

## ABSTRACT

Sepsis is a life-threatening condition that can be fatal if not recognized early and rapidly treated. Barriers to early sepsis recognition include the lack of education on the clinical presentations of sepsis and the protocols for intervention. By providing education to nurses, they will be better able to recognize the early stages of sepsis and alert the physician promptly so that hospital protocols may be implemented quickly.

## PICO QUESTION

For registered nurses (RNs) in the emergency department (ED), how does an evidence-based training program on required 3-hour sepsis bundle protocols improve staff knowledge and incorporate system processes at one month, six months, and 12-months?

## LITERATURE REVIEW

The purpose of this literature review is to explore evidence-based training programs that improve staff knowledge on sepsis and systematic inflammatory response syndrome (SIRS). The objective is to increase understanding of sepsis, interventions, educational programs, and ways to improve outcomes.

- Emergency Department Nurses' level of knowledge about sepsis care <sup>7</sup>.
- Barriers to Implementation of Sepsis Bundles
  - Internal Barriers- Attitude and knowledge about clinical practice guidelines of sepsis protocols <sup>1</sup>.
  - External Barriers- Lack of support from admin., lack of education or equipment, lack of time, heavy patient workload, lack of available staff <sup>1,8,9</sup>.
- Awareness and Educational Programs to Enhance Sepsis Knowledge <sup>9</sup>.

# Sepsis Bundle Protocols:

## A Quality Improvement Training for Emergency Department

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## PROJECT METHODOLOGY

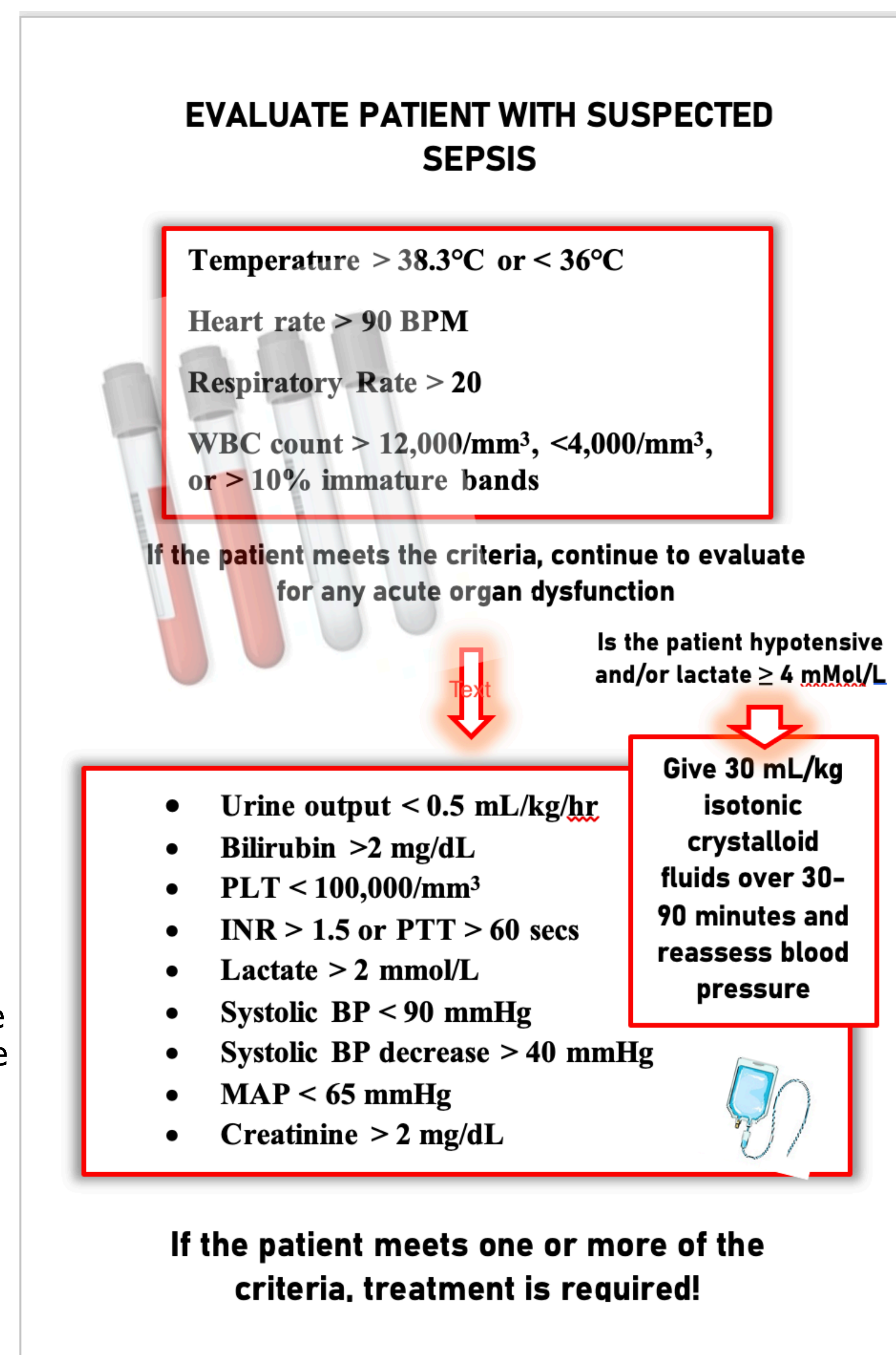
- Nurses should be well-educated on the signs and symptoms of sepsis <sup>3</sup>.
- Appropriate sepsis education for nurses has an encouraging influence on patient's long-term outcomes <sup>2</sup>.
- This project aims to provide continued education for sepsis and the utilization of sepsis protocols when a patient presents to the Emergency Department with sepsis signs and symptoms.
- Nursing education related to sepsis led to improvement in early detection of these signs and symptoms <sup>4</sup>.
- Continued education and nurses understanding the urgency of sepsis will help to save many lives in the future.

## Plan and Development

- Knowledge Pre-test-** will be utilized to understand where nurses knowledge deficits and current understanding of sepsis.
- PowerPoint-** a power point will be developed after the pre-test is resulted by the practice council and will be utilized during quarterly unit skills.
- Pocket Cards-** will also be developed to hand out as a reference to be used as needed for evaluating and triaging a patient with suspected sepsis.
- In addition to each deliverable monthly sepsis fact emails and ongoing reminders will be sent to nursing teams and physicians in the ED to utilize the sepsis workflow tab in the chart.

## Evaluation

- Monthly chart reviews to review compliance numbers to assess for improved compliance to sepsis bundle protocols.
- Percentages to be shared monthly with staff to provide reference to what needs continuous improvement.
- Evaluation of knowledge quarter four by utilizing pre-test questions and understanding the retention of knowledge learned.



## THEORETICAL FRAMEWORK

This project utilized the knowledge-to-action framework which translates the knowledge of a specific subject and changes the evidence into practice <sup>1</sup>. It consists of seven components:

- Identify the problem
- Adapt knowledge
- Assess barriers and facilitators
- Select, tailor, and implement interventions
- Monitor use of knowledge
- Evaluate outcomes
- Sustain use of expertise

## CONCLUSIONS

Understanding emergency nurses' knowledge and providing education that is applicable to early sepsis recognition and prompt treatment improves the long-term outcome of these patients <sup>5</sup>. An educational system will be utilized in the ED to assist nurses in up-to-date sepsis processes. Overall, providing updated sepsis education and evaluating the knowledge of ED nurses will improve the outcome for patients who present to the ED with sepsis.

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