

vegetations. Cardiac catheterisation showed good left ventricular function and fully competent aortic and mitral valves.

### Comment

Candidal endocarditis rarely responds to medical treatment alone.<sup>2-4</sup> Uttley *et al*<sup>5</sup> reported excellent results by removing the infected valve and giving systemic antifungal treatment, and this is now the preferred approach. Patients with acute lymphoblastic leukaemia now have a good prognosis because of modern chemotherapy; therefore if there is a need for major surgery, it should be considered.

### References

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## Contemporary Themes

### How effective are our child health clinics?

W A HENDRICKSE

Child health clinics have their origins in the child welfare movement that began at the end of the nineteenth century and gained official recognition in the Maternal and Child Welfare Act of 1918. With the establishment of the National Health Service in 1946, local authorities were given the responsibility to provide this service to nursing mothers and their children. The re-organisation of the NHS in 1974 placed responsibility for child health clinics in the hands of area health authorities with the intention to promote a better integrated service. With the changing pattern of childhood problems the Sheldon Report<sup>1</sup> in 1967 and the more recent Court Report<sup>2</sup> in 1976 reviewed child health services and came to similar conclusions. Both reports recommended that present-day needs of children and their families could best be met by an integrated system of comprehensive primary care based on general practice. The Court Report recommended a scheme for continued child health surveillance within this framework, based on periodic examinations by doctors and health visitors.

Child health surveillance is now a widely established part of primary paediatric care even though there has been inadequate evaluation of the cost effectiveness of this form of practice. It must be acknowledged, therefore, that practice in this subject is based on a consensus of what it is thought ought to be done and not on what has been shown to be effective or of value.

While I was paediatrician to a child health clinic the opportunity arose to evaluate the work of the clinic doctor by surveying all children seen during two periods in the year. The objectives were to assess the range of problems seen in the clinic, to determine what proportion of these were previously unidentified, and to what extent the clinic might be duplicating the service provided by the childrens' own general practitioner or hospital outpatient department.

### Patients and methods

The clinic is in an inner city area designated by the Nottinghamshire County deprivation study<sup>3</sup> as a deprived area with a high infant patient load. The health visitors working in the clinic visit the home of every newborn baby notified to them. Parents are informed of the services provided at the clinic and are encouraged to bring their child for a routine examination at six weeks, six, 12, and 18 months, two years, and annually thereafter until they go to school. Children are seen at any other times at the request of their parents or health visitor.

The survey was conducted in two separate periods, each consisting of 12 consecutive clinic sessions, in which I was the examining doctor. The first period was January to March 1980 and the second, six months later, September to October. The two periods reflected seasonal variation in the prevalence of disease.

The following information was recorded on every child included in the survey.

(a) Reason for consultation as given by the accompanying adult, who was usually a parent.

(b) Any problems or abnormalities already known to exist in the child.

(c) Whether the general practitioner had been consulted about this problem or was the child currently attending an outpatient service for the problem.

Routine history taking and examination for physical and developmental abnormality were carried out at the appropriate ages. On other occasions the history and examination centred on presenting complaints. In January 1981 the clinic records of all children seen were reviewed to assess their subsequent progress. In selected cases the hospital records were reviewed as well.

### Results

Table I gives the reasons for attendance in the 447 children seen during the survey.

#### ROUTINE EXAMINATIONS

Out of the 252 children seen for a routine examination, 43 were identified as having a problem, the remaining 209 children were normal. Most (88.1%) of these children were 2 years of age or younger,

TABLE I—Reasons for attending clinic

	No	%
Routine developmental, health check	252	56.4
Seen at parents' request	134	30.0
Requested by doctor to reattend for review	29	6.5
To discuss immunisation procedure/problems	26	5.8
Health visitor request	6	1.3
Total	447	100

and all those over 6 months had attended a child health clinic on at least one previous occasion.

Among the 43 children in whom a problem was identified, 18 were currently attending a hospital clinic for their problem, 11 were being managed by their general practitioner, and in a further seven the parents had recognised the problem before consultation. In only seven children was a new clinical finding recorded. There were four children with obvious systolic murmurs, three of which were considered to be benign, and one child had a small asymptomatic ventriculoseptal defect. Developmental delay was suspected in two children, one of whom subsequently showed normal developmental progress; the other child was already under hospital supervision for feeding difficulties and a heart murmur, and her delayed milestones would probably have been recognised at the next visit to the outpatient clinic. Finally, unilateral congenital dislocation of the hip was recognised in one child aged 6 months. In this case an earlier examination had recorded the hips as normal. These results are summarised in table II.

