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Campaigning Beyond: Sepsis Awareness Among Non-clinical Staff

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Campaigning Beyond: Sepsis Awareness Among Non-clinical Staff

Cynthia Wong

School of Nursing and Health Professions, University of San Francisco

NURS 653: Internship

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December 9, 2023

Abstract

Problem: Sepsis stands as the foremost cause of illness and death among hospitalized patients globally, yet a considerable number remain oblivious to this critical condition. Based on the pre-implementation survey among non-clinical staff members of an urban hospital, awareness of sepsis must be heightened to ensure swift recognition and response.

Context: The project conducted takes place in five distinct non-clinical departments at a large hospital organization in Northern California. Each department plays an essential role in the holistic and efficient functioning of the organization to provide quality patient care.

Interventions: A sepsis awareness campaign was implemented throughout the month of September. To enhance the understanding and recognition of sepsis, information about sepsis, its risk factors, and the importance of early detection was disseminated through group discussions and the distribution of educational flyers.

Measures: A pre-implementation assessment of each department was conducted before September. Clinical nurse leader (CNL) students conducted a verbal survey among non-clinical staff members to determine whether or not they were aware of the term “sepsis.” Evaluation of the campaign was executed through a post-intervention survey.

Results: In the pre-intervention survey, 3% of non-clinical staff were aware of sepsis. Due to changes in departmental leadership, the post-intervention survey was only conducted in one department - environmental services (EVS)- in which 0% of employees were aware of sepsis.

Conclusion: Non-clinical staff play a pivotal role in recognizing sepsis, facilitating timely interventions, and contributing to infection prevention. Fostering a heightened awareness through education, non-clinical staff can significantly enhance the hospital’s capacity to address sepsis.

Keywords: Sepsis, sepsis awareness campaign, non-clinical staff, quality improvement

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Introduction

Sepsis is the primary cause of illness and death among hospitalized patients. It is a critical condition that can emerge from various infections, not just bacterial infections. While bacterial infections are a common trigger, viruses, fungi, and parasites can also lead to sepsis (CDC, 2023). When the body faces an infection, the immune system reacts by releasing chemicals into the bloodstream, initiating an inflammatory response to fight the invading pathogens. This inflammatory response can cause symptoms such as an increase in heart rate, fever, fast breathing, and a general feeling of illness (Sepsis Alliance, 2023). If left untreated, a heightened response can lead to severe sepsis. This condition is evident with excessive systemic inflammation that can manifest into tissue damage and acute organ dysfunction (Huang et al., 2019). Indications of organ dysfunction include difficulty breathing, low or no urine output, abnormal liver tests, and changes in mental status (Sepsis Alliance, 2023). Progressing to the most severe stage of sepsis, septic shock occurs when an individual's blood pressure remains persistently low and unresponsive to adequate fluid replacement (Sepsis Alliance, 2023). This dangerously low blood pressure can lead to insufficient perfusion to vital organs, culminating in multiple organ failures and, ultimately, death.

Despite the extensive knowledge about sepsis, sepsis management continues to be a major challenge for healthcare systems globally. In the United States alone, approximately 1.7 million adults develop sepsis annually, with 350,000 of those cases resulting in death during hospitalization or being discharged to hospice (CDC, 2023). Even after surviving sepsis, many individuals continue to live with persistent physiological and psychological complications. Some patients experience generalized body aches that hinder daily activities, while others face mental health like hallucinations, panic attacks, and disrupted sleep patterns (Gritte et al., 2021).

Furthermore, the financial impact of sepsis on the healthcare system is notable. The United States healthcare system spends about \$38 billion on sepsis each year, as reported by the Agency for Healthcare Quality and Research (Liang et al., 2020). Factors that contribute to the cost of sepsis care include but are not limited to, the duration of hospitalization after diagnosis, discharge to supportive care, readmissions, and mortality rates (Paoli et al., 2018). As sepsis costs escalate with severity, it becomes crucial to enhance prevention, early identification, and treatment methods to deliver quality care and alleviate the economic burden.

Sepsis stands as the leading global cause of death, but public awareness is lacking. In 2022, 63% of U.S. adults were unfamiliar with the term ‘sepsis’ and only 15% of that group could identify the four most common symptoms necessitating emergency care for sepsis (Sepsis Alliance, 2023). While much research targets sepsis education for medical professionals, such as doctors and nurses, this quality improvement project directs attention toward non-clinical staff within the hospital.

Problem Description

Non-clinical staff, comprising individuals in the hospital who do not provide medical treatment or testing, work behind the scenes and play a significant role in supporting patient care and safety. The staff members of this project serve at various levels within the organization, including communications, security, central supply, surgical sterilization, and environmental services. Collectively, they contribute to the facility’s efficacy. Therefore, assessing their sepsis awareness is vital, enabling them to recognize early signs, initiate prompt treatment, and potentially save lives. Additionally, as non-clinical staff hold responsibilities in maintaining the hospital environment, heightened sepsis awareness offers an opportunity to integrate more comprehensive sepsis and infection prevention strategies into practice.

