published is accompanied by disappointment that Anand is thereby encouraged to continue to muddy the waters of what is, after all, a profoundly important and disturbing subject, which deserves much more serious consideration.

JOHN DOBBING

Emeritus professor of child growth and development

Higher Cliff Farm,
Birch Vale,
Stockport SK12 5DL

1 Anand RK. Health workers and the baby food industry. *BMJ* 1996;312:1556-7. (22 June.)

Author's reply

EDITOR,—John Dobbing fails to address the questions that I raised in my editorial about the World Health Assembly's resolution aiming to discourage financial and other help for health workers from the infant food industry. Instead he seeks to dismiss the issue by using the term "activist" in a pejorative way to describe those who agree with the principles of the resolution and not with his own views.

My challenge to Dobbing on both occasions was in response to his implication that poor women cannot breast feed adequately to meet the needs of their babies after two to three months. I have never quoted him as saying that malnourished women could not breast feed.

Dobbing's paper in India is recorded in the proceedings of a workshop.¹ In it he says, "Exclusive breastfeeding in communities as indigent as this will often adequately support good growth for two or three months." He claims that at this workshop he questioned me. It was the other way round. I questioned him after his presentation and quoted Gopalan, the former director of the National Institute of Nutrition, and others about the remarkable ability of poor women to breast feed and the dangers of early introduction of complementary food.^{2,3} Industry takes advantage of statements such as the above from Dobbing and from others and promotes the introduction of cereals from an inappropriately early age.

Statements about the inadequacy of breast feeding by poor mothers have been made on the basis of theoretical calculations of infants' energy requirements. They have sometimes led to inappropriate recommendations. Butte *et al* reported that adequate growth can occur in 4 month old infants exclusively breast fed with an intake of 297 kJ/kg/day, which is substantially less than the daily energy intake of 480 kJ/kg/day recommended in 1971 for infants of 3-5 months.⁴ The relevance for breast fed infants of the standards used by the National Center for Health Statistics (NCHS) for evaluating growth have also been questioned by the World Health Organisation's working group on infant growth as these standards were derived from a predominantly bottle fed population. The working group concludes from data on Indian infants that "declining status in weight-for-age is likely to be identified beginning at 3 months using the current NCHS-WHO reference, but not until 5 months using the 12-month breast-fed pooled data set."⁵

Dobbing seeks to counter my editorial by criticising the references. Three of the references are from peer reviewed journals, and the others are entirely appropriate and necessary to the subject. *Raja-Yoga* is available from the Ramakrishna Mission, Mumbai 400 052.

R K ANAND
Senior paediatrician

Jaslok Hospital and Research Centre,
15 Dr G Deshmukh Marg,
Mumbai 400 026,
India

1 Dobbing J. Maternal nutrition in pregnancy and later achievement of offspring. In: *Manual of proceedings of the pre-congress workshop on prevention of mental handicap.*

Bombay: Commonwealth Association for Mental Handicap and Developmental Disabilities, National Institute of Mental Health and Neurosciences, and King Edward Medical Hospital, 1985:24-43.

- 2 Gopalan C. Studies on lactation in poor Indian communities. *J Trop Pediatr* 1958;4:87-95.
- 3 Das D, Dhanoa J, Cowan B. Exclusive breast feeding for six months—an attainable goal for poor communities. *Nutrition Foundation of India Bulletin* 1982 Apr:3-6.
- 4 Butte NF, Garza C, Smith EO, Nichols BL. Human milk intake and growth in exclusively breast-fed infants. *J Pediatr* 1984;104:187-94.
- 5 World Health Organisation Working Group on Infant Growth. An evaluation of infant growth: the use and interpretation of anthropometry in infants. *Bull WHO* 1995;73:165-74.

New developments in Nestlé court case in India

EDITOR,—R K Anand's editorial about the World Health Assembly's resolution urging member states to prevent the baby food industry from providing financial or other support for health workers is timely.¹ Though Indian law has encouraged the major professional bodies to stop taking support from the infant food industry, Nestlé is now offering support to general practitioners in the guise of teaching about the dangers of unmodified bovine milk. This action is being challenged by consumer groups, and more and more health workers are becoming wary of getting any support.

It is over a year since the *BMJ* published an article about a court case in India involving Nestlé, concerning charges that it had violated the Infant Milk Substitutes, Feeding Bottles and Infant Foods (Regulation of Production, Supply and Distribution) Act 1992.² Nestlé subsequently claimed that it obeyed the Indian law. However, the criminal case against Nestlé is still before the court. The company has succeeded in further delaying the determination of this matter by filing a petition against the government of India challenging the provisions of the infant milk substitutes act. Consumer groups are infuriated by this and are considering a national boycott of Nestlé's products.

