

## **Developmental and paediatric care of the pre-school child \***

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**SUMMARY.** Through an Upjohn Travelling Fellowship I visited 27 experts in childcare and sought their opinions on the privileges, possibilities, and problems in organising developmental and paediatric care for pre-school children in the United Kingdom.

The role of the general practitioner was seen by many of the experts clearly. How he is to play it is shrouded in uncertainty. Research is urgently needed both on the tools of surveillance and on the different methods of arranging care.

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### **Introduction**

In recent years general practitioners have involved themselves increasingly in the comprehensive care of the pre-school child. Some have described their work (Pollak, 1973; Bain, 1974; Rowlands, 1975; Tuke, 1974; Starte, 1974, 1975). Each has described the evolution of a philosophy of care of preventive medicine and the acceptance of more responsibility for surveillance, including screening and the continuing care of the handicapped child and his family (Hutchinson, 1973; Bain, 1976). I have described the follow up of at-risk children who would normally be attending hospital paediatric outpatient departments (Curtis Jenkins, 1976). Some have organised play groups for disadvantaged children in their practice (Steele, 1976) and others have worked together to improve the quality of the screening examinations (Ashford Paediatric Research Group, 1976).

Two recent publications *Child Welfare Centres* (1967), and *Towards an Integrated Child Health Service* (Scottish Home and Health Departments, 1973) described in detail some advantages to be gained for effective and efficient reorganisation of such services and the pressing need for the interested general practitioner to be integrated with them: "Eventually the child health service will no longer be a distinct and separate entity but will become part of the family health service provided by the family doctor" (*Child Welfare Centres*, 1967).

Unfortunately despite these encouraging words little or no authoritative guidance is available to general practitioners wishing to start such a programme of care. The plethora of different examination forms used in the screening examinations attest to the widely divergent views of those responsible for designing them. Their sometimes inadequate completion tells of the lack of organisation, training, and even motivation of some of the staff using them.

Furthermore the commitment of time to a surveillance programme in a three-man general practice with a list size of 9,000 and an under-five-year population of 700 is about four to six hours weekly—a 20–25 per cent increase in consulting workload—not to be undertaken lightly in the absence of financial reward and help in organisation.

\*An edited version of the report of an Upjohn Travelling Fellowship.

### **Aim**

I tried to find out what were the aims of those thinking, planning, and working within the existing child health services.

### **Method**

I selected 27 doctors working in the United Kingdom in various parts of the paediatric health services. Five were general practitioners, 20 were working in the hospital sector, and two were working in the community health services. I met each of them in turn and during our general discussions about paediatric health services I asked the following six questions:

- (1) Who should be responsible for the surveillance of the pre-school child and screening for disorders which could lead to handicap?
- (2) Why should surveillance be carried out? What are the reasons for starting such a programme?
- (3) At what ages should routine examinations 'birthday checks' be carried out as part of a surveillance programme?
- (4) What problems do you foresee if surveillance including screening was to be a responsibility of the general practitioner?
- (5) What problems do you foresee in the planning and organisation of nationwide surveillance programmes—whether or not based on general practice?
- (6) What steps need be taken before a nationwide programme can be realised?

The 16 who answered the questions in full are identified by asterisk below (acknowledgements). Answers were recorded during the interviews and my impressions of the content of the meetings later fully noted on tape. The two records were then integrated and analysed.

The 11 who did not answer all the questions, however, greatly helped me to understand the problems.

### **(1) Responsibility for surveillance of the pre-school child**

#### *Discussion*

Thirteen nominated the general practitioner. Each felt that, once trained and motivated, the general practitioner could play the central role in a surveillance programme which included screening, the staffing of paediatric clinics (well-baby clinics), for the under five-year-olds as well as care for day-to-day illnesses.

Three felt that the health visitor was more suited to the role. They all were working in an area where health visitors had for long been responsible for surveillance and screening. Despite this, the area health authority concerned had recently approached every general practitioner in its area to ask them if they would wish to participate more fully in this work.

Seven chose a combination of general practitioner and community paediatric specialist working side by side in the same clinic. Each mentioned the outcome of better liaison, diffusion of information about each other's skill and better mutual understanding. All these it was felt would lead to increased efficiency and therefore effectiveness.

