

**PRIZE ESSAY**

**THE DIAGNOSIS AND MANAGEMENT OF THE  
FEBRILE CHILD\***

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*'Experience is the child of Thought,  
and Thought is the child of Action.  
We cannot learn men from books.'*

— Disraeli

**T**HE newly qualified medical practitioner is not conversant with the more simple diseases occurring in general practice. He is unfamiliar with their natural history which is not easily learned from books. Observation then is the teacher.

What is a child? To Shakespeare, 'twas a female infant.<sup>1</sup> To members of Parliament, a very young person up to the age of 16 years. In the medical dictionary, one who has not reached the age of puberty.<sup>2</sup> I propose to use this medical definition and, of course, include infants as well.

One of the greatest challenges to the general practitioner is the invitation to diagnose and manage an illness before the appearance of signs or even signposts. How often he is confronted by a child who has been poorly, off-colour, irritable or 'mardy' for a few hours only. Despite a diligent search for clues none are present and he must temporize. It is this aspect that I propose to enlarge upon and not the management of those who, defying solution at home, need constant care and observation by trained personnel in hospital together with its laboratory and radiological diagnostic facilities.

At this stage it would be wise too to define the febrile child as one with a temperature above 98.6°F. or 37°C. Immediately, one may ask whether mothers should be encouraged to take their children's temperatures. Many practitioners would feel they should not, as this raises emotions of fear particularly in those whose children are thermolabile and who may reach 104°F. to 105°F. rapidly. On the other hand, an observation that the child was flushed or felt hot

\*The Butterworth prize-winning essay, 1965.

to the touch means little, especially when he has been sitting in front of an open fire, swathed in blankets all day and with the windows tightly shut. In contrast one may see patients in the surgery with fevers as high as 101°F. or more without it being detected by the parent. I believe all parents should possess a thermometer and be capable of reading it. This could also be taught profitably to teenagers in schools.

How then should one take a temperature? Opinions vary considerably as epitomized in the correspondence on the subject a few years back.<sup>3,4</sup> In infants a rectal temperature is the most consistent but too much to ask of parents and an axillary or groin reading after three minutes must be relied upon. After the age of three and with patience it is not difficult to insert the thermometer between the cheek and the gum in the side of the mouth and if kept in long enough it will give a satisfactory reading. Accuracy is not absolutely essential as a few points here or there won't change the clinical assessment, but one is influenced when comparing 99°F. with say 105°F. Some diseases, like streptococcal tonsillitis or acute otitis media, are known to produce sudden high fevers, and in infants particularly one must prevent the development of hyperpyrexia with its potential liability to convulsions, cyanosis and permanent brain damage. Parents also need to be warned about swaddling their ill babes to prevent them from 'catching cold'.

### **The history**

The importance of a full accurate and satisfactory history cannot be overstressed. It is the cornerstone of diagnosis and most times will indicate the affected organ or system. But patience is necessary, the parent often being nervous, wondering what the doctor is likely to find, possibly feeling guilty for having sent for him in the first place and always anticipating the worst. They must be listened to with patience and forbearance and the irrelevancies separated from the clinical observations. They often need help in expressing themselves, mistaking coughing for vomiting, loose stools due to laxatives for diarrhoea, irritability for earache and diarrhoea for teething. A few questions outside the narrow field of symptoms are often rewarding especially in regard to contacts, visitors living at home, unsolicited advice from neighbours, behaviour toward siblings and the fears engendered by grandparents as to management and diagnosis. This act of history-taking is rewarding in another sense as the patient can be ignored during this period of establishing rapport with the mother. This rapport keenly observed by the young child who notes the confidence of the parent in this potential ogre of a man known to place cold hands on one's tummy and push things into one's mouth which makes one sick; while sitting protec-

tively on the mother's lap our patient will often submit quietly to these indignities. Many will argue that time does not allow of such niceties. This method, I believe, saves time in the long run because unless a satisfactory examination is performed the doctor may remain puzzled and the parent unconvinced. The unco-operative child will waste more time as he is chased around the room or, struggling in his mother's arms, he refuses to open his mouth. At the risk of being tedious and certainly obvious it is essential to stress the methods to be used in examination and the attributes necessary for success.