Nestlé also states that "it is noteworthy that none of the complaints against Nestlé are made by the Indian government or regulatory bodies." This ignores the fact that the Association for Consumers Action on Safety and Health, which has brought the case against Nestlé, is specifically mandated under section 21(i)(c) of the legislation to monitor the act and to make a written complaint in court against companies that violate it.

The action is being pursued according to due process, on the one hand by a multinational company determined to minimise constraints to its commercial operations and on the other hand by a small group with limited resources, concerned only that a law set up to safeguard the welfare of children is adhered to.

TARSEM JINDAL
Finance coordinator

Breastfeeding Promotion Network of India,
BP-33, Pitampura,
New Delhi-110034,
India

- 1 Anand RK. Health workers and the baby food industry. *BMJ* 1996;312:1556-7. (22 June.)
- 2 Lockwood C. Nestlé appears in court in India. *BMJ* 1995;311:348.

Costs that would be incurred in establishing "difficult airway register" could be better spent

EDITOR,—J B Liban proposes that a national "difficult airway register" should be established to identify and store information on those patients in whom airway management has been problematic.¹ Several points should be considered before such a scheme is proceeded with.

Liban states that "about 41% of all deaths attributable to anaesthesia are related to difficulties with endotracheal intubation." These data, from the confidential inquiries into maternal deaths, refer only to obstetric anaesthesia. The overall proportion of anaesthetic deaths related to difficult intubation is not cited in recent reports of national confidential inquiries into non-obstetric perioperative deaths, but the actual numbers are likely to be small. In a 1987 British retrospective study of non-obstetric failed intubations six out of 13 380 patients could not be intubated, and all survived.² Since these studies were undertaken the laryngeal mask airway has been introduced into routine anaesthetic practice and has been used effectively in the management of difficult intubation.³

Accessing a patient register would be time consuming and would depend on patients identifying themselves, either orally or (as Liban proposes) by means of a Medic Alert bracelet. We suggest that sufficient information to identify the patient's problem could almost always be fitted into the bracelet itself—for example, "Only intubatable with fibreoptics, but mask ventilation easy—J Bloggs, consultant anaesthetist, Small-town General." Many anaesthetists already provide written details of critical incidents to patients and their general practitioners post-operatively. Further registration with a national information store would take time and involve additional paperwork, which would almost certainly lead to non-compliance.

We could find no published evidence that the use of a centralised agency in the United States has reduced mortality due to airway problems. There is evidence that use of a strategy or algorithm facilitates successful airway management and leads to fewer adverse outcomes.⁴ The time and cost involved in establishing, running, and accessing a national database might be better spent on increasing awareness of, and rigorous training in, strategies for managing patients with a difficult airway. Summoning senior or more experienced help is as important as knowing the exact details of previous attempts at intubation.

EDMUND MORRIS
Senior house officer
ANTONY OSBORNE
Registrar
CLAIRE JEWKES
Consultant

Department of Anaesthetics,
Frenchay Hospital,
Bristol BS16 1LE

- 1 Liban JB. Medic Alert UK should start a new section for patients with a difficult airway. *BMJ* 1996;313:425. (17 August.)
- 2 Samsoon GLT, Young JRB. Difficult tracheal intubation: a retrospective study. *Anaesthesia* 1987;42:487-90.
- 3 Brain AJJ. Three cases of difficult intubation overcome by the laryngeal mask airway. *Anaesthesia* 1985;40:353-5.
- 4 Practice guidelines for management of the difficult airway. *Anaesthesiology* 1993;78:597-602.

Intravenous immunoglobulin in the Guillain-Barré syndrome

May cause severe adverse skin reactions

EDITOR,—R A C Hughes's editorial on the use of intravenous immunoglobulin in the Guillain-Barré syndrome concludes that this treatment is beneficial and is easier than plasma exchange to administer.¹ We agree with this but wish to draw attention to potentially severe adverse skin reactions to the treatment. We report here on four patients who each received a five day course of intravenous immunoglobulin at the standard dose of 0.4 g/kg/day. Three were given Sandoglobulin, while the other received intravenous immunoglobulin prepared by the Scottish National Blood Transfusion Service. All developed dermatological complications.

