smaller area health authorities, but could not, and should not these be based on existing district general hospital areas? Both the general public and those providing medical services to them would do well to challenge the loss of local involvement implicit in this new paper. Management can only be truly effective when it involves those at the grass roots.

At all events, let everyone think about the problem and do as we have done—pass on their opinions to the Secretary of State for Social Services and to the B.M.A., so that they may have a consolidated opinion on which to work.

The Government is in a hurry, so think now, for as Samuel Richardson said "Advice comes too late when a thing is done."—We are, etc.,

F. G. HATTERSLEY
Chairman,

G. N. CASH
Honorary Secretary,
Kettering Division of B.M.A.

Kettering and District General Hospital,
Kettering,
Northants

¹ Department of Health and Social Security, *National Health Service Reorganization: Consultative Document*, 1971.

SIR,—The publication of the Government's Consultative Document on National Health Service reorganization¹ highlights the mistake that has been made in separating the health and social services. This has particular importance for those practitioners now working in "Section 21" health centres. In such centres we at last have an opportunity to integrate health and social services, and this indeed was the idea behind them. With the placing of the new departments of social service under the Ministry of the Environment there is already a tendency in some areas for the local director of social services to move his team out of existing centres into other accommodation in the same town. My colleagues and I are aware of an instance where the estimate for a projected health centre has been severely cut by the Department of Health while at the same time the relevant county council is being asked to find a large sum for social service premises.

Most family doctors have welcomed the help of social workers in solving their patients' problems, and mutual trust and respect are being rapidly built up. This can best be achieved by close liaison from the same building. It is time that the future health centre construction programme was carefully looked at with this point in mind, and any general practitioners considering moving into a centre would do well to inquire during the early planning stage who will be sharing it with them.

As Dr. Ronald Gibson remarked recently: "... The division of responsibility for patients' care between two different departments can only result in a reduction in the standard of care." (*Supplement*, 22 May, p. 111.) This observation certainly applies as much at the level of primary patient care as at that of Ministerial responsibility.—I am, etc.,

ANTONY BARTER

Bridport,
Dorset

¹ Department of Health and Social Security, *National Health Service Reorganization: Consultative Document*, 1971.

The Ward Sister

SIR,—It is regrettably every hospital doctor's common experience to receive notices from the hospital administration to the effect that routine admissions must be stopped, certain wards are to be closed, a new unit cannot yet be opened, or even a whole new hospital cannot be used. In each case the care of the community suffers and the cause is always the same—shortage of nurses.

Nursing is still poorly paid and involves at times extremely hard work, often during inconvenient hours and under moderately strict discipline. Nevertheless many young women are eager to accept these hardships and responsibilities instead of a well paid 9-5 office job because they have a genuine and burning wish to serve humanity and care for the sick. The personal reward of nursing a sick, pain-stricken, and fearful patient back to health is more than sufficient compensation. But why do so many nurses leave the hospital service shortly after completing their training, when they are potentially of most value as nurses? Marriage and a wish to travel have always claimed many girls at this stage in their career, but for those who wish to continue nursing the prospects are far more bleak than previously, owing to the increasing influence of the Salmon Report.¹

The whole report is based on the assumption that the career ambition of nurses is eventually to become a super-administrative officer with immense power of co-ordination of management. The weakness of the report is revealed in the condescending remarks "senior nurses tend to interfere in ward matters more than they ought to and however laudable it may seem to be for the administrative nurse to 'roll up her sleeves' in the wards, it is often really a *satisfying of her own needs* (my italics) and not a service to patients or ward sisters. If the senior managerial positions are clearly seen to be of greater importance, 'in service to more patients rather than to the patient,' these positions become desirable to the nurse with a developed sense of vocation." The report goes on to state in rather a surprised tone that "on the whole ward sisters seem to find their job satisfying. This we attribute largely to the fact that each exercises decentralized control and substantial delegated authority. These features often make it the height of a nurse's ambition." Yet the report obviously disapproves of such limited ambition devoted to the care of patients when the wider vistas of administration and managerial power are open.

The young, newly qualified nurse finds disillusionment in the future. If she wants to become an administrator the prospects are bright, but if she wants to continue caring for patients, which was the whole reason for going into nursing, she cannot progress beyond a ward sister, and the implications of the Salmon report have resulted in denigration of the status of the ward sister. Unless something is done to rectify this a tragedy will result in British nursing, which in the past was the envy of the world.

We must realize before it is too late that the focal point of nursing is the ward sister. If this post was sufficiently attractive trained nurses would stay in hospital service instead of leaving nursing altogether or continuing

as private agency nurses, doing a job that they would otherwise do better in the hospital service, but with more pay and independence. The ward sister has responsibility and authority equivalent to a medical consultant in the care of patients. In the past she was accorded appropriate status. It was her ward, she always accompanied the doctors on their rounds, and, knowing the patients intimately, she was able to contribute to their medical care in discussion with the doctors and to the social welfare of the patient in discussion with his relatives. This vital role was understood and appreciated by patients. The ward sister should be regarded in a similar light to the post of consultant as a respectable and desirable focal point for the ambitions of a nurse. The post should be paid on a similar scale as consultants, rising with experience.

