

# Meeting overview: background, objectives and expected outcomes

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# 70<sup>th</sup> WHA - Sepsis report and resolution



SEVENTIETH WORLD HEALTH ASSEMBLY  
Provisional agenda item 12.2

A70/13  
13 April 2017

## Improving the prevention, diagnosis and clinical management of sepsis

### Report by the Secretariat

1. The Executive Board at its 140th session considered an earlier version of this report,<sup>1</sup> the Board then adopted resolution EB140.R5.

2. Sepsis arises when the body's response to infection injures its own tissues and organs. It can lead to septic shock, multiple organ failure and death, if not recognized early and managed promptly. It is a major cause of maternal and neonatal morbidity and mortality in low- and middle-income countries; and affects millions of hospitalized patients in high-income countries, where rates of sepsis are climbing rapidly. The present report summarizes the problem of sepsis as a key issue for global health, describes the Secretariat's actions to address it and briefly outlines priority actions for the future.

3. An international consensus has recently recommended that sepsis should be defined as "life-threatening organ dysfunction caused by a dysregulated host response to infection" and septic shock as "a subset of sepsis in which particularly profound circulatory, cellular, and metabolic abnormalities are associated with a greater risk of mortality than with sepsis alone".<sup>2</sup> Both definitions are accompanied by clinical criteria to translate them into practice to support diagnosis and clinical management during patient care.

4. The occurrence and frequency of sepsis are determined by a complex interplay of many host, pathogen and health system response factors. Several chronic diseases, such as chronic obstructive pulmonary disease, cancer, cirrhosis, AIDS and other immunodeficiency disorders, are associated with an increased risk of sepsis. Demographic and social factors, such as diet and lifestyle (for example, use of tobacco and alcohol), poverty, sex and race, also influence the occurrence of sepsis. Access to health care systems, in particular intensive care, as well as the timeliness and quality of care, are also associated with the occurrence of sepsis and its fatality rate.

5. Most types of microorganisms can cause sepsis, including bacteria, fungi, viruses and parasites, such as those that cause malaria. Bacteria such as *Streptococcus pneumoniae*, *Haemophilus influenzae*, *Staphylococcus aureus*, *Escherichia coli*, *Salmonella* spp. and *Neisseria meningitidis* are the most common etiological pathogens. Manifestations of sepsis and septic shock can be the fatal frequent pathway of infections with seasonal influenza viruses, dengue viruses and highly transmissible

<sup>1</sup> See document EB140/12 and the summary records of the Executive Board at its 140th session, fourth meeting and seventh meeting, section 2.

<sup>2</sup> Singer M et al. The third international consensus definitions for sepsis and septic shock (Sepsis-3). JAMA. 2016;315(8):801-10. doi: 10.1001/jama.2016.0287.

SEVENTIETH WORLD HEALTH ASSEMBLY

WHA70.7

Agenda item 12.2

29 May 2017

## Improving the prevention, diagnosis and clinical management of sepsis

The Seventieth World Health Assembly,

Having considered the report on improving the prevention, diagnosis and clinical management of sepsis;<sup>1</sup>

Concerned that sepsis continues to cause approximately six million deaths worldwide every year, most of which are preventable;

Recognizing that sepsis as a syndromic response to infection is the final common pathway to death from most infectious diseases worldwide;

Considering that sepsis follows a unique and time-critical clinical course, which in the early stages is highly amenable to treatment through early diagnosis and timely and appropriate clinical management;

Considering also that infections which may lead to sepsis can often be prevented through appropriate hand hygiene, access to vaccination programmes, improved sanitation and water quality and availability, and other infection prevention and control best practices; and that forms of septicemia associated with nosocomial infections are severe, hard to control and have high fatality rates;

Recognizing that while sepsis itself cannot always be predicted, its ill effects in terms of mortality and long-term morbidity can be mitigated through early diagnosis and appropriate and timely clinical management;

