (2009)	Level 3 Quality A	One ED; Midwestern USA	12 ED nurses (11 women, 1 man)	Descriptive Content Analysis Focus group
Arslanian- Engoren et al. (2011)	Level 3 Quality B	Nationwide sample; USA	158 ED nurses (all members of Emergency Nurses Association)	Descriptive Survey study
Ryan et al. (2015)	Level 3 Quality B	One ED; Australia	153 ED patients w/ confirmed ACS (94 male, 59 female)	Descriptive Retrospective
Sanders & DeVon (2016)	Level 3 Quality B	Two EDs; Southeastern USA	283 ED patients with confirmed ACS	Descriptive Retrospective

## **RESULTS -THEMES**

- Chest pain is hallmark symptom used to identify patients experiencing ACS
- Two studies suggest history of heart disease used to make triage decisions
- Multiple factors affect how nurses make triage decisions (Arslanian-Engoren, 2009):
  - ✓ past medical history
  - ✓ patient demographics
  - ✓ clinical presentation/general appearance
  - ✓ transportation mode
  - √ vital signs
- Limited information regarding **nurses' experience**; more experience may be related to less accurate triage (Ryan et al., 2015) or no difference in accuracy (Sanders & DeVon, 2016)

## IMPLICATIONS & CONCLUSIONS

- Little existing generalizable knowledge related to this question
- Additional research necessary: larger, more representative samples
- Limited existing evidence suggests potential targets for educational/practice interventions

#### **REFERENCES\***

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