	Neonatal Death Rate per 1,000 live births	Total Deliveries 1970	Birth Weight under 2·5 kg	Respiratory Disease
1st Quarter ..	14·0 (5·6)*	904	73 (8)‡	19 (6)†
2nd Quarter ..	15·8 (14·6)*	927	81 (6)‡	26 (4)†
3rd Quarter ..	10·6 (12·5)*	1003	79 (7)‡	19 (4)†
4th Quarter ..	14·2 (13·5)*	958	66 (10)‡	36 (7)†
Totals ..	13·6 (11·6)*	3792	299 (31)‡	100 (21)†

*1969.
†Neonatal deaths in this group.
‡Neonatal deaths in this group.

virus infection, which was not reported at antenatal clinic, might have on the infant a more detailed study has been made of the neonatal deaths at St. Thomas's. The highest neonatal death rate occurred in the second quarter of 1970, but there was also a rise in neonatal mortality rates in the first and fourth quarters of the year.

The neonatal mortality rate for England and Wales is usually highest in the last quarter of the year. The rise in neonatal mortality in the second quarter of the year in 1970 was exceptional. A similar rise in the second quarter of the year occurred in 1951 and in both these years an influenza epidemic had occurred in the preceding winter.

The Office of Population Censuses and Surveys has shown that the increase in neonatal deaths in the second quarter of 1970 was due to an increase in the number of deaths of infants with respiratory disease (Adelstein, personal communication). There is no evidence that low birth weight or respiratory disorders contributed to the increased death rate at St. Thomas's (Table).

An influenza epidemic might be associated with increased neonatal mortality either by giving rise to premature labour or by causing congenital malformation. In these conditions the rise in the death rate would be expected at the same time as the epidemic or be delayed by six months respectively, and not three to five months after the outbreak, which is the case in question. In addition, there is no evidence of an increased number of premature births in the first quarter at St. Thomas's, and the incidence of congenital malformations was spread evenly throughout the year.

We have examined our data in an effort to help analyse the national neonatal death rate. All the mothers delivered in the St. Thomas's group who reported influenza during their pregnancy had healthy babies. There was a small increase in low weight infants and infants with respiratory disease in the second quarter of the year. Although these changes are not statistically significant they suggest a trend which could be significant if it was supported throughout England. Nevertheless, any relationship that might exist between maternal influenza in pregnancy and neonatal mortality is small.—I am, etc.,

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1 Department of Health and Social Security. *On the State of the Public Health.* Annual Report of the Chief Medical Officer, 1970. London, H.M.S.O., 1971.
2 South, J., and Rhodes, P., *British Medical Journal*, 1971, **4**, 32.

Hospital Staffing

SIR,—The manpower problems involved in maintaining a 24-hour emergency service referred to by Mr. J. J. Shipman and his colleagues (29 April, p. 297) demand the most careful study and realistic action. It is not appreciated as widely as it should be that to keep one position filled for 24 hours a day, seven days a week, requires a minimum of 4½ people on the establishment if the demands for a 40-hour week are to be met. Maintenance of maternity services have depended for too long on excessive demands on those prepared to accept them.—I am, etc.,

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When is Dementia Presenile?

SIR,—Drs. C. D. Marsden and M. J. G. Harrison (29 April, p. 249) usefully emphasize that a proportion of demented patients have a potentially treatable cause for their dementia. It should be noted, however, that the 15% they refer to come from a highly selected group—but I agree that it could be useful to practitioners and relatives to know what success the National Hospital has, at present, in identifying remediable aetiologies.

The authors imply that patients admitted to the National Hospital with a presumptive diagnosis of dementia are all under the age of 65; perhaps this was not intended. But this raises the important question of how far one should investigate the elderly dement. Most of the tests mentioned by Drs. Marsden and Harrison have no morbidity and can be done as in outpatients; their only significant disadvantage is the expense of the tests. Air encephalography is the test having the highest chance of revealing a treatable condition (for example, space-occupying lesion or a suggestion of normal pressure hydrocephalus), but also it has a significant morbidity, which is likely to be greater in older patients and also in those with a treatable condition. I would suggest that unless there are reasonable grounds for suspecting an irreversible aetiology, and unless there are definite contraindications, an air encephalogram should be performed in all recently demented patients; the sooner the better.

There are good reasons, also for treating all demented patients, with antidepressants for a period. Firstly, because 25% of patients with dementia are depressed; and secondly, to discover those patients whose depression simulates dementia so well that they are admitted to hospital (and it could be a long-term mental hospital) with the latter diagnosis.—I am, etc.,

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SIR,—My congratulations to Drs. C. D. Marsden and M. J. G. Harrison who have managed to present an engaging study concerned with dementia (29 April, p. 249) without actually revealing the ages of patients included. Presumably "presenile" in the title is a clue, but the concept of presenile dementia is controversial.

Subsequent information is confusing. "This paper describes the results of investigating 106 patients with presenile dementia who were referred to a neurological hospital" is immediately followed by "Altogether 106 patients were admitted to the National Hospital, Queen Square, between January 1968 and December 1969 with a presumptive diagnosis of dementia." Was any age criterion applied in selection? The age is given only of a man of 60 years, who was seen before the period of the study anyway. Is he to be regarded as senile, presenile, geriatric, or just getting on a bit? Regardless of any upper age limit for the patients included, the incidence of the onset of dementia due to, for example, arteriosclerosis and Huntington's chorea, will have an important relationship to the age range of the patient sample, and therefore the absence of the ages of the patients limits the value of the paper considerably.—I am, etc.,

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Research in Psychiatry

SIR,—Your leading article "Research in Psychiatry" (8 April, p. 61) suggests further questions which need to be asked in order to explain why psychiatrists have contributed little to research. If it is accepted that a positive attitude to, and a readiness to engage in, research is most easily acquired early in a doctor's professional career, then it is important to know how many trainees in psychiatry are engaged in some form of research, and to try to ascertain what factors either facilitate or hinder them.

In the course of a survey of postgraduate education and training in psychiatry conducted in three regional board areas, done under the aegis of the Royal Medico-Psychological Association, I personally interviewed over 150 trainees—something over 95% working in the regions—and asked them whether they were interested in research, whether they were actively engaged in it either on their own or in collaboration, and whether they were receiving help and encouragement in this field from their consultants, local universities, and regional hospital boards. I also asked senior registrars whether they had sufficient time off for study and research.

Two fifths of all trainees and just over half of the senior registrars felt that they had a particular bent towards research. In practice, however, of the 133 S.H.O.s and registrars only 20 were engaged in research or clinical investigation either on their own