Recognizing also the need to improve measures for the prevention of infections and control of the consequences of sepsis, due to inadequate infection prevention and control programmes, insufficient health education and recognition in respect of early sepsis, inadequate access to affordable, timely and appropriate treatment and care, and insufficient laboratory services, as well as the lack of integrated approaches to the prevention and clinical management of sepsis;

Noting that health care-associated infections represent a common pathway through which sepsis can place an increased burden on health care resources;



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# Recommendations to MS (1)

- to include **prevention, diagnosis and treatment of sepsis** in national health systems strengthening in the community and in health care settings, according to WHO guidelines
- to reinforce existing strategies or develop new ones leading to strengthened **infection prevention and control programmes...**
- to continue in their efforts to reduce **antimicrobial resistance** and promote the appropriate use of antimicrobials...including the development and implementation of comprehensive antimicrobial stewardship activities
- to develop and implement **standard and optimal care** and strengthen medical countermeasures **for diagnosing and managing sepsis in health emergencies**, including outbreaks, through appropriate guidelines with a multisectoral approach
- to increase **public awareness** of the risk of progression to sepsis from infectious diseases, through health education, including on patient safety...

# Recommendations to MS (2)

- to develop **training for all health professionals** on infection prevention and patient safety, and on the importance of recognizing sepsis... and of communicating with patients, relatives and other parties using the term “sepsis” in order to enhance public awareness
- to promote **research ...**, including research for **new antimicrobial and alternative medicines, rapid diagnostic tests, vaccines and other important technologies, interventions and therapies**
- to apply and improve the **use of the International Classification of Diseases system** to establish the prevalence and profile of sepsis and antimicrobial resistance, and to develop and implement **monitoring and evaluation tools ...**including the development and fostering of **specific epidemiologic surveillance systems...**
- to engage further in **advocacy efforts to raise awareness of sepsis**, in particular through supporting existing activities held every year on 13 September in Member States

**IT IS THE DUTY OF ALL ORGANIZATIONS  
TO SUPPORT MS IN THIS PLAN**



# View of stakeholders on the 70<sup>th</sup> WHA resolution

Recommendations	Suggested Actions
<b>The World Health Assembly urges member states to:</b>	
Develop national policy and processes to improve the prevention, diagnosis, and treatment of sepsis.	Governments should develop national action plans in collaboration with the professions and patient-advocacy groups.
Improve infection prevention and control strategies: access to clean water, sanitation, and hygiene (WASH); vaccinations; clean childbirth; surgical site infection prevention; and protective equipment for health workers.	Policymakers should evaluate public access to WASH; professional bodies should develop strategy for prevention and control of health facility-acquired infection, monitor practice, and support improvement.
Continue efforts to combat antimicrobial resistance (AMR) by promoting judicious use of antimicrobials.	WHO AMR team in partnership with governments and professions should implement comprehensive antimicrobial stewardship activities.
Develop and implement measures to recognize and manage sepsis as a core part of national and international health emergency response plans (e.g., during epidemics, pandemics, and natural disasters).	Multisector approach should incorporate specific guidelines for sepsis awareness and management in emergency-response plans.
Increase public awareness of sepsis, particularly among high-risk groups, to ensure prompt recognition and presentation for treatment.	Member states should design nationally relevant, specific messaging for educating the public and health care providers.
Promote public awareness by training health care workers to use the term “sepsis” in communication with patients, relatives, and other parties.	Professional bodies should develop educational materials for health professionals at all levels; health care provider organizations should disseminate them and reinforce their message.
Train health care workers about the importance of sepsis as a time-critical medical emergency and as a key element of averting deterioration and ensuring patient safety.	Professional bodies and health authorities should develop education for health professionals at all levels; provider organizations should disseminate and reinforce education.
Promote research to develop innovative means to prevent, diagnose, and treat sepsis.	Include sepsis as a priority research area for funding bodies and commissioned research.
Improve the <i>International Classification of Diseases</i> (ICD) coding to allow for better assessment of the burden of both sepsis and AMR.	Where feasible, governments should monitor incidence and outcomes from sepsis; WHO should work with agencies to improve ICD coding.
Monitor progress toward improving outcomes for patients and survivors.	Governments and health care provider and professional organizations should develop and implement monitoring and evaluation tools, epidemiologic surveillance systems, and national registries.
Develop evidence-based strategies for policy change related to prevention, diagnosis, and treatment of sepsis and survivors' access to rehabilitation.	Governments should change health policy where high-quality evidence supports change.
Engage in advocacy efforts to raise sepsis awareness by supporting activities promoting such awareness including but not restricted to World Sepsis Day (September 13 each year).	Governments, professional and community groups should plan and support awareness activities centered on World Sepsis Day.

