



Opportunities and Challenges of the WHO Resolution on Sepsis

K. Reinhart, Chair Global Sepsis Alliance
GSA/WSD Supporter Meeting ESICM 2017

September | World
13 | Sepsis
2017 | Day



Global
Sepsis
Alliance

SEPSIS WHAT WE DO BECOME INVOLVED

Donate



WHA Adopts Resolution on Sepsis

**This resolution comprises
all requests that the GSA
has set out in the World
Sepsis Declaration in 2012 !**



Global
Sepsis
Alliance

**Draft resolution proposed by Australia, Austria, Colombia,
Costa Rica, Estonia, Germany, Ireland, Jamaica, Japan,
Luxembourg, Russian Federation and Switzerland**



140th session

EB140.R5

Agenda item 7.2

25 January 2017

**This resolution means a giant leap in the
fight against sepsis because it:**

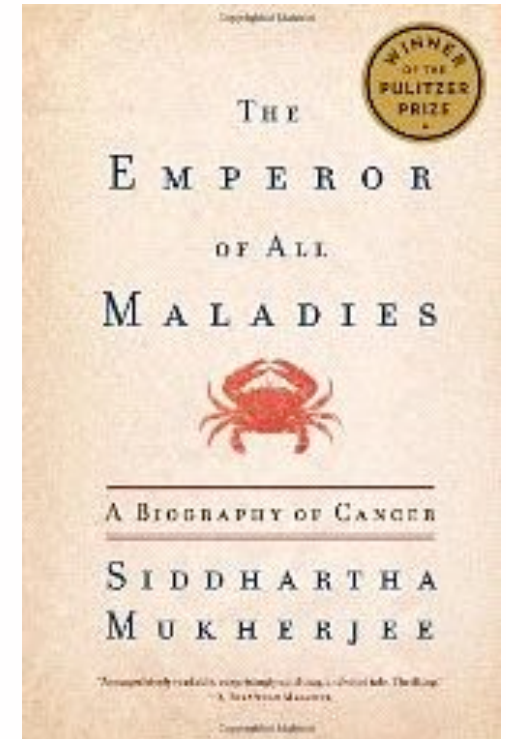
- **will help to overcome the poor
recognition, awareness and knowledge
on sepsis**

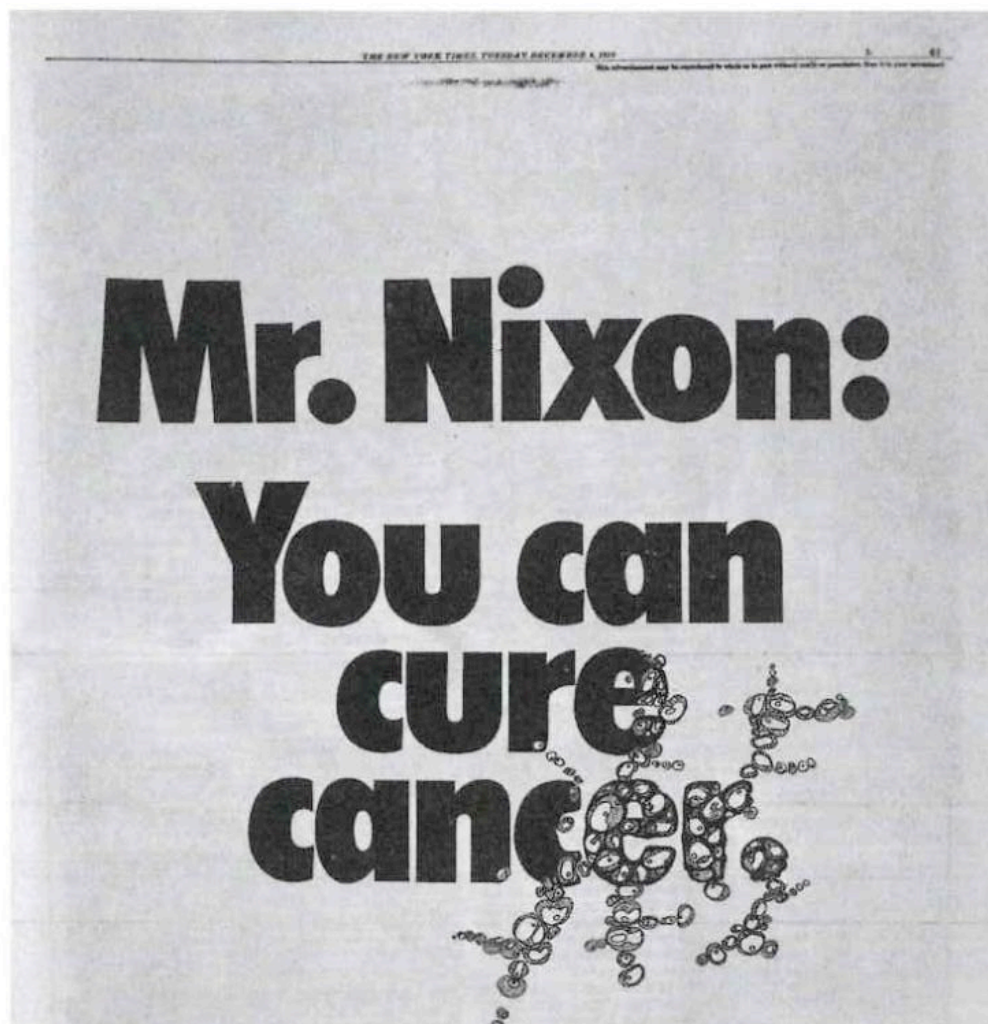
Having considered the report on improving the prevention, diagnosis and clinical management of sepsis,¹

RECOMMENDS to the Seventieth World Health Assembly the adoption of the following resolution:

We Learnt from Cancer and other fields

For any illness to rise to political prominence, it needed marketing..... A disease needed to be transformed politically before it could be transformed scientifically.







