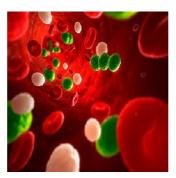


Reducing Sepsis Deaths



Sepsis is a common condition whereby an infection triggers an extreme immune response, resulting in widespread inflammation, blood clotting, and swelling. Although sepsis is believed to contribute to between a third and a half of all hospital deaths, the condition remains poorly understood. Now leading doctors warn that medical and public recognition of sepsis must improve if the number of deaths from this potentially life-threatening condition are to fall.

"The number of people dying from sepsis every year — perhaps as many as six million worldwide — is shocking, yet research into new treatments for the condition seems to have stalled," says Professor Jonathan Cohen, Emeritus Professor of Infectious Diseases at the Brighton & Sussex Medical School. "Researchers, clinicians, and policymakers need to radically rethink the way we are researching and diagnosing this devastating condition."

In a new Commission, published in *The Lancet Infectious Diseases*, Prof. Cohen and colleagues outline a roadmap for future research into this little-understood condition, highlighting a number of critical factors that need to change in the field if treatment and diagnosis of sepsis is to improve. Key recommendations include:

- Prioritising research into biomarkers for sepsis, which would allow quicker diagnosis;
- Better education of medical staff and improving public awareness to ensure earlier recognition;
- · Rethinking clinical trial design;
- Recognising that sepsis affects different patients differently and using the power of modern genetics to develop targeted treatments ("personalised medicine"); and
- Ensuring that universities and drug companies do not abandon research into new drug treatments.

As lead author of the Commission, Prof. Cohen notes that sepsis is "one of the most challenging medical conditions" in routine clinical practice. Among the early (but not universal) symptoms of sepsis are high temperature and fast breathing; if left untreated, it frequently leads to organ failure and death. Although no specific cure for sepsis exists, it can often be treated effectively with intensive medical care including antibiotics and intravenous fluid, if identified early enough.

In the UK, sepsis is thought to kill 37,000 people yearly (more than three times the number killed by breast cancer or prostate cancer). While mortality rates from sepsis in the UK and other high-income countries appear to be falling in recent decades, the Commission authors point out that the paucity of accurate estimates of the incidence of sepsis means that the true extent of the condition is poorly understood.

In low-income and middle-income countries, where most sepsis cases occur outside hospital, there are virtually no data on the condition's incidence, and mortality rates are likely to far exceed the already high rates in more wealthy countries.

In addition to the high fatality rate from sepsis, survivors are at an increased risk of long-term chronic illness and physical or mental impairment. However, research into the long-term consequences of surviving sepsis is relatively scarce, so clinicians have little evidence available on which to base long-term care plans for these patients.

Source: The Lancet

Image Credit: NHS Direct Wales
Published on: Tue, 21 Apr 2015