A preliminary survey conducted at Hospital A in Northern California revealed a significant opportunity to improve awareness and understanding of sepsis. Only 3% of the study population reported familiarity with the term ‘sepsis’ (n=1/34). Additionally, none of the non-clinical staff members demonstrated the ability to define sepsis or identify its associated signs and symptoms (n=0/34). Despite Hospital A surpassing its targeted sepsis compliance level (75%), the benchmark data collected suggests the need for quality improvement in these areas. Given the importance of early recognition and intervention in sepsis progression, it is crucial to increase sepsis awareness among non-clinical staff. Consequently, a sepsis awareness campaign will be implemented to educate non-medical professionals at Hospital A.

Literature Review

PICO Question

Amongst five non-clinical departments in an urban, Northern California hospital (P), how does the implementation of a sepsis awareness campaign (I) compared to no sepsis awareness campaign (C) affect sepsis knowledge and organization metrics (O)?

Search Strategy

To examine the existing research on sepsis awareness campaigns among non-clinical staff, the team conducted a literature review (Appendix B) utilizing various databases. Peer-reviewed articles from 2018 to 2023 were extracted through Pubmed, Scopus, and Cumulative Index to Nursing and Allied Health (CINAHL). Our search terms encompassed sepsis, sepsis awareness, non-clinical staff, non-patient facing, sepsis knowledge, quality improvement, environmental hygiene, infection control, and sepsis training. Articles were assessed using the Johns Hopkins Evidence-based Practice guidelines.

Throughout our investigation, it became apparent that the available research on our particular population was scarce. Existing studies were predominantly aimed at enhancing sepsis knowledge among medical professionals, leaving a sizable gap in evidence concerning non-clinical staff and sepsis awareness. This underscores the urgency for further research and studies within the non-clinical population of the hospital. Subsequently, we expanded our search to include clinical staff, sepsis awareness campaigns, and infection prevention practices.

Available Knowledge

In a comprehensive study, Parsons et al. (2022) examined the level of sepsis awareness among adults in Canada. The researchers conducted a cross-sectional online survey administered through Leger, a reputable Canadian market research and analytics company, which included questions related to sepsis awareness, knowledge, and information access. The survey targeted 3,200 adults to gather insights into public awareness. Results revealed that although 61% of participants had heard of sepsis, their knowledge about its definition, risk factors, and prevention strategies was generally low (Parsons et al., 2022). Consequently, the researchers suggested a need for increased education among adults, emphasizing infection prevention and control measures such as handwashing and vaccinations, given the serious and life-altering nature of sepsis (Parsons et al., 2022).

In another study conducted by Breuer and Hassinger (2020), the researchers aimed to comprehend how active education and general awareness affect sepsis-related knowledge, attitudes, and behaviors among providers at a tertiary care hospital. Following a hospital-wide needs assessment, responses from various departments indicated a perceived need for sepsis education (Breuer & Hassinger, 2020). The project employed newsletters, posters, and targeted simulations as a part of the sepsis awareness campaign. One year after implementation, the

findings suggest that striking a balance between active education and general awareness can improve sepsis-related knowledge, attitude, and behavior among pediatric practitioners (Breuer & Hassinger, 2020).

Kirsten Fiest and colleagues' scoping review in 2022 explored peer-reviewed journals to present and chart the existing literature on sepsis awareness, general knowledge, and information-seeking behaviors (Fiest et al., 2022). From an extensive pool of 5,972 distinct studies, the team identified 80 articles indicating sepsis awareness among patients and the general public was generally lower than healthcare professionals. The study revealed that individuals from the general public typically seek information about sepsis online, whereas healthcare professionals derive their knowledge from their professional roles and educational training (Fiest et al., 2022). According to Fiest et al. (2022), there is a notable need for improvement in patient and public awareness and knowledge of sepsis. The researchers suggest that sepsis knowledge campaigns could benefit from the establishment of a standardized definition of sepsis, along with increased awareness of symptoms and presentation of the condition (Fiest et al., 2022).

To improve sepsis best practices, Kiser (2023) conducted a quality improvement project utilizing a multidisciplinary sepsis workgroup, increased awareness of the RN sepsis screening tool, creation of visual cues, and sepsis escape rooms. Conducting the project within the emergency department of a small community hospital, best practice treatments increased from 44.9% in October 2021 to 68.3% in November 2022 (Kiser, 2023). The implementation of human factors interventions can drive meaningful improvement in the quality of care. Kiser also discovered that staff engagement can be improved with data transparency and awareness (Kiser, 2023).

Lastly, Sreeramoju and colleagues orchestrated a hospital-wide campaign aimed at reducing healthcare-associated infections and enhancing sepsis care. Over the span of five years, the staff consistently received messages from leadership, emphasizing the importance of initiatives such as performing hand hygiene and ensuring compliance with regulatory standards through bundle compliance (Sreeramoju et al., 2021). From 2013 to 2017, the hospital-wide initiative was deemed successful, showcasing a notable reduction in hospital-acquired infections and sepsis mortality (Sreeramoju et al., 2021).

Conceptual Framework

This quality improvement project was guided by the reinforcement theory of motivation. Developed by B.F. Skinner, this theory is based on the principles of operant conditioning which involves modifying behavior through positive and negative reinforcement. By manipulating reinforcement and punishment, individuals and organizations can influence and shape the behaviors they desire.

