Preventing Sepsis: A Community Based Approach

NYS Senior Action Council
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What is Sepsis?

Sepsis is a life threatening condition that arises when the body’s response to an infection injures its own tissues and organs.

If not treated promptly Sepsis can result in:

- Organ Failure (lungs, kidneys, heart)
- Tissue Damage
- Death

1. (Singer, et al. JAMA 2016;315(8) 801-810)
Why Community Based?

- >80% of sepsis cases originate outside of the hospital
- Public awareness of: signs, symptoms and risk factors for sepsis is poor
- **Sepsis is a Medical Emergency** that requires prompt medical attention
- Mortality (death) rates for sepsis are high
- Sepsis is a condition for which mortality is preventable with early detection and treatment
- Hospital readmission rates for hospitals are high
Sepsis Alliance: Faces of Sepsis

https://www.youtube.com/watch?v=12Qbn6XfH0
Common Infections Leading to Sepsis

The most common illnesses leading to sepsis include:

- Pneumonia
- Urinary tract Infections
- Skin infections
  - Skin sores
  - Skin tears
  - Pressure sores (from extended sitting in a wheelchair or lying in bed)
- Dental abscesses
- Infections of the gut
Why Haven’t I Heard of Sepsis?

You may have heard of people dying of:

- Pneumonia
- Abdominal Infections
- Kidney Infections
- Blood Poisoning

But often the cause of death was Sepsis

✓ Public Awareness of Sepsis is Poor
Early Recognition is Important

Early detection and treatment is critical to:

- Decrease morbidity and mortality related to Sepsis
- Avoid long term health-related complications
- Potentially avoiding sepsis-related hospitalizations

We have a great opportunity to educate not only the public, but also non-hospital based health care providers
Public Awareness of Sepsis is Poor

• Sepsis is one of the most under recognized and misunderstood conditions by Health Care Professionals (HCPs) and the public

• The public needs an understandable definition of Sepsis
  • 54% of US adults have not heard of Sepsis

• HCPs need improved clinical prompts to facilitate earlier identification of Sepsis

Who is at Risk for Sepsis?

Anyone with an infection!

Those at higher risk for developing sepsis include:

- People 65 or older
- Infants less than 1 year old
- People with chronic illnesses: diabetes, cancer, AIDS
- People with weakened immune systems
- People recently hospitalized
- People recovering from surgery
Sepsis and Aging

- People over the age of 65 constitute 1/5 of the US population but 2/3 of patients admitted to the hospital with Sepsis!
- As we age our immune systems become less effective at fighting infections
- Although sepsis can affect people of all ages:
  - People over the age of 65 are even more susceptible to sepsis than any other age group
  - People over the age of 65 with health issues are at an **even higher risk**
    - Diabetes
    - Heart disease/Heart failure
    - Kidney disease
Urinary Tract Infection (UTI) is a common source of Sepsis

- People over the age of 65 are more at risk for UTIs
- Especially those with indwelling urinary catheters
- Symptoms can differ from those of younger people and may include:
  - Confusion
  - Agitation
  - Poor motor skills or dizziness
  - Falling or loss of balance
  - Other behavioral changes

UTIs in elderly are often mistaken for early dementia or Alzheimer's Disease (NIH)
Early Signs of Sepsis

Patients typically **have more than one** of the following:

**Infection** *(confirmed or suspected)* plus:

- Fever
- Feeling very cold (hypothermia)
- Rapid heart rate
- Rapid breathing
- Shortness of breath
- Confusion or difficult to arouse
- Complaints of extreme pain
- Pale/discolored skin
Could it Be Sepsis?

- The goal is for people to be as familiar with the early signs and symptoms of sepsis as they are with those of a heart attack or stroke
- Know the signs
- Communicate to Health Care Professionals; “I am worried about sepsis”
- Sepsis is a medical emergency!
What if My Dr. Tells Me I Have Sepsis?