One also made the observations that the general practitioner was often the carrot that brought parent and child to surgery for the surveillance 'birthday check'. He described his own common experience of sitting in a health clinic in a community health service session in which he would see only one or two children. He felt that this was less likely to happen if the parents had been invited to take their child for examination by their own general practitioner. The experience of the developmental care programme

at the Woodside Health Centre where less than 30 per cent of two-year-olds were seen and where health visitors carried out most of the examinations would suggest this (Hutchinson, 1973).

## (2) Why should surveillance be carried out?

<i>Answers</i>	<i>Respondents</i>
(1) To detect, as early as possible in life, all disorders that could lead to handicap so that appropriate remedial action may be taken .. .. .	9
(2) To prepare parents of children with handicap to accept the implications of diagnosis .. .. .	6
(3) To detect specifically vision and hearing disorder .. .. .	5
(4) To discover the incidence of disorders so that the tools of detection may be improved and adequate provision made for treatment ..	3
(5) To make parents aware of their children and to promote the parent-child relationship and to teach parents how to care .. .. .	3
(6) To prevent alienation caused by a depressed child in a family by early diagnosis and adequate treatment .. .. .	2
(7) To demonstrate to parents that the primary care team <i>is</i> interested in their child and is there to help them .. .. .	2*

### *Discussion*

All the respondents found it difficult to answer this question. Each of the answers is a justification in itself of a surveillance programme, but the financial justification in terms of cost effectiveness could be quantified only in (1) and (3). Nevertheless the answers are relevant in justifying a much greater role for the general practitioners.

The implications are already apparent. Contrary to the view of Carne (1976) special training and awareness is required and separate time must be set aside for the work. The idea that a sickness consultation is the time to check hearing, vision, and speech and even as has recently been suggested, to check the progress of other siblings not present at the time of examination is, I suspect, a reflection of the lack of awareness of those who propose such ideas as to what surveillance really entails (Bolden, 1976).

## (3) At what ages should routine surveillance examinations be done?

<i>Age</i>	<i>Respondents</i>
Neonatal examination within 21 days (preferably within ten days and excluding examination after birth that all felt was mandatory) ..	16
6 weeks .. .. .	7
8 weeks .. .. .	1
5 months .. .. .	1
6 months .. .. .	2
7 months .. .. .	8
8-10 months .. .. .	8
12 months .. .. .	3
15 months .. .. .	2
18 months .. .. .	4
2 years .. .. .	11
2½ years .. .. .	1
3 years .. .. .	13
4 years .. .. .	12

\*1 General Practitioner. 1 Professor of Child Health

*Discussion*

All respondents chose at least three ages. What was surprising was that although all suggested that at least one of the traditional 'birthday checks' could be dropped, each chose a different one.

Close questioning revealed that at least in part the decision about which age to drop rested on the individual respondent's ability to relate to children of the age group in question. This echoed exactly my own often-stated prejudice that three-year-olds did not need a birthday check. Only when I examined a large group of them did I realise that firstly the number of disorders suspected in this age group was proportionally higher than all other age group examinations I performed (Curtis Jenkins, 1976), but that my main reason for feeling this way about three-year-olds was that I did not get on well with them and failed to establish rapport. Only after much practice and effort did I see the truth.

The answers also suggest that routine examinations at less than 21-days-old, at two-years-old, at three-years-old and at four-and-a-half-years-old (the pre-school examination) were considered the most important. Four of the respondents felt that the three-year-old examination could be selective, choosing as in Dundee, only those three-year-old children with a history of convulsions, middle-ear infections, and speech delay at two years old. In Dundee 50 per cent of the three-year-olds needed to be seen using these criteria (Drillien, 1975).

Examinations carried out between seven and nine months old were popular. The six-month examination that appears on so many printed examination schedules was thought by most to be a waste of time because of the universal experience that between 15 to 20 per cent of six-month children need to be recalled a month or two later to have re-checks of vision and hearing. This occurs because of the poor response of the six-month old to the standard Stycar vision and hearing tests. At seven months the recall rate drops to between five and seven per cent.