The application of the reinforcement theory principles in a systematic manner involves five stages. Initially, the first stage entails identifying the behavior that needs modification. In our quality improvement project, the targeted behavior is enhancing knowledge and prevention of sepsis. Subsequently, the second stage involves establishing a baseline for the undesired behavior. In this phase, the team conducted a microsystem assessment to grasp the current practices across the various departments. Additionally, staff members from five different non-clinical areas were surveyed to gauge their knowledge and awareness of sepsis. This encompassed understanding the definition of sepsis, recognizing signs and symptoms, and acknowledging preventative measures. Moving onto the third stage, the focus is on identifying the causes and motivations for behavior, and associated consequences. Our assessment revealed

that many staff members were unaware of sepsis and its detrimental outcomes. The fourth stage revolves around implementing the intervention. In our sepsis campaign, interventions to enhance staff awareness and knowledge include verbal discussion, engagement activities, and the distribution of informational flyers. Finally, the last stage of organizational behavior modification necessitates periodic measurement of behaviors to assess the extent of the modification achieved.

Project Aim

The specific aim of this project is to enhance awareness and knowledge regarding sepsis among non-clinical staff in five distinct non-patient-facing departments, achieving a 50% increase by November 1, 2023. The targeted departments comprise communications, security, central supply, sterile processing, and environmental services. The process begins with a pre-assessment survey, capturing essential insights into existing knowledge levels of non-clinical staff concerning sepsis. Subsequently, the sepsis awareness campaign was implemented throughout the month of September. Information compiled from Sepsis Alliance and current sepsis research was disseminated through verbal discussions and the distribution of informative flyers. To gauge the project's effectiveness, a post-intervention survey was conducted in November.

Methods

Context

While the conceptual framework of the quality improvement project followed Skinner's reinforcement theory of motivation, the Plan-Do-Study-Act (PDSA) cycle enabled the team to implement and test changes in a controlled and structured way (Appendix C). Furthermore, a Gantt chart was utilized to assist in monitoring the progress of the project (Appendix D).

The team initiated the PDSA cycle by commencing with the planning phase. In this initial stage, our team collaborated with various stakeholders within Hospital A to define the scope of the project and develop a plan for its implementation. We identified the imperative need for a sepsis awareness campaign specifically tailored for the non-clinical departments of the organization. Less than half of the population was familiar with the serious condition. Departments included in this project consist of communications, security, central supply, sterile processing, and environmental services. Consequently, we formulated a PICO question, a precise aim statement, and the operational definitions of data. From there, the team developed the material critical for the campaign including a script and promotional flier.

Transitioning to the “Do” phase, the team sought to understand the organizational framework of our study population, executed a microsystem assessment (Appendix E), and conducted a root cause analysis using a fishbone diagram (Appendix F). Several factors contribute to the delayed recognition and treatment of sepsis. The factors include the unawareness of the condition, risk of infection, lack of proper training, and more. Additionally, a Strength-Weakness-Opportunities-Threats (SWOT) analysis served as a guide to pinpoint the organization's strengths and weaknesses (Appendix G). Many employees demonstrated a strong desire to learn and understand the condition, recognizing that susceptibility is universal and the condition is preventable.

Intervention

The sepsis awareness initiative was rolled out across the five distinct non-clinical departments throughout the month of September 2023 in Hospital A. The primary objective of the campaign focused on enhancing understanding and inducing behavioral changes aimed at preventing infection, promoting early identification of sepsis, and expediting sepsis treatment.

CNL students crafted a comprehensive script and flyer addressing key aspects of sepsis, including its definition, the demographic susceptible to its effects, prevention measures, and the crucial importance of timely information dissemination (Appendix H and I). The content of the flyer, developed with resource material from Sepsis Alliance, included vital information such as signs and symptoms of sepsis along with guidance on when to seek medical attention. Encouraging active participation, the dispersal of information was not confined to the workplace. During morning huddles, employees were prompted to share insights with colleagues, families, and their communities. To amplify reach, the flyers were strategically placed in various locations within the organizational environment, ensuring widespread visibility and engagement.

Measures

The third phase of the cycle, termed “study,” involved the analysis of the data gathered during the implementation phase. CNL students verbally surveyed members of each non-clinical department. This encompassed pre-intervention data on the existing knowledge and awareness regarding ‘sepsis,’ its development, preventative measures, and the significance of awareness. Post-intervention data was also collected similarly and will be scrutinized for improvements compared to our initial data collection.

In the final act phase, the impact of our campaign will be evaluated, and necessary adjustments will be made. A successful project would signify the conclusion of the cycle.

Results

In total, our quality improvement project involved the participation of 34 non-clinical employees from diverse departments, including 2 from communications, 2 from security, 4 from central supply, 11 from sterile processing, and 15 from EVS. Pre-intervention assessments were done on the entire population indicating 3% correctly identifying sepsis (Appendix J). However,

complications arose during the post-intervention assessment due to the leadership transition within the organization. It significantly impacted our ability to secure approval from relevant management for revisiting each department for the post-intervention evaluation.

These challenges hindered our capacity to conduct post-intervention assessments across all departments. Despite these hurdles, the team was able to evaluate changes in the EVS department. It is crucial to note that those EVS staff who took part in the post-assessment were not present during the Sepsis Awareness Month interventions. As a consequence, when their sepsis knowledge was assessed in the post-intervention, none of the EVS staff present (n=0/5) exhibited the ability to define sepsis, express awareness of the term, or provide information on the applicable signs and symptoms or preventative measures (Appendix J).

