Abstracts

Screening for partner violence does not improve women's health

A three-arm trial tested approaches to addressing intimate partner violence against women who seek primary care for clinical complaints. Participants visited one of 10 urban primary care centres in Illinois, USA. Most were black (55%) or Latina (37%), with high school education or less (57%), and uninsured (57%).

In one group, 909 women were screened by means of a three-question, computer-delivered instrument, which was (in the case of a positive test) followed by a brief recording encouraging access to services and an information sheet on local resources available to women in abusive relationships, as well as other health and social resources. In the other groups 893 women received the information sheet without screening; 898 women had neither, and received only the list of general health and social resources available in the area.

One year later none of the measured outcomes differed between the groups. This included the physical and mental component of the quality of life; self-reported number of days unable to work in the past month, either at a job or in a household; use of a partner violence service or other health services, assessed by self-report and electronic health records, respectively; and recurrence of intimate partner violence, established in an interview asking specifically about 18 different forms of violence.

The negative results could be due to inadequate intensity of the interventions, as well as biases in the sample: nearly 1 in 5 of the invited women declined participation, 12% were lost to follow-up, and the study excluded all women who visited the clinic with a partner or older children.

Klevens J, et al. JAMA 2012;308:681-689.

Communicating risk

Those marketing commercial DNA tests often suggest that knowing your risk of a disease will prevent certain risky behaviours. A case in point is Crohn's disease and smoking. Those who have the genotype that predisposes to Crohn's may reduce their risk of developing the disease by never smoking or stopping smoking. Hollands *et al.* used a randomised controlled trial to test the hypothesis that people who know their risk of developing Crohn's would stop smoking to reduce this risk.

The trial looked at 497 smokers who were first-degree relatives of those with Crohn's disease – 209/251 people had DNA testing and 217/246 had standard risk assessment. The primary outcome was smoking cessation for 24 hours or longer, assessed at 6 months.

The intervention was communication of risk assessment for Crohn's disease by postal booklet based on family history of the disease and smoking status alone, or with additional DNA analysis for the NOD2 genotype. Participants were then telephoned by a National Health Service Stop Smoking counsellor to review the booklet and deliver brief standard smoking cessation intervention. Calls were tape recorded and a random subsample was selected to assess fidelity to the clinical protocol.

The proportion of participants who stopped smoking for 24 hours or longer did not differ between arms: 35% (73/209) in the DNA arm versus 36% (78/217) in the non-DNA arm. The proportion who made a quit attempt within the DNA arm did not differ between those who were told they had mutations putting them at increased risk (36%), those told they had none (35%), and those in the non-DNA arm (36%).

Among relatives of patients with Crohn's disease, feedback of DNA-based risk assessments does not motivate behaviour change to reduce risk any more or less than standard risk assessment. These findings accord with those across a range of populations and behaviours. They do not

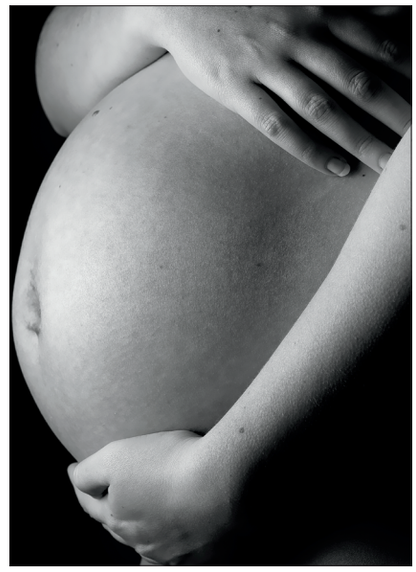
support the promulgation of commercial DNA-based tests nor the search for gene variants that confer increased risk of common complex diseases on the basis that they effectively motivate health-related behaviour change.

Hollands GJ, et al. BMJ 2012;345 [http://dx.doi.org/10.1136/bmj.e4708] (published 20 July 2012).

Maternal obesity is linked with newborn deaths in sub-Saharan Africa

In high-income settings, maternal obesity is a known risk factor for newborn deaths. This has also been shown for sub-Saharan Africa, where data are hard to come by. In the absence of longitudinal studies, the researchers relied on self-reported survey data collected from more than 80 000 women across 27 countries. The response rate was over 90%.

Women's body mass index (BMI), calculated from weight and height measured at the time of the survey, was found to be associated with the risk of death in their newborn offspring in the 5 preceding years. Only births closest to the survey date were taken into account.



Although 2 out of 3 women were in the normal range of BMI (18.5 - 24.9), 13.7% (11 252/81 126) were overweight and 5.3% (4 266) were obese (BMI 25 - 29.9 and 30 or over, respectively). On the day of delivery and the next day, the odds of neonatal death were increased 1.32-fold for mothers who were overweight and 1.62-fold for those who were obese. No excess risk was seen in underweight women (BMI <18.5) or in overweight or obese women in the rest of the neonatal period, up to the 28th day of life.

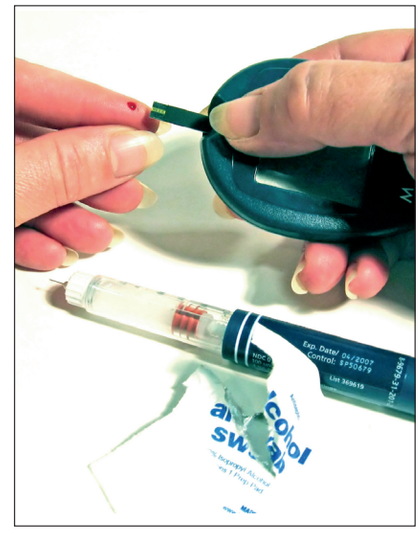
The study could not pinpoint the mechanisms that may be at play. Potential candidates are prematurity, intrapartum events, or infections. The odds of neonatal death were 2.69-fold higher if the baby was born by caesarean section rather than vaginally.

Cresswel JA, et al. Lancet 2012 [http://dx.doi.org/10.1016/S0140-6736(12)60869-1]

Obesity paradox holds in people who develop type 2 diabetes despite normal weight

We know that in some chronic diseases, such as heart failure and chronic kidney, people of normal weight die, on average, sooner than those who are overweight. The same has been shown for people whose body weight was normal at the time they were diagnosed as having type 2 diabetes.

The data came from 5 large US cohort studies. Diabetes was newly detected in 2 625 people, of whom 449 died during more than 27 000 person years follow-up. Across studies, 9 - 21% (mean 12%) of people were of normal weight at the time of diagnosis. Mortality rates were consistently higher in these people than in participants with a body mass index of 25 or more. In people of normal weight, total mortality, cardiovascular mortality and non-cardiovascular mortality were 284.8, 99.8 and 198.1 per 10 000 person years, respectively, compared with 152.1, 67.8 and 87.9 per 10 000 person years for those who were overweight or obese. After adjustment for demographic data and cardiovascular risks, people with normal weight had double the risk of dying of any cause, compared with those who were overweight or obese. Risks for cardiovascular and non-cardiovascular mortality were increased 1.5-fold and 2.3-fold, respectively.



Poor cardiorespiratory fitness and physical inactivity may pose a greater threat to health than obesity, write the editorialists.

Carnethon MR, et al. JAMA 2012;308:581-590.