and overheating babies; the campaign started in 1985-6, before advice about avoiding the prone sleeping position was available.² Since 1991 the emphasis of this campaign has been maintained, while we have tried to ensure that as few babies as possible sleep prone. We have advised that the normal maximum indoor clothing needs at 18°C are a nappy, vest, sleepsuit, and cardigan, with coverings of a sheet and three single blankets. Before the Department of Health's publicity, virtually all babies in this district who died had been placed and were found dead in the prone position.

The table shows the cumulative effect of these two campaigns in reducing postneonatal infant mortality. By 1991 the sudden infant death syndrome due to avoidable overheating had become rare, but detailed investigations at the scene of death showed that many babies were still hot or sweating when found dead; this has been postulated as likely to happen if feverish babies sleep prone.^{3,4} Since 1992 no cot deaths have occurred in this district.

Postneonatal infant mortality in Scarborough district, 1983-94

Years	No of births	All deaths	All cases of SIDS	Cases of SIDS due to avoidable overheating
1983-6	6061	39	30	19
1987-91	8124	20	16	5
1992-4	4519	5	0	0

SIDS=Sudden infant death syndrome.

Significance of reduction in all cases of the sudden infant death syndrome: 1983-6 v 1987-91, $P=0.003$; 1987-91 v 1992-4, $P=0.007$ (two tailed χ^2 test for independence with Yates's continuity correction).

All districts will continue to have sporadic cases of the sudden infant death syndrome, as unexplained deaths occur at every age. The Department of Health's advice is empirical, so that success in following the advice cannot prevent all cases of the syndrome and failure to follow the advice cannot be used as the explanation. The fall in unexpected deaths suggests, however, that the few that now occur are likely to be explicable and avoidable, even before the challenge of preventing parental smoking is addressed. The target rate for the syndrome in future years should be zero, not just a downward trend.

A N STANTON
Consultant paediatrician

Scarborough Hospital,
Scarborough,
North Yorkshire YO12 6QL

- 1 Gilman EA, Cheng KK, Winter HR, Scragg R. Trends in rates and seasonal distribution of sudden infant deaths in England and Wales, 1988-92. *BMJ* 1995;310:631-2. (11 March.)
- 2 Stanton AN. Avoiding overheating and preventing cot death. *Lancet* 1991;338:1144.
- 3 Nelson EAS, Taylor BJ, Weatherall IL. Sleeping position and infant bedding may predispose to hyperthermia and the sudden infant death syndrome. *Lancet* 1989;i:199-201.
- 4 Ponsonby A-L, Dwyer T, Gibbons LE, Cochrane JA, Wang Y-G. Factors potentiating the risk of sudden infant death syndrome associated with the prone position. *N Engl J Med* 1993;329:377-82.

Infant respiratory death rates mirror sudden infant deaths

EDITOR,—E A Gilman and colleagues speculate about the reasons for the dramatic falls in sudden infant deaths that occurred during the first and second quarters of 1992 as compared with the decreasing trends in the rates for these two quarters over the previous four years.¹ The dramatic falls occurred after the launch of the campaign to encourage parents to put infants to sleep on their backs and to avoid smoking near them or overheating them.

The authors put forward as one possible explanation of these falls the interaction between the prone sleeping position and the underlying patho-

genic mechanisms that it affects. In this regard, we would draw attention to the fact that the secular and seasonal trends in the monthly numbers of sudden infant deaths over recent years have been mirrored by those for infant deaths attributable to respiratory disease. The figure shows the two series for the years 1986-92. The concordance between

Numbers of sudden infant deaths and infant deaths attributable to respiratory disease, England and Wales, 1986-92 (source: Office of Population Censuses and Surveys)

these two series is evident in the summer troughs as well as the winter peaks. This phenomenon suggests that whatever has led to the seasonal variation and decreasing trend in sudden infant deaths, including the pronounced decrease during 1992, has produced a similar pattern for infant deaths attributable to respiratory disease. Furthermore, we have shown that during 1986-90 there was a close association between the monthly incidence of respiratory infectious diseases in the age group 0-4 years.²

D L CROMBIE
Research consultant
K W CROSS
Statistical consultant
D M FLEMING
Director

Birmingham Research Unit,
Royal College of General Practitioners,
Birmingham B17 9DB

- 1 Gilman EA, Cheng KK, Winter HR, Scragg R. Trends in rates and seasonal distribution of sudden infant deaths in England and Wales, 1988-92. *BMJ* 1995;310:631-2. (11 March.)
- 2 Birmingham Research Unit of the Royal College of General Practitioners. *Weekly returns service report for 1991*. Birmingham: Birmingham Research Unit, 1992:17.