Five of the respondents felt that at least some of the examinations could be carried out by health visitors. However, one of the respondents from the area where this had long been the practice echoed the doubts of Roberts and Khosla (1972) of their efficiency in diagnosis.

Ten of the 12 respondents who mentioned the four-and-a-half year examination described its "last ditch" nature; the last chance to detect disorder that could cause handicap on reaching school. Inability to see the blackboard or hear the teacher for the first nine months or so at school until the school medical examination is carried out can obviously have a lasting effect on the unfortunate child with such a disorder.

Only one respondent was uncertain about the aims of routine surveillance examinations. He felt that the use of untrained and unmotivated staff could be counter productive and that the detection of disorder could better be left to parents, teachers, and general practitioners.

Research is urgently required to test the truths of these assumptions about key age examinations and what constitutes 'disorder'.

To some (Carne, 1976) surveillance seems to be limited to physical disorder. To others it is apparent that a disorder is only a disorder if treatment is available. No speech therapy services means that speech delay goes unreported. This must in part be the reason for the widely differing detection rates reported (Bolden, 1976; Curtis Jenkins, 1976). Finally the cost of a system that called for six examinations rather than three in the first five years of life is nearly double and for this reason alone research is vital.

**(4) The problems of routine surveillance in general practice**

<i>Answers</i>	<i>Respondents</i>
(1) Lack of interest and skill of general practitioners in developmental paediatrics .. .. .	8
(2) Lack of suitable training programmes and of trained staff to run them	6
(3) Difficulty in motivating general practitioners to do the work .. ..	6
(4) Difficulty in persuading community health authorities to co-operate with general practitioners .. .. .	5
(5) Difficulty in persuading general practitioners to co-operate with community health authorities .. .. .	5
(6) The lack of effective organisation to ensure complete coverage of services to reach every child .. .. .	4
(7) Difficulty in motivating parents and children to use the service ..	3

*Discussion*

These replies show that although the replies to the first question might produce a rosy glow in the hearts of those of us already doing this work, the respondents were pessimistic about eliciting widespread general-practitioner involvement. The strongly held views about the average general practitioner's interest in developmental paediatrics generally must give considerable cause for concern.

The problems foreseen in the field of co-operation should also sound a warning to those enthusiastically preaching the message of general-practitioner involvement.

On the benefit side I was heartened to find that many doubts about the possibility of general-practitioner involvement were based on misconceptions and lack of knowledge of work already going on and the experiments in Dorset and Oxford seemed to be largely unknown as were the recent papers from general practice.

**(5) Problems in planning nationwide programmes of surveillance whether or not based on general practice***Discussion*

It was impossible to quantify the answers to this question because each centre visited had specific problems and at the same time shared common ones.

All those working in the community health services specifically mentioned the current disorganisation produced by the recent re-organisation of the British National Health Service. The loss of trained clinical staff to administration (the only path to promotion) had denuded the services of nearly all the experienced trained clinical staff in one area visited and was generally felt to have effectively put back by years any possibility of introducing local schemes at area or district level that were better than those already existing.

Lack of communication between areas and districts was cited by one area child care specialist as causing considerable problems. The specialist concerned had to co-operate with four district councils, five education authorities, and many other overlapping councils and committees on the periphery of her area.

In four centres which I visited, with decaying inner-city areas, my attention was drawn forcibly to their problems. Here, primary medical care services, housing, schools, and other public services were disintegrating. Immigrant populations often speaking little English compounded the problems and had developed the habit of using casualty departments of chronically short-staffed district hospitals for primary medical care. Mutual misunderstanding between general practitioner and patient, transfer phone system for

out-of-hours calls and a lack of understanding about how to use the services provided, all conspired to make this the rule.

In one centre 30 per cent of the children moved house with their parents each year, plans were being discussed to provide a 24-hour paediatric dispensary service within one district hospital. Another suggestion mooted was for divisions of primary medical care to be set up within the hospitals on the lines suggested by B.M.A. Planning Unit (1970).

The attachment of health visitors to general practitioners was under attack in these areas too. Health visitors in one area were actively campaigning to be removed from their general-practice attachments and instead be given geographical responsibilities centred on child health clinics. This they felt was necessary so that they could regain their all important 'local' knowledge which they argued had been lost on their attachment to general practitioners.

