Commentary

This paper by Buss *et al* demonstrates a poor range of knowledge among paediatric staff about the prevalence of HIV and hepatitis B carriage as well as widespread unsafe clinical practices even when risks were apparently understood. These results are worrying and lead to further questions that should be answered.

- Medical education is failing at an undergraduate and postgraduate level to get important messages across with regards to risk and clinical practice. What is the responsibility of medical schools, individual consultants, and occupational health physicians in ensuring that these simple principles are taught and ensuring that they are implemented?
- Why are 'district sharps policies' so widely disregarded? Are they badly communicated? Are they lost in a deluge of other circulars?
- The behaviour of doctors who have some understanding of risk, but still fail to act appropriately in clinical practice, in many

ways reflects the attitudes of the public as a whole in being aware of some individual health risks but then failing, for example, to stop smoking or to lose weight. The reasons behind this should be explored. Is there simply a tradition of neglect of important principles and the norm inherited by each new doctor is passed through the generations of junior staff without critical thought? Is there insufficient time and resources to implement safe practice? What is the effect of fatigue upon incidence of needlestick injuries?

This paper should be discussed in every paediatric department in hospitals and in the community. I fear from the evidence presented here that circulars from occupational health physicians to paediatric staff sink to the bottom of the pile and stay there!

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Bovine IgG and infant colic

The evidence that cows' milk avoidance in some breast feeding mothers prevents the excessive crying which we call infant colic in their babies is impressive.^{1 2} Presumably some component of cows' milk finds its way into breast milk and affects the baby, but what is that component? Bovine β -lactoglobulin and casein are both found in human milk but only in minute amounts about a million times less than in cows' milk. As the frequency of colic is about the same (20%) in breast and bottle fed babies any candidate for offending protein would have more credibility if its concentrations in human and cows' milk were of a similar order. Workers in St Louis, Missouri have looked at bovine IgG (Patrick Clyne and Anthony Kulczycki, *Pediatrics* 1991;87:439-44). Commercial cows' milk based formulas were found to contain bovine IgG at concentrations of the order of 0.5 to 5.0 $\mu\text{g/ml}$, although one powdered formula had much higher concentrations. Human milk samples commonly contained 0.2 to 1.0 $\mu\text{g/ml}$ of bovine IgG, the highest measured concentration being 8.5 $\mu\text{g/ml}$.

When milk from the mothers of 29 colicky and 30 non-colicky babies was compared there was a considerable overlap in bovine IgG concentrations but the mean concentration was significantly higher in the group whose babies had colic. No milk sample from a mother of a colicky baby contained less than 0.22 $\mu\text{g/ml}$ of bovine IgG whereas eight of the 30 mothers of babies without colic had milk containing less than that. Repeated samples of milk from the same mother showed fairly constant concentrations. All the babies in the study were exclusively breast fed. Bovine IgG, therefore, seems a credible offender in infantile colic. Interventional studies will be necessary to prove, or disprove, the point.

ARCHIVIST

1 Lothe L, Lindberg T. Cows' milk whey protein elicits symptoms of infantile colic in colicky formula-fed infants: a double blind crossover study. *Pediatrics* 1989;83:262-6.

2 Forsyth BWC. Colic and the effect of changing formulas: a double-blind, multiple-crossover study. *J Pediatr* 1989;115:521-6.