### The examination

Patience is the essence and yet as I have already indicated need not be time consuming, because there are short-cuts and full simple satisfactory examination can be carried out in a few minutes; an examination that will cover all systems and avoid overlooking any significant signs. Good lighting, a warm room, a spatula, preferably with a light attached are necessities, plus an extra pair of hands, usually the parent's. Each doctor will have his own methodology but it is wise to leave any unpleasant features such as looking at the throat or a rectal examination, to the last.

*The newborn and toddler.* The neonate needs to be completely undressed with the napkin off allowing for observation of the skin, umbilicus and genitalia. The infant and toddler should also be stripped lest a strangulated hernia, torsion of testis or some skin infection be overlooked. At the same time the activity of the child is observed. Beware of the docile, inactive, sleepy, dull babe who is possibly very ill. I am always happier when I see an aggressive bright child who yells, shouts, kicks and flails his arms as there is seldom serious disease present. But if he whimpers and is irritable or dull and hasn't the will to fight back then one must search even more carefully. He is best seen sitting on his mother's lap directly facing the examiner, thus allowing the mother to restrain him if necessary by putting her arms around him, at the same time pinning the upper limbs and hands. This leaves her other hand free to control the head by pressure on the forehead backwards against her chest. Not, as is so often seen, for slapping him and telling him to be good. Once mothers get used to this position they do it instinctively.

I start by palpating the apex beat, then percuss the chest, finding percussion directly on to the chest wall more satisfactory than on to one's finger placed on the chest. Next comes auscultation of heart and lungs and, being painless, is usually accepted without demur. Palpation of abdomen follows, always with warmed hands and if necessary from behind by standing behind the mother. Then knee and ankle jerks, observing at the same time whether he looks down

freely with chin on chest. This can now be pushed down further to test for neck stiffness. The fontanelle should be soft and the lymph nodes in the neck palpated. The postoccipital group must not be omitted as their enlargement is a most useful confirmatory sign in roseola infantum. The ears must never be forgotten and if obscured by wax it is best removed with a Jobson Horne probe. I prefer a big speculum with a powerful light which enables one to see the whole drum at a glance. Lastly the mouth and throat are the most difficult and objectionable. I can well recall a terrible two-year-old, escaping under a double bed which occupied a corner of the room. There he sat in the corner while his mother and I were on the floor pleading, cajoling, bribing to no avail. I had to return later in the day. Without a firm spatula, a bright light and a free hand this examination cannot be done effectively. A rapid glance down a shadowy cavern which is wriggling from side to side emitting high-pitched gurgling shrieks is useless and will prevent one from making a definitive diagnosis. This part of the examination must be thorough and cannot be skimped. There must be no doubt about the state of the tonsils, pharynx, gums, teeth and side of the mouth, as the cause of the fever is so often to be found here. With practice this routine can be carried out in a very few minutes and the diagnosis made. If not the process must be repeated daily until the answer becomes self-evident. I find these young patients the most difficult but challenging, demanding all our patience, skill and 'know-how' pitted against a distrusting aggressive, non-conforming little body. Alas at times it is necessary to pin him down on the bed and get on with the procedure as expeditiously as possible. Each time I resort to this there is a sense of failure.

*The older child* can usually be reasoned with and here once more a few minutes spent getting his confidence are well repaid. If he does not co-operate it is usually due to some unwarranted fear and an explanation of the steps of examination will reassure him. Sometimes the presence of a nervous worried or overattentive mother who wants her child to behave impeccably and who coaxes and threatens acts as a barrier between patient and doctor. By asking her to leave the room the patient may become more receptive. On the other hand, they may react sharply with screaming and crying through fear. Time must be found to reassure him. One can bargain with him—the immediate return of his mother for submission. Blackmail, maybe, but it works.

### **Specific diseases**

Recognition of the symptoms and signs of a specific disease or syndrome leads to a confident diagnosis, reassurance of parents and institution of appropriate treatment. A list of the most commonly encountered diseases follows; it is neither exhaustive nor academic

but aimed at being practical (table 1). In many the diagnosis and management is clear and well-documented but in others the discussion of personal observations may be helpful.