Discussion

Summary

This quality improvement project represents the initial endeavor to assess the outcome of a sepsis publicity campaign directed at non-clinical staff within an urban hospital. The data obtained from the study revealed that sepsis knowledge among non-clinical staff was generally low before any interventions were introduced. CNL students addressed the knowledge gap by creating educational flyers and conducting informational team huddles focused on sepsis. Sepsis information disseminated included a standardized definition of sepsis, its risk factors, causes, impact and prevention measures. By making this information available through flyers and discussions, the team hoped that it will encourage behavioral changes among non-clinical staff that involve preventing the occurrence of sepsis and improving the recognition and treatment of sepsis patients.

Pinpointing the specific influence of our sepsis awareness campaign posed challenges. Unfortunately, the post-intervention assessment was unsuccessful due to barriers including leadership, employees, and time constraints. Evaluation data from environmental services staff showed no improvement, but it is important to note that these individuals were not present during informational sessions or flyer distribution. Further investigation is necessary to accurately assess the project's impact.

Nevertheless, it is worth highlighting that the hospital's macrosystem consistently meets and exceeds established benchmarks for sepsis performance. Students hypothesize that the sepsis campaign will likely contribute to sustaining the overall functionality of the organization.

Limitations

The project interventions were conducted in five departments of a large medical center, which may have limited the population. Other limitations of the project include lack of scheduling aside from access to certain departments and the short length of time monitored. The sepsis awareness campaign was only implemented throughout the month of September, and evaluated one month after.

Recommendations

Limited research has been conducted on the level of sepsis awareness among support staff within hospital settings. The team advocates for additional research efforts aimed at enhancing sepsis awareness among non-clinical personnel. It is necessary to undertake an extended and sustained sepsis awareness campaign, especially during Sepsis Awareness Month (September). Continuously reinforcing the importance of recognizing and responding to sepsis is crucial for fostering a culture of awareness and preparedness within healthcare institutions.

Conclusion

Non-clinical staff in hospitals play a crucial role in the early detection and response to sepsis. Their awareness can contribute to timely intervention and improved patient outcomes. Sepsis is a life-threatening condition that can rapidly escalate, and non-clinical staff are often the first point of contact with patients and their families. Recognizing signs and symptoms, understanding the urgency of the situation, and efficient communication to the clinical team can significantly impact the speed medical interventions are initiated. Additionally, non-clinical staff play a key role in infection measures such as maintaining a clean environment and adhering to hygiene protocols which contribute to the prevention of infections that can lead to sepsis. As heightened awareness among non-clinical staff fosters a collaborative and responsive healthcare environment that enhances the hospital's capacity to address sepsis effectively and save lives, there is opportunity to introduce active sepsis education and training programs within these departments. Because of the success and creative thought in including non-clinical staff, additional research is recommended to expand in these efforts.

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Appendix A: Statement of Determination



Project: Statement of Determination and Non-Research Determination Form

Student Name: Cynthia Wong

Title of Project: Campaigning Beyond: Sepsis Awareness Among Non-Clinical Staff

Brief Description of Project

The purpose of this project is to enhance the awareness and knowledge regarding sepsis among non-clinical staff through a targeted awareness campaign. The campaign aims to improve the organization's sepsis-related performance. Pre-assessment surveys indicate a knowledge gap amongst the non-clinical staff within the organization. Through sepsis knowledge and awareness, the project hopes to promote behavioral changes aimed at preventing infection, promoting early identification of sepsis, and expediting sepsis treatment. A post-implementation survey will be conducted after interventions.

To qualify as an Evidence-based Change in Practice Project, rather than a Research Project, the criteria outlined in federal guidelines will be used:

<http://answers.hhs.gov/ohrp/categories/1569>

- This project meets the guidelines for an Evidence-based Change in Practice Project as outlined in the Project Checklist (attached). Student may proceed with implementation.
- This project involves research with human subjects and must be submitted for IRB approval before project activity can commence.

Comments:

EVIDENCE-BASED CHANGE OF PRACTICE PROJECT CHECKLIST *

Instructions: Answer YES or NO to each of the following statements:

Project Title: Campaigning Beyond: Sepsis Awareness Among Non-Clinical Staff	YES	NO
The aim of the project is to improve the process or delivery of care with established/ accepted standards, or to implement evidence-based change. There is no intention of using the data for research purposes.	yes	
The specific aim is to improve performance on a specific service or program and is a part of usual care . ALL participants will receive standard of care.	yes	
The project is NOT designed to follow a research design, e.g., hypothesis testing or group comparison, randomization, control groups, prospective comparison groups, cross-sectional, case control). The project does NOT follow a protocol that overrides clinical decision-making.	yes	
The project involves implementation of established and tested quality standards and/or systematic monitoring, assessment or evaluation of the organization to ensure that existing quality standards are being met. The project does NOT develop paradigms or untested methods or new untested standards.	yes	
The project involves implementation of care practices and interventions that are consensus-based or evidence-based. The project does NOT seek to test an intervention that is beyond current science and experience.	yes	
The project is conducted by staff where the project will take place and involves staff who are working at an agency that has an agreement with USF SONHP.	yes	
The project has NO funding from federal agencies or research-focused organizations and is not receiving funding for implementation research.	yes	
The agency or clinical practice unit agrees that this is a project that will be implemented to improve the process or delivery of care, i.e., not a personal research project that is dependent upon the voluntary participation of colleagues, students and/ or patients.	yes	