The NEW ENGLAND JOURNAL of MEDICINE

Perspective

Recognizing Sepsis as a Global Health Priority
A WHO Resolution

Konrad Reinhart, M.D., Ron Daniels, M.D.,
Raymond D. Schachter, L.L.B., and

“... The public and political space is the space in which [sepsis] needs to be in order for things to change.”
Sir Liam Donaldson, Geneva ; May 2017

“S... burden of
and preven-
management
and profes
at the clinical
but not visible
litical leaders,
care systems.
and political sp
in which [sepsis]
order for things to
So said Sir Liam Donaldson,
described by Donaldson, and as a

...se arise
known.
for 30 mil-
and 6 million deaths
per year come from a systematic
review that extrapolated from pub-
lished national or local popula-
tion estimates to the global pop-
ulation.³ The likelihood that the
result was a significant underes-

The Resolution Acknowledges That:

This helps to overcome some misconceptions on sepsis such as:

- **Sepsis occurs only in the health care setting**
- **Results mostly from unclean care**
- **Is primarily caused by multiresistant bacterial super bugs**

The Resolution Urges Member States To:

- Develop **national policy and processes** to **improve** the prevention, diagnosis, and treatment of sepsis.
- Implement measures to recognize and manage sepsis as a **national and international health emergency**.
- **Increase public awareness** of sepsis among high risk groups, to ensure prompt recognition and access to treatment
- Promote **communication** among health care workers to **use the term “sepsis”** consistently with patients, relatives, and other parties.
- **Engage** in advocacy efforts to raise sepsis awareness by supporting activities promoting such awareness including but not restricted to **World Sepsis Day**

Request that the DG of WHO to report on progress in 2018'nd in 2020

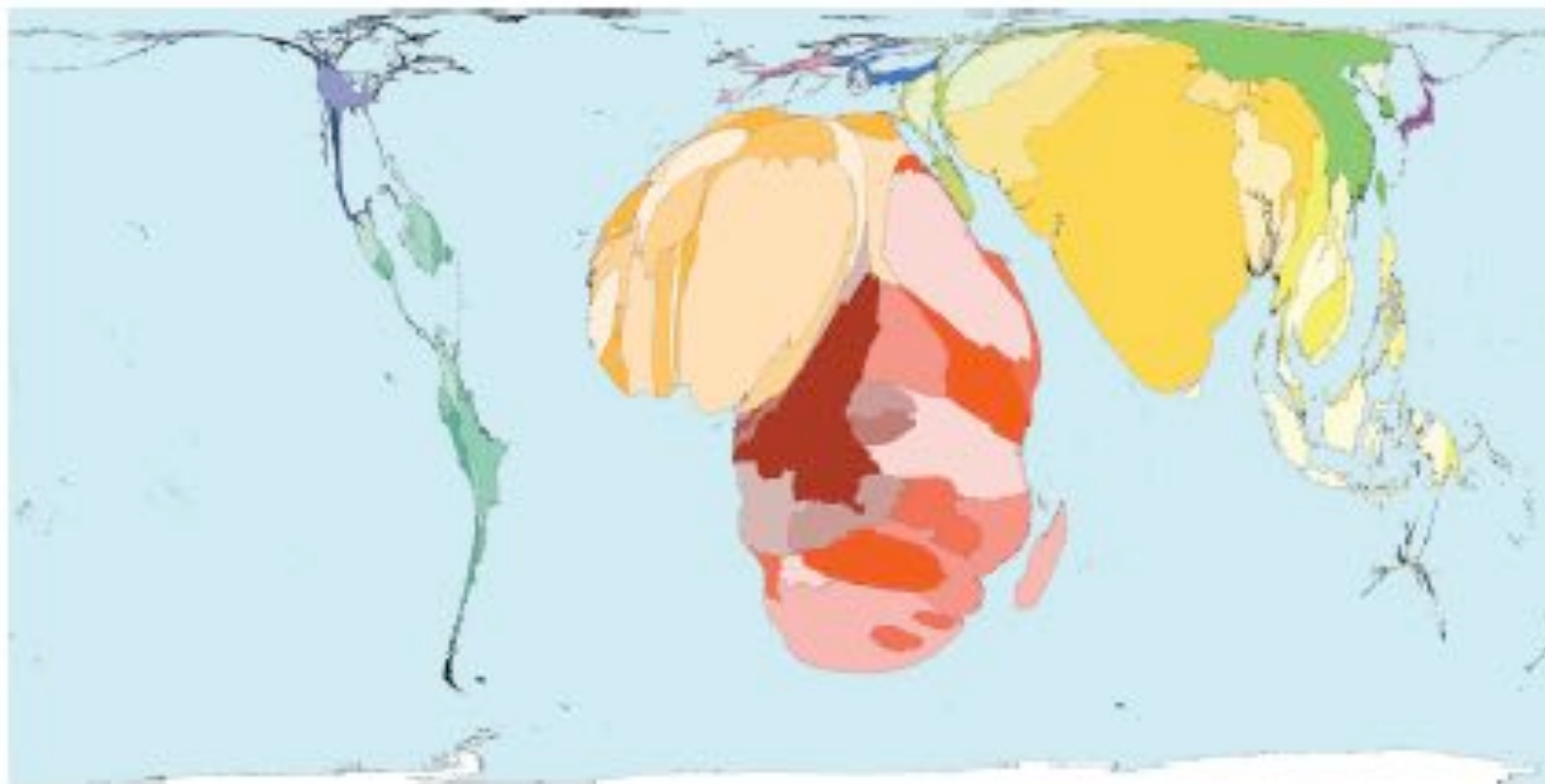
What contributed to the success and what helps to work with national governments !