### The newborn

*Overheating.* As has already been remarked the infant can become febrile from being too warmly wrapped, too near an open fire, or in an airless room. He becomes restless, cries and may refuse his feeds, or being thirsty takes it so avidly that he vomits. He is found to have a temperature and the family doctor is called immediately. I have seen two such patients in the past year. Allowed to cool down they have fallen asleep quickly, being perfectly well next day. Why this should occur in some babies and not others under the same circumstances is difficult to explain except to postulate an immature heat-regulating mechanism. Since midwives have been alerted to the syndrome of cold injury most neonates are very well wrapped and warmed after birth. Occasionally, I think, too enthusiastically.

TABLE I  
COMMON DISEASES OF THE NEWBORN

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| <ol style="list-style-type: none"> <li>1. Overheating</li> <li>2. Umbilical sepsis</li> <li>3. Gastro-enteritis; <i>Esch. coli</i>;<br/>ECHO virus</li> <li>4. Pyelonephritis</li> <li>5. Dehydration fever</li> <li>6. Meningitis</li> </ol> |
|---|

*Umbilical sepsis.* The umbilicus as a source of infection can easily be overlooked when obscured by a dressing or powder if or not examined with care. When present, fever and a serious illness may supervene and treatment should be immediate and thorough. I clean with spirit, apply 3 per cent aureomycin ointment daily and give an injection of penicillin followed by oral penicillin v for at least seven days. If a swab can be taken before treatment all the better. Tetracycline should not be given as the drug of choice under three months of age for fear of staining the permanent teeth, and chloramphenicol should not be used at this age in general practice. Ampicillin, cloxacillin or streptomycin are all safer and as useful. If the infant is ill admission to hospital is mandatory.

*Pyelonephritis.* This is said to be more common than realized but unless an adequately sterile specimen can be obtained the diagnosis is unlikely to be made. The use of a Chironseal plastic bag for the collection of urine in a female is difficult to arrange in the home unless help of the district nurse can be obtained. Boys are obviously easier. If a specimen is unobtainable at home the outpatient department of the hospital may help. This is often impractical so a clinical diagnosis is made and sulphadimidine given for at least two weeks. If, however, a second attack occurs hospital admission is essential to

eliminate a congenital anomaly.

*Gastro-enteritis* due to *Escherichia coli* seems to be more common in hospital nurseries. Diarrhoea in the babe at home is probably due to feeding or an unsuitable formula.

*Dehydration or inanition fever.* About the second or third day of life fever ranging between 101°F. and 105°F. may develop suddenly. The babe is hot, flushed, irritable but active and does not appear to be seriously ill or toxic. There are no localizing signs but thirst is marked and fluid taken avidly. If sufficient is given the temperature returns to normal rapidly. An immature heat regulating centre is the probable reason.

*Meningitis.* Commonly due to *Escher. coli*, this is an extremely serious infection coming on insidiously with few clues to guide one. Stiff neck, irritability, a bulging fontanelle are rarely present in the early stages. A dull baby, with fever, refusing feeds is enough to make one suspicious. Early diagnosis is imperative to prevent the present high mortality rate.

**The infant and younger child**

*Upper respiratory infection*

An U.R.I. is the commonest cause of a febrile illness in a child. How often we tell a parent: "It is some virus infection". This diagnosis has become the wastepaper basket for our ignorance of various syndromes and diseases; it has taken the place of that sop of former years "he has a bit of 'flu". I believe many opportunities for clinical observation and recognition of disease patterns are available to the general practitioner within this group. He is the one who sees the patient first; who knows whether other members of the family are affected too; who can observe and examine as frequently as is necessary; who, by keeping adequate records, can trace the epidemiology. This could be a very fruitful area for research. The meticulous observation of unexplained rashes may well be rewarding. Most parents send for their doctor immediately a rash appears. This seems to be a hangover from the bad old days when a rash meant a serious

