



Reuters/Marko Djurica

Bojana Danilovic, 29, reads the newspaper upside down in the southwestern Serbian town of Uzice. Ms Danilovic suffers from a rare brain condition called spatial orientation phenomenon, which has left her reading books and newspapers, and typing and writing, upside down, because her brain does not process images normally. While her eyes see the world the right way up, her brain flips the image over.

## From the NHMRC

### Australian community participates in developing advice for health practitioners on prostate cancer testing?

Controversy among health practitioners, academics and policymakers is a “healthy” aspect of Australian democracy and medical practice. This becomes unhelpful in health, however, when the polarised debate is coupled with a relatively high and rising interest in and use of a test or drug.

In the case of prostate cancer testing, there is inconsistent evidence from recently published trials of the prostate-specific antigen (PSA) test to detect early prostate cancer in asymptomatic men. The results of these trials are being interpreted differently by health professionals involved in the management of men with prostate cancer. So men and their families are receiving, at best, inconsistent advice about using the PSA test to detect prostate cancer.

To address this, the National Health and Medical Research Council (NHMRC) has undertaken to provide

high-quality advice using its standard three-pronged approach: thorough evaluation of current research, oversight by an expert advisory committee, and a public consultation process that encourages debate and provides feedback to the Council of the NHMRC.

The NHMRC *Evidence evaluation report (2013)* (<http://www.nhmrc.gov.au/guidelines/publications/men4>) summarises available evidence about whether PSA testing of asymptomatic men reduces mortality and morbidity. It also explores the harms and benefits of PSA testing, and of subsequent investigations and treatment. The evaluation brings together all of the available evidence within scope into the report.

A multidisciplinary expert NHMRC advisory committee used this review as the basis for drafting a resource to help health practitioners discuss the potential benefits and harms of a PSA



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test with their patients, and to provide the Australian community with high-quality, evidence-based health advice.

The draft document, *Prostate specific antigen (PSA) testing for prostate cancer in asymptomatic men: information for health practitioners* ([http://consultations.nhmrc.gov.au/public\\_consultations/prostate\\_cancer](http://consultations.nhmrc.gov.au/public_consultations/prostate_cancer)), was open for public comment from 22 July to 20 August 2013. The NHMRC invited submissions from all health practitioners involved in detecting and treating prostate cancer. The process also ensured that the wider Australian community had the opportunity to participate in developing NHMRC advice.

The final NHMRC document should be completed by the end of 2013. It will provide the best available evidence-based information to health practitioners, to assist men and their families to make an informed, personal choice about prostate cancer detection using the PSA test.

## News

## Two-stage screening for ovarian cancer

A two-stage screening strategy for ovarian cancer using annual testing of carbohydrate antigen 125 (CA125) levels and follow-up with transvaginal ultrasound (TVS) has shown excellent specificity and reasonable positive predictive value (PPV) in a study published in *Cancer*. The single-arm prospective study of 4051 postmenopausal women over an 11-year period tested the women annually for CA125 levels and triaged them using the Risk of Ovarian Cancer Algorithm (ROCA) into three groups — next CA125 test in 12 months (low risk), repeat CA125 test in 3 months (intermediate risk) or TVS and referral to a gynaecological oncologist (high risk). The average annual rate of referral (AARR) to a CA125 test in 3 months was 5.8%, and the AARR to TVS and review was 0.9%. Ten women had surgery. Four invasive ovarian cancers, two ovarian tumours of low malignant potential, one endometrial cancer and three benign ovarian tumours were detected, providing a PPV of 40% for detecting invasive ovarian cancer and a specificity of 99.9%.

*Cancer* 2013; 26 August (online). doi: 10.1002/cncr.28183



## Lower income linked to higher migraine prevalence

An association between low socioeconomic status (SES) and higher incidence and prevalence of migraine has been found in research published in *Neurology*.