Case 1—A 76 year old woman received the treatment for multifocal motor neuropathy. One week after treatment she developed a widespread erythematous, exfoliating rash, which was diagnosed after skin biopsy as being severe erythroderma. This required three months of intensive and predominantly inpatient dermatological care. The neuropathy initially responded to the intravenous immunoglobulin but then relapsed. After extensive patch testing with various brands of intravenous immunoglobulin, none of which resulted in a positive reaction, she was given a further course covered by oral steroids, but within six hours of the first dose the rash returned.

Case 2—A 66 year old man with inclusion body myositis developed itchy skin eruptions six days after receiving the Scottish preparation of intravenous immunoglobulin. Skin biopsy suggested an allergic aetiology. He had a further six courses of the same preparation at monthly intervals with oral steroid cover. No further complications developed.

Case 3—A 48 year old man with multifocal motor neuropathy developed a widespread eczematous rash 10 days after treatment with intravenous immunoglobulin. He was admitted to hospital after failure of outpatient treatment. Skin biopsy showed perivascular inflammation, hyperkeratosis, and parakeratosis without evidence of vasculitis.

Case 4—A 55 year old man received intravenous immunoglobulin for multifocal motor neuropathy. One week after treatment he developed widespread itchy, scaly eruptions, mainly on the arms and legs, which persisted for four weeks. Recovery was spontaneous and uneventful.

Serious side effects of intravenous immunoglobulin are rare. There are only a few reports of skin reactions in the literature²; although rarely life threatening, they may cause considerable distress (as they did in cases 1 and 3). A patient has been successfully treated with intravenous immunoglobulin and steroid cover after developing eczema,³ and the combination of intravenous immunoglobulin and steroid has been evaluated recently.⁴ This may well be optimal treatment, if only because the side effects of the immunoglobulin are lessened, but our experience is that the skin condition may recur despite such treatment.

H H M HAMDALLA
Registrar
C H HAWKES
Locum
E G SPOKES
Consultant

Department of Neurology,
General Infirmary,
Leeds LS1 3EX

J M BAMFORD
Consultant
P J GOULDING
Consultant

Department of Neurology,
St James's University Hospital,
Leeds LS1 3EX

- 1 Hughes RAC. Intravenous IgG in Guillain-Barré syndrome. *BMJ* 1996;313:376-7. (17 August.)
- 2 Misbah SA, Chapel HM. Adverse effects of intravenous immunoglobulin. *Drug Safety* 1993;9:259.
- 3 Barucha C, McMillan JC. Eczema after intravenous infusion of immunoglobulin. *BMJ* 1987;295:1141.
- 4 Dutch Guillain-Barré Study Group. Treatment of Guillain-Barré syndrome with high dose immune globulins compared with methylprednisolone: a pilot study. *Ann Neurol* 1994;35:749-52.

Products with low IgA content may be used in patients with total IgA deficiency

EDITOR—R A C Hughes emphasises that, on the basis of the results of recent randomised studies, intravenous immunoglobulin is as efficacious as plasmapheresis in the treatment of the Guillain-

Barré syndrome.¹ In view of the practical difficulties associated with plasmapheresis, intravenous immunoglobulin is increasingly likely to be preferred as first line treatment.

In this context Hughes states that intravenous immunoglobulin should be avoided in patients with IgA deficiency. This may mislead clinicians who are unfamiliar with immunoglobulin treatment and may result in them needlessly withholding treatment from all IgA deficient patients. Although it is true that anaphylaxis remains an important risk in some patients with selective IgA deficiency, this is virtually confined to those with the combination of severe or absolute IgA deficiency (<0.05 g/l) and high levels of antibodies to IgA.² Even in these patients the risk of anaphylaxis can be greatly reduced by the cautious use of an IgA depleted immunoglobulin product. Immunodeficient patients with high levels of antibodies to IgA (1 in 200 to 1 in 7000) have been maintained on regular replacement with an IgA depleted product with no serious adverse effects over a six year period.³

Table 1 shows the IgA content of immunoglobulin preparations currently available in Britain. Because measurement of the level of antibodies to IgA is available in only a few immunology laboratories in Britain it would be unwise to delay emergency treatment of the Guillain-Barré syndrome until the results of such measurement are available. It would be sensible to treat patients known to be totally IgA deficient, and those in whom any doubt exists, with an immunoglobulin product with a low IgA content.

