

interesting contrast to the 44 consultants in gastroenterology (as distinct from general medicine) shown in the DHSS's tables for England and Wales, 1981. Other medical specialties, such as rheumatology and thoracic medicine, have begun to produce valuable information from similar surveys, and Houghton and Richings⁷ from the DHSS have themselves published a useful survey of a wide range of "medical" specialties. Figures on the international movement of doctors are, almost by definition, either inaccurate or out of date, and new studies on what is happening to the patterns of emigration and immigration, and for what reasons, are badly needed.

Fourthly, given that the figures are reasonably reliable, what do they denote? Most are produced in the form of averages, aggregates, or percentages, and this may tell us little about the range and the spread, or about the problems of the individual unit and district. I seem to have said many times that a 4% growth in the number of consultants has little meaning when brought down to the district level of a clinical service where there are two paediatricians and the question is whether to appoint a third. The current Government "target" for doubling the number of consultants and changing the junior to senior ratio from 1.8:1 to 1:1.8 raises many questions of this kind. Should each region be aiming at this ratio, or even each district? Or is it meant as a national average within which considerable regional variation might occur? How much will specialties vary in their ratios? How will the ratios of juniors to seniors be reconciled with the need for increased numbers of senior registrars to fuel the consultant expansion?⁸ Coupled with what figures may denote, in a kind of chicken and egg relation, is the concern that they may generate. The latest figures given in response to a parliamentary question⁹ show a substantial rise in the number of doctors registered as unemployed persons. Nobody doubts that there are unemployed doctors, any more than doctors have a generally privileged position in the employment market compared with most people in the community. That fears and anxieties exist is self-evident. Among those who are good enough to respond to our inquiries about career preferences comments begin to appear about future prospects: "Unemployed, as it looks now." The vast bulk of the actual employment is "frictional" and the overwhelming majority of our respondents who have had periods away from work have been bearing children, coping with domestic commitments, studying for examinations, and so forth. But the need to do something urgently about the career structure is unmistakable.

Finally, there is the root question which seems sometimes so far away as to be almost imperceptible: what do medical manpower figures really *mean*? When all is said and done how do we know how many doctors we need to have, and what constitutes "enough"? We can set targets and priorities, and identify deficiencies—for instance, in health education, prevention, and occupational medicine—but, as Tudor Hart¹⁰ and Holdstock¹¹ have pointed out, it is hard to see how these priorities may be assessed against the background of continuing economic depression, huge Falkland Islands' bills, and a massive national commitment to defence expenditure in general. If our philosophy as a nation is to lead us blunderingly into spending more money on defence, rather than on non-military priorities such as education, doctors, and other health workers, we may have to adjust our manpower plans accordingly. But for the moment the plans have been made: the numbers of British medical students began to increase after the Todd Report of 1968 and the graduates that we have willed upon ourselves, for right and proper reasons, are now beginning to fill up the system. The fact that regional

growth money has been further restricted does not mean that the problem of the career structure will go away. It makes it more urgent. The number of career outlets—for consultants and general practitioners—must somehow be increased in order to prevent a total silting up of the over-large registrar grade with British graduates. This increase in career outlets must be achieved without a great increase in the total number of doctors in the system and all this must begin to happen now, while it is still only 10 or 15 years too late. Otherwise, the "I told you so's" who have argued for a reduction in the size of the medical schools—usually for the wrong reasons, and sometimes through misinterpretation of the data—will have a field day at the expense of our embittered medical graduates and our deteriorated medical services.

J PARKHOUSE

Postgraduate Dean and Director,
Regional Postgraduate Institute for Medicine and Dentistry,
Newcastle upon Tyne NE2 4AB

¹ Minerva. *Br Med J* 1982;284:1880.

² Department of Health and Social Security, Manpower Division. Medical and dental staffing and prospects in the NHS in England and Wales, 1981. *Health Trends* 1982;14:28-33.

³ Hewitt, LF. Medical Staffing in the National Health Service in Scotland. *Health Bulletin* 1982;40:255-64.

⁴ Rowell N. Medical manpower mismanagement: mirage or miracle? *Br Med J* 1982;284:1562.

⁵ Appleyard WJ. Medical manpower mismanagement: mirage or miracle? *Br Med J* 1982;284:1351-5.

⁶ Royal College of Physicians of London, Committee on Gastroenterology. Career prospects in medical gastroenterology in the United Kingdom. *Gut* 1981;22:677-81.

