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## RESEARCH

- 449 Impact of a new national screening policy for Down's syndrome in Denmark: population based cohort study**  
Highly sensitive and specific screening—based on maternal age, nuchal translucency scanning, and testing for serum free  $\beta$  human chorionic gonadotrophin and pregnancy associated plasma protein A in the first trimester—was followed by halving of the annual incidence of Down's syndrome births and a sharp decline in invasive testing  
Charlotte K Ekelund, Finn Stener Jørgensen, Olav Bjørn Petersen, Karin Sundberg, Ann Tabor, Danish Fetal Medicine Research Group  
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- 453 Comparison of different strategies in prenatal screening for Down's syndrome: cost effectiveness analysis of computer simulation**  
Contingent screening (where further testing is offered only to women at high and intermediate risk on early screening) performed better than other strategies by ensuring reassurance to most in the first trimester and minimal costs during the second  
Jean Gekas, Geneviève Gagné, Emmanuel Bujold, Daniel Douillard, Jean-Claude Forest, Daniel Reinharz, François Rousseau  
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- 457 Effect of topical alkane vapocoolant spray on pain with intravenous cannulation in patients in emergency departments: randomised double blind placebo controlled trial**  
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Ramzi Hijazi, David Taylor, Joanna Richardson  
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- 460 Combination antiretroviral therapy in population affected by conflict: outcomes from large cohort in northern Uganda**  
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Andrew Kiboneka, Ricky Jones Nyatia, Christine Nabiryo, Aranka Anema, Curtis L Cooper, Kimberly Ann Fernandes, Julio S G Montaner, Edward J Mills  
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- 463 Outcome of depression in later life in primary care: longitudinal cohort study with three years' follow-up**  
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- 478 Interactive case report: A 38 year old woman with hypotensive shock at the onset of menstruation: case progression**  
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BFI (WWW.BFI.ORG.UK)

**PICTURE OF THE WEEK**

Film still taken from the 1949 sex education film *The People at No 19* about Joan, who is stunned to learn from her doctor that she has contracted syphilis. Many of the films in the British Film Institute's anthology *The Joy of Sex Education* were released in and around the time of the second world war when reported cases of sexually transmitted diseases rose sharply. The DVD, released on 9 February, covers the various approaches British sex educators have taken from 1910 to the 1970s and is an 18 certificate.

**THE WEEK IN NUMBERS**

**2.5-5 million** Number of people in the UK who take ecstasy every month (News, p 435)

**1 in 9** The first trimester cut-off value for high risk. Contingent screening with this cut-off value is the preferred option for prenatal screening for Down's syndrome (Research, p 453)

**6%** Proportion of the global population aged over 65 who are affected by Alzheimer's disease (Clinical Review, p 467)

**32 000** Number of pages on cervical cancer viewed daily on the day news of Jade Goody's diagnosis broke—before she was diagnosed the number was around 2000 to 3000 (Observations, p 445)

**THE WEEK IN QUOTES**

**“I really was shocked to find how totally our system of death certification is dependent upon the honesty and integrity of a single doctor”** (News, p 435)

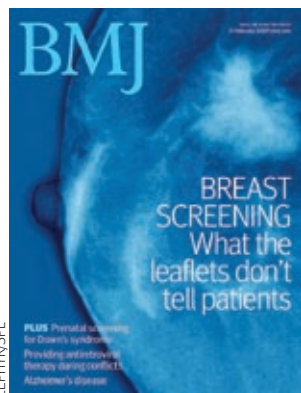
**“Quite often we find ourselves demonstrating that things the government's done haven't worked . . . You don't get credit for that”** (Feature, p 440)

**“Depression in patients aged 55 or more in primary care has a poor prognosis”** (Research, p 463)

**“The junior doctor is often an important coordinating link in the process of discharge [from hospital]”** (Practice, p 472)

## EDITOR'S CHOICE

## Tricky thing, choice



Analysis, p 446

This week's cover story is a careful dissection of the information given to women who are about to undergo breast screening with mammography (p 446). Three years ago Jørgensen and Gøtzsche surveyed information given to women invited for breast screening in six countries and concluded that all of it was misleading—because it didn't mention the major harm of misdiagnosis and overtreatment (*BMJ* 2006;332:538). This week they and their colleagues revisit the issue—by explaining how the leaflet used in the United Kingdom still misleads. Gøtzsche and his colleagues are known critics of breast screening programmes, having long argued that their benefits are small and their harms rarely discussed. But the authors' point here is that women are not being enabled to make an informed choice—and they offer their own leaflet instead (available on [bmj.com](http://bmj.com)).

Yet if it is hard for a woman to get a clear picture of breast screening, how much harder it is with screening for Down's syndrome. In this week's issue Jean Gekas and colleagues assess the cost effectiveness of three screening strategies for Down's syndrome: an integrated test (where results from both first and second trimester tests are evaluated together to assess risk); sequential screening (first trimester tests determine which second trimester tests are offered); and contingent screening (first trimester tests are used to categorise risk, with women at high and intermediate risk undergoing different further tests). Using different cut-off levels for each strategy, they performed computer simulations with real trial data to compare 19 screening options. They conclude

that contingent screening, with a cut-off value of 1 in 9 for high risk, is the optimum strategy (p 453).

