

March Education Seminar

March 22, 2018



Welcome



- All phone lines are muted
- **Mute *6**
- **Unmute: #6**
- Unmute your phone to ask questions at the end of the presentation
- Or, ask questions through the Chat Box
- Recording and slides will be available on web site
- Please provide feedback

Sepsis and Kidney Disease

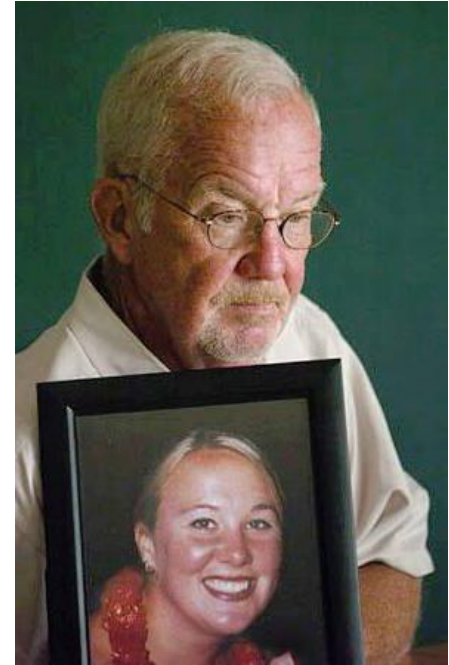


SEPSIS ALLIANCE®

Suspect Sepsis. Save Lives.™

About Sepsis Alliance

Largest sepsis advocacy organization in the U.S. working in all 50 states to save lives and reduce suffering from sepsis. Sepsis Alliance is a charitable organization run by a dedicated team who share a strong commitment to battling sepsis.



Our Vision: A world in which no one is harmed by sepsis.

Our Mission: Save lives and reduce suffering by raising awareness of sepsis as a medical emergency.

Sharon L. Hansen, MN, RN, CCRN



For more than 30 years, Sharon has been a critical care nurse in the Tacoma, WA area and a critical care nurse educator for the last 10 years. She received her Masters of Nursing from University of Washington Tacoma and currently lectures in the School of Nursing part-time. Sharon is also a clinical instructor for Green River Community College.

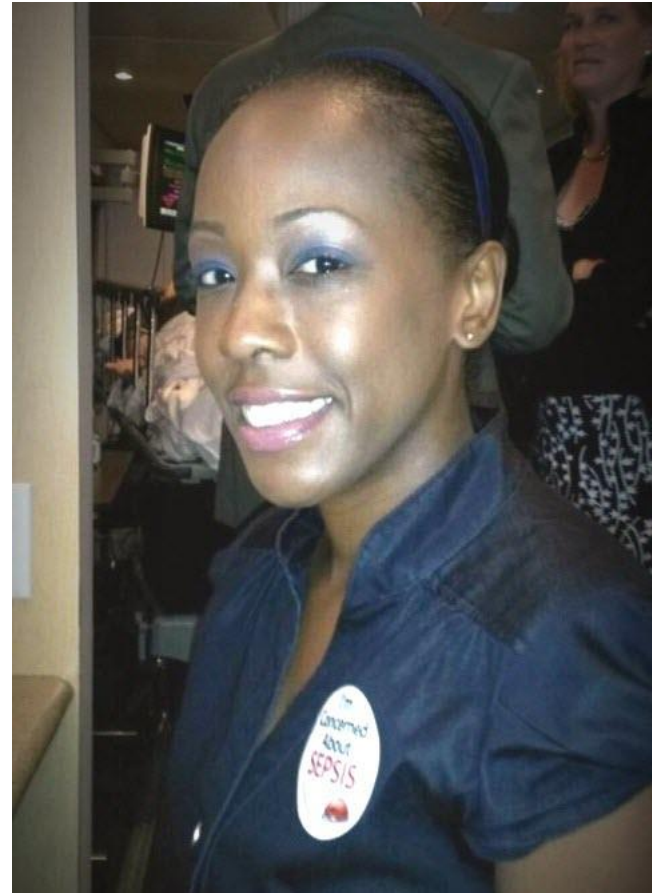
She is a member of the Society of Critical Care Medicine and the American Association of Critical Care Nurses (AACN), as well as an active member of the Mountain to Sound AACN Chapter. Sharon is all too familiar with sepsis in both her personal and professional life after her husband, Mark, developed sepsis in 2003 and experienced post-sepsis syndrome symptoms. Her clinical focus centers on sepsis identification, early and effective resuscitation, hemodynamics, oxygenation, optimizing hemodynamic support, and post sepsis syndrome.

