



Tackling Sepsis: Nurses Take the Frontline!

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Introduction

Sepsis is leading cause of death in US hospitals. It is accountable for 1 out of 5 deaths. Sepsis is not bias - everyone is at risk. If identified promptly sepsis patient can have a positive outcome. Emergency care nurses are first to hear the chief complaint and assess the patient. ER RN can promptly identify and react to sepsis alerts, we will have less sepsis induced deaths. Research has proven that sepsis bundles starting in the emergency department save lives and reduce complications in patients.

Research Question

In adult emergency department patients with suspected sepsis, what is the effect of the Detect-Act-Reassess-Titrate (DART) tool on timeliness of sepsis identification and treatment compared to no standardized tool for sepsis identification and treatment?

Purpose

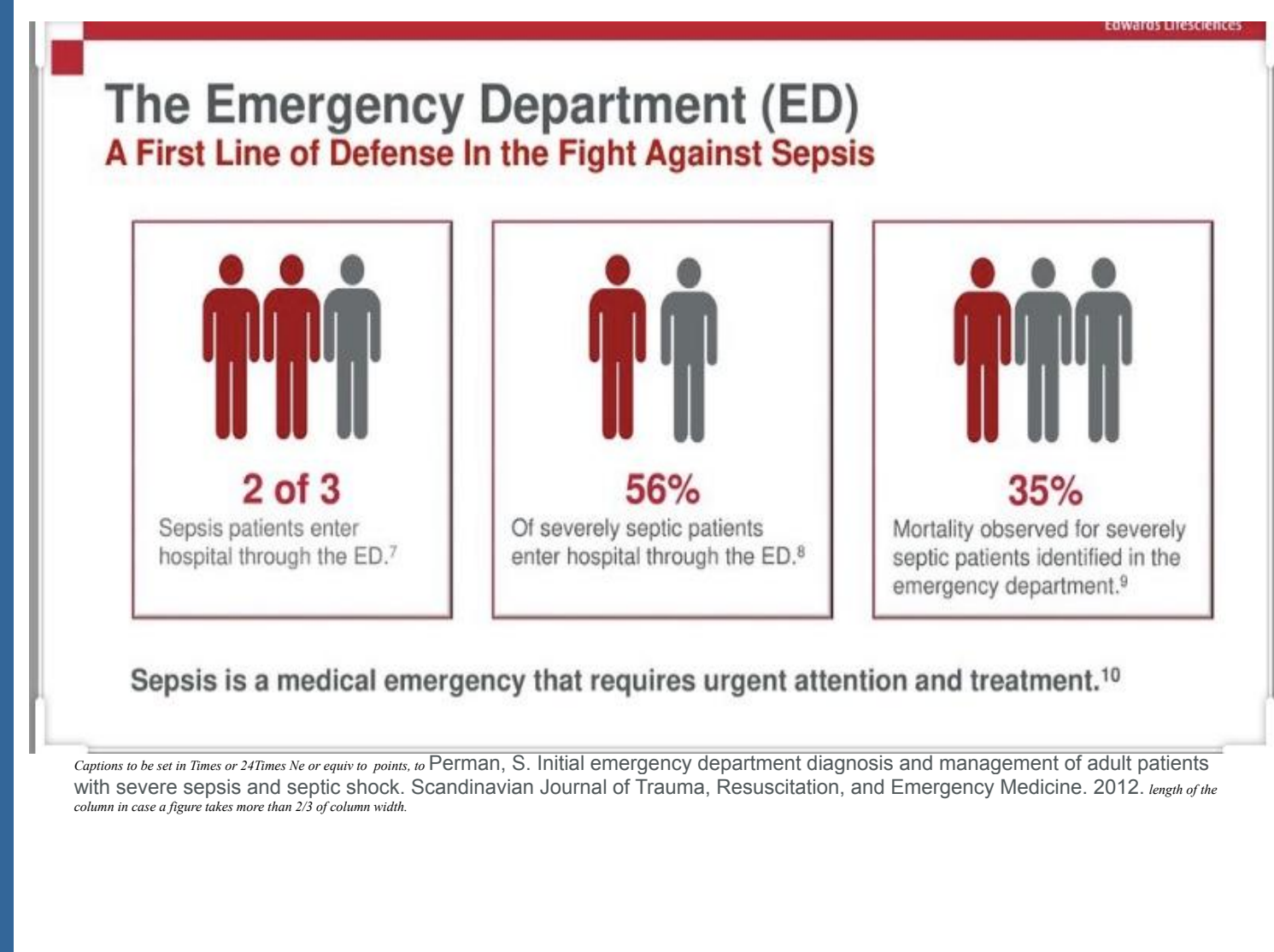
To identify that DART sepsis bundles started in the emergency department directly impact the safety, outcome, and improve overall care of patients versus patients who had delayed sepsis screenings.

Conceptual Framework

Faye Abdellah's model twenty one nursing problems uses patient centered care to improve care for patients. The DART sepsis bundle would directly impact the care given to patients with suspected sepsis. DART is setup to detect, act, reassess, and titrate the therapy based on patient's response much like the nursing process. Abellah states that nursing is an art and science that moulds the attitudes, intellectual competencies, and technical skills of the individual nurse into the desire and ability to help people, sick or well, cope with their health needs. Sepsis can come on subtle, but if treated promptly poor outcomes can be prevented. Like Abedellah's model, nurses would promptly assess, identify, and meet the needs of the patient providing improved nursing care and outcomes for patients.

