



The Introduction of Sepsis Boxes to Clinical Areas

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Background

Sepsis is a life-threatening medical emergency. When a pre-existing infection sets off a series of events throughout the body, it can lead to sepsis, resulting in organ failure, tissue damage and death if not treated promptly (CDC, 2022). Sepsis can result from any infection caused by bacteria, viruses or fungi. Sepsis is more common in young children and people that are immunocompromised. Sepsis can sometimes be difficult to recognise as symptoms can differ from person to person.

It is estimated that around 15,000 people will develop Sepsis in Ireland each year, resulting in approximately 3,000 deaths (RCSI, 2022). Worryingly 60% of all hospital deaths are Sepsis related (RCSI, 2022). Early identification and prompt treatment of Sepsis is key in increasing survival rates.

Timely access to appropriate treatment is vital to enhance patient outcomes in sepsis cases.

Aims

The aim of this initiative was to:

- Provide all clinical areas with a Sepsis Box
- Increase 'Sepsis-6' awareness
- Increase staff awareness of Sepsis management
- Treat Sepsis in a timely manner
- Ensure all appropriate equipment is easily accessible



Methods

The Sepsis Boxes were launched in Clontarf Hospital on "World Sepsis Day". The Sepsis boxes contain the necessary equipment to initiate sepsis treatment in a timely manner. The boxes are located in a visible area on all five wards allowing easy access for clinical staff day or night. The box contains the 6 elements of the 'Sepsis-6' care bundle "give 3 and take 3" with the exception of antimicrobials which are stored in the ward medicine press.

Sepsis awareness training was held and staff were advised to familiarize themselves with the contents of the Sepsis Boxes and relevant documentation:

- 'Start Smart then Focus', An Antibiotic Care Bundle for Hospitals
- The Sepsis contents box checklist
- The 'Sepsis Pathway' for Adults
- The adult Early Warning Score, including the Escalation Protocol Flowchart

A staff survey was conducted to gauge awareness of the Sepsis Box, sepsis-6 interventions, stocking/cleaning and perceived effectiveness of the Sepsis Box. See figure 1.

Sepsis Box Survey 2023

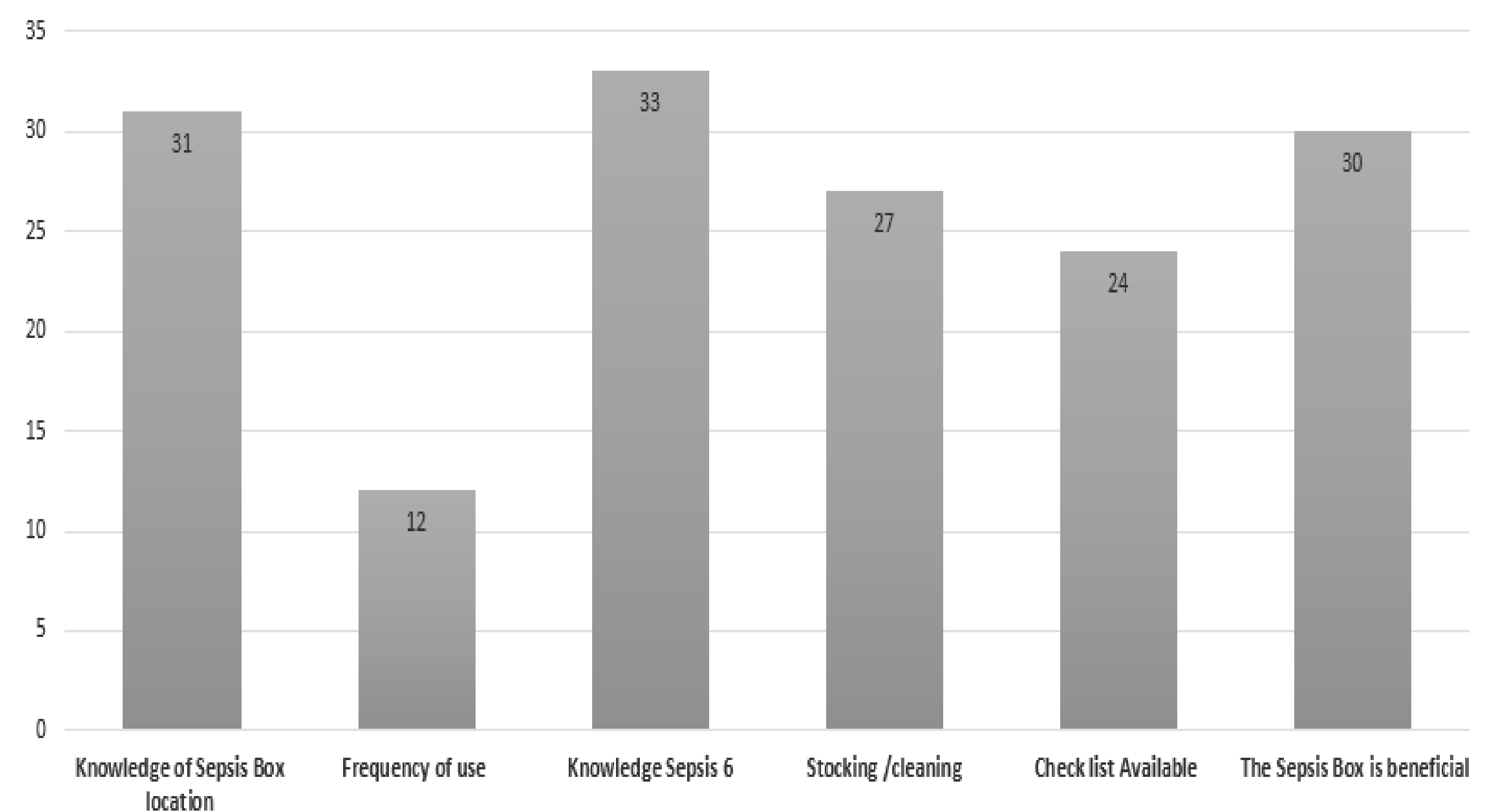


Figure 1. Sepsis Box Survey Results

"Regular reminders and ongoing awareness education to new and existing staff on the availability and location of the Sepsis Box (both medical and nursing) "

"Include laboratory forms for microbiology and biochemistry"

Figure 2. Staff Suggestions from Survey

Analysis

The Sepsis Boxes were positively received in all clinical areas. This quality improvement initiative has raised awareness of the interventions required to manage sepsis in a timely manner. Providing easy access to initial treatment of sepsis cases will have a positive effect on patient outcomes. Staff survey results show that the Sepsis Boxes are being utilised and being replenished after use. Staff suggestions from survey have been acted on. Ongoing auditing is required to ensure equipment is readily available and within date.

Conclusion

Sepsis is a life-threatening condition. If not treated promptly can lead to organ failure and death. The introduction of Sepsis Boxes to all clinical areas has raised awareness and provided easy access to all necessary equipment to initiate sepsis management and treatment.

References

1. CDC (2022) What is Sepsis?, Available at: [What is Sepsis? | Sepsis | CDC](#) (Accessed 16 July 2023).
2. RCSI (2022) *Developing a new treatment for patients with sepsis*, Available at: [Developing a new treatment for patients with sepsis - Royal College of Surgeons in Ireland \(rcsi.com\)](#) (Accessed 16 July 2023).