Dutch doctor convicted of murdering disabled infant

EDITOR,—Tony Sheldon reports the death at the hands of a Dutch gynaecologist of a baby with serious congenital malformations who was in great pain and had a limited life expectancy; the doctor was convicted of murder but not sentenced.¹ Bringing about the death of a severely disabled infant is an attempt to wipe out a distressing problem for the attendant adults by attributing their anguish to the child and then bringing that to a quick end. This overlooks three important facts.

Firstly, the natural adult reaction to any crisis of expectation is to try to deny it. Doctors can deny reality by continuing aggressive treatment for an incurable illness as well as by agreeing to bring it to a quick end. In either case this can arrest or delay the anger, guilt, bargaining, and depression of grief, which may all arise during its natural resolution but which, when thwarted, can leave bereaved people with serious emotional upsets. Removing the problem may not stop the pain.

Secondly, babies are born ready to relate to parents along all five sensory pathways. Even when serious disability hinders such normal mutual interaction (and this is not always so) parents who attempt it are more likely to feel satisfied that the child's life, though brief, was enhanced by their

personal care. Their grief is also likely to resolve better.

Thirdly, babies who are born disabled do not know that this is their condition and may never do so. They may cry because of discomfort, but symptomatic relief is available for them, just as it is for adults. Those who advocate "mercy" killing for babies (and others) tend to polarise their options into futile attempts to cure or final advice to kill. There is, however, a third way. The specialty of palliative medicine is inadequately represented in the Netherlands but is well established in Britain, both for adults and for older children. Dying babies, too, can be helped to live until they die.

All these points were illustrated in a paper that a colleague and I wrote in 1988.² To ignore the normal reaction to grief and to destroy the opportunity for parents and the child to have even a brief time to enjoy each other is to sow a legacy of chronic emotional pain. For most of us, disabled babies included, life's chief value lies not in the number of days or in physical and mental assets but in secure and creative relationships. Any doctor-parent-baby relationship should have this as its goal.

JANET GOODALL
Retired consultant paediatrician

Trentham,
Stoke on Trent,
Staffordshire ST4 8SP

- 1 Sheldon T. Dutch court convicts doctor of murder. *BMJ* 1995;310:1028. (22 April.)
- 2 Delight E, Goodall J. Babies with spina bifida treated without surgery: parents' views on home versus hospital care. *BMJ* 1988;297:1230-3.

Misleading meta-analysis

Public policy is based on results of epidemiological meta-analyses that contradict common sense

EDITOR,—Matthias Egger and George Davey Smith's scepticism about the validity of meta-analyses whose conclusions are contradicted by those of single megatrials¹ can be extended to meta-analyses of epidemiological studies whose findings contradict biological common sense. The alleged causative contribution of passive smoking to lung cancer is based, among other things, on a meta-analysis of 10 case-control studies and three prospective studies that showed a highly significant 35% increased risk among non-smokers living with smokers compared with non-smokers living with non-smokers.² This risk is especially pronounced for adenocarcinoma in the periphery of the lung (a histological category not associated with smoking in Doll and Hill's studies of doctors) rather than for the central squamous cell cancers seen most commonly in active smokers.³ If the conclusion of this meta-analysis is to be believed it is necessary to suppose that carcinogenic cigarette smoke inhaled in massive doses over 30 years causes one type of lung cancer whereas the same cigarette smoke at much lower doses causes a completely different type of cancer, not usually associated with smoking, in a different part of the lung.

Similarly, on the basis of a meta-analysis of 78 trials of a reduction in salt intake in hypertension it has been claimed that a reduction of 3 g a day in Western populations could reduce the incidence of stroke by 26% and of ischaemic heart disease by 15%.⁴ This seems improbable for two reasons. Firstly, the immediate physiological response to salt reduction is that salt is conserved in the kidneys. Secondly, the maintenance of a steady blood pressure is under the control of at least six independent physiological homeostatic mechanisms, so the contribution of salt intake, if any, is likely to be very small. The results of salt restriction have been more plausibly attributed to a placebo effect.⁵