TABLE II—Results of routine examinations undertaken at the clinic

	No	%
Normal	209	82.9
Abnormal	43	17.1
18 Attending outpatient department for the problem		
11 Attending general practitioner for the problem		
7 Problem recognised by parents		
7 New findings (benign murmurs (3), ventriculoseptal defect (1), suspected developmental delay (2), and congenital dislocation of hips (1))		
Total	252	100

#### CONSULTATIONS AT PARENTS' REQUEST

A wide range of problems was encountered among the 134 children seen at their parents request (table III). The family general practitioner

TABLE III—Reasons for parents requesting to see the doctor at the child health clinic

	No	%
Medical problems	81	60.4
24 Respiratory tract illness		
17 Acute gastrointestinal tract illness		
10 Rashes (excluding simple nappy rash)		
10 Other febrile illness		
15 Surgical orthopaedic problems		
5 Miscellaneous		
Advice/reassurance on feeding, weight gain, behaviour, toilet training, etc	36	26.8
Parental anxiety about development	3	2.2
Delayed speech	5	3.9
Social or parental emotional problems	6	4.5
Squint	3	2.2
Total	134	100

had already been consulted in 15 instances, and in a further three cases the child was already under hospital supervision for this problem. Acute admission to hospital was necessary in three cases, and a further nine children were referred to a hospital outpatient service. In all other cases where further medical treatment or management was indicated the family was referred to their general practitioner and the relevant health visitor was also notified.

#### HEALTH VISITOR REFERRALS

Developmental delay was suspected by the health visitor after a home visit to one child, and this was confirmed in the clinic. Other problems referred were suspected child abuse, feeding difficulties with failure to thrive, poor social circumstances, and parenting ability needing close support and monitoring. Two children who failed to give consistent responses to distraction audiometry were referred for formal hearing assessment.

#### IMMUNISATION

All immunisations were administered by a designated nurse who was authorised to vaccinate when a doctor was present in the clinic. The parents of 26 children were seen to discuss problems or anxieties relating to the procedure. For example, many parents asked for reassurance about the advisability of whooping cough vaccination. Nursing staff were issued with written guidelines for immunisations and were instructed to refer any child in whom they or the parents thought immunisation might be contraindicated. Any parents who declined to have their child immunised were asked if they wished to discuss this decision with the doctor. One child was seen who developed a superficial abscess at the inoculation site.

#### Discussion

Several acute medical problems were seen in the clinic which occupied much of the doctor's time. Child health clinics are not intended to undertake the management of such problems, and clinical medical officers do not in fact have the facility to prescribe. A study in Newcastle upon Tyne<sup>4</sup> found that 24-32% of consultations in child health clinics were for medical complaints, and Illingworth<sup>5</sup> similarly described a considerable number of medical problems presenting in a child health clinic. Apparently, therefore, medical problems form a large proportion of the work load of many clinics. The Court Report<sup>2</sup> recommends integrating child health surveillance within general practice, and if this was done treatment could be started when necessary, without further referral on each occasion. This would be more satisfactory for both patients and doctors.

The number of new problems identified on routine examination was low. Only seven children out of 252 examined had new clinical findings that had not previously been detected, but in five of these the findings were inconsequential, one patient was already under hospital supervision, and in only one case was the abnormality detected in the clinic of any consequence. Most children in this survey with overt handicaps or at risk of developing a problem had already been identified at the time of examination, and were already under the care of either hospital or general practitioner. On reviewing the records no case was found where the problem had been originally identified in the clinic before starting the survey.

A policy to detect handicap early seems both rational and desirable, but many fundamental questions still remain unanswered as to what the most effective structure of such a policy might be. Early detection can be achieved only by periodic screening from birth onwards. Repeated examinations, however, impose a heavy burden on children, their parents, and the medical profession, which is not easily justified if returns are low.

Clinic-based health surveillance programmes will only reach that population that actually visits the clinic and are therefore not likely to identify all children in need. In a study in the London Borough of Hounslow<sup>6</sup> the results indicated that a larger proportion of children not brought to child health clinics were in a group with a high risk of developmental problems. In this group of clinic non-attenders an appreciably higher percentage of problems were identified on home developmental examination than in the study population as a whole. The authors pointed out how well this illustrated Brimblecombe's law of inverse care,<sup>7</sup> in which he states that "Better-off families whose need is generally least, make optimal use of services provided, while poorer families whose need is commonly greatest make the least use of avail-

able resources." Probably, therefore, any parent who identifies a problem in their child and then attends a clinic would seek alternative professional advice if the clinic was not available.

Duplication of services did appear to apply at several levels. Many children with problems or at risk of developing them were already under supervision, and many of those requiring further management for a medical problem needed onward referral.

Immunisation is an important part of the work of a child health clinic, and it behoves all members of the team to promote the maximum uptake possible.

