received a booster dose. *Haemophilus influenzae* type b polysaccharide IgG responses are shown in the table. The proportions of children who had antibody titres below the minimum protective level of 0.15 μg/ml before receiving their booster dose at 1 year of age was higher than previously reported with the more extended primary immunisation schedule. The mean increase in antibody titre after administration of the booster dose was 80-fold (95% confidence interval 65 to 955).

Comment

This increase in antibody titres after booster immunisation is consistent with an immunological memory response, and shows that the children’s immune systems were successfully primed by the three doses of conjugate vaccine they received during infancy. Immunological memory induced by vaccines administered according to the accelerated primary schedule may provide long term protection even when circulating antibody titres are low. Conjugate vaccines against *Haemophilus influenzae* type b could be introduced into the expanded immunisation programme of the WHO using a schedule of three doses in infancy and no booster dose. This should enhance deliverability and reduce costs.

Contributors: DG and EM designed the study. KC and EM coordinated the recruitment of patients and their follow up. DG and NM were responsible for developing the laboratory assay. The paper was written by all the authors. DG is guarantor for the study.

Funding: Medical Research Council. DG is a Welcome Trust Fellow.

Conflict of interest: None.


(Accepted 16 December 1997)
In total, 153 children (76 primary course and 77 measles, mumps, and rubella immunisation) were randomised to intervention A, 159 children (82 primary course and 77 measles, mumps, and rubella immunisation) to intervention B, and 139 children (74 primary course and 65 measles, mumps, and rubella immunisation) to the control group. The study had a power of 80% to show a 15% difference between each intervention and the control group at 5% two sided significance. Distribution of baseline characteristics in the three groups was similar. There was no significant difference between either intervention group and the control group in the proportion completing the primary course or measles, mumps, and rubella immunisation (see table). Nor was there a significant difference in study end point, when both interventions combined were compared with the control group. Subgroup analysis by maternal age and parity showed a substantial but non-significant effect of intervention in promoting completion of primary immunisation in firstborn children (56%, 10/18) compared with firstborn controls (25%, 3/12), and in children of firstborn children (56%, 10/18) compared with controls (13%, 5/38). There was no effect on uptake of measles, mumps, and rubella immunisation.

Comment
Randomised controlled trials provide the best evidence for effectiveness of interventions. However, we found only one other trial of an intervention to promote childhood immunisation. This was carried out in preschool children in the United States and found that a computer generated telephone reminder resulted in a significant but modest improvement of 12% in immunisation uptake in the intervention group, after excluding the 20% of households with no telephone.

Neither intervention we studied improved immunisation uptake. The results suggest that district-wide initiatives directed at individual families are unlikely to be worth while, although there may be some benefit from targeting young or primiparous mothers. There is evidence that initiatives by primary healthcare teams such as opportunistic immunisation of children attending the surgery and domiciliary immunisation by nurses can improve uptake, although these approaches would benefit from more formal evaluation. More use should be made of randomised controlled trials to evaluate interventions to promote uptake of preventive services in primary care.

We thank the child health support team at the Welsh Health Common Services Authority for providing immunisation data; Mrs Margaret Morgan, Cardiff Community Healthcare NHS Trust, for her invaluable assistance and Dr Frank Dunstan, Department of Medical Statistics and Computing, University of Wales College of Medicine, for statistical advice.

Contributors: MZM helped design the protocol, collected and analysed the data, and helped write the article. MRE conceived, designed, and supervised the study; wrote the article; and is the guarantor.

Funding: None.

Conflict of interest: None.


(Accepted 6 May 1998)

Memorable patients

Doing as they are told

We all worry about patients’ compliance. However, this is not the hazard. Occasionally advice can be taken too literally.

A young woman brought her baby to see me on account of nappy rash. The baby did not look ill and I asked the mother to undress her. I was horrified by the sight of a baby seemingly consisting of skin and bones. The only time I had seen anything like it was an illustration of marasmus in a textbook. On inquiring what kind of food the baby was having, the mother told me that it was Robinson’s Patent Barley. “How was it made up?” “With water.” “What else do you give her?” A blank stare. “No milk?” “No, my mother said I was brought up on Robinson’s Patent Barley and I was always a bonny baby.” The mother had obviously failed to mention that Robinson’s Patent Barley was to be given in addition to and not instead of milk.

Once I was called to see a man in his 60s because “his legs had turned blue.” I found a slightly obese man, fussed over by his wife. He had the most extensive ecchymoses on both legs and also on other parts of his body. On inquiry it turned out that he had had a duodenal ulcer some years before. He was then advised to have plenty of milk drinks and milk puddings. That was indeed the diet his wife kept him on to the exclusion of all other food; she was very proud of it. Thus I saw what must have been the only case of scurvy in south Yorkshire.

Perhaps we are sometimes too emphatic and not sufficiently explicit in advising our patients.

Otto Fleming, retired general practitioner, Sheffield