A further problem encountered by the health visitors was when rehousing was under-way general practitioners were naturally loth to give up their patients who had often moved to the other side of the city. The health visitor, the general practitioner, and the patient spent many hours travelling to see each other, and the health visitors in particular were conscious of this wasted time. None of the respondents from these areas were optimistic that any change for the better was possible in the foreseeable future.

#### (6) Preparation for starting a programme

	<i>Answers</i>	<i>Respondents</i>
(1) Improvements in the training of hospital paediatric specialists, community specialists, and general practitioners .. .. .	9	9
(2) Implementing improvements in existing programmes .. .. .	8	8
(3) Improvement in training general practitioners specifically to take over the responsibility for surveillance .. .. .	6	6
(4) Improvement in co-operation between community health services, hospital, and the general practitioners .. .. .	5	5
(5) A change in the emphasis of paediatric undergraduate teaching towards community-based paediatrics .. .. .	4	4

These replies show that all the respondents understood the need for first changing attitudes in order to accept a new system. "It was no good changing the organisation if you hadn't convinced the people within it of the need for change" was one such remark. Already in Glasgow the medical students were introduced to the concept of community and preventive paediatrics and seemed considerably changed in attitude by the altered emphasis of the teaching.

The nine respondents who thought that urgent steps should be taken nationwide to run combined training programmes for community health service doctors, general practitioners and hospital paediatric specialists in training all felt that if this was *not* done there was no possibility of change.

Improvements in existing programmes to trace defaulting children and to persuade their parents to bring them for follow-up when something abnormal is suspected was also felt to be essential. High mobility of families in those inner city areas most likely to benefit from this makes the problems of organisation particularly difficult to overcome.

#### Conclusion

Much information was gained from this investigation and I can commend the technique of consulting experts, the Delphi technique, to others with interests in other topics. It

is one of the techniques used in forecasting and planning that is more likely than most to produce relevant information (Pavitt, 1972). It is most useful in long-term relatively ill-defined problems. The reasoning behind many expert opinions may be just as important as the opinions themselves. Great care must be taken in choosing the experts; the statistically median opinion may well be wrong and the gain in the technique used in this method of interviewing the experts individually, prevented the all-too-frequent convergence of opinions that gives an often false sense of certainty to the deliberations of committees, commissions, and other bodies.

The role of the general practitioner is seen by many of the experts clearly. How he comes to play it is shrouded in uncertainty.

There is no one single answer to the problem of starting nationwide surveillance. Flexibility and the evolutionary approach to surmount the local difficulties of inner city areas would seem to be part of the answer. I am concerned lest the experience of paediatric specialists working in these areas and their heartfelt and passionate involvement in attempting to solve the difficulties of say Manchester or Newcastle should be allowed to influence too greatly the future patterns of child care in this country. Local problems can usually be solved with local solutions. Let us hope not too unrealistically that this may be allowed to come about as one of the results of the devolution of government away from London and towards the regions.

Research is urgently needed before any widespread introduction of surveillance programmes is attempted. The development of surveillance *tools* is at a standstill as many concentrate on the problems of introducing the programme. With two possible exceptions (Starte, 1975) and the development from this by the Ashford Developmental Paediatric Research Group of developmental profile examination schedules none of the existing tools are effective enough to warrant introducing them. Work is urgently required to refine and develop them. Finally, screening at the expense of providing a comprehensive paediatric illness service must be avoided at all costs.

#### Acknowledgements

I should like to thank Upjohn Limited for awarding me the Travelling Fellowship and all those listed below who gave so generously of their time.

Drs D. J. G. Bain, Livingstone New Town; \* F. Bamford, Manchester; \* Professor H. Barber, Glasgow; Drs R. Bassett, Livingstone New Town; \* M. Bax, London; \* B. Bewley, London; \* G. Bryant, Cardiff; \* Harvard Davis, Cardiff; \* C. Drillien, Dundee; \* R. Evans, Cardiff; R. Graham, London; \* Professor K. Holt, London; \* Dr P. Hooper, Newport, I.O.W.; Professor J. H. Hutchinson, Glasgow; \* Dr R. C. MacKeith, London; Professor R. Mitchell, Dundee; The late Dr G. Neligan, Newcastle; Drs C. Peckham, London; \* M. Pollak, London; P. Robson, London; \* M. Salmon, Aylesbury; M. Sheridan, London; P. Stanfield, Glasgow; G. Stark, Edinburgh; H. Steiner, Newcastle; \* C. H. Walker, Dundee\* and P. Zinkin, London.\*

