Table 2 Approximate cost estimates for various options in hepatitis B prevention

Option	Approximate annual cost (£)
Selective screening of antenatal patients:	
(i) Antibody to hepatitis B immunoglobulin (Anti-HB ₁ g) at birth plus hepatitis B vaccine for infants of 'high risk' mothers: no immunisation for infants of anti-HBe positive mothers	46000
(ii) Anti-HB ₁ g at birth plus hepatitis B vaccine for all infants of HBsAg positive mothers	151000
Screening of all antenatal patients:	
(i) Anti-HB ₁ g at birth plus hepatitis B vaccine for infants of 'high risk' mothers: no immunisation for infants of anti-HBe positive mothers	120000
(ii) Anti-HB ₁ g at birth plus hepatitis B vaccine for all infants of HBsAg positive mothers	246000

It is emphasised that these assessments apply to Britain only. Acute hepatitis B can be expected to be more common among young infants in populations with higher HBsAg carrier rates.

The mothers of the five HBsAg positive infants were reported to be HBsAg positive, but results of HBe antigen and antibody tests were not recorded.

According to these reports, in Britain each year less than one infant develops acute hepatitis B as a result of perinatal exposure. On this basis, it would be necessary to immunise more than 2000 neonates of anti-HBe positive mothers to prevent acute hepatitis B in one young infant. More recent Communicable Disease Reports confirm this assessment. Since the surveillance began in 1982 more than 5000 infants are estimated to have been born to anti-HBe positive carrier mothers in Britain: during this time there have been only two reports of acute hepatitis B in early infancy, including the infant who died.

Cost estimates of various options

A summary of estimates made in 1983 is given in Table 2. These do not include the cost of salaries of clinical and laboratory health service staff. A reduction in expense due to the recent introduction of paediatric doses of hepatitis B vaccine will have been offset by increases in other costs—for example, laboratory tests—since 1983.

References

- Arya SC, Ashraf SJ, Parande CM. Immunoprophylaxis of infants born to hepatitis B virus exposed mothers. *Arch Dis Child* 1986;**61**:207.
- Polakoff S. Immunisation of infants at high risk of hepatitis B. *Br Med J* 1982;**285**:1294-5.
- Polakoff S. Hepatitis B virus DNA and e antigen in serum from blood donor's positive for HBsAg. *Br Med J* 1985;**290**:1211-2.
- Sinatra FR, Shah P, Weissman JY, Thomas DW, Merritt RJ, Tong MJ. Perinatal transmitted acute icteric hepatitis B in infants born to hepatitis B surface antigen-positive and anti-hepatitis Be-positive carrier mothers. *Pediatrics* 1982;**70**:557-9.
- Shiraki K, Yoshihara N, Sakurai M, Eto T, Kawana T. Acute hepatitis B in infants born to carrier mothers with antibody to hepatitis Be antigen. *J Pediatr* 1980;**97**:768-70.

- Ewing CI, Davidson DC. Fatal hepatitis B in infant born to a HBsAg carrier with HBeAb. *Arch Dis Child* 1985;**60**:265-7.
- Office of Population Censuses and Surveys. Registrar General's statistical reviews of England and Wales 1974-81. Notification infective jaundice. London: HMSO, 1983.
- Polakoff S, Tillett HE. Routine laboratory reports of patients with acute hepatitis B as indicators of incidence of the disease. *J Infect* 1984;**8**:44-8.

SHEILA POLAKOFF
Central Public Health Laboratory,
London NW9 5HT

Ethical aspects of neonatal care

Sir,

Dr Bissenden's annotation on 'Ethical aspects of neonatal care'¹ is based on a series of (conceivably false) premises that render illogical his conclusion that each case should be treated 'without preconceived ideas'. All our decisions are influenced by some underlying moral reference points and I for one would totally reject several of those on which Dr Bissenden's decisions are based. What is the evidence that life clearly does not begin at the fusion of the gametes? When does it begin? At 40? At what stage in infancy does one become a child thereby acquiring rights? (The United Nations Declaration of the Rights of the Child of 1959 includes the phrase 'before as well as after birth'.) Has the author never observed the two way communication between parents and their severely handicapped child 'of mental age no more than 2'? To label as evil someone who supports the life of a severely handicapped child is to make a highly offensive value judgment, presumably based on Dr Bissenden's idiosyncratic definition of good and evil. At the same time the Catholic position is conveniently dismissed by simply avoiding it.

There is no doubt that we are facing many taxing ethical problems in neonatal practice. It would be most unfortunate if Dr Bissenden's philosophy was to become the basis for solving them.

R B MCGUCKEN,
Royal Albert Edward Infirmary,
Wigan WN1 2NN

Dr Bissenden comments:

The inevitable consequence of writing on a subject such as 'Ethical aspects of neonatal care'¹ is that whatever one writes someone will strongly disagree. There is no reason to believe that doctors will have uniform moral reference points relevant to an issue, any more than teachers or lawyers will.

Dr McGucken asks difficult questions, provides no answers, and is very critical. His beliefs, however, are highly personal. They should be respected but are as irrelevant as mine. I do not have an absolute view on the subject, but what I tried to do in the annotation was to acknowledge that most neonatologists in the United Kingdom were, under certain circumstances, withdrawing intensive care from premature neonates. That being the case, when examining the logistics of decision making, and