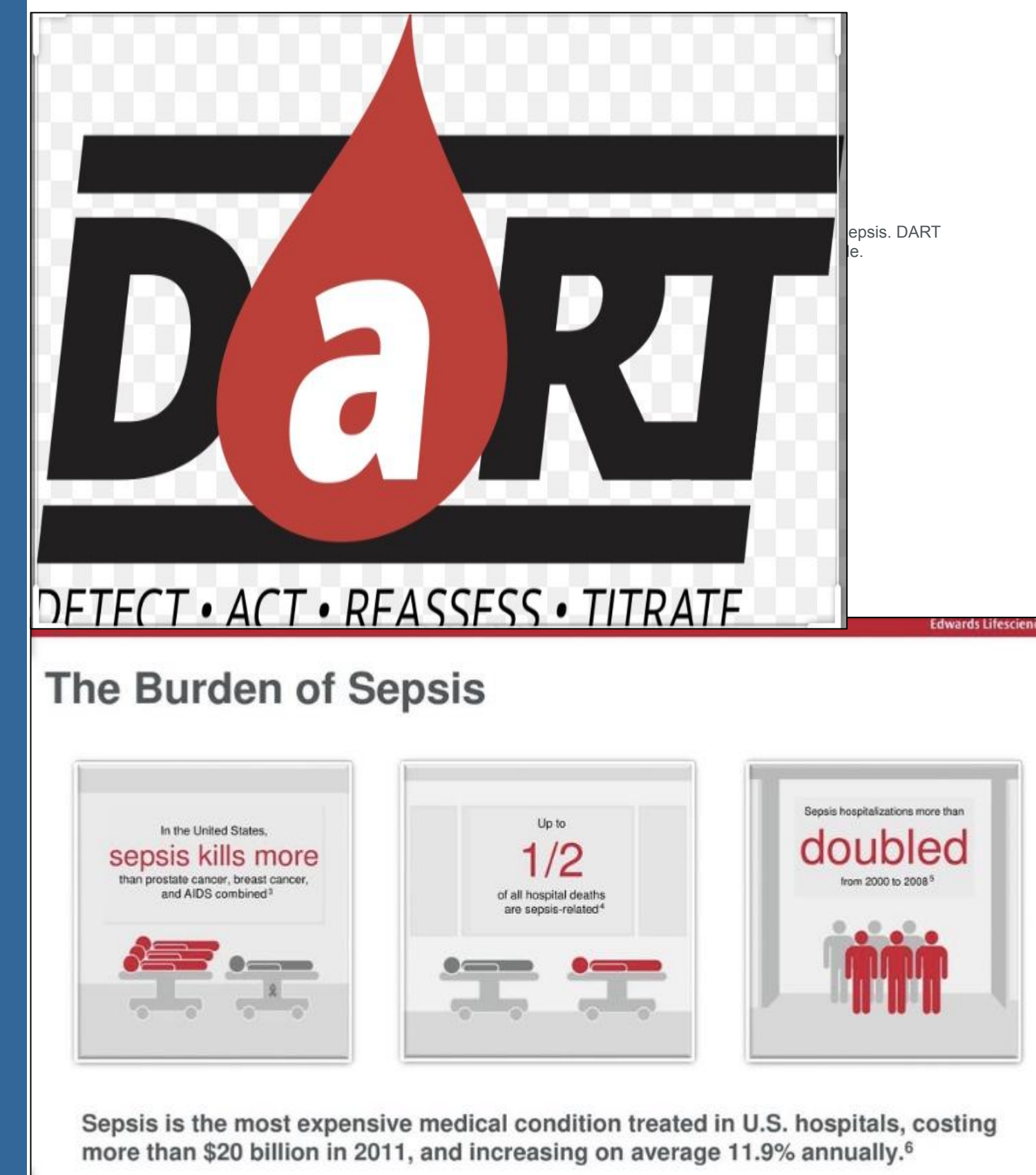
Methods

A systematic review of studies related to DART (detect, act, reassess, and tritate) was completed versus no standardized tool for sepsis identification on adult patients who entered the emergency department. Emergency department used 3 studies to evaluate benefits to nurse initiated DART sepsis bundles, limitations, and restrictions. Nurse driven algorithm was setup based on DART (Detect, act, reassess, and titrate) tool to help initiate sepsis protocol. A "code sepsis" was called over head in ER who whomever met criteria. Nurse would initiate bundles as soon as patient met sepsis protocol criteria. All bundles interventions were to be started in the first three hours and antibiotics with 1 hour or less. New bundle was compared to previous and less inforced protocols two months prior to new DART bundle.



Results

The results of the studies showed that the DART sepsis bundle was effective at reducing mortality rates in sepsis patients. The bundle improved overall outcomes for the patient. Sepsis was caught quickly by triage nurses. Nurses promptly notified providers. Patient that were placed in ED holds for a bed had no delay in care. Two and half days were cut off admission stays of patients with sepsis diagnosis. The cost for the hospital regarding sepsis stays decreased. Patients who presented with complaints that could leave to sepsis were assessed seven minutes faster. The compliance of using the sepsis bundle went up by 50%. DART Sepsis bundles initiated by ER nurses led to better outcomes for patient and sepsis caught early.



Implications for Nursing

As nurses, we are in a position to directly impact sepsis-related morbidity and mortality. Early identification and treatment are the cornerstone of sepsis management. In hospital settings early sepsis recognition by nurses has been shown to improve survival for patients in hospital with sepsis (Torsvik et al, 2016) Emergency nurses are the first to meet and assess the patient. We know early intervention leads to better outcome. It's our time to take the frontline and protect the patient from fatal outcomes!

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