-

Assessment of Global Incidence and Mortality of Hospital-treated Sepsis

Current Estimates and Limitations

Carolin Fleischmann^{1,2}, André Scherag³, Neill K. J. Adhikari⁴, Christiane S. Hartog^{1,2}, Thomas Tsaganos⁵, Peter Schlattmann⁶, Derek C. Angus^{7*}, and Konrad Reinhart^{1,2*}; on behalf of the International Forum of Acute Care Trialists



Between 2009-2014 In The US Less Than 50% of Sepsis Cases were Coded In the ICD-9

- According to EHRs 5.9% of patients had sepsis. Neither incidence nor mortality decreased

Projected national incidence of 517/100 000 overall 1.67 million cases, 260,000 deaths.

Currently Sepsis Incidence and Burden of Sepsis May Be Considerably Underestimated

Open Forum Infectious Diseases

MAJOR ARTICLE



Sepsis Incidence: A Population-Based Study

Lisa Mellhammar,¹ Sven Wullt,¹ Åsa Lindberg,² Peter Lanbeck,¹ Bertil Christensson,¹ and Adam Linder¹

¹Department of Clinical Sciences, Division of Infection Medicine, University of Lund, Sweden; ²Hallands Hospital Halmstad, Sweden

Background. A

assess the incidence

hospitals in an enti

Methods. This i

nous antibiotic the

dysfunction. The n

regions were started on intravenous antibiotic treatment on the dates of the survey. Patients who had ongoing intravenous antibiotic therapy preceding the inclusion dates were excluded, if sepsis was already present.

Results. Four hundred eighty-two patients were included in the study; 339 had a diagnosed infection, of those, 96 had severe sepsis according to the 1991/2001 sepsis definitions, and 109 had sepsis according to the sepsis-3. This is equivalent to an annual incidence of traditional severe sepsis of 687/100 000 persons (95% confidence interval [CI], 549–824) or according to the sepsis-3 definition of 780/100 000 persons (95% CI, 633–926). Seventy-four patients had sepsis according to both definitions.

• Sepsis-3 780/100 000

• Mortality 17.4%

e aim of this study was to

antibiotic in all parts of all

were started on an intrave-

idence of sepsis with organ

three patients living in the

Bloomberg ▼

America Has a \$27 Billion Sepsis Crisis

A photograph of a hospital bed, showing the white plastic frame and side rails. A large red banner is overlaid diagonally across the center of the image, containing white text. The text lists estimated direct costs for Germany and the UK. The word 'on' is partially visible on the right side of the red banner.

Estimated direct costs:
Germany 7.7 Billion Euros
UK 7.7- 10.7 Billion Pounds on

News suggest a striking rise in the deadly syndrome, but hospitals have a profit-motive to find it—and it may have been there all along.

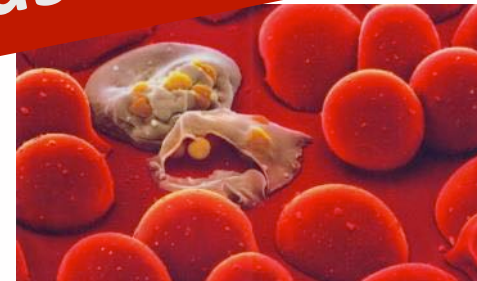
The Resolution Acknowledges That:

„Most types of microorganisms can cause sepsis, including bacteria, viruses and parasites, such as those that cause pneumonia, urinary tract infections, skin infections, and infections of the respiratory tract.”

“Sepsis often presents as the clinical deterioration of common and preventable infections such as those of the respiratory, gastrointestinal and urinary tract, or of wounds and skin.”



Candida albicans



Special Communication | CARING FOR THE CRITICALLY ILL PATIENT

The Third International Consensus Definitions for Sepsis and Septic Shock (Sepsis-3)

Mervyn Singer, MD, FRCP; Clifford S. Deutschman, MD, MS; Christopher Warren Seymour, MD, MSc; Manu Shankar-Hari, MSc, MD, FFICM; Djillali Annane, MD, PhD; Michael Bauer, MD; Rinaldo Bellomo, MD; Gordon R. Bernard, MD; Jean-Daniel Chiche, MD, PhD; Craig M. Coopersmith, MD; Richard S. Hotchkiss, MD; Mitchell M. Levy, MD; John C. Marshall, MD; Greg S. Martin, MD, MSc; Steven M. Opal, MD; Gordon D. Rubenfeld, MD, MS; Tom van der Poll, MD, PhD; Jean-Louis Vincent, MD, PhD; Derek C. Angus, MD, MPH

“Sepsis is the primary cause of death from infection, especially if not recognized and treated promptly. Its recognition mandates urgent attention.”

