were indeed limiting and bore heavily on those promoting drugs we might expect plentiful evidence of possible transgressions. If issue number 20 of *Reports to Chief Executives in the Pharmaceutical Industry* is anything to go by evidence of transgressions is limited. Nine possible cases were examined with four rulings of breach and five of no breach. Breaches included a misleading use of a graphic aid by a representative and a misleading claim (how to stop 5% of your patients taking up 25% of your time) for a psychotropic drug. In addition, an advertiser had quoted from an article that was six years old and claimed it to be recent, and another company had issued an invitation to doctors' spouses as well as to doctors themselves.

Assuming that these are the best or rather the worst cases, we can conclude that misleading promotion scarcely occurs and that the industry is careful and respectful of its code. An alternative explanation is that transgressions do not occur because there are plentiful means of exploiting real differences, minor or major, or gently manipulating data to advantage. The Medicines Act 1968 contains provisions that medicines shall be generally safe and effective but does not take account of comparative efficacy. In the same way advertisers do not have to take cognisance of what is actually the best buy, hence perhaps the tendency to vague hype in the promotion of drugs. An even more difficult issue is that of comparative safety. Drugs within classes tend to have similar patterns of adverse effects, and because clinical practice is not a large scale randomised trial and drug usage, promotions, and patterns will vary we have difficulty in drawing clear conclusions about league tables of safety. Postmarketing surveillance seems particularly unhelpful as the studies usually lack the power to detect adverse effects or the ability to discriminate between natural events and those induced by drugs. It is also rare for comparative studies to emerge, or if comparative data do exist the comparability is doubtful.

Given all these difficulties, I cannot see how any code of practice, however honourable, can limit any but the most obvious forms of overenthusiastic advocacy. The maxims of caveat emptor and reading the small print must continue to apply.

MICHAEL LANGMAN

Professor of Medicine,
Queen Elizabeth Hospital,
Birmingham B15 2TH

Crisis in the maternity services

Recent complaints are right

Harriet Harman, the shadow health minister, recently wrote to Tony Newton, the health minister, identifying serious problems in the English maternity services (23 April, p 1201). Are her claims justified?

Between 1981 and 1986 staffed maternity beds were reduced and births increased in every region in England.[1,2] Overall, however, bed occupancy has not increased, presumably because of shorter stays both before and after birth. This is a cause for concern because the higher dependency of women occupying hospital beds increases the workload of the midwifery and medical staff for each bed. For an individual hospital, bed occupancies of 65-75% may be acceptable, but over a region they must mean overcrowding in some hospitals because women having babies are not evenly distributed. A bed somewhere in a region may not be available to a woman in labour who has to reach hospital quickly; and continuity of care is impossible if women have to go somewhere other than the place of booking at the last minute. The regions with the most births for each bed are South West Thames, North West Thames, North East Thames, Oxford, and the West Midlands.

There are also fewer special care cots for more babies.[1,3] Particularly worrying is the fact that the number of low birthweight babies for each cot has increased. In 1986 the perinatal and infant mortality were the highest in the regions with the most low birthweight babies for each cot, suggesting that shortage of beds may contribute to mortality. More serious problems (not mentioned by Ms Harman, perhaps because no national or regional data exist) are that intensive care costs are unevenly and insufficiently available and that designated cots are rarely adequately staffed.[4] These problems in the NHS are exacerbated by the increase in multiple births generated by assisted reproduction (done mainly in the private sector).[5] The availability of intensive neonatal care improves mortality[6] and the care of at least the larger very low birthweight babies is cost effective.[7] Investment in neonatal care is necessary, but designation of intensive care cots is essential for monitoring services.

The 1986 rise in infant mortality resulted mostly from a rise in postneonatal deaths, which are usually held to reflect social conditions rather than provision of services.[8] There is controversy over whether social class differentials are inevitable or might respond to social or medical initiatives,[9] but better methods of identifying the social determinants of women's health are required.[10]

Ms Harman is right to abhor complacency in accepting interregional variations in mortality, and the contrast she draws between the high mortality in the West Midlands and the low mortality in East Anglia is consistent between 1981 and 1986. Interpretation of the differences really requires detailed assessment of the cause of death; attention to possible differences in the extent to which deliveries after very short gestations are registered; and linkage of maternal and neonatal data as neonates at high risk often cross interdistrict or interregional boundaries.[11-13]

Clear evidence of the comparative safety of different sizes of maternity units is lacking,[14] though for surgery,[15] assisted reproduction,[5] and obstetric anaesthesia[16] small does not always seem to be beautiful. Closures of small maternity units are usually unpopular, but it is difficult to argue that they can never be justified even when bed occupancy is low and the number of births insufficient to maintain the skills of staff. Requiring district health authorities to provide a choice of hospital settings for childbirth for every woman is also unrealistic, though a choice should always be offered for how the delivery is conducted.

