

Prostate cancer incidence and mortality

Since the early 1990s, rates of death from prostate cancer have declined, possibly because of the advent of prostate-specific antigen (PSA) screening in the late 1980s. Linda Perron and colleagues tested this hypothesis by studying data from cancer incidence and mortality databases in Quebec. They identified 15 groups of men over 50 (grouped by year of birth). The change in prostate cancer incidence rates between 1989 and 1993 (the year when the rate peaked) was calculated for each group. The change in prostate cancer mortality for each group between 1995 and 1999 was also calculated. Between 1989 and 1993 the incidence rate increased in all 15 groups, by 22% to 178%, and between 1995 and 1999 the rate of death decreased in 11 of the 15 groups, by 3% to 50%. Using weighted linear regression analyses, they showed that the groups with large increases in detection did not necessarily experience large mortality decreases. Thus, greater rates of detection early in the 1990s (presumably owing to PSA screening) did not seem to correlate with larger declines in mortality by the late 1990s. In a related commentary, André Vis suggests that additional randomized trials are needed to identify whether PSA screening is truly beneficial at a population level.

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Alzheimer's disease and their potential side effects. He also looks at possible future avenues for therapy.

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Bicycle helmet legislation

Five provinces have laws mandating bicycle helmet use. John LeBlanc and colleagues used trained observers to identify the rates of helmet use in Halifax before, during and after 1997, when helmet legislation was passed in Nova Scotia. They also looked at trends in the rate of head injuries during the same period. The rate of helmet use rose, from 36% and 38% in 1995 and 1996 to 75% in 1997 to 86% and 84% in 1998 and 1999. The proportion of injured cyclists with head injuries decreased by about half from 1995/96 to 1998/99 (1.6% v. 3.6%, $p = 0.06$). In a related commentary Mary Chipman notes that, although the rate of helmet use increased, the number of cyclists dropped after the legislation was passed. She suggests combining legislation with other strategies to promote safe cycling (e.g., development of safer environments for cyclists such as dedicated bike paths).

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Genital warts and cervical pathology

Women with external genital warts may be at increased risk of harbouring the subtypes of human papillomavirus (HPV) that predispose to cervical dysplasia and cancer. Given that Papanicolaou (Pap) smears are imperfect at detecting cervical dysplasia, Michelle Howard and colleagues reviewed the charts of 64 consecutive women presenting with external genital warts to an STD clinic to determine whether colposcopy is warranted in such cases. All of the women had had a Pap smear and undergone colposcopy. The sensitivity of the Pap smear for detecting any grade of cervical intraepithelial neoplasia was only 39% (95% exact confidence interval [CI] 20%–61%), and the specificity was 68% (95% exact CI 52%–82%). The sensitivity of the Pap smear for detecting high-grade dysplasia was 80% (95% exact CI 28%–99%), and the specificity was 69% (95% exact CI 56%–81%). The authors suggest that Pap smears may be insufficient for screening women with external genital warts for lower grades of dysplasia and that a full colposcopic examination may be required.

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Therapy for Alzheimer's disease

Alzheimer's disease is a debilitating illness, but new medications may slow its progression in some people. Serge Gauthier reviews the cholinesterase inhibitor class of medications, their place in the management of

Omega-3 fatty acids and heart health



Low rates of cardiovascular disease in some populations that eat large amounts of fish, such as the Greenland Inuit, have prompted research into the possible cardiovascular benefits of the omega-3 fatty acids found in fish oils. In the fourth article in the Clinical Nutrition series, Bruce Holub reviews the dietary sources and potential antithrombotic effects of omega-3 fatty acids and discusses a practical approach to the use of these agents.

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