The World Sepsis Day Fact Sheet

Sepsis *The most common, but least recognized disease*

Sepsis *is common and carries a high risk of death and long-term complications*

Sepsis remains the primary cause of death from infection despite advances in modern medicine, including vaccines, antibiotics, and intensive care. Sepsis, which is often misunderstood by the public as "blood-poisoning" is one of the leading causes of death around the world. Sepsis arises when the body's response to an infection injures its own tissues and organs. It may lead to shock, multiple organ failure, and death, especially if not recognized early and treated promptly. Between one third and one half of patients with sepsis die (1, 2).

In the developing world, sepsis accounts for 60-80% of lost lives per year in childhood, killing more than 6 million neonates and children yearly and is responsible for more than 100,000 cases of maternal sepsis (3). Every hour, about 50 people die from sepsis.

Sepsis causes more deaths than prostate cancer, breast cancer and HIV/AIDS combined. Globally, an estimated 20 – 30 million cases of sepsis occurs each year. Experts in the field believe sepsis is actually responsible for the majority of the mortality associated with HIV/AIDS, malaria, pneumonia and other infections acquired in the community, in healthcare settings and by traumatic injury (4). Patients surviving sepsis have double the risk of death in the following 5 years compared with hospitalized controls and suffer from physical, cognitive and affective health problems (5).

Incidence *is increasing dramatically*

The incidence of sepsis is increasing dramatically, due to the ageing population (1, 4) and despite the advantages of modern medicine including vaccines, antibiotics and intensive care. Hospitalisations for sepsis have more than doubled over the last 10 years (4, 7, 9) and have overtaken those for myocardial infarction in the US (8, 9) (Fig.1). International and national surveys indicate that 20-40% of sepsis patients that require treatment in the intensive care unit developed sepsis outside the hospital (10). The incidence of sepsis developing after surgery trebled from 1997 to 2006.

The diagnosis *of sepsis often is delayed*

Sepsis is often diagnosed too late, because the clinical symptoms and laboratory signs that are currently used for the diagnosis of sepsis, like raised temperature, increased pulse or breathing rate, or white blood cell count are unspecific. In children, the signs and symptoms may be subtle and deterioration rapid. Sepsis is under-recognized and poorly understood due to confusion about its definition among patients and healthcare providers, lack of documentation of sepsis as a cause of death on death certificates, inadequate diagnostic tools, and inconsistent application of standardized clinical guidelines to treat sepsis (4).

COSTS *of sepsis are high and rising*

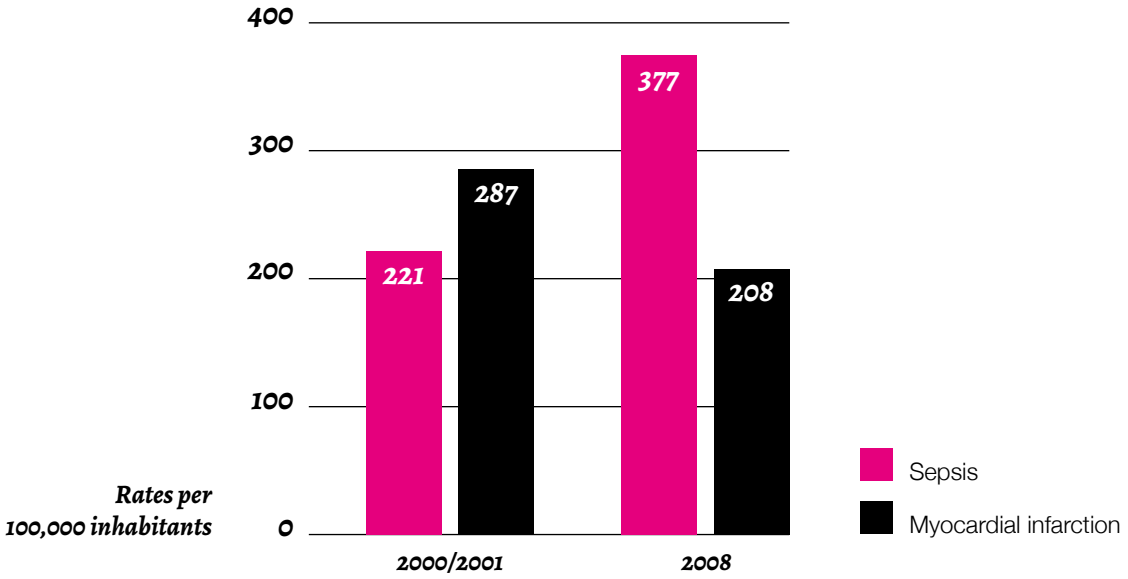
An estimated $14.6 billion was spent on hospitalizations for sepsis in the US in 2008, and from 1997 through 2008, the inflation-adjusted aggregate costs for treating patients hospitalized for this condition increased on average annually by 11.9% (8). The costs related to long-term sequelae of sepsis are unknown. In Europe, it has been estimated that a typical episode of sepsis costs healthcare services approximately 25,000 Euros. Given the considerable loss of life years the human costs of sepsis are enormous (12).

SEPSIS *is a medical emergency*

Rapid initiation of simple, timely interventions including antimicrobials (13, 14), intravenous fluids (14) and targeted treatment to restore the circulation (15) can halve the risk of dying. Patients with suspected sepsis should be referred immediately to an appropriate facility. Early sepsis treatment is cost effective, reducing hospital and Critical Care bed days for patients. Unfortunately, sepsis is still mostly overlooked and recognized too late.

HOSPITALIZATION *rates for sepsis have overtaken the incidence of myocardial infarction*

Fig.1



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