

## **MINERVA**

A Canadian study of over 11 500 non-smoking women, of whom 11.1% reported exposure to passive smoking during pregnancy, reports that adverse outcomes were experienced more frequently by women who were exposed to smoke. These included babies with smaller head circumferences, lower birth weights, and increased rates of stillbirths and preterm births (*BJOG* published online 23 March 2011, doi:10.1111/j.1471-0528.2011.02941. x).

A very complex economic analysis of whether it's cost effective to screen for Chagas disease in all Latin American women giving birth in Spain concluded that the "test option" was still preferable to the "no test" option. Chagas disease is imported by migration and in non-endemic countries the disease is spread through vertical transmission. The threshold analysis concluded that even with a drop in Chagas prevalence, a drop in the probability of vertical transmission, and an increase in screening costs, the test option was still worth adopting (*Acta Tropica* published online 9 March 2011, doi:10.1016/j.actatropica.2011. 02.012).

A genetic link has been established between the loss of two major senses—smell and pain (*Nature* published online 23 March 2011, doi:10.1038/nature09975). Scientists have discovered that both humans and mice with mutations in the gene coding for Na<sub>v</sub>1.7, the voltage gated sodium ion channel that has previously been shown to cause insensitivity to pain, are also unable to perceive smells. A complete absence of the ion channel does not affect action potentials in the olfactory sensory neurons, but it does prevent the transmission of information from neural synapses to downstream neural circuits. Before throwing drugs at children with emotional problems, help parents to identify and get support for their own emotional issues, because the two go hand in hand. According to non-profit

help parents to identify and get support for their own emotional issues, because the two go hand in hand. According to non-profit child advocacy group Zero to Three, about 10% of children from birth to 3 years old have a psychiatric impairment—about the same proportion as in adults. The good news is that the earlier a problem is caught, the likelier it can be fixed, and an expert advises that parents who address their own mental health will see "attunement" in their offspring (*Time*, 21 March 2011, 28-9, www.time.com/time/magazine/article/0,9171,2058206, 00.html).

A minimally invasive treatment for varicose veins—endovenous laser ablation—was compared with conventional surgery (ligation and vein stripping) for patients with great saphenous varicose veins in a UK randomised clinical trial. Both groups of 280 patients enjoyed significant clinical improvement after treatment, improving their disease specific quality of life scores, but endovenous laser ablation had a less negative effect on early quality of life after the intervention, including less pain and a faster return to work (*British Journal of Surgery* 2011;98:501-10, doi:10.1002/bjs.7394).

Low level laser treatment may be the answer to another medical issue—straightening teeth in postmenopausal women. The procedure offers positive effects on pain relief and wound healing of hard and soft tissues, due to its ability to stimulate cell metabolism, angiogenesis, bone formation, and osteoclastogenesis. A Chinese team suggests that low level laser treatment might help to both protect and facilitate orthodontic tooth movement (*Medical Hypotheses* 2011;76:479-81, doi:10. 1016/j.mehy.2010.11.025).

Diarrhoea causes high morbidity and mortality in people living with HIV in Africa. An evaluation of a point of use water quality intervention in Nigerian women who were infected with HIV reports that, compared with baseline rates, diarrhoea rates in project participants were significantly lower after the intervention was introduced. The benefit was even greater in women whose stored water at home was found to have residual chlorine during most of the home visits made by the project team. The differences were significant even for women who weren't taking prophylactic antibiotics with or without antiretroviral treatment (*AIDS Care* 2011;23:330-9, doi:10.1080/09540121.2010.507749).

Informed consent involves sharing information to facilitate patients' rights to self-determination. When it comes to children, the process is taken on by parents or guardians. In a recall study of 263 parents, 96.2% said they recalled receiving information about how their child's anaesthesia would be administered, but only 51.1% recalled being given information about the risks of anaesthesia. How side effects would be managed was only recalled by 42.4%. Disclosure of information about anaesthesia seemed to be incomplete and recall by parents relatively poor. Information was recalled significantly better when it was given by anaesthesia providers rather than surgeons (*Anesthesia and Analgesia* 2011;112:918-23, doi:10.1213/ANE. 0b013e31820a9193).

What do patients value most when oncologists tell them that their cancer has recurred? A commentary on specific moments in audio-recorded conversations listened to by patients was provided by encouraging them to pause the tape when they heard things they liked or disliked. Three themes of importance to the patients emerged: the oncologist's recognition of the gravity of the news; guidance, meaning the oncologist's ability to frame the news and plan the next steps; and, finally, responsiveness, or the oncologist's ability to sense the need for recognition or for guidance, and to move easily between the two (*The Oncologist* 2011;16:342-50, doi:10.1634/theoncologist.2010-0274).

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