tunity available to the defence will be to question the sampling methods, the identification, transportation, and preservation of the specimens and the analytical method. Accordingly, it will be of paramount importance for doctors to follow explicitly the instructions which are provided by the police for obtaining specimens under the new Act. Clinical medical evidence of unfitness to drive is not an issue under the new Act. The new Act allows the doctor's evidence relating to the taking of the specimen to be given by certificate, which must be served on the defence at least seven days before the hearing. The doctor will not normally be required to attend unless the defence gives notice.

Hospital Cases

The Ministry of Health has sent out a circular which explains the procedure to be adopted when drivers attend a hospital.⁴ It is important to note that the doctor in charge of the case may object not only to the specimen being taken but also to the requirement to provide a specimen being indicated by the police to the patient. The police must arrange for their own doctor to take the necessary specimen of blood and he must take his own equipment with him. Apart from providing facilities of reasonable privacy for the sample to be taken the hospital authorities play no part in the procedure.

Conclusion

The Drinking Driver drew attention to the need for police authorities to appoint doctors on a retaining basis in order that expert medical advice and assistance would be speedily available to the police. The reluctance of many police authorities to do this and the tendency to rely on any doctor who happens to be available has long been a source of irritation and has certainly not been in the interests of justice. It will be impossible to administer the provisions of the new Act unless doctors are freely available to take specimens of blood and to advise the police. Fortunately, the Home Office has already issued two circulars to police authorities drawing their attention to the pressing need to make the necessary arrangements before the Act comes into force, and agreements are being reached between local B.M.A. representatives and local police authorities (who are autonomous in these matters) on the fees and allowances which will be paid to doctors called by the police.

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Fallacies in Four Fevers

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Among other fallacies habitually copied from one textbook to another or lingering in the minds of practitioners as a relic of treatment of the past, because their validity has never been questioned, are those concerning the common infectious diseases of childhood. This paper concerns four common infections—measles, German measles, chicken-pox, and mumps. The fallacies to be discussed concern confinement to bed, quarantine, isolation, undue absence from school, dietary restrictions, and the use of medicines.

Confinement to Bed

When considering the value of any line of treatment, including the administration of any drug, one should always think of three questions: What good may it do? What harm may it do? What harm may be done by not giving this treatment?

It is the practice of many doctors to confine children to bed for any of a wide variety of conditions such as abdominal discomfort, headache, a sore throat, a slight rise of temperature, a cold, or diarrhoea without any apparent reason. The fallacy of such treatment has been discussed by me several times,¹⁻⁴ and subsequently by Jolly.⁵ If a child feels well enough to be up—even merely sitting in a chair by the fireside—and wants to be up, even if his temperature is raised, it is very difficult to think of any reason for confining him to bed. There are possible exceptions: infectious hepatitis, the preparalytic stage of poliomyelitis, and the first few days of rheumatic fever. I can certainly see no reason why it should be thought likely that a child with a sore throat would recover more quickly if he sits up in bed than if he sits up in a chair reading a book in front of the fire. I am unable to think of any physiological mechanism which would make it likely that he would recover more

quickly if he sat on a bed than if he sat on a chair. In hospitals which I have visited in many countries of the world, including Russia, all children are kept in bed. In one hospital I saw a ward full of children with behavioural problems, and in another a ward full of children with epilepsy, and in both cases all children were kept in bed throughout their stay in hospital.

So children with measles, rubella, chicken-pox, or mumps should not be kept in bed if they want to get up. A child in the febrile stage of measles before the rash appears may well prefer to stay in bed. I can see no reason otherwise why children with these conditions would be harmed by being out of bed. There is no physiological or pathological basis for a belief that complications, such as orchitis in mumps, would be more likely if the child were out of bed.

I can see many reasons why confinement to bed may be harmful. It bores children. They sleep less well if they have been confined to bed. The adverse physiological and pathological consequences of bed rest have been well described in the excellent book by Browne,⁶ who aptly wrote that "the bed is often a sign of our therapeutic inadequacy, rather than a therapeutic measure deserving of praise. The bed is the non-specific treatment of our time, the great placebo."