TABLE II  
COMMON DISEASES IN INFANT AND YOUNG CHILD IN GENERAL PRACTICE

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| <ol style="list-style-type: none"> <li>1. Upper respiratory infections (table III)</li> <li>2. Lower respiratory diseases: bronchitis; bronchiolitis; bronchopneumonia</li> <li>3. Tonsillitis, otitis media, myringitis, cervical lymphadenitis</li> <li>4. Gastro-enteritis and dysentery</li> <li>5. Infectious diseases: exanthema subitum, measles, scarlet fever, whooping cough, chickenpox and rubella</li> <li>6. Pyelonephritis</li> <li>7. Meningitis</li> </ol> |
|---|

infectious disease possibly leading to complications or epidemics. Today the child may feel perfectly well but a rash is still treated as an emergency. Many a time we are called to examine a sweat rash, urticaria or contact dermatitis. Some cannot always be as easily labelled yet these are precisely the rashes we should try to investigate. Some members of the College of General Practitioners are already doing this through the Epidemic Observation Unit.<sup>5</sup> Adams described them succinctly in 1960.<sup>6</sup>

### Virus infections

*Coryzavirus infections.* These produce the common febrile cold with nasal discharge, cough and irritability. Enlarged cervical nodes may be associated. Occasionally they may be responsible for lower respiratory infection (Hilleman *et al.* 1963).<sup>7</sup> Often other members of the family are infected simultaneously.

*Adenovirus infections*<sup>8</sup> causes 'pharyngo-conjunctival fever' with red watery eyes, an injected pharynx, fever, and cervical lymphadenopathy. A picture in

fact very like early measles or 'some virus infection'. It usually lasts four to five days and does not have an exanthem.

*Respiratory syncytial virus* is thought by Hilleman (1963)<sup>9</sup> to "probably be the most important cause of respiratory tract illness in childhood". Its pattern is protean and diverse causing fever, cough, rhinitis and pharyngitis as an upper respiratory infection but also commonly causing bronchitis, bronchiolitis and bronchopneumonia. It tends to occur in winter and spring and is a very rare cause of croup.

*Herpangina.* Due to Coxsackie A virus and first described by Zahorsky in 1924,<sup>10</sup> it is fairly easily recognized; it may occur in small epidemics showing red-ringed grey ulcers on the anterior pillars of the fauces and over the soft palate varying in number from two to 20. Abdominal pain may be an accompanying symptom.

*ECHO viruses.* Specific syndromes are being recognized in association with these viruses (Rose 1960)<sup>11</sup> and it is in this field particularly that I think the general practitioner has the great opportunity for observing them in their earliest phases and correlating their signs and symptoms. Variations are manifold with and without exanthemata, fever, diarrhoea, cough, aseptic meningitis, enlargement of lymph nodes and sore throat. They do not usually cause serious

TABLE III

COMMON AGENTS CAUSING VIRUS INFECTIONS SEEN IN GENERAL PRACTICE

Coryzavirus	Adenovirus
Herpes simplex	Para-influenza
Respiratory syncytial virus	ECHO virus 9 and 16
Eaton agent	Coxsackie A and B

illness, fever often lasting only a day or two. Occasionally, hospital is necessary. Garrow (1965)<sup>12</sup> has recently discussed these syndromes.

*ECHO 16 virus* also produces raised red or yellowish-white lesions on the fauces and tonsils somewhat similar to herpangina. However, it also produces a rash, especially in children, which is maculopapular, pink or salmon coloured, usually discrete and mainly affecting the face chest and back. This rash appears *after* the fever of only one or two days duration has subsided. It is one of the two diseases (roseola infantum being the other) which behaves like this. All other infectious diseases produce their rash at the height of the fever. ECHO 16 attacks all age groups.

*ECHO 9 virus* infection also causes an exanthem similar to ECHO 16 but invading the trunk and extremities as well; it begins during the fever and on the average lasts four to five days. Sore throat, nausea, vomiting and abdominal pain may occur especially in children. The temperature is known to last two to 15 days but averages about six. It may therefore be a common cause of unexplained temperature which settled spontaneously. Obviously without the confirmatory evidence of growing the virus at the time of the illness one cannot be sure of the aetiology. All we can do is to make an intelligent clinical assumption. This can be an interesting clinical exercise and I think I have seen a few cases. One must continually keep the syndromes in mind and observe the natural history of illness daily.