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<i>agency and as such was not formally supervised by the Institutional Review Board."</i>		
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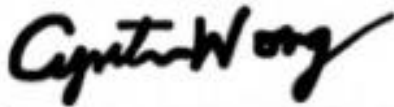
ANSWER KEY: If the answer to **ALL** of these items is yes, the project can be considered an Evidence-based activity that does NOT meet the definition of research. **IRB review is not required. Keep a copy of this checklist in your files.** If the answer to **ANY** of these questions is **NO**, you must submit for IRB approval.

*Adapted with permission of Elizabeth L. Hohmann, MD, Director and Chair, Partners Human Research Committee, Partners Health System, Boston, MA.

STUDENT NAME (Please print):

Cynthia Wong

Signature of Student:



DATE 11/21/2023

SUPERVISING FACULTY MEMBER NAME (Please print):

Theresa Mostasisa

Signature of Supervising Faculty Member



DATE 12/8/2023

Appendix B: Literature Review Table

Title & Author(s)	Objective & Design	Sample Setting	Results & Conclusion	Level of Evidence
<p>Public awareness and knowledge of sepsis: a cross-sectional survey of adults in Canada – Parsons Leigh, J., Brundin-Mather, R., Moss, S. J., Nickel, A., Parolini, A., Walsh, D., Bigham, B. L., Carter, A. J. E., Fox-Robichaud, A., & Fiest, K. M. (2022)</p>	<p>To conduct a comprehensive examination of adult’s sepsis knowledge in Canada. A cross-sectional online survey comprised of 28 questions regarding sepsis awareness, knowledge, and information access was developed and distributed among English – and French- literate adults in Canada.</p>	<p>Surveys were distributed through Leger, a Canadian-based market research and analytics company, to adults 18 years of age or older who resided in Canada.</p>	<p>61% of 3,200 adults sampled heard of sepsis. Respondent knowledge of sepsis definitions, symptoms, risk factors, and preventions were generally low. (53.0%, 31.5%, 16.5% and 36.3%, respectively) A minority of the surveyed Canadian residents knew about the signs, risk factors, and strategies to lower risks of sepsis. As sepsis can cause life-altering physiological and psychological effects, education initiatives should focus on infection prevention and control measures like handwashing and vaccination.</p>	<p>Level III (Dang & Dearholt, 2018)</p>
<p>Impact of a Multidisciplinary Sepsis Initiative on Knowledge and Behavior in a Pediatric Center – Breuer, R. K. & Hassinger, A. B. (2020)</p>	<p>To understand how active education and general awareness affects sepsis-related knowledge, attitude, and behavior among providers. A prospective, observational study that utilizes a multidisciplinary educational initiative to improve provider knowledge, attitude, and behavior regarding pediatric sepsis recognition and treatment. The educational initiative utilized newsletters, posters, and targeted simulations.</p>	<p>Emergency department, inpatient ward, and Pediatric Intensive Care Unit (PICU) of a tertiary care children’s hospital.</p>	<p>Post-intervention electronic surveys reveal that an increase in sepsis knowledge positively influences practitioner behavior. Nurses and staff reported greater comfort in sepsis recognition and a lower hesitancy in responding to sepsis cases. The combination of a sepsis awareness campaign and small-group education led to increase in knowledge and confidence among physicians, registered nurses, respiratory therapists, and advanced practice providers.</p>	<p>Level III (Dang & Dearholt, 2018)</p>

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<p>Patient, Public, and Healthcare Professionals' Sepsis Awareness, Knowledge, and Information Seeking Behaviors: A Scoping Review- – Fiest, K. M., Krewulak, K. D., Brundin-Mather, R., Leia, M. P., Fox-Robichaud, A., Lamontagne, F., Leigh, J. P., & for Sepsis Canada (2022)</p>	<p>To identify and map literature related to sepsis awareness, general knowledge, and information-seeking behaviors to inform future sepsis research and knowledge translation campaigns. A scoping review of peer-reviewed journal articles using MeSH terms and keywords related to sepsis awareness, knowledge, and information-seeking behaviors.</p>	<p>Databases searched include MEDLINE, EMBASE, CINAHL, and Education Research Complete</p>	<p>Out of 5,972 unique studies, 80 articles demonstrated the public's sepsis knowledge was generally low but improving over time. Healthcare professionals showed higher knowledge on sepsis than patients and the public. There is a need to enhance patient and public knowledge of sepsis. Sepsis awareness campaigns would benefit from a standard definition of sepsis, consistent use of survey tools, and awareness of the symptoms of sepsis to seek medical care.</p>	<p>Level V (Dang & Dearholt, 2018)</p>
<p>Improving Sepsis Compliance with Human Factors Interventions in a Community Hospital Emergency Room – Kiser, M. (2023)</p>	<p>To improve sepsis best treatment compliance with proactive identification and management of potentially septic patients. A quality improvement project using a PDSA methodology was implemented through several human factors and tools to facilitate sepsis screening and early treatment. Interventions included a reboot of the multidisciplinary sepsis workgroup, increased awareness of the RN triage sepsis screening tool, creation of visual cues of sepsis criteria (computer cue cards and badge buddies), and sepsis escape rooms to</p>	<p>An 8-bed unit within the Emergency Department of a small community hospital in Grove City, Pennsylvania.</p>	<p>Hospital compliance with sepsis best practice treatment increased from 44.9% (n=69) in October 2021 to 68.3% (n=82) in November 2022. Mortality in 2021 decreased from 7.2% (n=5) to 3.6% (n=3) in 2022. Interventions implemented resulted in improvement for sepsis best practice treatment, surpassing the aim of 50% by 23% from the previous year. Sepsis compliance at the hospital in November 2022 was above the national and state average at 68.3%.</p>	<p>Level V (Dang & Dearholt, 2018)</p>