“Sepsis is defined as life-threatening organ dysfunction caused by a dysregulated host response to infection.”

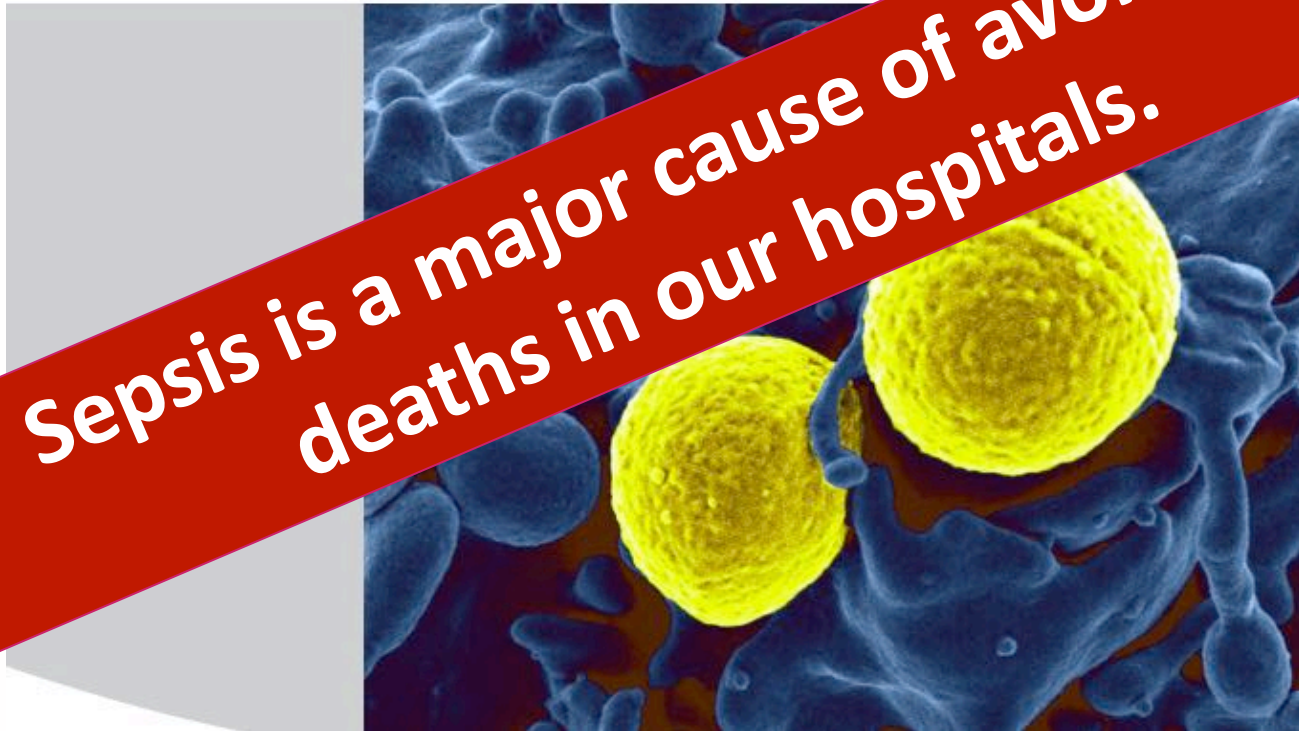
The Documentation of Poor Quality of Sepsis Care

Report by the National Confidential Enquiry into Patient Outcome and Death – 2015 in UK

Just Say Sepsis!

A review of the process of care received
by patients with sepsis

Sepsis is a major cause of avoidable deaths in our hospitals.



CLINICAL
FROM
INCIDENT

CLINICAL
EXCELLENCE
MISSION

Recognition and Management of Sepsis

**This report identified sepsis
as a primary cause of
preventable deaths !**

Antimicrobials Were Delayed in 44% of Patients

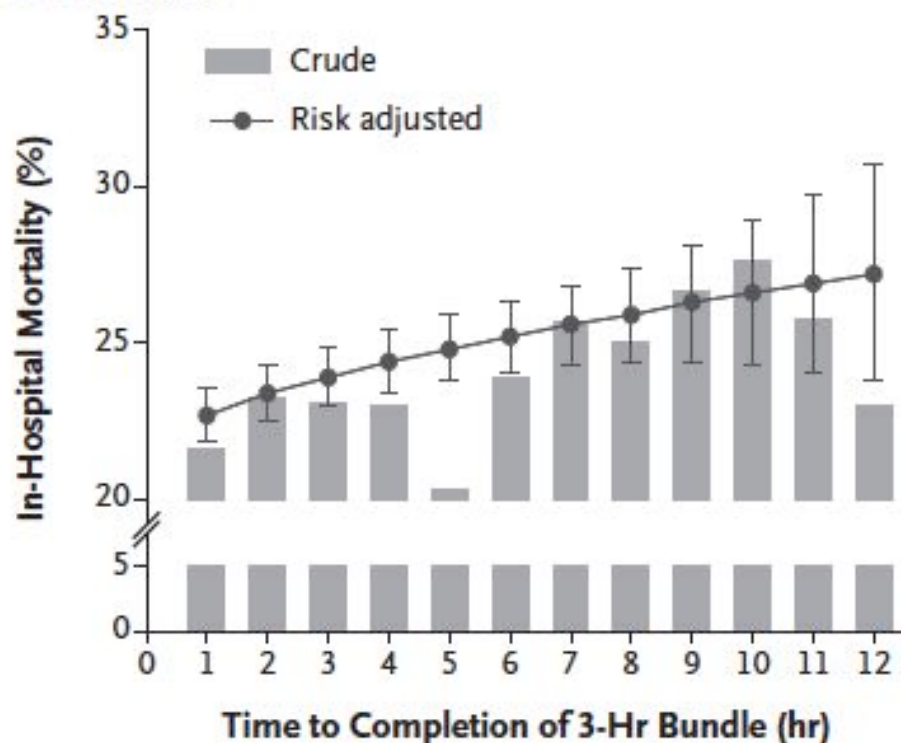
Just Say Sepsis!