Perhaps the most serious problem to which Ms Harman draws attention is the crisis in midwifery staffing. There is an 18% shortage of staff midwives, with much graver shortfalls in some places,[17] and the shortages increase stress for the remaining staff. The new clinical grading structure offers an opportunity to correct the longstanding anomaly whereby neither the additional training nor the unique clinical responsibilities of midwives has any financial recognition. Surely the minimum grading for trained staff is inappropriate for practising midwives, who provide much antenatal and postnatal care and conduct most deliveries? Furthermore, staff doing shift work in labour wards and special nurseries need

additional reward. But paying midwives more will not be enough. Staff establishments need to be increased, especially in the community, where early discharges of mothers and babies from hospital have increased the workload. The job satisfaction of midwives will be increased if the continuity of care desired by women[18] is helped by increasing the proportion of antenatal care provided in the community. This is safe, acceptable to women, and may be the best way to improve the low rates of breast feeding.[19-23]

A new study of health statistics in the European Community has shown that during 1974-8 Britain had a much lower maternal mortality than France or Germany despite lower health expenditure.[24] This cannot be maintained without adequate resources and staff. Harriet Harman is right to call for the maternity services committee to be reconvened to address the crisis.

MARION H HALL

Clinical Senior Lecturer in Obstetrics and Gynaecology,
University of Aberdeen,
Aberdeen AB9 2ZD

1 Department of Health and Social Security. *Hospital statistics. National and regional summaries for 1981-1986*. London: DHSS, 1988. (Form SH3.)
2 Department of Health and Social Security. *Vital statistics series*. 1985-8. London: HMSO, 1985-8. (Nos 8-13.)
3 Office of Population Censuses and Surveys. *Maternity statistics 1981-86*. London: HMSO, 1988.
4 Speidel BD. Skimping on care of the newborn is false economy. *Br Med J* 1986;**293**:575.
5 Voluntary Licensing Authority for Human In Vitro Fertilisation and Embryology. *Third report*. London: Voluntary Licensing Authority, 1982. (Available from the Secretariat, 20 Park Crescent, London W1N 4AL.)
6 Forbes JF, Larssen KE, Bakketeig LS. Access to intensive medical care and neonatal survival in low birthweight infants: a population study in Norway. *Paediatric and Perinatal Epidemiology* 1987;**1**:33-42.
7 Boyle MH, Torrance GW, Sinclair JC, Horwood SP. Economic evaluation of neonatal intensive care of very low birthweight infants. *N Engl J Med* 1983;**308**:1330-7.
8 MacFarlane A. The downs and ups of infant mortality. *Br Med J* 1988;**296**:230-1.
9 Chalmers I. Short, Black, Baird, Himsworth, and social class differences in fetal and neonatal mortality rates. *Br Med J* 1985;**291**:231-3.
10 Moser KA, Pugh HS, Goldblatt PB. Inequalities in women's health: looking at mortality differentials using an alternative approach. *Br Med J* 1988;**296**:1221-4.
11 Cole SK, Hey EN, Thomson AM. Classifying perinatal death. An obstetric approach. *Br J Obstet Gynaecol* 1986;**93**:1204-12.
12 Hey EW, Lloyd DJ, Wigglesworth JS. Classifying perinatal death: fetal and neonatal factors. *Br J Obstet Gynaecol* 1986;**93**:1213-23.
13 Royal College of Obstetricians and Gynaecologists. *The computerisation of maternity information: how to cope with Körner*. London: RCOG, 1987.
14 Campbell R, MacFarlane A. *Where to be born? The debate and the evidence*. Oxford: National Perinatal Epidemiology Unit, 1987.
15 Luft HS, Bunker JP, Enthoven AC. Should operations be regionalised? The empirical relation between surgical volume and mortality. *N Engl J Med* 1979;**201**:1364-9.
16 Association of Anaesthetists of Great Britain and Ireland. *Anaesthetic services for obstetrics—a plan for the future*. London: Association of Anaesthetists of Great Britain and Ireland, 1987.
17 Royal College of Midwives. *Evidence to the Review Body for Nursing Staff, Midwives, Health Visitors and Professions allied to medicine for 1988*. London: RCM, 1986.
18 Association of Community Health Councils for England and Wales. *Health news briefing. Antenatal care: still waiting for action*. London: ACH, 1988.
19 Klein M, Lloyd I, Redman C, Bull M, Turnbull AC. A comparison of low risk pregnant women—booked for delivery in two systems of care: shared-care (consultant) and integrated general practice unit. *Br J Obstet Gynaecol* 1983;**90**:118-28.
20 Marsh GW. New programme of antenatal care in general practice. *Br Med J* 1985;**291**:646-8.
21 Flint C, Poulengeris P. *The "know your midwife" report*. London: South West Thames Regional Health Authority and the Wellington Foundation, 1986. (Available from 49 Peckarmans Wood, Sydenham Hill, London SE26 6RZ.)
22 Hall MH, MacIntyre S, Parker M. *Antenatal care assessed*. Aberdeen: Aberdeen University Press, 1985.
23 Department of Health and Social Security. *Present day practice in infant feeding: third report*. London: HMSO, 1988. (DHSS Report on Health and Social Subjects 32.)
24 Holland WW, ed. *European Community atlas of avoidable death*. Oxford: Oxford University Press, 1988.