Quarantine

Thanks largely to the work of Smith at Rugby⁷ it is now widely recognized that children should not be quarantined for the common infectious diseases. Quarantine was not successful in the prevention of infectious disease in the past. Ninety per cent. of children acquired measles by the age of 14, 70% acquired chicken-pox, and 50% acquired rubella and mumps. If healthy contacts are prevented from going to school they will assuredly mix with their school fellows after school hours. In

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the past children were placed in quarantine even if they had had the infection in the past. There is no truth in the idea that contacts can carry the infections of measles, German measles, chicken-pox, or mumps to school without themselves suffering from them. It was quite irrational to isolate contacts throughout the incubation period of infectious diseases. For instance, the usual incubation period of mumps and rubella is about 16 to 18 days. Contacts who are going to acquire the disease cannot be infectious for at least the first 12 days after exposure.

Smith wrote that after 16 years' experience of 75 outbreaks of infectious disease at Rugby School there was no instance in which the originator knew how he had acquired the infection. In the same period 203 boys who had been exposed to infection were allowed back to school, and only one acquired the expected disease at school. There were no secondary cases. If strict quarantine had been enforced 4,224 days would have been lost.

Quarantine for these infections is outmoded.^{8 9} This does not mean that there should not be sensible surveillance—that a careful eye should not be kept on a contact after a suitable point in the incubation period.

Isolation

It is usually futile to attempt to isolate an infected child from others in the family. By the time the diagnosis has been made the other children have already been exposed to him at the most infectious stage of the illness. In any case, there is much to be said for children acquiring the infection in childhood rather than later. Mumps is rarely complicated by orchitis before puberty, so it is better for boys to acquire mumps before then, so that they do not acquire mumps with the risk of orchitis later. It is desirable for girls to acquire rubella before pregnancy. I believe (rightly or wrongly) that adults are liable to be more ill with the common infectious diseases than children are.

It is most regrettable that there are still infectious disease hospitals which do not allow parents to visit their children with these infections, or which, worse still, allow them to see their children through a glass partition—an infuriating and thwarting experience for a small child. The rationale of such isolation measures escapes me. The harm done by them is obvious.

Keeping the Child Off School

At any one time about 10% of schoolchildren in England and Wales are absent from school. Only a small proportion of these are absent for any good medical reason.^{10 11} In the case of the four common infectious diseases many children are kept away from school for much too long a period. The duration of infectivity of these four infections is shown in the Table.

Duration of Infectivity of the Common Infectious Diseases

Measles		Five to six days before the rash until six days after the appearance of the rash if the child is afebrile
Rubella		One day before the rash until two days after the appearance of the rash
Mumps		Two days before the swelling of the parotid gland until the swelling has subsided
Chicken-pox		One day before the rash until six days after the appearance of the rash

It would be interesting to see figures for the mean duration of absence from school for these conditions—and the differences between children from one area of a city or town and those from another.

Obviously no child should go back to school until he is fit, but prolonged absence of a well child from school is altogether wrong.

Dietary Restrictions

There are still some doctors who, without thinking, prescribe a "light diet" for children with infections. Provided that their appetite is unimpaired I cannot see any reason for such a diet.

Medicines

For chicken-pox and rubella there is no indication for any medicine. There is no need to prescribe a lotion for the rash of chicken-pox. For an occasional case of mumps with severe pain a sedative may be indicated, but no medicine should be given otherwise. For measles, unless there is a complication such as otitis media or pneumonia, both of which demand the use of antibiotics, there is no indication for medicine. Investigation¹² has shown that the prophylactic use of an antibiotic in measles does nothing to reduce the incidence of complications. There is no point in giving the child cough medicine. It will achieve nothing. How much money is spent in England and Wales each year on the totally unjustifiable prescription of medicines for children with these four fevers?

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