A review of the process of care received by patients with sepsis

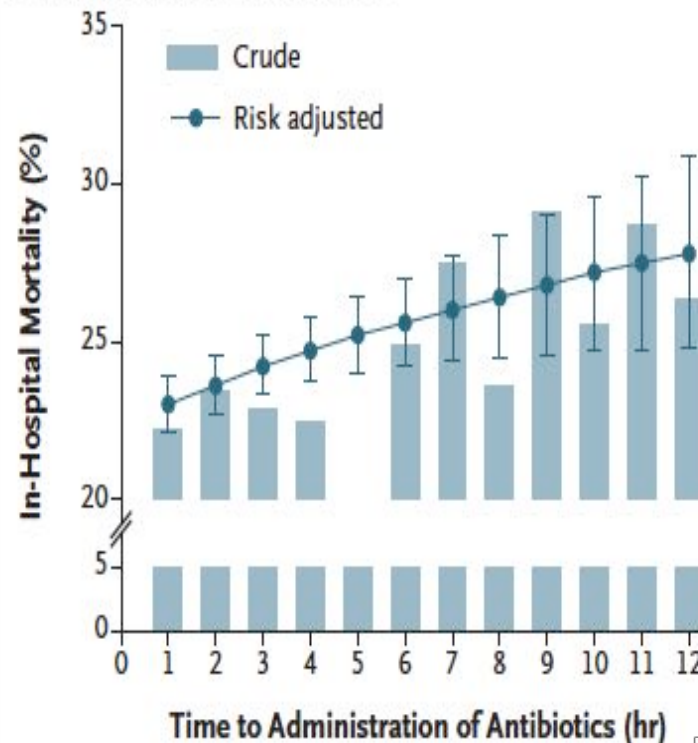
Outcome affected	Number of patients	%
Yes	43	44.3
No	54	55.7
Subtotal	97	
Insufficient data	17	
Total	114	

Time to Treatment and Mortality during Mandated Emergency Care for Sepsis

A 3-Hr Bundle



B Administration of Antibiotics



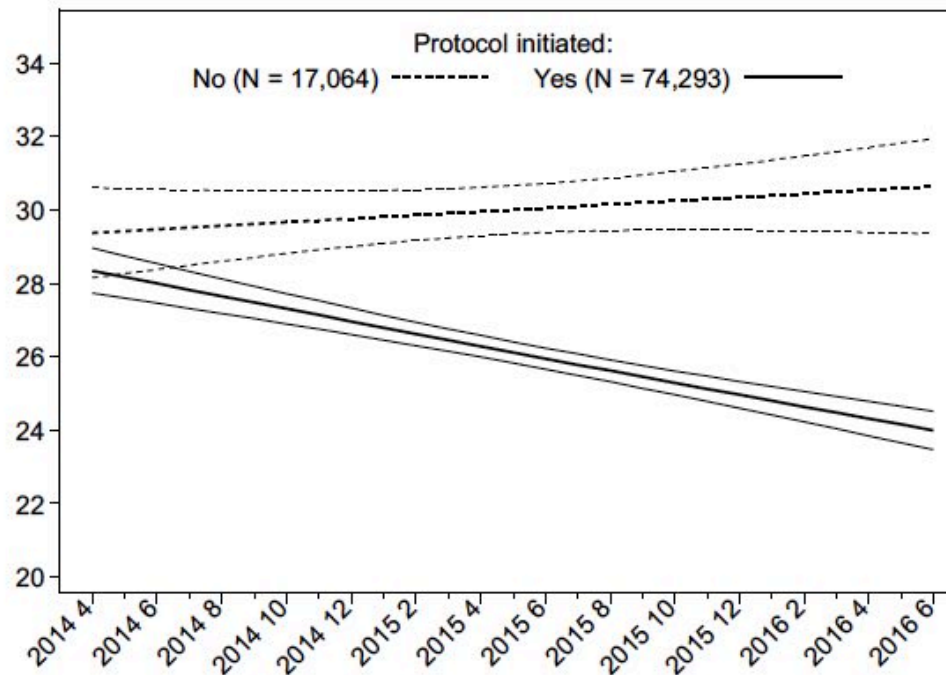


Bethesda Hospital

New York State Mandated Public Reporting Study



Figure 3: Risk adjusted hospital mortality over time by protocol initiation status.



