

assign duties, establish standards of emergency medical care, conduct and supervise training programmes, and review and revise the disaster plan at regular intervals. The final arbiter for most hospitals on whether their plan works will be a properly designed exercise simulating a disaster,<sup>6</sup> and many regional boards are now encouraging hospitals to test their arrangements in conjunction with the other emergency services. The published experience of such exercises in North America and in Britain<sup>7</sup> suggests that only by such a test can a hospital be sure that its major accident plan will actually work.

The fact remains that disaster planning is a difficult and unpopular task for busy people hampered by lack of funds. Catastrophe never seems imminent, and we must accept the irony that as training continues the hospital becomes better prepared to respond to an event which every one hopes will never occur.

<sup>1</sup> Fairley, J., *British Medical Journal*, 1969, 4, 551.

<sup>2</sup> Bennet, G., Human Reaction to Disaster. Paper read at Conference on Disaster Technology. London, Imperial College, 1971.

<sup>3</sup> Shaftan, G. W., *Journal of Trauma*, 1962, 2, 111.

<sup>4</sup> Savage, P. E. A., *Injury (The British Journal of Accident Surgery)*, 1971, 3, 49.

<sup>5</sup> *Lancet*, 1968, 2, 904.

<sup>6</sup> Campanale, R. P., *Military Medicine*, 1963, 128, 418.

<sup>7</sup> Savage, P. E. A., *British Medical Journal*, 1970, 4, 168.

## From Birth to Seven

Though the Health Service and the educational system in Britain have many excellent qualities, no one would be rash enough to suggest that they have no faults. It is important that we should be fully informed about our deficiencies. Now an excellent little book<sup>1</sup> published by the National Children's Bureau under the skilled editorship of Ronald Davie, Neville Butler, and Harvey Goldstein provides much food for thought. But the difficulty is to know what to do with the food when one has digested it.

The book is a study of 17,000 British children born in the week 3-9 March 1958. It is a social study and concerns itself with such matters as overcrowding and its consequences, the effect of poverty, the relationship of social class to reading ability, the effect of having a working mother, the frequency of attendance at clinics and of immunization in relation to social class, the care of teeth, the number of hospital admissions in relation to class, and the relation of social class to breast feeding, to defects of speech, hearing, and vision, to general ability and attainment, the need for special education, the frequency of tonsillectomy, and many other conditions. Striking facts emerge: for instance, smoking in pregnancy, as well as tending to reduce the weight of the fetus and to increase perinatal mortality by 30%, also tends to reduce the height of the child at least until the age of 7 and to be related to a reduced reading ability at that age. Perhaps the most notable observation is the disadvantage suffered by the children in the lowest classes in all aspects of development, and notably in reading. The average difference in reading attainment of children from unskilled families as compared with those of professional families is at least two years at the age of 7. As many as 9% of all the children had been admitted to hospital because of an accident at home; 2.9% of the boys and 1.7% of the girls had had hospital treatment for a road accident; and other accidents, neither on the road nor at home, caused another 9% to be admitted to hospital.

This is a valuable study of the effect of social factors on

the development of a child, his ability, and his attainments. It tells us not only about the cost of poverty to the child but the cost of poverty to the nation—in extra schooling, in extra hospital care, and in the loss of potential intellectual attainment. We have learnt much about the same subject from the similar studies of J. W. B. Douglas,<sup>2,3</sup> who followed up children born in the first week of March 1946. Long ago Cyril Burt,<sup>4</sup> discussing the much greater incidence of backwardness at school among the children of unskilled workers than in those of the middle and upper classes, named some of the factors responsible as the greater frequency of absence from school, overcrowding at home, and lack of a suitable room in which to work. Other valuable studies of the problem of backwardness in relation to social class include those of D. H. Stott,<sup>5</sup> M. Kornrich,<sup>6</sup> and R. R. Dale and S. Griffith.<sup>7</sup> It is not surprising that H. C. Wimberger<sup>8</sup> in the United States considered that 30 to 50% of school children achieve less than they should, and that Sir Alec Clegg<sup>9</sup> should report that in Britain children of white collar workers are 16 times more likely to secure university places than children of manual workers.

It is now recognized that the children of the lowest classes lag behind children of upper classes long before they start school, and that the first three or four years are vital for the child's later intellectual progress.<sup>10</sup> What we need to know above all is how to help the child of a disadvantaged home in these early months and preschool years,<sup>11</sup> how to guide parents in the choice of play material and in other ways of bringing the best out of their children. Doctors in the child welfare clinics can do much to help in this respect. They can encourage mothers to read to their children from their first birthday or even sooner and to offer their children material that will introduce them to learning as an enjoyable process.

<sup>1</sup> Davie, R., Butler, N., and Goldstein, H., *From Birth to Seven*. London, Longman, 1972.

<sup>2</sup> Douglas, J. W. B., *The Home and the School*, 1961. Aldershot, MacGibbon and Kee, 1964.

<sup>3</sup> Douglas, J. W. B., Ross, J. M., and Simpson, H. R., *All Our Future*. London, Peter Davies, 1968.

<sup>4</sup> Burt, C., *The Causes and Treatment of Backwardness*. London, University of London Press, 1953.

<sup>5</sup> Stott, D. H., *Unsettled Children and their Families*. London University Press, 1956.

<sup>6</sup> Kornrich, M., *Underachievement*. Springfield, Illinois, Charles Thomas, 1965.

<sup>7</sup> Dale, R. R., Griffith, S., *Downstream: Failure in the Grammar School*. London, Routledge and Kegan Paul, 1965.

<sup>8</sup> Wimberger, H. C., *Journal of Pediatrics*, 1966, 69, 1092.

<sup>9</sup> Clegg, A. B., *Education*, 1965, 125, 238.

<sup>10</sup> Bloom, B. S., *Stability and Change in Human Characteristics*. New York, John Wiley, 1964.

<sup>11</sup> Illingworth, R. S., *Journal of Pediatrics*, 1968, 73, 61.

## Burst Abdomen

Any surgical incision through the layers of the abdominal wall is associated with a small but definite risk of complete dehiscence. The incidence varies in reported series of cases, but it is somewhere between 0.5 and 5%.

For the first few days after operation the integrity of the wound is maintained entirely by the sutures used for the closure. These have to withstand all the mechanical stresses applied to the wound and keep the cut edges opposed until the healing process gets under way. The wound begins to gain strength after about five days, after which time it rapidly gains in strength over the next 14 to 21 days.

Disruption almost always occurs in the peritoneal layer and later involves the muscular or fascial layers of the abdominal wall. Typically the patient complains of pain in the