

Professor James S. Lawson, Professor and Head of the School of Health Service Management at the University of NSW, has prepared the following public health items from the literature.

## SERUM CHOLESTEROL LEVELS AND DEATHS FROM TRAUMA

Two clinical trials have shown that reduction in serum cholesterol, while lowering the incidence of coronary heart disease, has resulted in an apparent increase in deaths from violence and accidents. Accordingly, it is alleged that lowering serum cholesterol has not affected total mortality from all causes. Because of this finding a large study has been conducted in Finland involving more than 20,000 subjects whose mortality was monitored over 10-15 years. This study showed that to the contrary, serum cholesterol concentration was not associated with mortality from accidents, suicides and other violent deaths. But there was a relationship between such violent deaths and smoking and drinking alcohol.

Vartiainen E, Puska P, Pekkanen J. Serum cholesterol concentration and mortality from accidents, suicide and other violent causes. *Br Med J* 1994; 309:445-447.

## CONDOMS EFFECTIVE IN PREVENTING HIV TRANSMISSION

An American study of heterosexual couples where one partner was HIV positive has shown that couples who used condoms had no transmission of HIV in contrast to other couples who used condoms inconsistently. This is the first good prospective evidence that condoms, if consistently and appropriately used, can reduce the rate of HIV transmission.

Vincenzi I et al. A longitudinal study of human immunodeficiency virus transmission by heterosexual partners. *New Engl J Med* 1994; 331:341-346.

## INCREASE IN LIVER CANCER IN WESTERN SYDNEY

The incidence of hepatocellular carcinoma (cancer of the liver) appears to be steadily increasing in most countries. A study from Western Sydney has indicated a probable increase as demonstrated by a doubling of the incidence between 1979 and 1992. This apparent increase involved individuals born in Australia (50 per cent) as well as immigrants. This cancer was associated with cirrhosis in 93 per cent of patients. The increase appears to be predominantly due to alcohol use and abuse but also hepatitis B and hepatitis C.

Brotodihardjo AE, Tait N, Weltman MD et al. Hepatocellular carcinoma in western Sydney. *Med J Aust* 1994; 161:433-435.

## FINANCIAL SECURITY AND RUPTURE OF THE APPENDIX

A major American study has for the first time documented that there is a relationship between financial security and health care. Rupture of the appendix was used as an indicator because it is accepted that delay in seeking treatment is directly related to rupture of an inflamed appendix. This large study demonstrated that lack of any medical insurance, coverage by fee-for-service private insurance and coverage by limited government aid were

significant risk factors for ruptured appendix in patients admitted to hospital for acute appendicitis compared to patients who had prepaid insurance plans. This finding was independent of other characteristics, including poverty and socioeconomic status, and can be explained by insurance-related delays in seeking medical care. Uninsured patients might delay seeking care at private and county hospitals because of their concern about ability to pay. Lack of a primary care physician could also be associated with delays in seeking or receiving medical help.

Braveman P, Schaaf VM, Egerter S et al. Insurance-related differences in the risk of ruptured appendix. *New Engl J Med* 1994; 331:444-449.

## CORONARY ARTERY BYPASS SURGERY INCREASES SURVIVAL

In the 25 years since coronary artery bypass graft surgery was introduced it has become clear that the operation relieves angina and probably improves the quality of life. But whether the operation increased survival has been a matter of controversy. A large international collaborative study has clearly shown such surgery is associated with lower mortality as compared to management by medical means including delayed surgery if necessary. The risk reduction was greater in patients with left main artery disease than in those with disease in three vessels.

Yusuf S, Zucker D, Peduzzi P et al. Effect of coronary artery bypass graft surgery on survival: overview of 10-year results from randomised trials by the Coronary Artery Bypass Graft Surgery Trialists Collaboration. *Lancet* 1994; 344:563-579.

## BIRTHS: FRIENDS AND RELATIVES MORE IMPORTANT THAN CHEMICALS

A United Kingdom study which has reviewed in detail many studies has concluded that provision of a companion throughout labour reduces the need for analgesia, lowers the incidence of caesarean and operative vaginal delivery and improves foetal outcome. Early amniotomy and early oxytocin do not reduce the rates of caesarean sections and operative vaginal deliveries.

Thornton JG, Lilford RJ. Active management of labour: current knowledge and research issues. *Br Med J* 1994; 309:366-369.

## SURGERY FOR BREAST CANCER IN AUSTRALIA

The early detection of breast cancer by mammography and clinical examination or mammography alone has been shown to reduce mortality from breast cancer by about 30 per cent. Based on international studies and a recent publication of the experience of the Central Sydney Area Health Service Breast X-Ray Program, up to 90 per cent of women who have had early detection of their breast cancer can expect to have a 10-year survival rate. Nearly 60 per cent of the cancers that were detected could not be felt by clinical examination. This is an important advance as breast cancer continues to be a major cause of mortality in Australia.

Harrison RI, Glen DC, Niesche FW et al. Surgical management of breast cancer. *Med J Aust* 1994; 160:617-620.