Dyslexia

Not one condition but many

Parents often consult general practitioners and paediatricians about their children's learning difficulties. They may be puzzled about an otherwise bright child's problems in mastering reading and spelling. They may be dissatisfied with the response of the school or may be seeking a diagnosis of "dyslexia" in the belief that a label will alleviate the problem. What should general practitioners be looking for and how should they advise parents who have read accounts of the latest miracle cures?

The first thing to note is that severe reading difficulties that cannot be accounted for by low intelligence occur in 4-10% of children in junior schools.[1] Typically such children have lower verbal than practical intellectual skills, and they are more likely to have had difficulties with speech and language and other developmental delays—for instance, in telling left from right. A minority have problems of clumsiness, poor motor control, and difficulties in differentiating shapes. Social factors are important, both those within the family and those at school. The problems often persist in varied forms into adulthood; many of the early developmental features are no longer seen—and, indeed, reading slowly improves in many cases—but difficulties in spelling often persist.

Severe reading and spelling problems arise from many causes. There is no distinct unitary condition, so the label dyslexia does not help either in defining the problem or in pointing to effective help. Often the label is taken to imply an underlying biological condition as if environmental influences are unimportant. Children with a biological impairment may, however, be more vulnerable to environmental adversities, and reading difficulties result from an interaction between constitutional deficits and environmental hazards.

There is increasing consensus that language difficulties are more important than visuomotor difficulties in the causes of reading difficulties.[2,3] The important studies of Bryant and Bradley have shown that children who have difficulties in reliably classifying speech sounds and in producing rhymes go on to have reading problems.[3] Moreover, when such children are given specific help on sound categorisation their reading difficulties abate. Longitudinal and intervention strategies are important in adducting a causal link between these cognitive deficits and reading problems, and for too long the subject has been bedevilled by studies in which good and poor readers have merely been compared cross sectionally. Almost irrespective of the measure used poor readers perform worse than controls—that is, until the correct controls are introduced. Too often it has been found that poor readers perform similarly to younger normal readers matched for reading age—whether on reversing pqbd or on other visuomotor tasks. Confusing correlation with causality may lead to inappropriate remedial treatments as when poor readers are drilled on visuomotor tasks. Such drilling may improve their scores on tests of visual perception, but it does not improve their reading.

Over the past few years the popular press has promoted a breakthrough in treating dyslexia with tinted lenses, while some professional journals have claimed that monocular occlusion has benefited dyslexic children. Given that reading difficulties have many causes and that vision is necessary for reading, some poor readers are bound to have visual problems. It would be surprising, however, if visual problems explained most reading difficulties because of the strong evidence for underlying language problems.

Wilsher and Taylor have reviewed the scant evidence for the effectiveness of tinted lenses in treating dyslexia and find that Irlen's claims have still to be scientifically tested.[4] Much more important are the studies of Stein and Fowler, who claim not only that poor binocular control of vergence eye movements causes some forms of reading difficulty but also