	facilitate learning.			
Results and lessons from a hospital-wide initiative incentivised by delivery system reform to improve infection prevention and sepsis care – Sreeramoju, P., Voy-Hatter, K., White, C., Ruggiero, R., Girod, C., Minei, J., Garvey, K., Herrington, J., Minhajuddin, A., Madden, C., Haley, R., & Cerise, F. (2021).	<p>To reduce healthcare associated infection and improve sepsis care through an incentivized Delivery System Reform Incentive Program.</p> <p>A prospective observational quality improvement study conducted from 2013 to 2017. Key interventions implemented include the following: 1) awareness campaign and clinician engagement 2) implementation of HAI and sepsis bundles 3) education on standardized curriculum on bundles 4) training on key managers, leaders, and personnel on quality improvement methods and 5) EMR-based clinical decision support.</p>	Parkland Health and Health Systems, a publicly funded 770-bed academic hospital in the USA.	<p>Hospital-wide rates of HAI reduced: CLABSI from 1.6 to 0.8 per 1000 catheter days, CAUTI from 4.7 to 1.3 per 1000 catheter-days, and surgical site infections from 3.4% to 1.3%. Mortality of sepsis patients presented in the ED reduced from 9.4% to 2.9%.</p> <p>The hospital-wide initiative succeeded in reducing HAI and sepsis mortality over 5 years in a sustainable manner. Adherence to bundles of care and hand hygiene and the hospital culture of patient safety improved.</p>	Level III (Dang & Dearholt, 2018)

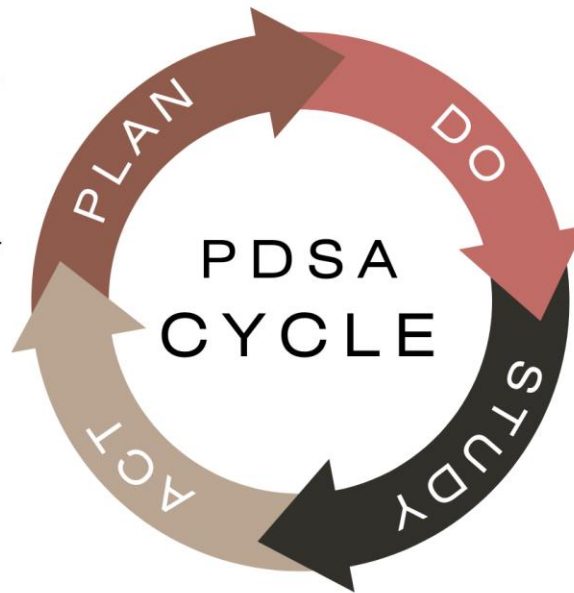
Appendix C: PDSA Cycle

PLAN

- Collaborated with stakeholders at our organization regarding non-clinical staff's sepsis knowledge
- Created a PICO question and specific aim statement
- Created a script and flyer to present during the preliminary data collection

ACT

- Continue to collect and observe data post-intervention and implement necessary adjustments



DO

- Assessed the 5 non-clinical departments using the 5Ps
- Performed a SWOT analysis
- Implemented Sepsis Awareness Campaign
- Collected qualitative and quantitative data

STUDY

- Analyze data from campaign
- Will analyze the effect of Sepsis Awareness Campaign on non-clinical staff knowledge and organizational metrics related to sepsis

Appendix E: 5 P's Microsystem Assessment

Purpose

- The five non-clinical departments support the macrosystem at different levels.

Patients

- Each department deals with non-direct patient care.

Professionals

- Communications
- Security
- Central supply (loading dock)
- Sterile Processing
- Housekeeping (EVS)

