

Mortality in neonatal ICUs

Most studies looking at mortality rates in neonatal intensive care units (NICUs) have looked at specific populations such as low-birth-weight infants. In contrast, Koravangattu Sankaran and colleagues used anonymously linked data to determine the rates and causes of death among all 19 265 infants admitted to 17 tertiary care Canadian NICUs between January 1996 and October 1997. Overall, there were 795 deaths (4%); 40% of them occurred within 2 days after admission to the NICU. Common conditions associated with death were birth at a different hospital from the NICU (340 [42%]), congenital anomalies (270 [34%]), infection (108 [14%]) and hypoxic-ischemic encephalopathy (128 [16%]). The risk-adjusted mortality rates differed significantly among the 17 NICUs (range 1.6% to 5.5%). Jon Tyson and Kathleen Kennedy point out the importance of careful risk adjustment in studies of the differences in patient outcomes among hospitals.



In a related commentary John Hoey and colleagues review briefly the history of quality improvement studies in facilities such as health care institutions. They challenge the idea of maintaining institutional anonymity when publishing studies related to important issues such as variations in mortality occurring at different public facilities.

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Nephrology in practice

The kidneys continuously sift and discriminate between what is to be retained and what is to be expelled by the body. With less glamour in myth and the media than other viscera, critical renal homeostatic roles involving blood pressure, electrolytes, acid-base balance, hematopoiesis and mineral metabolism are often overlooked. It is easy to forget that the delicate complexity of the kidneys makes them sensitive to a range of acute and chronic insults, from hypotension and hypertension to diabetes and drugs, inflammation and infections. In this issue, *CMAJ* launches a series of articles to familiarize readers with advances in areas of nephrology that have an impact on the investigation, prevention and treatment of renal diseases. Ross Morton describes the pathophysiology of kidney stones and offers advice on how to manage nephrolithiasis in the first article in the series.

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Estrogen replacement therapy

Estrogen replacement therapy is used to treat menopausal symptoms and has been found to be effective in preventing osteoporotic fractures. To investigate longitudinal trends in estrogen use by Canadian women, Ilona Csizmadi and colleagues used data from Saskatchewan Health's prescription drug plan database to calculate age-standardized prevalence rates between 1981 and 1997. The rate increased steadily, from 5.1% in 1981 to 15.4% in 1997. Estrogen use was highest among women aged 50–54, ranging from 10.8% (95% CI 9.8%–11.8%) in 1981 to 30.6% (95% CI 24.7%–36.5%) in 1997. Whether estrogen use will continue to increase in light of recent literature questioning its presumed benefits remains to be seen.

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Food, mood and behaviour

Few would dispute that food sustains not only the body but also the mind and spirit. But can food help modulate mood and behaviour? In the third article in our series on clinical nutrition, Simon Young reviews the possible psychopharmacologic effect of several nutrients. He discusses the possible mild antidepressant effects of *S*-adenosyl-



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methionine (SAME), folic acid and tryptophan (a precursor for the neurotransmitter serotonin). Young reviews the relation between carbohydrate consumption and sedation, the myth that

sugar causes hyperactivity in children, and the developing understanding of the role of dietary fat in neural function.

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