went to war over petroleum. Yet, if in the 1960s, 1970s, and 1980s we have come to recognise the dangers of addiction to cigarettes, drugs, and alcohol and begun to seek to reduce their use, in the 1990s we must acknowledge the price, in deaths, disability, and environmental damage, of our global addiction to petrol.

Cycle helmets do not improve safety but place responsibility for injury protection on the victim. As with smoking, the preferred public health policy would be to seek to remove the cause.

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The argument for helmets

Cynthia Illingworth

Exact numbers of injuries to cyclists in Britain are impossible to obtain but may be as high as 100 000 a year. In 1985 296 pedal cyclists were killed.¹ In the United States more than 1200 deaths related to bicycle accidents occur each year, about half of which are in children.²

Occurrence of head injuries

In studies of bicycle accidents at Sheffield Children's Hospital between half and three quarters of the children had injuries above the neck.³⁻⁶ In Calgary, Alberta, a study showed that more than two thirds of admissions after bicycle accidents were because of head injury.⁷ Similar findings were reported at the Children's Hospital, Philadelphia.⁸ Deaths after bicycle accidents are nearly always caused by head trauma.⁹

Any accident in which a child falls head first over the handle bars is potentially dangerous. Twenty three of 100 riders of BMX bicycles whom I studied had done this. Head injuries which at first seem to be minor may later prove more serious or lead to sequelae which may affect the child's education or have a profound effect on the family.

Can helmets help?

It is difficult to compare the effect on a model headform with that on a human head, but if damage to the headform is reduced it is reasonable to assume some increased protection for the human.

At present the use of helmets in Britain is comparable with use of seat belts in cars before they became mandatory. Their use is increasing, largely due to the efforts of road safety officers, whose enthusiasm and ingenuity in devising low cost schemes through schools and retailers have greatly increased sales. Fewer than 10 000 helmets were sold in Britain in 1989; in 1991 sales rose to a million; some schemes have methods of retrieving helmets worn in accidents and getting information about the circumstances and the injuries sustained. In 1991 at least 30 children in Sheffield were almost certainly saved from serious injury through wearing helmets. (T R Smith, personal communication).

An important study into the effectiveness of helmets was made in Seattle in 1989.¹¹ Of 99 patients with head injuries, only four wore helmets. They found that helmets reduced the risk of head injury by 85%.

Over three years in one hospital in New South Wales there were 37 serious injuries and six deaths in 251 children admitted after a bicycle accident. None of

Deaths after bicycle accidents are nearly always caused by head injuries

those seriously injured or killed had been wearing a helmet and analysis suggested that helmet wearing would have been beneficial in 76% of those seriously injured and in five of the children who died.¹²

Williams studied the performance of helmets in bicycle accidents in Melbourne in 1989.¹³ Of 432 cyclists wearing a helmet at the time of an accident, 64 had sustained an impact to the helmet. When the helmet stayed on the head and was not defective, no serious head injuries occurred despite some severe impacts. Serious head injuries and skull fractures happened when the helmet came off the head or if it was defective.

Increased use, fewer deaths

In Stockholm, after several campaigns, the proportion of cyclists wearing helmets rose from 8% in 1986 to 16% in 1988.¹⁴ The authors of that report concluded that although it was difficult to show

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reliably the importance helmets had in reducing skull injuries, in both ice hockey and riding the incidence of serious head injuries had decreased since helmets had been compulsory, and with an increased use of cycle helmets there had been a reduction in fatal accidents.¹⁴

Children use their bicycles as playthings as well as for transport and do not ride only on roads or established cycle routes. Even if cycle routes are improved and good instruction given, helmets are an important factor in reducing the toll of injuries in all age groups of the cycling population.

As Ballantyne wrote: "Wear a helmet. It's inconvenient but so is not being able to think or talk because your head has been pounded to jelly."¹⁵ The argument for helmets is overwhelming.