Of course there is a need for good nursing administration, although much of the work now done by nursing administrators could probably be done better by professional administrators not qualified in nursing. But to opt for administration should not immediately involve an increased salary and status. One of the most regrettable aspects of the Salmon report has been the promotion of juniors over the heads of their ward sisters because the junior chose administration. To be under the authority of someone less experienced than oneself merely because she has decided to leave the vocational aspects of nursing has been a bitter pill for many ward sisters, and not surprisingly, some have found it too unpleasant to swallow and have left nursing in disillusionment and sadness. We cannot afford to lose these dedicated and highly trained women, and unless something is done quickly the present nursing crisis will rapidly deteriorate further.—I am, etc.,

ROY CALNE

Department of Surgery,
University of Cambridge

¹ Ministry of Health, *Report of The Committee on Senior Nursing Staff Structure*, London, H.M.S.O., 1965.

Brucellosis and the British Tourist Industry

SIR,—The purpose of this letter is not to criticize, ungraciously, the University College of Wales, Aberystwyth, or the local division of the B.M.A., but to show some of the pitfalls which confront those who wish to protect themselves and their families from infection conveyed by milk.

On 2 April, by invitation, I attended a symposium on rural medicine at the B.M.A. Annual Clinical Meeting. Accommodation and board were arranged by the B.M.A., which in this capacity served as my tourist agent. Innocently I had supposed that only pasteurized milk is provided at the halls of residence of British universities but at Aberystwyth I am now assured this is not so. Had the B.M.A. known this and explained it to me beforehand I might have declined the invitation and stayed elsewhere, and I feel sure that many other members, who also prefer not to drink raw milk, would have done the same. Our trusted tourist agent deserves a gentle rebuke.

In the same way Government, through its various tourist boards, invites people to spend their holidays in country places, and it also has a responsibility, hitherto neglected, to see that our visitors come to no harm. In Wales brucellosis is a common disease of

cattle and the Welsh Tourist Board, on its brochures, should advertise this fact very clearly, explaining at the same time how to prevent human disease. It is commonly believed that milk in bottles is invariably pasteurized, that milk served in all large hotels (and universities) is pasteurized, and that milk supplied by licensed producer/retailers in bottles labelled "untreated" must be brucella-free. But these are misconceptions,¹ and holiday makers should be encouraged to demand milk which has been properly pasteurized or, alternatively, to boil it if, bravely, they are prepared to accept it raw.

Farmers, especially those who are themselves licensed producer/retailers, claim that there is no risk in drinking milk from accredited brucella-free herds, and the college herd at Aberystwyth is in this category. Infection, however, can be re-introduced into a clean herd, especially when it is present on neighbouring farms, and because of the interval between tests evidence of breakdown may be found only in retrospect. Furthermore, cows infected late in pregnancy, while they excrete brucella organisms, may at first show no clinical or immunological evidence of disease and may give birth to healthy calves.

Government, judging from its record, does not fear the risk from brucellosis to holiday makers, visitors from abroad, and members of the B.M.A., who are all tourists in rural Britain, provided that the industry thrives. Informed tourists would be better able to protect themselves, and a penitent B.M.A., through the medium of its lay publications, should seize this opportunity to atone.—I am, etc.,

EIRIAN WILLIAMS

Pembroke County War Memorial Hospital,
Haverfordwest

¹ Williams, E., *Lancet*, 1970, 1, 1220.

Ketamine Anaesthesia

SIR,—The finding of depression of laryngeal reflexes during ketamine anaesthesia by Drs. P. A. Taylor and R. M. Towey (19 June, p. 688) is of great importance, particularly in view of a description by workers from this department of its use as sole agent in obstetrics.¹

We were aware of this possibility and have carried out a similar investigation in 20 patients. These were undergoing post-partum tubal ligation under intermittent ketamine following either atropine or no premedication. The medium was injected once anaesthesia had been stabilized, but to reduce exposure to radiation a single x-ray was taken at the end of the operation—for example, 40-60 minutes later. In only one of our patients was there evidence of aspiration, although on occasions the outline of the oesophagus was seen in the radiograph. The patient in whom there was evidence of tracheal contamination received a very large (850 mg) dose of ketamine and also 10 mg diazepam.

One would like to know the dose of ketamine given by Drs. Taylor and Towey for, as pointed out in your leading article (p. 666), sedatives and all general anaesthetics reduce activity of laryngeal reflexes. Our patients were very light during surgery and able to swallow and phonate and this may account for the discrepancy of findings. In continuing studies a few observations made using

an image intensifier tend to support this. The use of hyoscine as premedication may also have played a part as this has a strong hypnotic action.