Charlotte Ekelund and colleagues meanwhile describe the real world results of a combined screening strategy in Denmark in 2005-6 (p 449). Pregnant women were offered a first trimester risk assessment based on maternal age, nuchal translucency scanning, and a biochemical test; those found to be at high risk were then offered an invasive test. This strategy resulted in a halving of the numbers of infants born with Down's syndrome and a sharp fall in the number of invasive tests.

So what are parents to conclude from all this, asks Zarko Alfirovic in his editorial (p 421). The language used to describe the evaluation of screening policies is incomprehensible, he says, and someone needs to decide the trade-off between sensitivity and specificity. In the UK the NHS has set a target for 2010 of a detection rate of over 90% with a false positive rate of less than 2%. Yet what parents want in practice are different things—to be able to choose not to be screened, to state that any risk of having an affected baby is unacceptable, or to have a risk assessment to help them decide—and they may want to change their mind at any time. "These decisions are not irrational—they are personal choices that change during pregnancy and between pregnancies." If the NHS is genuinely to provide patients with choice, argues Alfirovic, it needs not one optimum screening test but a range of options that produce reliable results.

**Jane Smith, deputy editor, [BMJjsmith@bmj.com](mailto:BMJjsmith@bmj.com)**

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Career Focus, jobs, and courses appear after p 484.

## WHAT'S NEW ON BMJ.COM

## LATEST RESEARCH

## EFFECT OF TOBACCO SMOKING ON SURVIVAL OF MEN AND WOMEN BY SOCIAL POSITION

Smoking is a greater source of health inequalities than social position, and it nullifies women's survival advantage over men. The scope for reducing health inequalities related to social position in this and similar populations may therefore be limited unless many smokers in lower social positions stop smoking, according to this 28 year cohort study.

## EXPOSURE TO SECONDHAND SMOKE AND COGNITIVE IMPAIRMENT IN NON-SMOKERS

Exposure to secondhand smoke could increase the risk of developing dementia and other forms of cognitive impairment, according to this national cross sectional study. The accompanying editorial agrees that passive smoking and cognitive impairment are likely to be linked but says that confirmation is needed from further research.

To comment on these and other blogs, go to <http://blogs.bmj.com/bmj/>

## LATEST BLOGS

Guest blogger Liz Wager muses on the "somewhat mysterious use of articles in medical terms . . . you might hear "He's got the flu" or "Jane's had the measles" but you'd never say "She's got the cancer."

She has obviously struck a note with her readers—Hazel Thornton: "The one that gets me going is 'the patient'—whoever s/he may be . . . (Sometimes unavoidable, I grant)." Trish Groves explains our publication's own dilemma: the editors call it "the" *BMJ*, the marketing team prefer it without the article. And Matiram Pun wonders whether the English of scientific articles from English speaking countries is too difficult for people from non-English speaking countries.

Richard Smith ponders barriers to writing and getting published for authors from low income countries. He found that "there were also problems with methodology, getting data analysed, and disputes over ownership of data . . . aiming too high, lack of enthusiasm, laziness, and complacency. One Nepalese student summed it all up: writing produced a 'low return for all the investment.' What about career advancement, fame, money, and the love of beautiful women? 'There are,' he answered, 'much easier ways to get those things.' Perhaps that's the real reason for not writing and publishing."

Join these debates and others at <http://blogs.bmj.com/bmj/>



## Last week's poll asked:

"Doctors and the drug industry: what's in the best interests of patients?"

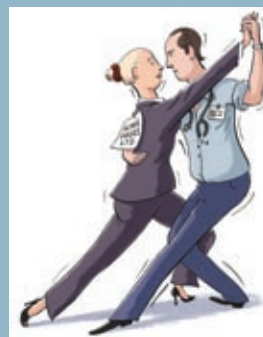
**TIGHTER STANDARDS OF CONDUCT:** 103 votes (42%)

**NO RELATIONSHIP:** 60 votes (25%)

**LESS BUT BETTER REGULATION:** 38 votes (16%)

**CLOSER WORKING:** 30 VOTES (12%)

**NO CHANGE:** 12 votes (5%)



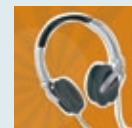
## THIS WEEK'S POLL AND PODCAST: BMJ GROUP AWARD FOR LIFETIME ACHIEVEMENT

Voting for the 10 candidates shortlisted for the BMJ Group's lifetime achievement award ends on 27 February 2009. The candidates were chosen by a BMJ panel on the basis of who had made a unique and substantial contribution to improving health care. Still not sure who to vote for? Listen to this podcast, which features interviews with supporters of the shortlisted candidates.

<http://podcasts.bmj.com/bmj/2009/02/13/bmj-group-lifetime-achievement-award/>

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# Too many unanswered questions?

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