Risk-adjusted mortality improved in patients with a sepsis protocol initiated throughout the study period, but was stable for patients without a protocol initiated. The difference in mortality between patients treated with and without a sepsis protocol first became significant ($p = 0.019$) during the 3rd month of the study

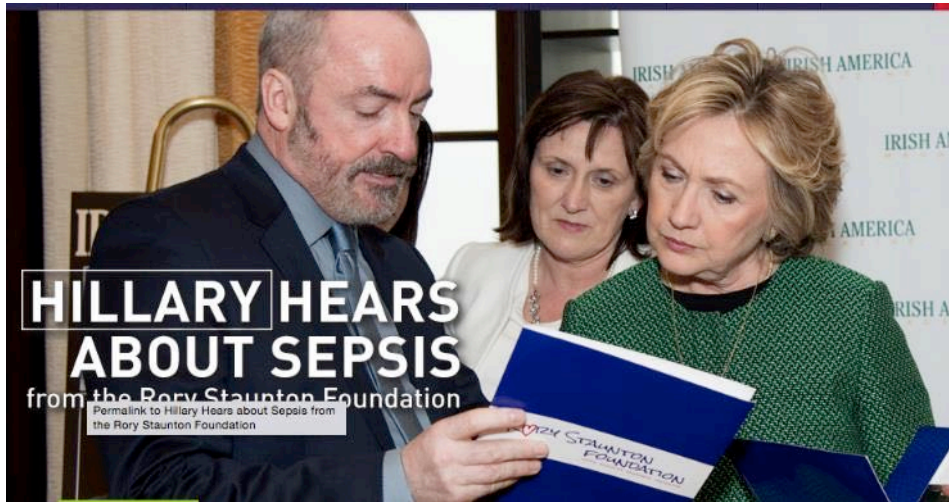


The Potential for Cost Savings Through QI is Huge

Depending on the increase in guideline compliance by 10%, 20% or 30%, the annual savings range between 83, 166 and 249 million pounds.*

* WHITEWATER CHARITABLE TRUST
The Cost of Sepsis Care in the UK
Final Report

Families Are No Longer Willing to Accept Poor Quality of Sepsis Care

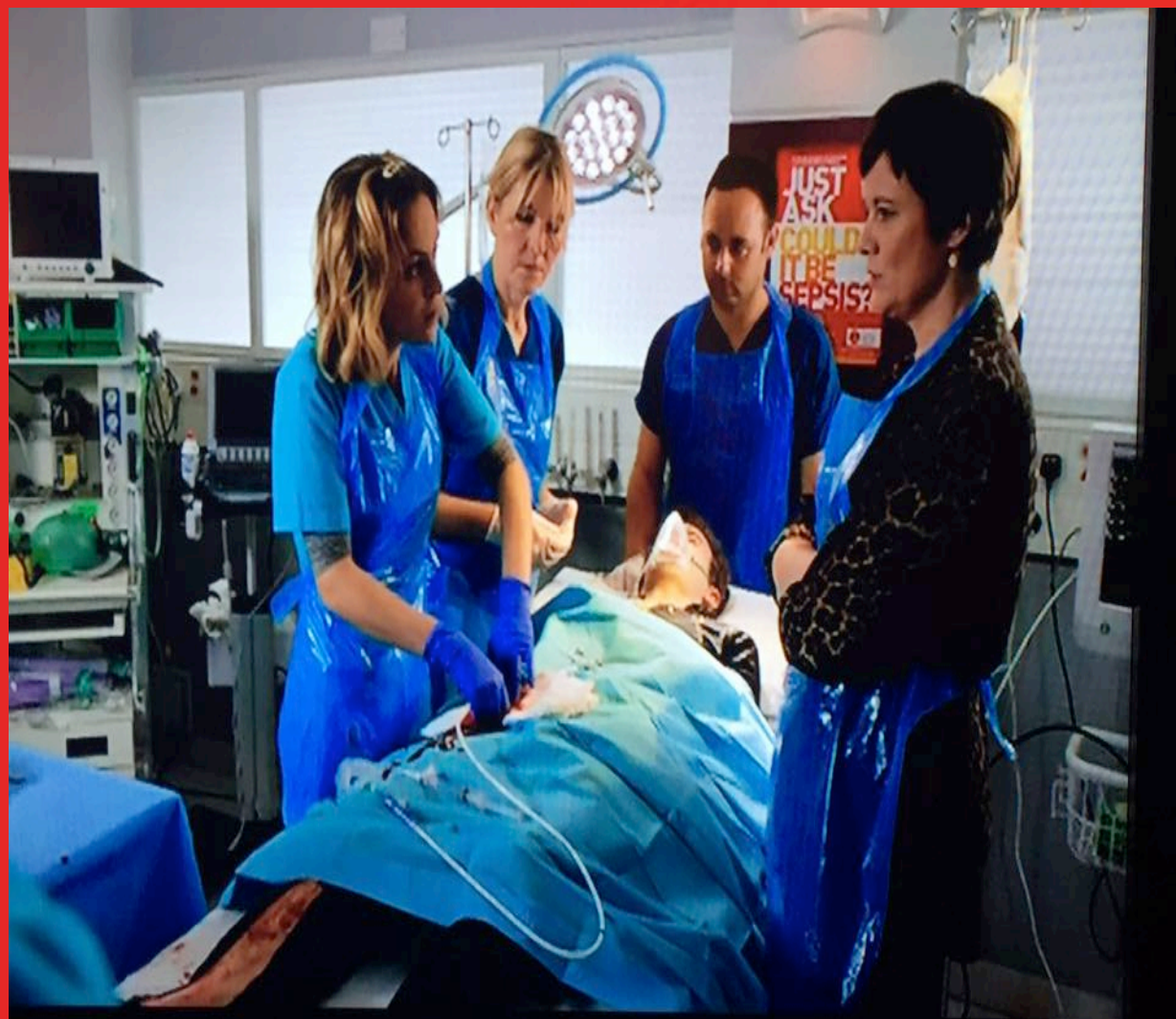


Sepsis and the little ones who never should have died: Heartbreaking stories that prove why it's so vital families and doctors are taught how to spot symptoms sooner