*Roseola infantum* as Zahorsky called it when he first described it in 1913<sup>13</sup> is, in my opinion, much more common than realized and much more common than rubella under the age of three years. Far too frequently, it is mistakenly still called rubella or even measles and accounts for the many children said to have had two attacks of rubella or measles. It usually occurs between three months and three years of age but has been reported occasionally in adults.<sup>14</sup> Because a rose-coloured rash appears unexpectedly on the fourth day of a febrile illness *after* the temperature has subsided the illness was called exanthema subitum by Veeder and Hempelmann.<sup>15</sup> In ignorance, the rash is often blamed on teething, aspirin, laxatives and penicillin. Signs are few but enlarged occipital lymph nodes occur early and frequently.

*Measles*. It is well known that a child may be febrile for the whole of the incubation period of measles or he may appear to be incubating it for a few days, apparently recover spontaneously only to succumb a few days later with fever, Koplik spots and rash. This prodromal phase has been well described by Partington and Quinton<sup>16</sup> as the Illness of Infection.

*Tonsillitis*. This may be viral or bacterial and look so similar as to defy precise labelling. Throat swabs may be helpful. During



the winter and spring of 1965 we saw many more cases of beta haemolytic streptococcal tonsillitis than previously, a veritable epidemic attacking adults as well as children and running through a family; on occasions I thought it wise to give everyone in the family a course of penicillin as a prophylactic especially when scarlet fever appeared. Many responded dramatically but some did not and their throat swabs grew a normal flora. One presumed these were viral infections but at the time had purulent follicles in the tonsils and were impossible to distinguish clinically. Some at the start of the illness would complain of sore throat and fever and examination would show some reddening only. This I regarded as a viral infection and offered aspirin only to find to my distress next day that the patient was worse and the tonsils blossoming with purulent follicles. I have also mistaken the prodromal phase of measles for virus tonsillitis.

#### *Lower respiratory diseases*

In babies particularly, rapid respirations and the refusal to feed are warning signs of bronchiolitis, bronchitis and bronchopneumonia. Physical signs are not always present and observation with a suspicious mind is necessary. Onset is frequently rapid followed quickly by toxæmia and hypoxia with restlessness. Hospital is best.

#### *The older child*

The older child may contract any of the febrile diseases already listed (excepting roseola) but he is especially susceptible to others:

1. All as in table II except for exanthema subitum
2. Rheumatic fever
3. Acute nephritis
4. Henoch-Schonlein syndrome
5. Periodic disease
6. Glandular fever
7. Infective hepatitis

In general these affections are of insidious onset and many days may pass before a diagnosis can be made. They should be considered whenever pyrexia has persisted for more than four days. Blood and urine tests will confirm the clinical impression when positive. Only in periodic disease is there no confirmatory test and one must rely upon a history of repeated attacks of symptoms which may include persistent low-grade fever, headache, pallor, nausea and vomiting, anorexia, abdominal pain and pale stools. There is often a family history of migraine.

### Management

Oh, my friends, be warned by me,  
That breakfast, dinner, lunch and tea,  
Are all that human frame requires . . .  
With that the wretched child expires.

Hillaire Belloc understood well the significance of love, kindness and mothering all of which are doubly necessary when the child is ill. He becomes difficult and irritable; is easily brought to tears; acts petulantly; feels sorry for himself; develops headache which he cannot understand nor is he able to communicate his lack of comprehension. He is in need of infinite love and patience from all around him but most of all, his mother. She, in turn, must respond. Difficulties may arise if she is working or feels ill or tired or worried. Feelings of guilt develop. She is torn between her ill child and her loyalty to her employer. Resentments may build up—resentments often unwittingly transmitted to the child. In the past and unquestionably, bed rest has always been a major part of the management of any febrile illness but more recently—and none too early—at last is being questioned. I think circumstances and the children themselves have been guiding us. When the only warm room in the house is the living room or lounge no child is going to remain in a cold bed and room; it isn't possible for the mother to be at the beck and call of a bored and frustrated child who lies alone in a room thinking up all manner of fads and fancies. Anyhow the matter is usually taken out of our hands for at the first visit the patient is already installed in front of the fire busy with his toys, radio or television. When he feels really ill he doesn't wish to be up and in that case is better left in bed or on a couch in the living room. Activity within his powers does no harm and usually contributes to a more rapid recovery. When the weather is good and he appears to be up to it there is no reason why he shouldn't be outside. In the first place therefore he should be kept as happy as possible and occupied. Uncompromising bed-rest is an unnecessary restriction except in the first weeks of rheumatic fever.

