“Nurses could help stop sepsis killing four patients an hour”

Sepsis – a systemic inflammatory response to a new infection – is a hidden killer. Unchecked, organ failure, shock and death ensue. In the UK, sepsis claims 37,000 lives a year – more than breast, bowel and prostate cancer combined. Severe sepsis – sepsis with organ failure – carries a 35% mortality rate. This is over five times higher than that in heart attack or stroke.

Each year, most of the 100,000 patients with severe sepsis will pass through emergency departments or acute medical units before being admitted to critical care. Each episode of sepsis costs the NHS £20,000 and sepsis as a whole costs it more than £2bn.

In 2008, the Surviving Sepsis Campaign published revised international care standards, including the severe sepsis resuscitation bundle. These standards are met in fewer than one in five cases (Levy et al, 2010).

The bundle comprises basic care elements that can be delivered in wards and more complex tasks requiring critical care. The apparent inability of staff to deliver this bundle reliably lies in their failure to suspect sepsis early – even though the condition accounts for one-third of critical care episodes, and up to one half of episodes of deterioration on wards.

The good news is the most effective interventions do not rely on invasive monitoring or costly critical care treatment. Rapid delivery – within one hour – of intravenous antibiotics and fluids has been shown to reduce mortality by 30-50%.

Operational pathways such as the Sepsis Six comprise tasks that can be completed immediately in a ward or emergency department, coupled to systems that rapidly escalate care in patients who do not respond (Daniels et al, 2011).

Nurses, as the primary responders to deterioration, will be key to transforming sepsis care. Patients with raised track-and-trigger scores should be screened for sepsis. Nurse prescribers can autonomously deliver care via pathways such as the Sepsis Six.

The UK Sepsis Group recommends health professionals examine how their own and other organisations manage sepsis. The group intends to develop metrics against which trusts can monitor their performance and a national sepsis registry.

Outside acute trusts, clinicians need to consider the interplay between primary and community care, ambulance services, and receiving units. Education and awareness need to be addressed. World-class sepsis care will require coordinated pathways, like those used in heart attack and stroke.

We will get there with sepsis. The problem is that, until we do, a patient is dying every 15 minutes. NT

Ron Daniels is a critical care consultant at Good Hope Hospital, Heart of England Foundation Trust, and chair of the UK Surviving Sepsis Campaign group. Sign the petition to make sepsis a clinical priority for the NHS by going to http://petitions.direct.gov.uk and searching for sepsis.

HIGHLIGHTS
Early intervention reduces psychosis p24

Physiology and risk factors for osteoarthritis p12

What makes nurses clinical leaders? p22

References

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Osteoarthritis has far-reaching consequences

Osteoarthritis (OA) is a painful, progressive condition that affects many people for years.

Nurses often see patients being treated for conditions, such as stroke or diabetes, who also have OA and its impact on health and wellbeing cannot be ignored; for example, rehabilitation after stroke will be made more difficult by pain and stiffness.

Our three-part series on osteoarthritis starts in this issue, by looking at its physiology and how it causes pain. In part two next week, our expert author looks at management using medication and options such as exercise, weight reduction and joint replacement.

People with osteoarthritis experience anxiety twice as much as others. The final part, to be published online only, looks at the psychological and social consequences of this condition.