A weekly round-up of the latest research and scientific reports from the nursing and medical journals

Health visitors pick up on relationship problems

Screening by health visitors can successfully identify couples with relationship problems following the birth of a baby. The stresses of parenthood can provoke or intensify relationship difficulties yet these are rarely revealed to healthcare staff.

London researchers investigated the impact of specially trained health visitors to identify and help such couples. At the developmental check at six to eight weeks, health visitors in nine practices invited women to complete a screening scale for relationship problems and offered help in the form of supportive listening, advice or referral where necessary. These were compared with nine control clinics. At the 12-week immunisation clinics, all women were asked to complete a questionnaire.

Screening led to a striking difference between the intervention and control clinics in the percentage of women identified as or potentially in need of help at six to eight weeks (21 versus 5 per cent) and in the percentage actually offered help (18 versus 3 per cent).

About half the women identified as having problems were also identified as having postnatal depression. At the 12-week visit, women in the intervention group were twice as likely as controls to report having discussed relationship problems with the health visitor and 75 per cent more likely to report having received help with a problem.


Urinary tract infection is a potential risk to the fetus

Pregnant women should be aggressively screened for bacteriuria because of the increased risk of fetal death and learning disability caused by urinary tract infection.

US researchers undertook a retrospective study which compared pregnant women with and without urinary tract infection to assess the extent to which prescriptions for antibiotics were dispensed.

The risk of learning disability in children of women with untreated infection was 16 per cent higher than in children of women without the condition. The risk of death of a fetus exposed to maternal urinary tract infection was twice that of those that were unexposed.

Analysing the data by trimester showed the risk was significant only in the second and third trimester and there was no association between treated urinary tract infection and either fetal death or subsequent learning disability. Women diagnosed with a urinary tract infection should be told of the risks of fetal infection and encouraged to complete the course of antibiotics.


Antioxidants might help in uraemic encephalopathy

Uraemic encephalopathy might be amenable to treatment with antioxidants, researchers from the United States believe.

Uraemic encephalopathy is a common side effect of chronic renal failure and can produce fatigue, irritability and sleep disturbance. The researchers used western blot analysis to investigate the amount and distribution of nitrotyrosine in the brains of rats with experimentally induced renal failure.

Results showed a marked increase in the substance in the cerebral cortex.

The rats were then divided into three groups of six. One group was treated with a potent antioxidant and lipid peroxidation inhibitor, while the second group received a placebo. The third group were given the angiotensin-converting enzyme inhibitor captopril to determine whether hypertension was contributing to elevated nitrotyrosine levels.

Both treatments alleviated oxidative stress and significantly reduced the concentrations of nitrotyrosine in the cerebral cortex. More research is needed, however, to determine whether such treatments would be effective in humans.


More evidence implicates coffee in heart disease

Giving up coffee might decrease your risk of heart disease, new research suggests.

The role of coffee in heart disease has long been disputed, with previous research suggesting that unfiltered (boiled) coffee increased levels of homocysteine and cholesterol. How this related to filtered coffee remained unclear.

Norwegian researchers undertook a randomised controlled study in 191 healthy non-smokers who were assigned to one of three groups. One group drank no coffee, a second drank between one and three cups a day while the third group drank more than four cups a day. Homocysteine and cholesterol levels were measured at the beginning of the trial and after three and six weeks.

In the two groups of coffee drinkers levels remained the same at the beginning and end of the study. In those who drank no coffee — but had drunk an average of four cups a day before the study — there was a decrease in homocysteine levels of 1.08mmol/itre and a decrease in total cholesterol of 0.28mmol/itre. These decreases could translate into a reduction in the homocysteine-attributed risk of ischaemic heart disease of about 10 per cent and the cholesterol attributed risk of about 15 per cent.


Giving up coffee could reduce your risk of heart disease, research suggests.