I do not propose to discuss the detailed management of febrile diseases, many of which need only symptomatic treatment. It is better to state general principles and underline certain facets. Specific therapy must depend upon the clinical diagnosis which in turn depends upon an adequate examination. Once the disease is named treatment can be started. The dosage schedules of specific therapy are well documented for all ages.<sup>17</sup> I myself find little place these days for sulphonamides except in urinary infections and occasionally in dysentery although even here neomycin is my first choice. For streptococcal throats penicillin is specific and the response dramatic. It has been my usual practice to prescribe suffi-

cient for five days but among the many cases of streptococcal tonsillitis we have had in our practice this year a fair number have had recurrences within a few weeks. Very recently the Ministry of Health has recommended a ten-day course of penicillin in bactericidal dosage for the prevention of initial attacks of rheumatic fever.<sup>18</sup> There is good reason, then, for a definitive diagnosis in these patients and throat cultures could be helpful. In acute otitis media it was my practice to give a large dose of penicillin by injection supplemented thereafter by oral penicillin v. Now I find high doses orally for ten days are as satisfactory. In those rare cases which do not respond ampicillin with cloxacillin should be tried before tetracycline. I use the same scheme for pneumonia except in small infants when cloxacillin is given with the penicillin at the outset against the possibility of a resistant staphylococcal infection. Sensitivity tests on cultures of throat swabs, sputum, or urine are only of use in retrospect or when the response is unsatisfactory. By the time these are available the patient is usually much better as so many of the illnesses we are discussing are short-lived.

The long-term illnesses such as rheumatic fever, acute nephritis and the Henoch-Schonlein syndrome are likely to be cared for in hospital but infective hepatitis and glandular fever at home. Treatment is symptomatic unless of course complications ensue. Periodic disease is not easy to control but once the diagnosis is confirmed clinically a long discussion with the parents in search of possible precipitating factors is vital. Guidance in regard to handling of the patient and the behaviour of the parents themselves should be offered. Reassurance to all follows.

Certain basic rules apply. The drugs prescribed must be known to be given and taken, and to prevent relapses the full course should be laid down lest the parents decide to discontinue therapy the moment the patient has improved. This applies particularly in the prevention of rheumatic fever and in its long term therapy of prophylaxis. If vomiting supervenes injections must be used. One or two doses of chlorpromazine are useful for its anti-emetic and sedative properties.

Convulsions are very frightening episodes to observe, particularly for a parent. As we all know, they may well be of serious portent although more usually are shortlived and the consequence of high fever. It is more usual for us to diagnose a convulsion from the story than actually to witness it. When we do, it is necessary to be certain that the airway is clear and that cyanosis is absent. A rapid examination of ears, throat, lungs and fontanelle is made. Temperature is recorded and an anticonvulsant—phenobarbitone or paraldehyde—given intramuscularly. Unless the cause of the fit is

obvious and the practitioner feels competent to deal with it, admission to hospital is wise.

The treatment of viral infections is at present still symptomatic and must remain so until the development of substances similar to interferon show their specificity. The successful prevention of infection by oral immunization, as has been achieved in poliomyelitis, is apparently progressing steadily and our management of virus infections in the future may well be the swallowing of a certain number of capsules each year.<sup>19</sup>