Stacy Slater

Mom

Paralegal

Sepsis Survivor



Objectives

By the end of this session you should be able to:

- Describe what sepsis is
- Recognize the early warning signs of sepsis
- Discuss the relationship of sepsis and kidney disease
- Identify ways you can prevent sepsis
- Explain what to do if you think you or a loved one has sepsis



Introduction

For purpose of this discussion

- **Chronic Kidney Disease (CKD)** kidney disease but do not require renal replacement therapy (dialysis or transplant)
- **End-Stage Renal Disease (ESRD)** stage 5 CKD and are receiving maintenance dialysis (hemodialysis or peritoneal dialysis)



Poll

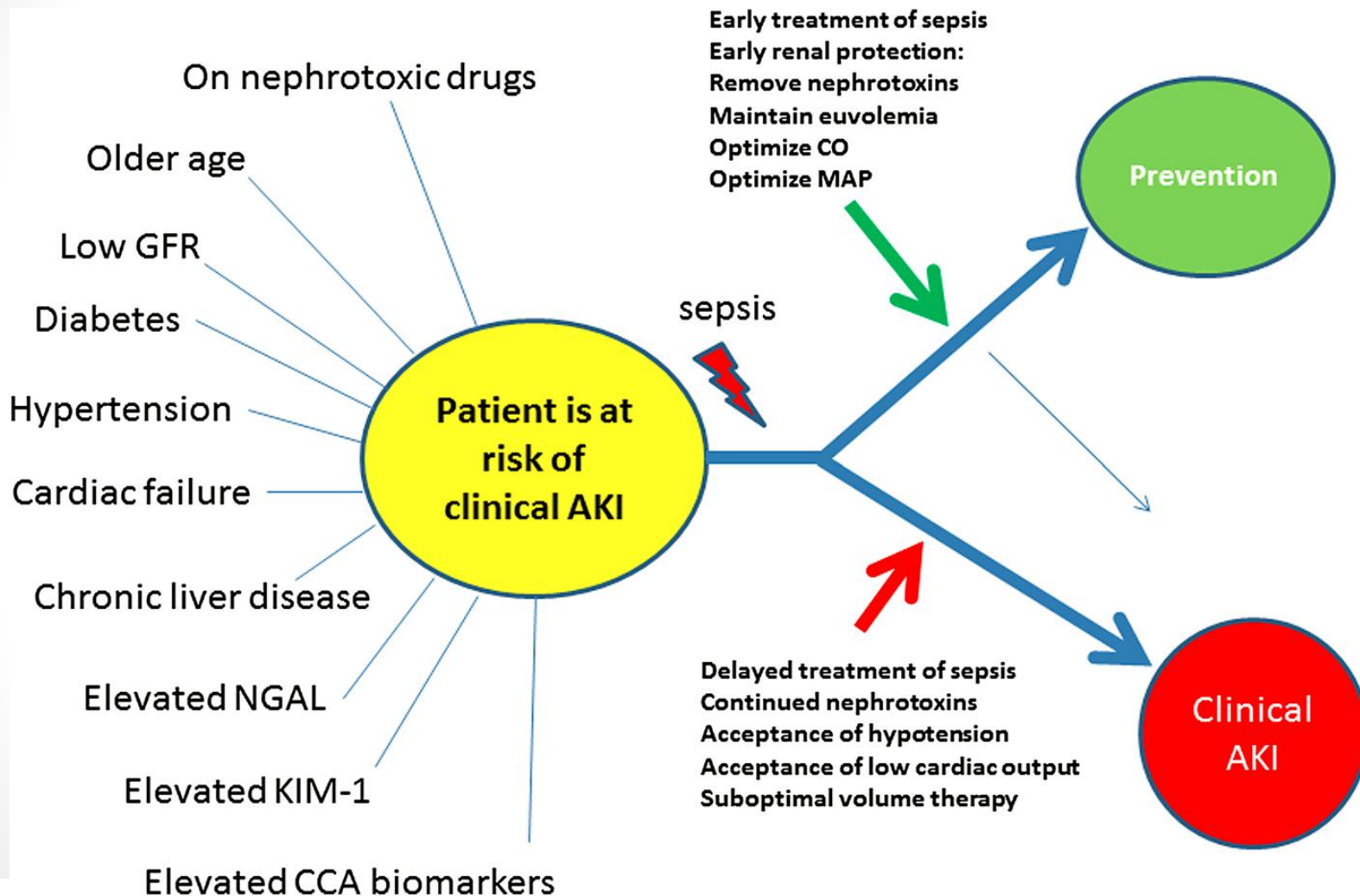
- Have you had sepsis?
- Has a friend or family member had sepsis?