#### REFERENCES

- Ashford Developmental Paediatric Research Group Report (1976). *A Developmental Screening System for Use on Children Aged 0-5 Years*. In Press.
- Bain, D. J. G. (1974). *Health Bulletin*, 32, 189-193.
- Bain, D. J. G. (1976). *Update*, 12, 707-720.
- Bolden, K. J. (1976). *Proceedings of the Royal Society of Medicine*, 69, 385-386.
- British Medical Association (1970). *Primary Care*. London: B.M.A.
- Carne, S. (1976). *Update*, 12, 535-539.
- Central Health Services Council (1967). *Child Welfare Centres*. Report of the Sub-committee. London: H.M.S.O.
- Curtis Jenkins, G. H. (1976). *Journal of Maternal & Child Health*, 1, 32-35.
- Curtis Jenkins, G. H. (1976). *Update*, 12, 777-786.
- Drillien, C. (1975). Personal Communication.
- Hutchinson, J. H. (1973). *Health Bulletin*, 31, 156-160.
- Pavitt, K. (1973). *Futures*, 5-12.

- Pollak, M. (1973). *Today's Three Year Olds in London*. London: William Heinemann.
- Roberts, C. J. & Khosla, T. (1972). *British Journal of Preventive and Social Medicine*, **26**, 94-100.
- Rowlands, P. (1975). *Update*, **10**, 379-390.
- Scottish Home & Health Department (1973). *Towards an Integrated Child Health Service*. Edinburgh: H.M.S.O.
- Starte, G. D. (1974). *Practitioner*, **213**, 823-828.
- Starte, G. D. (1975). *Journal of the Royal College of General Practitioners*, **25**, 880-887.
- Starte, G. D. (1976). *Practitioner*, **216**, 311-316.
- Steele, A. (1976). Personal Communication.
- Tuke, J. W. (1974). *Update*, **9**, 337-341.

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### £25,000 A YEAR PER DOCTOR

“Doctors themselves are economic decision-makers to an extent which few people realise. In 1975/76 the average general practitioner (and his team) controlled resources (including his own time and the drugs he prescribed) worth £25,000 a year. (There were 21,700 general practitioners in 1975). So this was a total resource of £540 million. In 1975/76 the average consultant, his team and nursing and professional colleagues controlled resources worth about £250,000 per year. (If each hospital doctor is considered as a key decision maker—with nursing colleagues—then each controlled resources worth about £100,000). There were 9,600 consultants and a total of 26,400 hospital doctors in 1975. Clinical freedom is often cited as a reason for not considering economic consequences. Doctors claim that the doctor/patient relationship only allows a doctor to decide what is best for that particular patient: some doctors believe it is for others, in particular the politicians, to make the economic decisions. Yet many doctors have been able to reduce costs without harming their patients, and it is worth looking at the results.”

#### REFERENCE

Owen, D. (1976). Minister of State, Department of Health and Social Security, Speech, April.

### BUILDING ON OUR ASSETS

Looking ahead, Sir George saw four important features of the National Health Service which should be preserved and developed further.

Firstly, we had evolved a system of primary care based on doctors in groups working with nurses and very different from the single-handed practices of 1948. If properly used this gave the patient far better continuity of care than any other system, which also gave doctors leisure time and reasonable opportunities to continue their medical education.

#### REFERENCE

Godber, Sir George (1976). *British Medical Journal*, **1**, 638.

### ABOLISHING GENERAL PRACTICE

“I have often felt that general practice, as it exists in most Western countries, is a cottage industry which could safely be abolished, and that the whole business of primary medical care—the initial contact between patient and profession—could confidently be entrusted to a good nurse.”

#### REFERENCE

Brewer, C. (1974). *The Guardian*, July, p. 11.

### WATCHING TELEVISION

In February 1975 the average number of hours of television viewed per week by children aged between five and 14 was 24 hours per week.