Note to authors of letters: Please note that all letters submitted for publication should be typed with *double spacing*. Failure to comply with this may lead to delay in publication.

Haemophilus influenzae vaccine

Sir,

Haemophilus influenzae vaccine type b (Hib) was introduced in the United Kingdom in the last months of 1991 and immunization with three doses is recommended for all children aged 12 months or less who have no contraindication to the vaccine.[1] A single injection is recommended for children between 13 and 48 months of age.[1] The information available on the computers of some 1400 selected general practitioners in England and Wales who are using practice computers provided by VAMP Health has been reviewed in order to estimate the extent of use of this vaccine and the incidence of *H influenzae* meningitis.

The participating practices have a similar age–sex distribution to that of the population of England and Wales and a similar geographic distribution. The quality and completeness of the recorded information has been documented in many publications.[2-6]

Among about 34 000 babies born in 1991 fewer than 1% were immunized with Hib vaccine during that year (Table 1). Among 51 681 babies born between January 1992 and June 1993, 48 035 (92.9%) were recorded as having received the Hib vaccine. By January 1993 more than 90% of the babies who were immunized had received three doses starting with a first dose at eight to 12 weeks of age with subsequent dosages given at four to six week intervals thereafter.

During 1991 there were 12 cases of *H influenzae* meningitis recorded in babies aged 12 months or less (Table 1). None was immunized. During the period January 1992 to October 1993, there were seven cases of meningitis recorded in babies aged one year or less. All were recorded in 1992, and none of the babies was recorded as having received the Hib vaccine.

There were an estimated 31 610 babies born in 1990 who remained in the practices until October 1993. All of them would have been at least 13 months of age by January 1992 when the vaccine began being widely used. Among these 31 610 children, 22 663 (71.7%) had received the Hib vaccine. There were 11 cases of *H influenzae* meningitis recorded in 1991 among children aged 13–48 months, eight cases in 1992, and no cases in 1993 as of October — none of these children had received Hib immunization.

These findings are similar to those reported by Booy and colleagues[7] and we conclude that Hib immunization is virtually complete for babies aged 12 months or less in the participating practices and that a majority of children aged 13–48 months are immunized. There were no cases of *H influenzae* meningitis among immunized children, indicating that the vaccine prevented all cases which might have otherwise occurred.

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Table 1. Hib immunization and cases of *H influenzae* meningitis (HiM) among babies aged 12 months or less.

Date of birth	No. of births	No. (%) immunized	No. of cases of HiM (no. immunized)
January–December 1991	34 000[a]	157 (*0.5*)[b]	16[c](0)
January–June 1992	17 527	15 727 (*89.7*)	3 (0)
July–December 1992	17 516	16 699 (*95.3*)	0 (0)
January–June 1993	16 638	15 609 (*93.8*)	0 (0)

[a]Estimated. [b]In 1991. [c]Four of the cases occurred in 1992.

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Obstetric cholestasis

Sir,

Itching in pregnancy is often regarded as a benign condition and may well occur over abdominal stretch marks or over the breasts owing to increased blood supply. This may be relieved by simple advice such as avoiding man-made fibres and applying calamine lotion.

Itching which commences on the hands and feet and then spreads centrally, in the absence of a skin disease, is much more likely to be caused by obstetric cholestasis. This is a condition which sometimes may be a result of an inherited enzyme deficiency, where the liver is unable to cope with the high oestrogen levels of pregnancy. It may only be revealed in multiple pregnancies. The diagnosis is confirmed by finding raised liver enzymes and bile acids (where the latter investigation is available).

The condition is extremely distressing to the mother, particularly as the itching is worse at night. In severe cases it can progress to jaundice and steatorrhoea and then may be associated with an increased risk of postpartum haemorrhage owing to an inability to absorb vitamin K.[1] The condition has, however, more serious implications for the fetus as there is an

increased incidence of pre-term delivery, fetal distress and of stillbirth.[2,3]

A mother will often relate her symptoms to the first professional carer with whom she is in contact, and, if they are played down, will not mention them again. It would be good practice for all professionals to ask directly. The condition may, however, be clinically obvious when the mother attends her antenatal visit with visible scratch marks on her legs.