The concept of child health surveillance has gained widespread acceptance, although there has been no true validation of this concept. Few studies have attempted to evaluate health status as measured by lowered childhood morbidity or mortality resulting from such programmes. In a study on a sample of children in the British Birth Child study,<sup>8</sup> the results of screening for sensory and handicapping conditions were disappointing and called into question the accuracy of tests carried out under normal clinic conditions. The study highlighted the high proportion of both false-positive and false-negative results. They concluded that there was an urgent need to evaluate these programmes. The committee on research into services for children and adolescents<sup>9</sup> noted that, "despite the increasing pressure to extend health surveillance and the increasing resources being devoted to it, there has been little evaluation of important aspects of health surveillance." Furthermore, they made a plea for future research to "examine the effectiveness of health surveillance particularly in relation to cost, in the context

of what are today's health and social problems." A plea that appears well justified if the experience of this clinic is widely shared.

I am grateful to Dr Leon Polnay for his help and interest.

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## MATERIA NON MEDICA

### Wild sage and edelweiss

Skopelos is one of the Sporades islands, so named because they are scattered, or "sporadic." Legend has it that many fishermen built churches here in gratitude for returning home alive, and thus Skopelos hides at least 360 churches, chapels, and monasteries in its evergreen mantle. Some are near enough to the shingled coves to attract bathers waiting for the bus back to town. Others must be sought to be enjoyed.

The monastery of Ioannis Prodromou, or St John the Baptist, lies high above the town of Skopelos. Here there are no roads, just a lonely rubble track blasted out of the rock, for, as on many other Greek islands, the twentieth century exists only around the nucleus of a port. An hour's walk among olives, cypresses, and wild sage of several varieties took us to sensational views of the town and bay below. Another hour's climb, now on a rocky footpath, led to the monasteries of St Barbara and St John the Baptist. This path is steep, and its edge precipitous, but I was encouraged by evidence that donkeys had recently made the journey. We also had glimpses of multicoloured goats scampering away as we approached. Spit-roasted goat is a favourite Skopeliot dish, so their shyness was understandable. We scrambled upwards till we reached the pedestal, about 900 feet above the sea, on which rest the twin monasteries. St Barbara is a deserted white fortress as old as the Byzantine era. It stands apart from the sparse vineyards and orchards, where some old nuns were harvesting. A bent figure in black led us into Ioannis Prodromou, to a cloister filled with roses and geraniums. We gazed at a pale fresco of Christ with St John the Baptist and the Virgin Mary. I remembered the local popularity of the Virgin, for it was she whose picture hung in the front of the island's two buses, and she too, no doubt, who daily prevented their collision on the hairpin bends.

We then entered the small central church. No pews cluttered it, but against the walls a few high wooden chairs provided seats for the infirm. When our eyes accommodated to the candlelight, the gold on the eighteenth century altar screen could be seen as a design of interlocking leaves. It was beautiful, yet it had competitors even in this tiny space: delicate woodwork, a floor of enamel plaques, and, of course, the icons with the thin faces of saints piercing the darkness. I felt clumsy here. My breathing was dry and harsh, my sandals too noisy. We lit another candle and stared.

As we went out, another arthritic in black beckoned us to a small

room, where we were offered Greek delight and a glass of water. I saw now that we were among a curious selection of objects for sale, ranging from knitted baby clothes to little pottery vases decorated, inexplicably, with edelweiss. My eyes rested on a metal button-badge of Ioannis Prodromou. No ardent badge collector could pass this one up. As I parted with the equivalent of 70p, I realised that tourism had caught on here too.—CAROL COOPER, Harrow, Middlesex.

### Barter in the operating theatre

Indulging in some non-medical conversation with my anaesthetic colleague while closing the wound after a difficult and trying operation, is something I do (and I know I am not alone in this) as a form of relaxation. During one such interlude, I found to my surprise that my anaesthetist baked loaves in his spare time. It was such a closely guarded secret that the theatre sister who had known the anaesthetist for well over a decade was unaware of this particular non-gaseous talent. Not wanting to be outdone from such fruitful non-medical pastimes, I mentioned the results of my gardening—my very first season at it. We immediately decided on an exchange—my lettuce, beetroot, and turnips for his loaves. After driving a hard bargain, we had decided that one loaf was worth two turnips and three lettuce.

All through the summer the exchange rate worked amicably with minor fluctuations, but always, so it seemed, in favour of my colleague. It was brown bread, rich in bran and delicious. On more than one occasion the loaves were even delivered at home—at a price, of course: three beetroots in addition to the usual rate.

Now that winter is fast approaching, it looks as though we will have to buy our bread unless my colleague is prepared to supply us on credit to be reimbursed next summer. This method of using one's garden produce is an avenue worth exploring, especially for those contemplating market gardening as a hobby. What better way to ignore the Inland Revenue legally?

As for myself, I have decided to cultivate my anaesthetist (or should I say, for him) for evermore, if only for his baking abilities. I cannot muster up enough courage to ask him if he has ever thought of taking it up full time—baking loaves, I mean. PRADIP K DATTA, consultant surgeon, Wick, Caithness.