- The Daily Mail is campaigning to end the sepsis scandal
- 1,500 children have died from sepsis in the last 14 months
- Jeremy Hunt promised to consider a national awareness campaign
- Sepsis is an over-reaction of the body's immune system to infection
- If caught early enough, it's treated with intravenous antibiotics and fluids

By JONATHAN GORNALL FOR THE DAILY MAIL

PUBLISHED: 00:05, 15 March 2016 | UPDATED: 10:29, 15 March 2016







Sepsis

The challenge
politics

“Together with other German-speaking health ministers, I am advocating that the World Health Assembly adopt a resolution on the topic of sepsis in the coming year.”

Joint symposium at the University Hospital and
the German National Academy of Sciences Leopoldin

under the auspices of the Federal Minister Hermann Gröhe

The German Moh Is the Driving Force to Get a Resolution on Sepsis on the Agenda of the WHA



Vienna Sept. 4th 2015

September | World
13 Sepsis
2015 | Day



A truly global effort to fight sepsis.
On every continent. In over 40 countries.



WORLD SEPSIS CONGRESS

1ST WSC - SEPTEMBER 8TH AND 9TH, 2016

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The Global Sepsis Alliance and the World Health Organization have joined forces to bring you the free online congress 'WSC Spotlight: Maternal and Neonatal Sepsis' on September 12th, 2017. To find out more and to register for free, please visit



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Dr. Margaret Chan, Past DG of WHO, on Sepsis and Its Implications



World Health
Organization





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Dr. Tedros Adhanom Ghebreyesus, DG of WHO, on Sepsis - Opening Remarks...



World Health
Organization



Auf youtube.com ansehen



0:54 / 3:26



HD

YouTube



Sepsis Mortality Differs in Magnitude and Trends Between Countries and Continents

• Australia	2000-2012: 35,0%	➡	18,5%
• England	2000-2012: 45,5%	➡	32,1%
• USA	2009-2014: 39,9%	➡	23,2%
• Germany	2010-2013: 47.8%	➡	43.6%
• Brazil	2015		55,7%
• Turkey	2015		62,6%

Next Steps

- WOH will convene a stakeholder meeting to develop strategy
 - To update the burden of sepsis
 - To start modell projects in ressource poor countries
 - Assess the current acitivities of the UN member states
- GSA will intensify its work with the authors of GBDR
- In several countries like UK, Ireland, Germany, Australia national sepsisplans are implemented or in preperation
- GSA provides template materials to foster the request for national sepsisplans and suggests the creation of national coalitions

Nationaler Aktionsplan gegen Sepsis

Memorandum aus Anlass des Sepsis Summits Berlin 2013

Zielsetzung

Initiierung eines Nationalen Aktionsplans, um in Deutschland eine Senkung der Sepsissterblichkeit und eine Verbesserung der Lebensqualität nach überlebter Sepsis zu erreichen.

Präambel

Der Begriff Sepsis ist in der Öffentlichkeit bei Laien unzureichend bekannt. Er wird meist mit Blutvergiftung gleichgesetzt, was zu Missverständnissen bei den meisten Menschen führt. Sepsis ist die schwerste Verformung des Immunsystems, die von Infektionen auszugehen kann. Etwa 15 - 20 000 Menschen sterben jährlich an Sepsis, ca. 60.000 werden schwer verletzt.

Die WHO prophezeit „eine post-antibiotische Ära“, in der es für viele gewöhnliche Infektionen keine Behandlungsmöglichkeiten mehr gibt; das Weltwirtschaftsforum hat das Problem in seinen „Global Risk

Because in Germany annually
15 - 20 000 sepsis deaths
are preventable!

SEPSIS



THE UK
SEPSIS
TRUST

TOGETHER WE CAN
SAVE 14,000 LIVES



LOCAL IMMUNISATION

Child Health clinic

1. Name _____ Time _____ Tel _____

2. Name _____ Time _____ Tel _____

3. Name _____ Time _____ Tel _____

4. Name _____ Time _____ Tel _____

5. Name _____ Time _____ Tel _____

Baby, Toddler & Parents groups

Name _____ Time _____ Tel _____

Address _____ Time _____ Tel _____

Nursery schools / classes

Name _____ Time _____ Tel _____

Other useful contacts

_____ Time _____ Tel _____

_____ Time _____ Tel _____

_____ Time _____ Tel _____

_____ Time _____ Tel _____

_____ Time _____ Tel _____

_____ Time _____ Tel _____

Spotting sepsis and serious illness in children

Please use this page if you are concerned about your child's symptoms, especially if their illness seems different to any previous illness they've had, or if they are 'just not right' (even if their temperature falls).

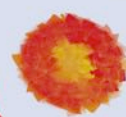
This information will help you monitor you child's condition so you know:

- When to ask for help
- Where to go
- How to describe the symptoms

This information is derived, with permission, from the SAPH handbook produced by NHS England (South West) following the death of three-year-old Sam Morris in December 2010 to improve recognition of signs in children. Contributors include paediatricians, sepsis experts, nurses, GPs and parents of children who've had sepsis.

