

Masala

Elephants kill people by hitting them with their trunks or by stamping on them. Bhat *et al.* from Jamshedpur, Bihar (*Indian J Surg* 1995;5:351–2) report an unusual attack when an elephant pierced the chest of a 27-year-old male trekker with its tusk, and threw him on the ground. The injuries included a 15 cm diaphragmatic tear, the liver was hanging free of its peritoneal attachments and the stomach had herniated into the chest sealing the left-sided exit wound. The heart escaped trauma due to the curvature of the tusk. After operation the patient made an uneventful recovery 'except for a mild wound infection at the site of tusk entry'.

Psychological stress adversely affects the immune system. Kiecolt-Glaser *et al.* from Columbus, Ohio, USA (*Lancet* 1995;346:1194–6) compared the healing of a 3.5 mm punch biopsy wound in 13 women caring for demented relatives and 13 matched control subjects. Wound healing took significantly longer in care-givers (49 v. 39 days) and their peripheral blood leukocytes produced less interleukin 1 β (a cytokine which is important in the destruction and remodelling of connective tissue). These findings may explain why patients who are optimistic about the outcome of their surgical operations recover more quickly than those who are not.

Bad news about Third World science. The August 1995 issue of the *Scientific American* carries a long article by Wayt Gibbs entitled 'Lost science in the Third World' (pp. 76–84). India, the most productive developing country, produces only 1.64% of all the mainstream science journal articles—the US produces 30.8%, Japan 8.2% and the UK 7.9%. Even Sweden which has a population of 9 million has a share of 1.84%. The number of Third World journals included in the *Science Citation Index* has declined from 80 in 1981 to 50 (out of a total of 3300) in 1992. Most journals from this region are not included in any international indexing system. They are, therefore, inaccessible to other scientists and condemned to a ghost-like existence. Western editors generally believe that the low representation reflects the poor quality of science in developing countries. Jerome Kassirer, Editor of the *New England Journal of Medicine*, said that 'there is no science in these countries'. C. N. R. Rao from Bangalore, however, feels that the under-representation is due to inherent prejudice in the minds of some referees in the West about authors from the Third World countries. Whatever be the reason it is clear that we must improve our journals and with them the quality of our research. There is no reason why the *The National Medical Journal of India* (NMJI) should not be as good as the *New England Journal of Medicine* (NEJM). However, we hope that when and if it does its editor will be a little less arrogant.

Does the timing of sexual intercourse influence the chance of conception as well as the sex of the baby? Two hundred and twenty-one women who were planning to become pregnant (*N Engl J Med* 1995;333:1517–23) collected daily urine specimens (measuring oestrogen and progesterone metabolites to estimate the day of ovulation) and kept daily

records of whether they had sexual intercourse. Conception occurred only when intercourse took place within the 6-day period before ovulation with its probability increasing from 8% six days before, to 36% on the day of ovulation. The timing of sexual intercourse had no influence on the baby's sex. Nature continues to find ways of preserving the sex ratio and efforts to produce males to order have been largely unsuccessful.

The influenza vaccine has been recommended for elderly persons and those with chronic disease but is it useful in healthy adults? Eight hundred and forty-nine working adults in the Minneapolis-St. Paul area in Minnesota, USA aged 18–64 years were randomized to receive either the influenza vaccine or placebo injections (*N Engl J Med* 1995;333:888–93). Those who received the vaccine had 25% fewer episodes of respiratory illness, 43% fewer days of sick leave and 44% fewer visits to doctors. The cost savings were 47 dollars per person vaccinated. These results may have been because of an excellent match between the strains in the vaccine and the predominant circulating virus strains. Perhaps we should consider a vaccination programme for our health care workers.

The costs of conventional medical care have become so high that all countries have had to ration it to a certain extent. An alternative would be to develop a low cost, effective treatment like spiritual healing. But is spiritual healing valid and effective? Fifty-six out of 136 controlled studies showed that spiritual healing is effective in experiments as diverse as increasing the rate of wound healing in mice, inhibiting fungal cultures and raising the blood haemoglobin levels (*J R Soc Med* 1985;88:303–7). The mechanism seems to be a transmission of energy from the healer to the patient whereupon an 'energy balance is established and the natural healing force enhanced'. We at the NMJI have an open mind about its efficacy but believe that spiritual healing as a form of treatment certainly deserves greater attention and should be scientifically validated particularly in this country.

Should a surgeon carrying the replicating hepatitis B virus (HBsAg-positive) be asked to change to a different career and should HBsAg-positive applicants be denied admission to medical schools? The UK National Health Service thinks so (*Lancet* 1994;311:927–8). It advises that all health care workers be vaccinated against hepatitis B, those not responding to the vaccine be screened for viral markers and HBsAg carriers stopped from doing invasive procedures. The counter-arguments would be that such action is an invasion of privacy; some carriers might be rendered negative after interferon treatment and there is no hard evidence that hepatitis B is transmitted from staff to patients without a serious breach in technique. And what is to be done to those who carry other viruses like hepatitis C? In India where the HBsAg carrier rate for hepatitis B is 3%—six times as high as in the UK—this will pose enormous problems not only of ethics but also of economics. However, this is an issue which should be publicly debated.