If sepsis is caught early you have a good chance for survival as well as avoiding long term complications!

- People with sepsis are usually treated in the hospital
- Doctors will treat your infection with (IV) antibiotics
- In the hospital you will have your blood and vital signs tested
- You will probably be given IV fluids
- You may be admitted to the hospital for on-going care
Early Signs and Symptoms of Sepsis

Has your healthcare provider diagnosed you with an INFECTION? You could be at risk for SEPSIS. Know the signs!

What is Sepsis?
Sepsis is your body’s life-threatening response to an INFECTION anywhere in your body. Anyone can get sepsis!

Signs and Symptoms of Sepsis
Watch for a combination of INFECTION + fever or feeling chilled, confusion/sleepiness, fast heart rate, fast breathing or shortness of breath, extreme pain and pale/discolored skin.

SEPSIS IS A MEDICAL EMERGENCY

GREEN Zone: ALL CLEAR - Feeling well
- No fever or feeling chilled
- No confusion or sleepiness
- No fast heart rate
- Easy breathing
- No increase in pain

RED Zone: Call your doctor or nurse immediately if you experience INFECTION and...
- Fever or feeling chilled
- Confusion/sleepiness (recognized by others)
- Fast heart rate
- Fast breathing or shortness of breath
- Extreme pain
- Pale or discolored skin

If you are unable to reach your doctor or nurse, CALL 911 OR HAVE SOMEONE TAKE YOU TO THE EMERGENCY DEPARTMENT.
Patients Hospitalized for Sepsis:

- Are more severely ill than those hospitalized for other conditions
- Have considerably longer lengths of stay in the hospital than those hospitalized for other conditions
- Are more likely to die during their hospitalizations compared to those hospitalized for other conditions
Treatment

- Prompt administration of IV antibiotics
- Prompt IV fluid administration
- Diagnostic Testing
  - Blood cultures
  - CBC (complete blood count)
  - Lactate level
  - Coagulation studies (to assess blood clotting)
  - Radiology testing to identify source of infection
Preventing Sepsis

- Wash hands often
- Get Vaccinated against:
  - Influenza (Flu)
  - Pneumonia (Pneumococcal)
  - Hepatitis B
  - Shingles
  - Pertussis (Whooping Cough)
- Prevent Infections
- Treat Infections Promptly
- Manage Chronic diseases (diabetes etc.)
- Maintain Good Overall Health
Every Minute Counts!

- Sepsis is treatable and can be prevented from progressing to Septic Shock...**BUT** it must be suspected!

- For every hour that appropriate treatment is delayed the risk of death increases by 7.6%¹

New York State Regulations

- NY was the first state in the nation to enact Sepsis Regulations ("Rory’s Regulations")
- In August of this year Illinois signed “Gabby’s Law”
- Requires every hospital to have protocols for:
  - Recognizing early signs of Sepsis
  - Identifying high risk patients
  - Early treatment measures
  - Staff training
  - Metric analysis as a driver of change

Sepsis Awareness Saves Lives

- Treat Sepsis as a **MEDICAL EMERGENCY**

- If you or a family member exhibits the early signs of Sepsis notify Physician ASAP for medical attention

**EARLY  PROMPT RECOGNITION & TREATMENT GREATLY IMPROVES SURVIVAL RATES**
How You Can Help

- Familiarize yourself with the early signs of Sepsis
- Know who is at risk for Sepsis
- Know preventative measures to decrease your risk of developing sepsis
- Educate your family and friends about the signs & symptoms of Sepsis
Resources:

IPRO Sepsis Initiative
http://www.stopsepsisnow.org

Surviving Sepsis Campaign:
http://www.survivingsepsis.org/Pages/default.aspx

Centers for Disease Control (CDC):
http://www.cdc.gov/sepsis/clinicaltools/index.html

Sepsis Alliance:
http://www.sepsis.org/

Rory Staunton Foundation:
https://rorystauntonfoundationforsepsis.org/
For more information

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