⁷ Houghton J, Richings J. The second specialty of general physicians. *J R Coll Physicians Lond* 1981;15:28-31.

⁸ Vaughan DH. Changing gear: problems of selecting appropriate staffing ratios. *Br Med J* 1982;284:1498-9.

⁹ Anonymous. Unemployed doctors. *Br Med J* 1982;285:303.

¹⁰ Hart JT. Measurement of omission. *Br Med J* 1982;284:1686-9.

¹¹ Holdstock DJ. The arms race and health care. *Br Med J* 1982;285:421-2.

Breech: vaginal delivery or caesarean section?

Ten years ago Moir thought that caesarean section was justified in 10% of breech births in Britain.¹ In practice nowadays, probably some 40% of breech presentations are delivered by caesarean section,² and in some centres the proportion is much higher (personal communications). Reports from other countries confirm the trend. The recent consensus report on caesarean section in the United States noted that breech presentation was one of the four main conditions responsible for the rapidly increasing section rate in that country.³ According to Quilligan and Zuspan,⁴ the practice in the United States in the past five years has been to deliver most breech babies by caesarean section—their section rate for breeches is currently 72.5%. Similar support for a high section rate is given in the authoritative *Williams' Obstetrics*, where the editors Pritchard and MacDonald⁵ record that in their own unit in Dallas the abdominal delivery rate for breech presentation is 75%. From the Groote Schuur group of hospitals in Cape Town de Groot⁶ reports a section rate of 65% to 83%.

Among the reasons for this trend are the increasing safety of the operation, the highly skilled care available in neonatal intensive care units leading to better immediate and long-term prospects for the smallest breech babies, and the understandable disinclination of today's obstetricians to undertake

difficult manipulative procedures when there is always the risk of a claim for heavy damages should anything "go wrong."

Caesarean section rates in breech delivery do vary from hospital to hospital, and, indeed, from country to country, and for reasons that are plain to see. The management of breech birth is affected by such factors as the age, parity, and nutritional state of the pregnant women (and to some extent by the preference the women themselves have for either abdominal or vaginal delivery), the experience and skill of the obstetrician, and whether he has the immediate support of paediatricians and nurses in a neonatal intensive care unit. A further, and important, consideration is the local practice in regard to litigation.

There can, therefore, be no universally applicable agreed correct or optimum caesarean section rate for breech birth. But it is time to take stock, to look at some of the implications of this widespread trend towards abdominal delivery in breech birth. The higher the incidence of elective abdominal delivery the less chance there is for resident staff to gain experience of all the subtle observations and skills associated with the safe management of vaginal breech birth. This in time will lead to an even higher caesarean section rate, for future obstetricians will probably turn to the easier technique of caesarean section in preference to risking the hazards of a vaginal breech birth for which they are poorly trained. Another concern is the increasing acceptance of caesarean section for impending preterm breech delivery. This has been ably discussed recently by Crowley and Hawkins.⁷ From their critical examination of 11 papers published since 1975 they conclude that abdominal delivery appears to be advantageous for the infant weighing between 1000 and 1500 g but that operative delivery is much more difficult to justify for babies weighing less than 1000 g. Caesarean delivery should be considered when the child can be cared for immediately in a specialist neonatal intensive care unit. With breech babies of this gestational age and weight there is a substantial risk of some major congenital anomaly,⁸⁻¹² and even when adequate screening procedures have been carried out the obstetrician undertaking caesarean section can never be sure that he will be spared the embarrassment of delivering a small baby with some deformity that will prove fatal within days or weeks.

Mostly the operation chosen is a lower-segment caesarean section, but at an early gestational age some obstetricians prefer a classical section.⁹ This issue has been little discussed, but should the present tendency towards caesarean section for preterm breech birth continue it should receive more attention. Classical section is a bad operation with increased immediate and long-term risks for the mother. Indeed, the whole matter of risk for the mother is something that must be considered carefully as the rate of abdominal breech birth increases. No direct comparison can be made between the risks associated with vaginal and abdominal delivery in breech presentation, but abdominal delivery must increase the threat to the life of the mother severalfold,¹³⁻¹⁵ and both immediate and long-term morbidity are also increased.

Previous leading articles¹⁶⁻¹⁸ have reviewed particular aspects of breech birth, but the central controversial issue is the balance between vaginal and abdominal delivery. Obstetricians seem steadily to be moving towards a policy of abdominal delivery, but this may well be challenged—in the same way that high rates of induction of labour and of episiotomy have been challenged in recent years.