We have stressed¹ that the safety of ketamine in the presence of a full stomach is not known. Drs. Taylor and Towey have shown that it is certainly unsafe under certain circumstances, but this could be owing to the use of unnecessarily large doses such as could easily occur from continuous infusion. With ketamine, more than with any other anaesthetic, slight movement of the patient (particularly after hyoscine) could be interpreted as light anaesthesia. We hope to present our full findings in the near future.—We are, etc.,

JOHN W. DUNDEE
JAMES MOORE

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The Queen's University of Belfast,
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¹ Bovill, J. G., Coppel, D. L., Dundee, J. W., and Moore, J., *Lancet*, 1971, 1, 1285.

SIR,—I am a little worried by the letter from Lieutenant-Colonel T. R. Austin and Captain D. R. Bevan regarding paralysis with succinylcholine as a means of obtaining a still patient under ketamine anaesthesia. On more than one occasion I have found a still ketamine patient give a convulsive jerk and become restless at the application of a knife, as evidence of insufficient analgesia. One feels the need to emphasize testing the degree of analgesia before paralyzing the patient.—I am, etc.,

R. LUNT

Littleover,
Derby

SIR,—Two days after reading the articles and letter dealing with ketamine (19 June, pp. 666, 688, and 709), I had the following experience while using the drug.

A 10 kg one-and-half-year-old female child who was to have a plaster spica applied for a congenital dislocation of hip was given 125 mg ketamine intramuscularly. She had been premedicated with oral trimeprazine (Vallergran Forte) two-and-half hours previously but was only lightly sedated. Five minutes later the child was unconscious and developed respiratory obstruction and cyanosis caused by thick salivary secretions. She was able to clear these when turned on her side. Respiratory obstruction recurred several times in the next 30 minutes, but was easily cleared using gauze wipes on a finger. That her reflexes were present was indicated by this finger being severely bitten during one of these episodes! The hazardous situation was not helped by the nurse who was with the child during the induction period disappearing owing to a misunderstanding.

As Lieutenant-Colonel T. R. Austin and Captain D. R. Bevan point out, the induction of anaesthesia with ketamine is so easy that inexperienced anaesthetists may be tempted to use it. Both the preparation of the patient for, and the conduct of, the anaesthesia must be scrupulously carried out, and in the light of the above experience the premedication should include atropine, a drug which can often be dispensed with when using modern anaesthetics such as halothane. Whether the laryngeal reflexes are lost as Drs. P. A. Taylor and R. M. Towey suggest, or retained as evidence from this hospital might suppose,¹ pharyngeal reflexes

are not adequate to deal with excessive secretions, blood, or presumably vomit.

It would be a shame if this drug which may have a tremendous potential in disaster or military situations should gain a reputation as a killer through careless usage, as thiopentone (Pentothal) did after Pearl Harbour.²—I am, etc.,

J. P. ALEXANDER

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Belfast

¹ Moore, J. A., unpublished data.

² Halford, F. J., *Anesthesiology*, 1943, 4, 67.

SIR,—The report by Lieutenant-Colonel T. R. Austin and Captain D. R. Bevan (19 June, p. 709) is a timely warning on the problems associated with ketamine in the presence of blood in the upper airway. I am in full agreement that the use of ketamine, despite its ease of administration, must be restricted to physicians skilled in the management of airway problems. While I appreciate that the patient these authors described was in no danger, the presence of blood or secretions in the upper airway can not only result in coughing but can also induce laryngeal spasm. In a series of now over 50 patients anaesthetized with ketamine for cardiac catheterization¹ two patients developed laryngeal spasm as a result of secretions. The introduction of oxygen and halothane, combined with suction and further atropine, enabled this complication to be overcome. Withdrawal of halothane was accomplished without any recurrence.

The presence of blood and secretions in the upper airway would seem to be a contraindication to the use of ketamine as a sole agent. Careful selection of patients combined with the routine administration of atropine can increase the safety of this very useful anaesthetic agent.—I am, etc.,

D. L. COPPEL

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¹ Coppel, D. L., and Dundee, J. W., *Anaesthesia* (in press).

Fractured Femur and Fat Embolism

SIR,—The article by Dr. G. A. Gresham and others (12 June, p. 617) is the latest in a series of communications emphasizing the risks which are associated with the use of acrylic bone cement. The risk of fatal fat embolism is greatest in the elderly patient who has just sustained a fracture, but the way to avoid it is not to go back to nailing the subcapital fracture, a procedure which commonly ends in disaster, but to use an uncemented prosthesis. A simple Moore's replacement in these patients, performed at a reasonable technical level, can be expected to give a high standard of hip function with a low morbidity and mortality, and in most patients is the procedure of choice.

I would accept that fatal fat embolism is a very rare complication of a cemented total joint replacement, but this risk and the increased risk of infection, together with the doubts we must still have about its long-term stability, should lead us to evaluate whether the use of cement is necessary in each individual patient. A stable unipolar or bipolar replacement can be achieved in primary procedures without difficulty; in revisional surgery on the other hand, cement may be necessary in some patients on the