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OBITUARY

Colonel T E Field

Colonel T E FIELD
MBE, MD, FRCPATH, DTM&H

Having served in the Royal Army Medical Corps throughout the war, in 1945 Toffie Field accepted a regular commission. Rapidly promoted, he specialised in pathology and ably combined the skills of clinician, researcher, and lecturer. He was awarded several prizes for academic achievement during his military career. He directed army laboratories in Germany and Singapore and then the David Bruce Laboratories in Wiltshire. In 1964 he was appointed professor of pathology at the Royal Army Medical College in London, but after the death of his first wife, Madge, in 1965 he relinquished his service career and returned with his four children to Northern Ireland, where he had spent his early life.

He became medical superintendent of the Royal Victoria Hospital, where his quiet, effortless authority and charm quickly disarmed any opposition. He was the particular friend of the most junior members of medical staff, the sometimes unruly house staff. In 1969 he was appointed director of the Northern Ireland Blood Transfusion Service, which he rapidly transformed.

Gregarious in nature, Toffie was a remarkable raconteur. His friends—local, national, and international—were legion and his generosity legendary. He had a lifelong interest in sport: he played first class golf until he was no longer able to maintain his own high standard, and as a young man he had excelled at rugby, football, tennis, and cricket. He was also a fine snooker, bridge, and poker player.

Prominent figures with a military background lead an unquiet life in Northern Ireland, but the colonel was unperturbed by the many death threats he received. At a road block set up during the Ulster workers' strike in 1974 he jumped from his car and addressed the throng: "I need you, you, and you to come and give blood." The crowd melted away. Toffie died after a long and painful illness, during which his mother, Ina, died aged 103; he attended her funeral just three months before his own. He is survived by his second wife, Moyna, whom he married in 1967, and one son and three daughters. —ALUN EVANS, FRANK PARTRIDGE

Thomas Eglinton Field, director of the Northern Ireland Blood Transfusion Service 1969-80, died 24 July aged 76. Born 24 September 1915; educated Campbell College, Belfast, and Queen's University, Belfast (MB, BCh, BAO 1939). During war served in Royal Army Medical Corps in north Africa and Europe (mentioned in dispatches and awarded MBE 1945).

Continued in army until 1965, directing army laboratories in Germany, Singapore, and England. Professor of pathology at Royal Army Medical College, London, 1964-5. Medical superintendent of Royal Victoria Infirmary, Belfast, 1965-9.

B S KAUSHAL
MBE, MB, BS

Baldev Kaushal devoted his professional life to the people of Bethnal Green and in retirement made considerable contributions to medical charities in India.

After graduating in Lahore, where his father was physician to the governor's household, he came to England and in 1935 became a general practitioner in Bethnal Green. Throughout the blitz he served in the London Civil Defence and was faced with horrific situations: on one occasion he helped to certify as dead most of the 173 people who died in the Bethnal Green "tube disaster" in 1943, when people who fell during a panic rush into an underground shelter died of asphyxiation by compression. He was awarded the MBE in 1945 for his work during the war.

Afterwards, though he remained hard at work until his retirement, he became something of a recluse, though he was for a time president of the Hindu Association of Europe. He would regale those friends who had penetrated his reserve with a rich fund of accurately recorded anecdote. As a result of frugal living and careful investment he gave considerable donations to medical institutions in India. He was unmarried. —G CHOWDHARY-BEST

Baldev Sahai Kaushal, a general practitioner in Bethnal Green, east London, 1932-65, died 14 July aged 85. Born Partoki, Punjab, India; educated King Edward Medical College, Lahore (MB, BS 1931), and Middlesex Hospital, London (MRCS, LRCP 1932).

N S B VINTER
MB, BS

While working in general practice Noel Vinter played an active part on several local medical committees and boards. Through his membership of the Socialist Medical Association and the Medical Practitioners' Union he was an early enthusiast in planning the NHS. He was an active member of the Society of Friends and was appointed prison visitor for Frenchay meeting. He did much with the St John Ambulance Brigade in

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