J K RUSSELL

Professor of Obstetrics and Gynaecology,
Princess Mary Maternity Hospital,
Newcastle upon Tyne NE2 3BD

- ¹ Moir JC, Myerscough PR, eds. *Munro Kerr's operative obstetrics*. 8th ed. London: Baillière, Tindall and Cassell, 1971.
- ² Dewhurst J. *Integrated obstetrics and gynaecology for postgraduates*. 3rd ed. London: Blackwell Scientific Publications, 1981.
- ³ National Institutes of Health. *Cesarean childbirth—report of a consensus development conference*. Bethesda, Maryland: National Institutes of Health, 1980.
- ⁴ Quilligan EJ, Zuspan FP, eds. *Douglas-Stromme operative obstetrics*. 4th ed. New York: Appleton-Century-Crofts, 1982.
- ⁵ Pritchard JA, MacDonald PC, eds. *Williams' obstetrics*. 16th ed. New York: Appleton-Century-Crofts, 1980.
- ⁶ de Groot HA. *Annual report*. Cape Town: Department of Obstetrics and Gynaecology, University of Cape Town, 1980.
- ⁷ Crowley P, Hawkins DF. Premature breech delivery—the caesarean section debate. *Journal of Obstetrics and Gynaecology* 1980;**1**:2-6.
- ⁸ Brenner WE, Bruce RD, Hendricks CH. The characteristics and perils of breech presentation. *Am J Obstet Gynecol* 1974;**118**:700-12.
- ⁹ Braun FHT, Jones KL, Smith DW. Breech presentations as an indicator of fetal abnormality. *J Pediatr* 1975;**86**:419-21.
- ¹⁰ Geirsson RT, Namunkangula R, Calder AA, Lunan CB. Preterm singleton breech presentation: the impact of traumatic intracranial haemorrhage on neonatal mortality. *Journal of Obstetrics and Gynaecology* 1982;**2**: 219-23.
- ¹¹ Karp LE, Doney JR, McCarthy T, Meis PJ, Hall M. The premature breech: trial labor or cesarean section? *Obstet Gynecol* 1979;**53**:88-92.
- ¹² Goldenberg RL, Nelson KG. The premature breech. *Am J Obstet Gynecol* 1977;**127**:240-4.
- ¹³ Collea JV, Rabin SC, Weghorst GR, Quilligan EJ. The randomized management of term frank breech presentation: vaginal delivery vs cesarean section. *Am J Obstet Gynecol* 1978;**131**:186-95.
- ¹⁴ Collea JV, Chein C, Quilligan EJ. The randomised study of term frank breech presentation: a study of 208 cases. *Am J Obstet Gynecol* 1980;**137**:235-44.
- ¹⁵ Francome C, Huntingford PJ. Births by caesarean section in the United States of America and in Britain. *J Biosoc Sci* 1980;**12**:353-62.
- ¹⁶ Anonymous. Fetal damage from breech birth. *Br Med J* 1975;ii:158-9.
- ¹⁷ Anonymous. Birth trauma in vaginal breech delivery. *Br Med J* 1978;ii: 320-1.
- ¹⁸ Anonymous. Premature breech: vaginal delivery or caesarean section? *Br Med J* 1979;ii:1747.

Management of pulmonary embolism

As Bell and Simon have recently pointed out in a comprehensive review,¹ pulmonary embolism is still an important cause of morbidity and death. Venous thrombosis and pulmonary embolism are sometimes preventable, as numerous clinical trials in patients having general surgical operations have shown; and limited epidemiological evidence shows a fall in incidence in general surgical wards, possibly attributable to prophylactic measures.² In other specialties, such as orthopaedics and neurosurgery, the problems of prophylaxis have not been entirely solved, particularly in cases of trauma. Specific prophylactic measures appear to have been applied in patients with medical conditions only after myocardial infarction^{3 4} and stroke.⁵ With the recognition of predisposing factors (including previous thromboembolism, varicose veins, age, obesity, malignancy, and cardiac disease) selective prophylaxis should, perhaps, be used more often in acute medical wards.

As for established embolism, no dramatic improvements have been made in management in recent years, but the role of investigations have been more clearly defined and some treatments modified. Most pulmonary emboli are small; indeed, most do not cause infarction and are therefore silent.⁶ Even when symptoms do arise they are usually non-specific. Embolism may masquerade as pneumonia, congestive cardiac failure, myocardial infarction, chronic obstructive airways disease, angina, pleurisy, or carcinoma of the lung.⁷ Leg