Table 1—Approximate IgA content of immunoglobulin preparations

Product	IgA (mg/l)
Alphaglobin	24*
Endobulin	10-50†
Gammagard-SD	0.4-1.9*
Gamimune-N	270*
Sandoglobulin	720*
SNBTS intravenous immunoglobulin	920†
Vigam S	5†

SNBTS = Scottish National Blood Transfusion Service.

*Data from reference 4.

†Data provided by manufacturer.

Hughes's statement that intravenous immunoglobulin should be avoided in patients with renal failure also requires clarification. Temporary reversible deterioration in renal function (ranging from an asymptomatic increase in the serum creatinine concentration to anuric renal failure) associated with the use of high dose intravenous immunoglobulin (2 g/kg) is likely to be related to the toxic effect of a high sugar load on renal tubules.⁵ While the use of a single dose of 2 g/kg should be avoided in patients with pre-existing renal impairment, it may be possible to infuse lower doses at a slower rate safely in such patients.⁵ Hence, rather than renal failure being viewed as an absolute contraindication to intravenous immunoglobulin therapy, each case should be assessed on its individual merits.

SIRAJ MISBAH

Consultant clinical immunologist

Department of Chemical Pathology and Immunology,
Institute of Pathology,
Leeds General Infirmary,
Leeds LS1 3EX

- 1 Hughes RAC. Intravenous IgG in Guillain-Barré syndrome. *BMJ* 1996;313:376-7. (17 August.)
- 2 Björkander J, Hammarström L, Smith CIE, Buckley RH, Cunningham Rundles C, Hanson LA. Immunoglobulin prophylaxis in patients with antibody deficiency syndromes and anti-IgA antibodies. *J Clin Immunol* 1987;7:8-15.
- 3 Cunningham Rundles C, Zhuo Z, Mankarious S, Courter S. Long-term use of IgA depleted intravenous immunoglobulin

lin in immunodeficient subjects with anti-IgA antibodies. *J Clin Immunol* 1993;13:272-8.

4 Buckley RH, Schiff RI. The use of intravenous immune globulin in immunodeficiency diseases. *N Engl J Med* 1991;325:110-7.

5 Tan E, Hajinazarian M, Bay W, Neff J, Mendell JR. Acute renal failure resulting from intravenous immunoglobulin therapy. *Arch Neurol* 1993;50:137-9.

Impact factors need to be improved

EDITOR—Because the number of citations per article is widely used to rank journals, institutions, papers, and scientists we should welcome Eugene Garfield's suggestions for improving the validity of this simple ratio.¹ The final sentence of the summary of Garfield's article, however, hardly fits the title and finds little support in the rest of the article. While good attracts good (Nobel prizewinners work with Nobel prizewinners), we would expect citations to attract citations. Yet this circular argument is reminiscent of the explanation of why the higher echelons of the civil service in Britain continue to find their most suitable recruits to be graduates of Oxford and Cambridge universities. This circular argument is barely scientific and potentially invidious.

Many factors contribute to the number of citations per paper, including the science; the nature of the research; the style of the communication (papers vary in the number of references they include, from none to over 100); editorial policy (several journals ration the number of references per article); circulation and readership (more readers equals more citations); citation bias (comparable to submission bias and publication bias); conformism (scientists often cite those papers that are currently cited); authors' tendency to cite their own work; and referees' self promotion (referees' tendency to recommend inclusion of references to their work).

A "scientific" evaluation of the citation ratio as a measure of the quality of an article might include assessments of prior agreed criteria of quality; the value added to scientific knowledge at the time that the paper was submitted for publication (not necessarily the time it was published); whether the article is deemed correct with the wisdom of hindsight—say, 30 years after publication (because many scientific observations follow a current popular paradigm or consensus); and blind scoring by a panel of judges.

One wonders whether, if independent external criteria were used, some popular articles in widely read weekly journals would still turn out to be 30 or 40 times more valuable to science than those in monthly or quarterly specialist journals, and whether the *Lancet* really is twice as good as the *BMJ*.

ROBERT WEST

Reader in epidemiology

University of Wales College of Medicine,
Cardiff CF4 4XN

- 1 Garfield E. How can impact factors be improved? *BMJ* 1996;313:411-3. (17 August.)

Non-fatal overdosing is related to polydrug use in Glasgow

EDITOR—Michael Gossop and colleagues found that 9% of 438 heroin users in London reported at least one non-fatal overdose in the previous year, and they state that the use of heroin in combination with other drugs may be a critical risk factor.¹ In our study of 1018 drug injectors recruited in Glasgow during 1993-4, 276 (27%) reported at least one non-fatal overdose requiring medical attention during the previous year.