As a consultant obstetrician, I have personally known five mothers whose obstetrician/midwife/general practitioner had been unaware of the potential hazard of this condition and these mothers had six stillbirths between them. Four have had a subsequent pregnancy in which they again developed obstetric cholestasis, but delivery prior to 38 weeks gestation achieved a live child. Another mother in whom cholestasis was diagnosed had a sister with similar symptomatology who had suffered two 'unexplained' stillbirths. A mother with proven obstetric cholestasis must be regarded as having a high risk pregnancy and thus additional monitoring must be instituted and the pregnancy ended by 38 weeks gestation.

Various drug treatments have been tried to treat obstetric cholestasis and the present drug of choice would appear to be ursodeoxycholic acid given orally, up to 750 mg per day throughout pregnancy. This drug stops the puritis and reduces serum levels of bile acids and liver enzymes.[4] Loss of control of the symptoms would be an indication to deliver the baby early. Ursodeoxycholic acid is thought to act by replacing more cytotoxic bile salts (possibly linoleic acid) in the bile acid pool. Unfortunately, it is not licensed for use in pregnancy and therefore can only be used on a named patient basis with her understanding and consent. At present it would be difficult to be certain that it definitely protects the fetus from unexpected probable biochemical death.

A more widespread understanding of the potential risk of obstetric cholestasis is of even greater importance as obstetric/midwifery practice changes with the implementation of the Cumberledge report.[5] This means that mothers who are judged to be 'low risk' will not necessarily have any obstetricians involved in their antenatal care and all deviations from normal will be expected to be detected in the primary care setting.

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General practice–psychiatry liaison by audioconference

Sir,

With the National Health Service reforms and the development of community oriented psychiatric services, improved communication between general practitioners and specialists is of paramount importance.[1] Audioconferencing provides a new method of communicating. The procedure involves a moderator, present in one location and several other participants located in different places, all linked together by telephone.

In February 1994, a small study was carried out to evaluate an audioconference between a psychiatrist and four local general practitioners. Two of the general practitioners were men and two women. Two had no previous experience of audioconferencing and two had minimal experience. The psychiatrist (a man) had no previous experience of audioconferencing.

A detailed agenda was sent to each participant one week before the meeting. The topic chosen for discussion was community psychiatry and the planned duration of the conference was 55 minutes. For the audioconference the psychiatrist and two hospital representatives were based in a private hospital facility. The general practitioners were in their surgeries. The technical equipment needed was a voicepoint, provided by a communications company. A voicepoint is like a hands-free telephone set and one speaks at it from a distance of about three feet. It is voice-activated which means that only one person can speak at a time. To speak, one has to interject after the previous speaker has finished or during a pause. The hospital-based participants used the voicepoint and the general practitioners used their standard telephones.

The conference began at 12.30 hours when the psychiatrist contacted the telephone operator and the operator then contacted the general practitioners. The psychiatrist invited each general practitioner to speak in turn. An interactive discussion followed.

Each general practitioner was interviewed by a hospital representative, using a semi-structured interview devised by the psychiatrist, within one week of the conference. The method of audioconferencing was generally acceptable to the general practitioners. The main advantages were considered to be networking with colleagues, convenience, reduced travel and savings including time and money, but these were not quantified. The problems identified were technological difficulties including staccato speech and poor sound quality. All the general practitioners felt extra concentration was required owing to the lack of non-verbal cues and unfamiliarity with the technology. Three general practitioners indicated a preference for an additional visual component (that is, seeing a face).

Two general practitioners were satisfied with the timing of the conference and two dissatisfied. Evenings were chosen as the most convenient time by two general practitioners, lunchtime by one and before afternoon surgery by one. The surgery was seen as the most convenient place to participate in a conference by all the general practitioners.

Three general practitioners recommended improved sound and visual aids, and one general practitioner recommended having a microphone or hands-free telephone rather than a hand-held telephone.

Future uses for audioconferencing were suggested: giving general practitioners who do not attend meetings the opportunity to participate in an interactive discussion from their surgeries or homes; enlisting prominent distant speakers; holding seminars with postgraduate education accreditation approval so that doctors living in remote areas would not be disadvantaged regarding their continuing medical education; and running section 117 meetings (section 117 refers to the statutory duty of trusts/NHS hospitals to provide aftercare for patients detained in hospital under sections 3, 37, 41, 47 and 48 of the mental health act 1983).

When asked if they would participate in further meetings, one general practitioner replied no, one probably and two yes. Further evaluation of audioconferencing is warranted.

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Emergency contraception

Sir,

The paper by Julie George and colleagues