

Abstracts

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.

Cresswell 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.