Title: *Antibiotic Administration for Suspected Sepsis Patients*

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Introduction

Severe illness known as sepsis occurs when the body reacts incorrectly to an infection. The body's infection-fighting mechanisms activate, impairing the function of the organs. Septic shock can develop from sepsis.
This significant drop in blood pressure has the potential to harm the liver, kidneys, lungs and other organs.
Death is a possibility in cases of extreme damage. Globally, the in-hospital death rate is thought to be around 25%.
Sepsis can be treated early, which increases survival rate. (Gyawali, Ramakrishna, Dhamoon, 2019)

Aim

To implement timely antibiotic administration for suspected sepsis patients in the ED as part of the sepsis 1 hour bundle.

Materials and Methods

Process mapping was used to identify a gap, and a sepsis screening tool was created to identify and document all suspected sepsis cases in the ED using Antibiotic Administration for Suspected Sepsis Patients.
Enhancing the process mapping had a positive impact through:

1. Improved ED management processes in the management of severe sepsis and septic shock by reducing the time required to administer medication and intravenous fluid.
2. Increase of sepsis awareness and management protocols
3. Early identification of suspected sepsis patients
4. Create ED Sepsis management protocols.
5. Streamlined admission process for suspected sepsis patients.

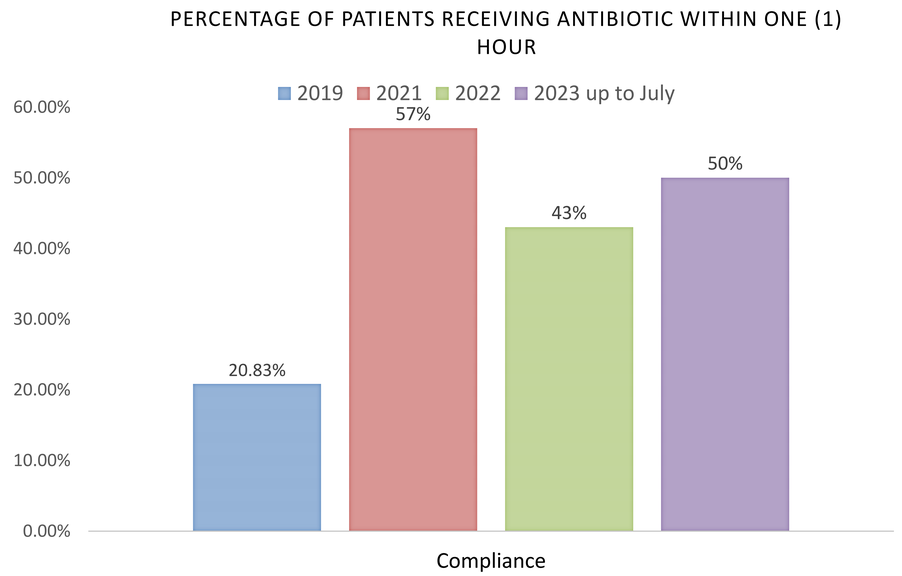
Results

Data showed increase Compliance of administration of antibiotics within 1 hour in from 20.83% in 2019 to 50% in 2023 up to July. In addition sepsis mortality rate reduced from 40% (Pre implementation) to 12%(Post implementation).

Conclusion

Recognizing and responding to sepsis early can significantly improve patient outcomes. Severe sepsis relies on timely identification for proper treatment and better outcomes for patients by implementing sepsis screening on patients as they arrive in the ED.

Graphs



References

- Gyawali, B., Ramakrishna, K., & Dhamoon, A. S. (2019). Sepsis: The evolution in definition, pathophysiology, and management. *SAGE open medicine*, *7*, 2050312119835043. https://doi.org/10.1177/2050312119835043