Causes of Kidney Disease

- Conditions that may lead to kidney disease
 - High Blood Pressure (Hypertension)
 - Diabetes
 - Chronic glomerular disease
 - Congenital anomalies such as:
 - Polycystic Kidney Disease
 - Medullary Sponge Kidney
- Kidney damage
 - Sepsis- the most common cause of Acute Kidney Injury in the Intensive Care Unit
 - Shock
 - Toxins

Risk of AKI Caused By Sepsis



Stacy's story



Your voice

- You have a voice to say something is wrong
- You know **you** the best

“...found a good urologist who listened to me and my concerns..”



Chronic Kidney Disease: Risk Factors for Infection

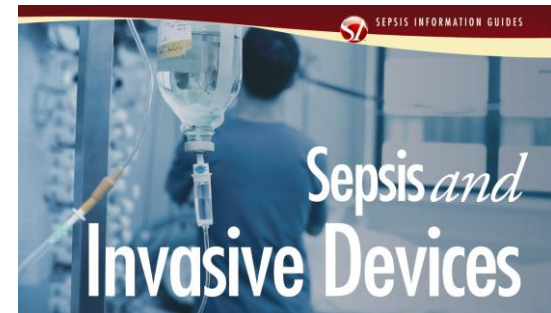
- Often have co-existing conditions
 - Diabetes
 - Cardiovascular disease
- Malnutrition and low albumin levels
- Immunosuppressive therapy
- Nephrotic syndrome (protein leaks into urine)
- Uremia
- Anemia
- Obstruction
- Medical devices and procedures

(Dalrymple & Go, 2008)

Acute and End-Stage Disease: Risk Factors for Infection

Individuals requiring dialysis have risk factors:

- Dialysis Access
 - Temporary catheter into a large blood vessel
 - Arterial-Venous fistula or graft
 - Peritoneal catheter
- Dialysis procedure
 - Solutions
 - Accessing site
- Immunodeficiency



(Dalrymple & Go, 2008)

Sepsis

Sepsis is the body's overwhelming and life-threatening response to infection that can lead to tissue damage, organ failure, and death.

It's your body's over active and toxic response to an infection

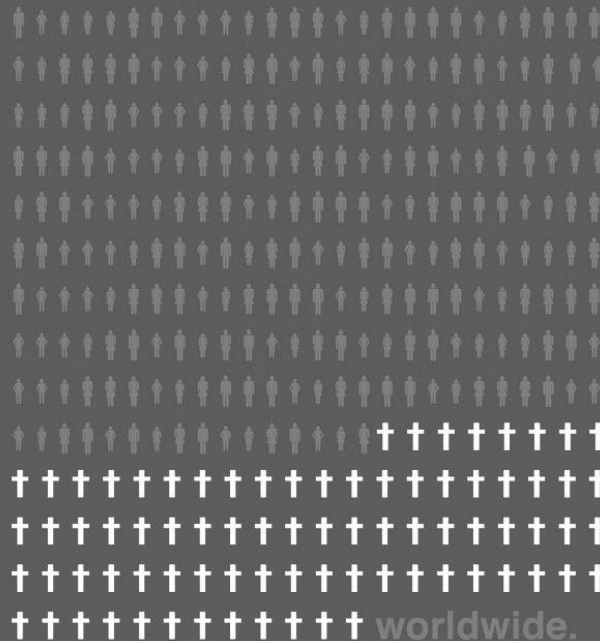
(Sepsis Alliance, 2018)