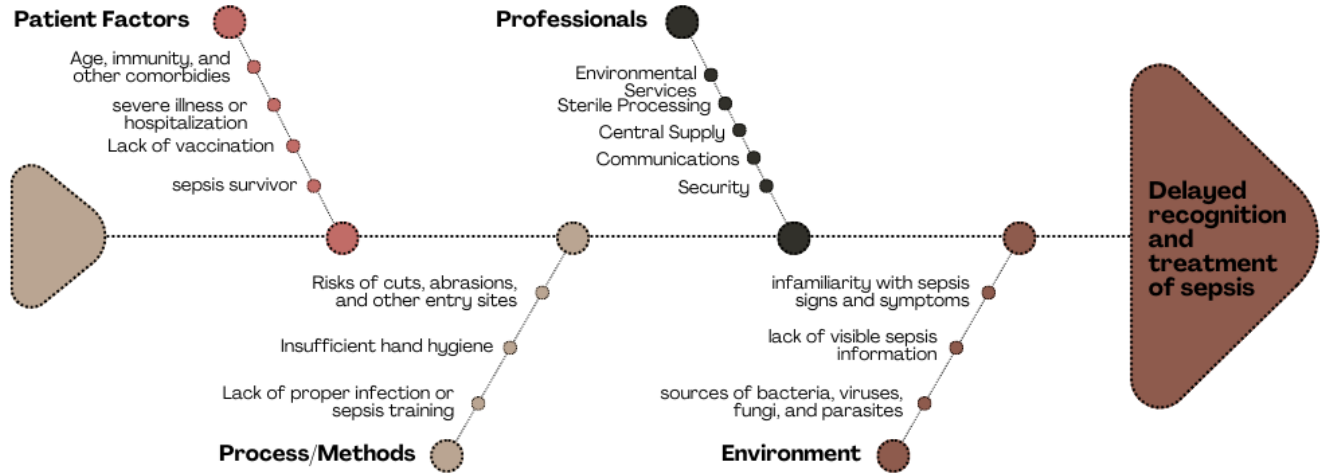
Process

- Infection Prevention Training
- Pre-patient admission
- During patient admission
- Post-patient discharge
- Awareness on sepsis

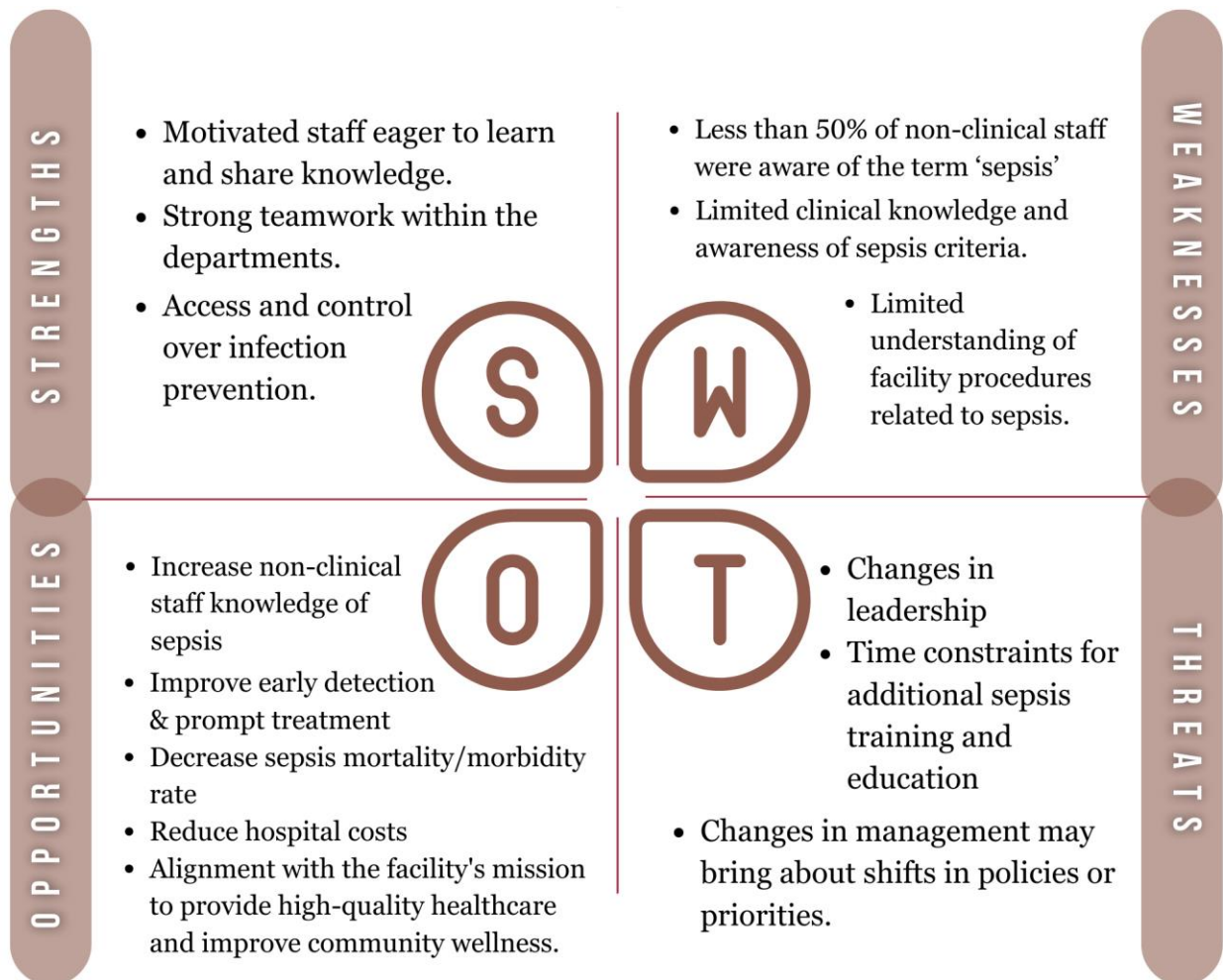
Patterns

- Housekeeping:
 - Removes medical waste on units and throughout the facility.
 - Responsible for maintaining environmental hygiene thereby decreasing the spread of healthcare-associated infections.
- Sterile Processing:
 - Cleans, prepares, processes, sterilizes, stores and issues medical/surgical supplies necessary for patient care.
- Communications:
 - Facilitates the ability for healthcare providers and supporting staff to connect collaborate and exchange information
- Security:
 - Manages hospital access while protecting patients and staff
- Central supply:
 - Receives and disperses material throughout facility

Appendix F: Fishbone Diagram



Appendix G: SWOT Analysis



Appendix H: Sepsis Awareness Month Script

WHO

We are Nursing Students from USF and are here to spread the word about sepsis as September is Sepsis Awareness Month. Do you know what sepsis is?