This information relates to the law and procedures in England and Wales. All information included within this handbook is correct at time of print. For 2016.

The UK Sepsis Trust registered charity number (England & Wales) 1148411. Company registration number 0640279. Sepsis Trust sepsistrust.org.uk



THE UK
SEPSIS
TRUST

www.sepsistrust.org

Growth charts & other information
Screening & routine reviews
Immunisation

ANY CHILD WHO:

- 1 Is breathing very fast
- 2 Has a 'fit' or convulsion
- 3 Looks mottled, bluish, or pale
- 4 Has a rash that does not fade when you press it
- 5 Is very lethargic or difficult to wake
- 6 Feels abnormally cold to touch

MIGHT HAVE SEPSIS

Call 999 and just ask: could it be sepsis?

The UK Sepsis Trust registered charity number
(England & Wales) 1158843.

ANY CHILD UNDER 5 WHO:

- 1 Is not feeding
- 2 Is vomiting repeatedly
- 3 Hasn't had a wee or wet nappy for 12 hours

MIGHT HAVE SEPSIS

If you're worried they're deteriorating **call 111** or **see your GP**

JUST ASK

"COULD IT BE SEPSIS?"

IT'S A SIMPLE QUESTION, BUT IT COULD SAVE A LIFE.



SARA

THE SEPSIS AUDIT & RESEARCH ALLIANCE



'Sepsis is an absolute priority for me in the coming year'

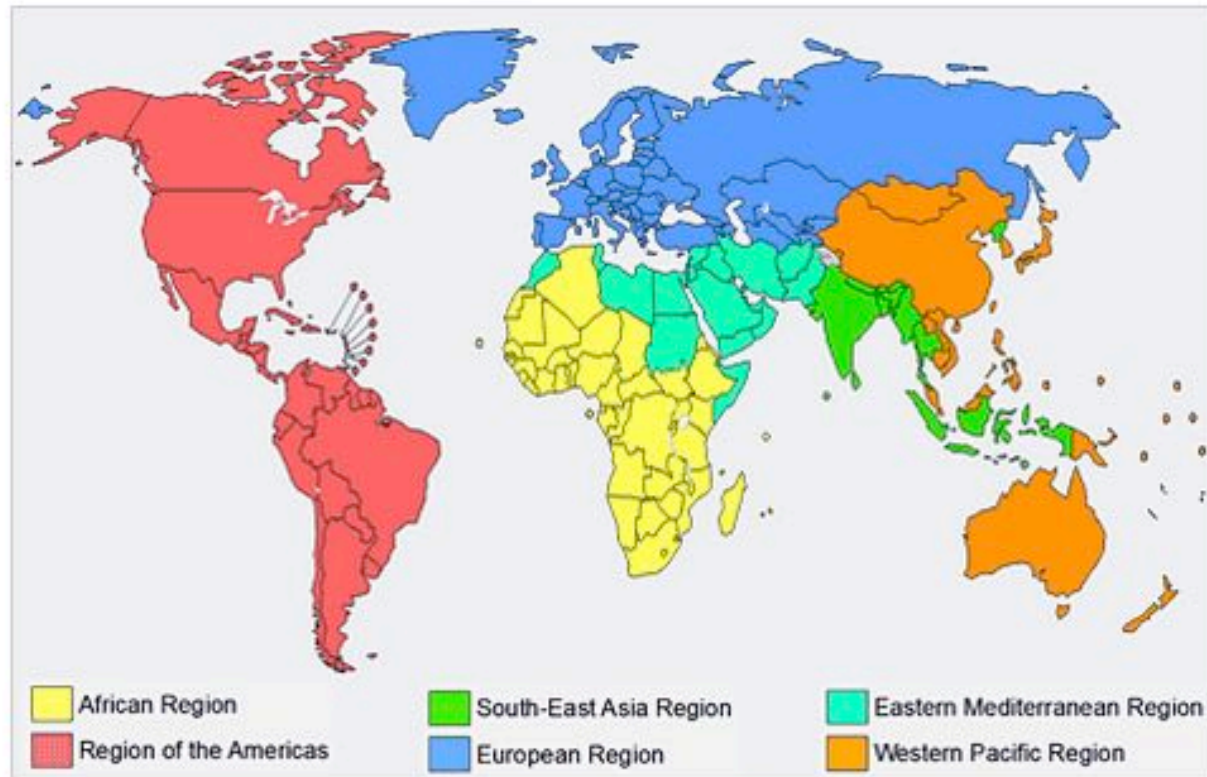
J Hunt MoH UK

Joint Coordinated Efforts by All Stakeholders

- Health authorities
- Health care providers
- Health care workers
- Patients and their families
- Professional societies
- Society
- Policy makers

GSA Encourages the Creation of Regional Sepsis Alliances

WHO regional offices



WHO Member States are grouped into six regions. Each region has a regional office. The map shows the WHO regions and the location of the regional offices.

“A moon shot for cancer”

**The rocket is in the launcher ramp now
for a moon shot against sepsis !**

The relationship between science and medicine in the post-war world has been without very much visible change. With much solemnity, we have in the last more than a decade elevated science to a level of extraordinary influence in national policy; and now that it is there, we are not very certain what to do with it.

—William Carey, 1963



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A World Free of Sepsis

The GSA invites you to join this fight and share our vision!

September | World
13 Sepsis
2015 | Day