mothers from a painful experience is understandable though mistaken, for it impedes their mourning; and failed mourning gives rise to psychological troubles.³

The management of stillbirth causes considerable anxiety. For this reason it can help if those managing such painful conditions as stillbirth have discussions with a psychotherapist with experience in this technique.

EMANUEL LEWIS

Tavistock Clinic,
London NW3

¹ Bourne, S, *Journal of the Royal College of General Practitioners*, 1968, **16**, 103.

² Lewis, E, *Lancet*, 1976, **2**, 619.

³ Lewis, E, and Page, A, *British Journal of Medical Psychology*. In press.

SIR,—We had already proposed to do just what Dr Ann Cartwright has suggested in her letter (4 February, p 298), not as an alternative but in addition to the leaflet for parents. Our third objective is to establish a national counselling service composed of lay and professional counsellors. This should answer Mr Peter Diggory's point raised in his letter in the same issue (p 298).

We hope the influence of this leaflet for parents will sensitise the hospital staff to try and work out what best to do in each particular instance, be it to see and hold or not to see and hold a grossly abnormal baby and whether to let the hospital or the parents carry out the funeral

DAVID MORRIS
Convener,

National Stillbirth Study Group

London W1

Fluids for parenteral nutrition

SIR,—Some modern pharmacies have the technical skill and equipment to dispense a daily parenteral nutrition solution which is tailored to a patient's requirements. The cost of this is often used as a deterrent for developing such a system, but this view is negated by the inherent advantages. These facilities have been available in American hospitals for many years and safety guidelines are well developed. On the other hand most British centres have relied on multiple-bottle systems, which are clumsy and are associated with more practical problems.

The pharmacy premix service requires a sterile area with appropriate pressurised filtered air. This is provided by a lamina flow hood, which is not a very expensive piece of equipment. The required nutrients can then be added to a bottle using aseptic pharmaceutical techniques. Repeated checks are required to be sure that the system is maintained at this high standard. The final daily fluid volume (from 1 to 5 l) contains the appropriate amounts of amino-acids, dextrose, and electrolytes (sodium, potassium, phosphate, magnesium, and chloride ions). Trace elements and a multivitamin preparation with vitamin C, folic acid, and vitamin K are also added. It has been shown that only when the appropriate amount of electrolytes are included can the maximum anabolic effect be obtained¹; yet to add these and the necessary vitamins to a multibottle system is time-consuming for the nurses and adds to the sepsis risk, even when the electrolyte solution is used for a vehicle as is generally recommended.

The benefits of this premix system are: (1) sepsis is less likely to develop with a simple one-bottle and one-giving-set regimen; (2) electrolyte concentrations can be adjusted from day to day and spread over the whole day, which is most important for potassium; (3) as many additives as necessary can be included without extra risk of infection—if more than two additions are to be made to any intravenous solution this should be done in a pharmacy²; (4) nurses are saved the daunting task of regulating multiple drips in parallel; and (5) an infusion pump set can be used to ensure a constant infusion rate and therefore better regulation of blood glucose.

The cost of preparing the single-bottle solution in our pharmacy (over the first 85 patient days of total parenteral nutrition) has been tabulated at £8.60 per patient per day if the solutions are prepared three times a week. The cost of each working session is broken down as follows:

For two days' supply	£
Labour	11.00
Sterile containers	2.80
Disposable needles, etc ..	1.00
Millipore filters	1.50
Running expenses	0.90
Total	17.20

This cost would be correspondingly less if more patients were treated each day and might be reduced by some refinements of technique with increasing experience.

In conclusion, we feel this added cost to the pharmacy is clearly justified by the reduced hazard of sepsis, by improved parenteral solutions for the patients, by decreasing the nursing load, and by giving more flexibility to the clinician. We feel that provision should be made for the introduction of this service to all major hospitals in the UK.