Using data for 132 674 females and 124 665 males aged 12 years or older from the American Migraine Prevalence and Prevention Study, the authors estimated incidence and remission rates within three specific household (HH) income groups (< US\$22 500, US\$22 500–US\$59 999, and ≥ US\$60 000). They found migraine prevalence increased as HH income decreased for both males and females. There was a higher incidence rate in the lower HH income groups for both males and females, while remission rates did not differ by income. They concluded that their results were more compatible with the social causation hypothesis (economic status causes migraines) than with the social selection hypothesis (migraineurs are more likely to move into a lower SES). An accompanying editorial cautioned that the use of only one SES component (income) and the exclusion of those with chronic migraine were possible weaknesses in the research.

*Neurology* 2013; 81: 948–955. doi: 10.1212/WNL.0b013e3182a43b32

*Neurology* 2013; 81: 942–943. doi: 10.1212/WNL.0b013e3182a43ea7

### From the MJA archives

#### MJA 1965; 9 October (edited extract)

#### Anticoagulant therapy: the present situation

R B Hunter (UK) said that after nearly 20 years the place in therapeutics of anticoagulant therapy with coumarin drugs was by no means settled. The evidence suggested that coumarin anticoagulants would prevent or minimise venous thrombosis and diminish the danger of pulmonary embolism. The evidence that they significantly affected arterial thrombosis was still in question. The difficulties of the control of therapy and the danger of haemorrhage made

those drugs by no means ideal, and there was little prospect of improving their usefulness in therapeutic practice. Recent work with an extract of Malayan viper venom would appear to offer the possibility of controlled incoagulability of the blood without attendant risks of haemorrhage. W J H Butterfield (UK) asked Professor Hunter to give some indication of how quickly the circulating fibrinogen disappeared after administration of Malayan viper venom. Professor Hunter said that it disappeared very quickly, within two and a half hours.

*Proceedings of Second Australian Medical Congress, Perth, 14–20 August, 1965*

## Priorities for global preconception care

A group of researchers has come up with a list of research priorities for reducing the rates of maternal mortality and morbidity in low- and middle-income countries (LMICs). A 2-day meeting of maternal, newborn and child health experts used the Child Health and Nutrition Research Initiative methodology to define a list of 12 research priorities with a timeline for development and delivery of interventions within 10 years, according to a paper published in *PLOS Medicine*. The top priority was: “How can preconception nutrition interventions, such as diet diversity, micronutrient supplementation/fortification, and achieving optimal BMI [body mass index], be integrated into broader nutrition and/or health programs and delivered in a cost-effective manner?” Other issues for investigation included environmental tobacco smoke, adolescent pregnancy, smoke stoves, contraception, hypertension, malaria and anaemia, and HIV interventions.

*PLOS Med* 2013; 3 September (online)

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## Potential in thyroid nodule characteristics

A study attempting to detect thyroid nodules at risk of being malignant based on their ultrasound imaging characteristics (UICs) has been interpreted cautiously in an accompanying editorial in *JAMA Internal Medicine*. The study of 8806 patients undergoing thyroid ultrasound imaging between 1 January 2000 and 30 March 2005 found 105 patients diagnosed with thyroid cancer, 96.9% of whom had thyroid nodules. Three UICs — microcalcifications, size > 2 cm, and a solid composition — were associated with increased risk of thyroid cancer. “Compared with performing biopsy of all thyroid nodules larger than 5 mm, adoption of this more stringent rule requiring 2 abnormal nodule ultrasound imaging characteristics to prompt biopsy would reduce unnecessary biopsies by 90%”, but would still maintain a low risk of cancer in those not referred for biopsy, the authors concluded. However, the editorial warned the study analysed a cohort in which cancer prevalence was 1.6%, less than the established population prevalence of 8%–15%, suggesting a “non-representative study population and increased potential for sampling bias”. The editorial concluded that the results of the current study could not be readily applied to clinical practice.

*JAMA Intern Med* 2013; 26 August (online)

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