When fever persists or when there are doubts as between viral and bacterial infections it is most difficult to withhold therapy for more than 24 or 48 hours. Pressure from parents and the inability to make a firm diagnosis make this even harder. It's the "not knowing the cause" that engenders fears in both doctor and parents. Under these circumstances we tend to rationalize the clinical diagnosis by finding an injected throat, a 'red' drum or a few rhonchi which allows us to embark upon antibiotic treatment. Provided daily examinations are still carried out and with an open mind I don't think much harm comes from this. In fact it is likely that some infections are thus aborted and others prevented from progressing. These thoughts are certain to be criticized particularly by our teachers in the medical school and hospital, who, supported by the resident staff and laboratory facilities can safely bide their time. However in the young infant this practice is to be condemned for fear of obscuring a more serious smouldering infection. If the temperature has continued for 48 hours and the babe is ill or deteriorating, hospital is preferable to blind chemotherapy. In the older age group one can safely wait, observe, examine and re-examine until an answer is apparent. There is no justification for offering antibiotics for fever alone. Aspirin is just as good.

Cough mixtures are highly regarded by parents, largely, I think, because they feel they are doing something for their child. Admittedly it is important to reassure the mother and attempt to forecast the pattern of the illness and give a prognosis. Some will accept that cough mixtures are of little benefit and seldom used in hospital. Others will insist on a bottle of medicine. One can point out that it is unnecessary in measles to blackout the room unless the patient complains of the light hurting his eyes. The child is irritable enough without adding to his discomfort. There is also no reason why a window should not be left open rather than have an airless hot room. Possibly in acute croup a very warm room with added steam is soothing and justified.

Segregation of siblings is usually impossible and of little use because of the close contact during the incubation period. On the

contrary, it is better to allow them all to get what is going especially chickenpox and measles which are so infectious. However in certain circumstances separation may be essential when a sibling is suffering from some other disease such as mucoviscidosis, infantile eczema or recurrent bronchitis. The use of gamma globulin for these special risks must then seriously be contemplated.

Aspirin is a great standby and one of the most useful drugs in our armamentarium. Used with discretion it will relieve pain, headache (a symptom seldom complained of by young children yet frequently endured) and the fever.

Diet must include plenty of fluids together with small feedings of whatever the child fancies and will take. Ice-cream is withheld by some parents because it is so cold and detailed advice is sometimes necessary.

### Conclusion

This essay was completed before the publication in the *British Medical Journal* on 7 August 1965, of the Report by the M.R.C. working party on Acute Respiratory Virus Infections. To all practitioners it should be required reading as it contains a wealth of detail and many useful clinical observations; e.g. of 486 patients with infections from whom a virus or streptococcus was grown 336 or 65 per cent had fever. It is also an excellent example of co-operation and team work with general practitioners playing a large role. This alone is most heartening.

Responsibility for the care of serious disease has largely been shifted from general practice to the hospital. This I believe is one of the root ills in general practice today. The satisfaction of caring for ill patients and watching them get better is reward indeed. Their gratitude and the gratitude of relatives and the personal knowledge of having done good work has inspired the ideal of service for medical men all over the world. This could be restored in some measure by allowing practitioners to care for their own patients in hospital. In one field, however, he can be supreme, confident and responsible. That is in the early recognition of disease. He must distinguish between severe and non-serious illness because it is in the early diagnosis of serious disease, when specific therapy can best be instituted, that he can play a major role. He must become a relentless detective, probing, questioning, observing. The earliest symptoms or the first sign must be pounced upon and used in the course of time for valid deductions. In this he can find his greatest satisfactions.

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### Role of the General Practitioner Maternity Unit. 1000 Deliveries Analysed.

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One thousand cases, delivered in a rural general practitioner maternity unit in South Wales over a period of seven years, are analysed.

Due to the relatively isolated position of the unit, the general practitioners in attendance have dealt with a greater variety of obstetric emergencies than is usual in units close to consultant care. Twenty-six caesarean sections were performed, mostly classical—this being “the operation with which the senior partner has become familiar”. Recently the lower-segment operation has also been performed.

It is pointed out that the area has probably attracted doctors who find emergency work stimulating and that “only against a background of fairly continuous surgical and emergency work could the general practitioners in this area feel themselves to be justified—or indeed confident enough—to carry on with the present policy”.

Despite the booking of some relatively high-risk cases the perinatal mortality rate was 27 per 1000, comparing well with national and regional rates. During the same period 450 low-risk cases delivered in the district had a perinatal mortality of 25 per 1000.