Global Incidence of Sepsis

Sepsis cases:

≈ **27,000,000**

↓ / † = 100 000 people { † = dead }



≈ **8,000,000**

people die of Sepsis every year.

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- Sepsis contributes to
- 1 in every 2 to 3 deaths
 - in hospitals
 - Majority had sepsis
- on presentation to the hospital

258,000 deaths a year in the US

Deaths from

Breast cancer

AIDS

+ Prostate Cancer

TOTAL < Deaths from Sepsis

SYMPTOMS OF SEPSIS

- S** Shivering, fever, or very cold
E Extreme pain or general discomfort (“worst ever”)
P Pale or discolored skin
S Sleepy, difficult to rouse, confused
I “I feel like I might die”
S Short 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



Kidney Condition Challenges in Sepsis Recognition

- Normal sepsis symptoms may not be present due to:
 - Medications
 - Decreased immune response
 - Chronic hypertension
 - You may have a relative decrease in blood pressure instead of absolute
 - Difficulty identifying if symptoms are due to infection or renal condition
- Think about other factors that may make sepsis recognition difficult

October 31st, 2012

- 37-year-old female with stents placed in kidney on October 30th
- Experienced:
 - Fever
 - Chills
 - Severe pain
 - Nausea Vomiting

Time is VERY Critical



Suspect Sepsis

- Blood Cultures
- Early Antibiotics
- Fluid Administration
 - Significant work is being done regarding the right amount of fluid.
 - It is important there is enough fluid but not too much fluid given
- Remove source or possible source of infection

SEPSIS IS A MEDICAL EMERGENCY

IF YOU SUSPECT SEPSIS, CALL 9-1-1 OR GO TO A HOSPITAL RIGHT AWAY

Suspect Sepsis, Say Sepsis

- Advocate
- Educate family and friends regarding symptoms of sepsis

“All I wanted to do was lay down but before I could lie down I threw up, took more pain meds and took a nap. After about two hours of napping I could barely hold my head up I was very confused, in pain, headache, and my temp had gone up to almost 102. As I sat up catch my bearing, I threw up again by this time I knew something was very wrong.”

-Stacy



Preventing Sepsis

- Prevent infection by:
 - Good hand hygiene
 - Excellent oral care
 - Vigilance monitoring of dialysis access sites
 - Scrub the Hub before accessing dialysis catheter
 - Partner with health team regarding invasive lines
 - If indwelling urinary catheter is not necessary, it should be removed
 - Vaccinations
 - Educate family/friends about infection prevention
 - Optimize nutrition

The Great Unknown.....

Sepsis Survivors

- Number of disabilities
 - Amputation
 - Thinking
 - Memory
 - Calculations
 - Post traumatic stress disorder
- Many carry the scars of sepsis for the rest of their lives



Post Sepsis Syndrome



Sepsis Survivors and Families



Suspect Sepsis, Save Lives

Prevention

Awareness

Empowerment

Urgency



Sepsis Alliance Resources

- Sepsis Information Guides
- Sepsis Symptoms Cards
- Additional resources

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References

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Join us next month for..



A LIVABLE, LOVABLE APPROACH TO KIDNEY DISEASE NUTRITION

PRESENTED BY JESSIANNA SAVILLE,
M.S., R.D., C.S.R., L.D.

April 26, 2018 at 2:00 PM Eastern

Learn more at www.dpcedcenter.org