WHAT

What is Sepsis? Sepsis is a life-threatening reaction to an infection.

WHO CAN BE AFFECTED

Anyone can be affected!

WHEN

It's an infection in the body as a response to a simple cut, pneumonia, or even the common cold.

PREVENTION

We can prevent sepsis by following hand hygiene, getting vaccinated, and protecting ourselves from illness.

WHY IS THIS IMPORTANT

According to the Joint Commission, sepsis is the leading inpatient cause of death over heart attacks!

Depending on which department:

- *“You can be at risk as you deal with sterilizing equipment”*
- *“You can be at risk as you use razor blades and material which can cause a cut in your role”*

Introduce and explain flyer

Appendix I: Sepsis Awareness Flyer

Sepsis Awareness Month 2023

THIS SEPTEMBER, TAKE THE TIME TO KNOW THE SIGNS

More than 80% of sepsis patients are 50 years of age or older.



T
TEMPERATURE
that's abnormal

I
Signs of an
INFECTION

M
MENTAL
DECLINE

E
Feeling
EXTREMELY ILL

For every hour treatment is delayed, the risk of death increases by as much as 8%. If you suspect sepsis, seek urgent medical care.

SEPSIS » SAY SEPSIS
SAVE LIVES
SEPTEMBER
SepsisAwarenessMonth.org

When it comes to sepsis, remember **IT'S ABOUT TIME™**. Watch for:



TEMPERATURE

higher or lower than normal



INFECTION

may have signs and symptoms of infection



MENTAL DECLINE

confused, sleepy, difficult to rouse



EXTREMELY ILL

Severe pain, discomfort, shortness of breath

Watch for a combination of these symptoms. If you suspect sepsis, see a doctor urgently, CALL 911, or go to a hospital and say, **"I AM CONCERNED ABOUT SEPSIS."**

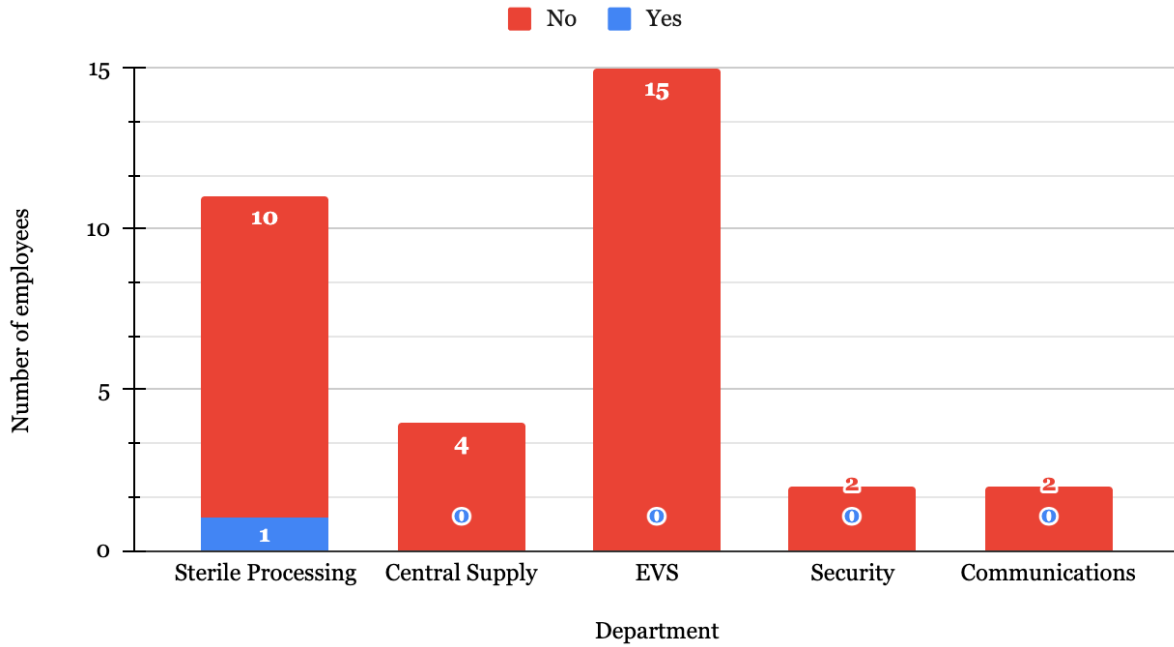


sepsis.org

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Appendix J: Pre- and Post-Implementation Data

Pre-Assessment: Do you know what sepsis is?



Post-Assessment: Do you know what sepsis is?