ROSS SMITH
M J TARR
R TREDREE

University Department of Surgery and
Regional Sterile Products Unit,
University Hospital of Wales,
Cardiff

¹ Rudman, D, *et al*, *Journal of Clinical Investigation*, 1975, **55**, 94.

² Department of Health and Social Security, *Addition of Drugs to Intravenous Fluids*, Health Circular HC(76)9. London, DHSS, 1976.

Noxythiolin-resistant organisms

SIR,—Further to my study on noxythiolin-resistant organisms (29 October, p 1121) I have observed a peculiar phenomenon. After prolonged storage on nutrient agar slope some of the original noxythiolin-resistant strains have now reverted and are sensitive to this antiseptic. But they have maintained their resistance on repeated subcultures in nutrient broth or, better still, with freeze drying. The same phenomenon has also happened with gentamicin-resistant *Pseudomonas aeruginosa*.¹ However, there has not been any change in the antibiogram with multiresistant *Staphylococcus aureus*² after prolonged storage for more than a year under similar conditions.

It is rather interesting to note that this spontaneous loss of resistance occurs only on preservation on solid medium in the absence of re-exposure. During my initial investigation the *Escherichia coli* (NCTC 10418) which was used as a control was being used in the laboratory for more than two years and was sensitive to noxythiolin. Now we have obtained a fresh culture from the NCTC, which,

although sensitive to all the commonly used antibiotics against Gram-negative rods, is nevertheless, to my surprise, resistant to noxythiolin. We have therefore inoculated this newly acquired strain on a nutrient agar slope so that the sensitivity can be checked from time to time to see whether the same phenomenon is repeated.

B CHATTOPADHYAY

Public Health Laboratory and
Hospital Microbiology Department,
Whipps Cross Hospital,
London E11

¹ Chattopadhyay, B, *Lancet*, 1975, **2**, 934.

² Chattopadhyay, B, *Journal of Antimicrobial Chemotherapy*, 1977, **3**, 371.

Psychological evaluation in cases of self-poisoning

SIR,—I would like to comment on the above article by Dr R Gardner and his colleagues (17 December, p 1567). I find its conclusions difficult to evaluate and I think this may be because of some lack of clarity in presentation of the methodology and data.

I am prepared to accept the finding that a group of physicians who are sufficiently interested in the topic of parasuicide to enter a study of it will organise follow-up disposals for their patients very similar to those arranged by a group of psychiatrists, especially since "preregistration house physicians and medical registrars were instructed in the principles of a psychiatric assessment" by the principal author. If all doctors were as interested and as well instructed there would indeed be less need for mandatory psychiatric intervention in the assessment of parasuicidal cases, as the authors conclude, and disposals on discharge would be rationally determined whether the psychiatrist was involved or not.

If the article stopped at this one conclusion one might agree that Addenbrooke's was fortunate in its physicians and simply comment that parasuicidal patients in other parts of the country should make for there rather than for their local hospitals, where attitudes more like these described by Patel¹ are liable to be encountered. The fact is that in many psychiatrists' opinions parasuicidal patients are given very short shrift by doctors and nurses when they arrive in casualty departments and medical wards and it will take a long time to change this adverse attitude. Till then I think it would be safer to call in the psychiatrist routinely to make an assessment of each patient's needs. However, one point is hinted at in this article: physicians often complain that psychiatrists are unduly slow in responding to requests to see the patients and one notes that (possibly for entirely different reasons) more patients in the psychiatric group discharged themselves before they could be seen than was the case in the medical group. Psychiatrists must be prepared to view parasuicide as an emergency and make arrangements to see cases with no delay.

Much of the rest of the article is taken up with the demonstration that the outcome for patients over a 12-month period was much the same whether they were assessed by physicians or by psychiatrists. Since the proportions of patients within the two groups routed to different forms of treatment or supervision was similar this is scarcely surprising. It merely highlights the point that a good physician, with enough interest and with some knowledge of modern psychiatry, should be