- **WHA 70.7**  
—[http://apps.who.int/gb/e/e\\_wha70.html](http://apps.who.int/gb/e/e_wha70.html)
- **Reinhart K et al.**  
**NEJM 2017**



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# Recommendations to WHO's DG

- to develop **WHO guidance** including guidelines, as appropriate, **on sepsis prevention and management**
- to **draw attention to the public health impact of sepsis**, including by publishing a **report on sepsis** describing its global epidemiology and impact on the burden of disease, **and identifying successful approaches for integrating the timely diagnosis and management of sepsis into existing health systems...**
- **to support Member States**, as appropriate, to define standards and establish the necessary guidelines, infrastructures, laboratory capacity, strategies and tools for reducing the incidence of, mortality from and long-term complications of sepsis
- **to collaborate with other organizations** in the United Nations system, partners, international organizations and other relevant stakeholders...while taking into account relevant existing initiatives
- **to report to the Seventy-third World Health Assembly** on the implementation of this resolution

# View of stakeholders on the 70<sup>th</sup> WHA resolution

## The World Health Assembly requests that the director general:

Develop WHO guidance including guidelines, as appropriate, on sepsis prevention and management.

Director general or delegates should develop context and country-specific guidance or guidelines in collaboration with national and international experts, patient advocates, and patient-safety representatives.

Draw attention to public health impact of sepsis through a WHO report by the end of 2018.

WHO should publish, independently or in collaboration with others, a report on global epidemiology of sepsis and impact on burden of disease.

Identify successful approaches for integrating timely diagnosis and management of sepsis into health systems and provide guidance on adoption.

Director general or delegates in conjunction with others should identify initiatives whose success is supported by reliable data and provide advice to member states on adapting such approaches to local conditions and resources.

Support member states in defining standards and improving infrastructure and developing and implementing strategies for reducing incidence, mortality, and long-term burden.

WHO in partnership with governments should promote national standards and guidelines related to recognition, treatment, laboratory support, and follow-up and support learning, including in low- and middle-income countries.

Collaborate globally to improve access to safe, affordable, effective prevention including immunization, particularly in developing countries.

WHO should work with member states to improve public access to WASH, vaccination programs, and professional health care providers.

# Main **aspects** of sepsis according to the resolution

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1. Epidemiology and global burden of sepsis
2. Prevention
3. Diagnosis
4. Clinical management, including AMR



# Main **actions** for tackling sepsis according to the resolution

- Awareness raising activities
- Reports
- Policies
- Evidence-based guidelines
- Implementation strategies
- Education and training activities
- Research
- Networking, coordinating partners' actions

# 1<sup>st</sup> Technical Expert Meeting on Sepsis - Objectives

- To share an overview of major initiatives ongoing worldwide on sepsis
- To present current WHO activities and plans
- To discuss global needs and priorities for action
- To gather input on the critical role of WHO and key areas of work
- To explore collaborations between WHO and other key players with the common goal of progressing the sepsis agenda

# Main agenda sessions

- Overview of WHO work on sepsis
- Overview of international sepsis activities and situation
- *Working groups* on mapping out global work on sepsis and identification of gaps and actions needed
- Priorities and plans for action at country and international level
- Roles, responsibilities and collaborations to disseminate the resolution and implement the plans
- Closing remarks