This experience is likely to fall, and falls more heavily, on the psychiatric patient, who is precisely the person in most need of protection.—I am, etc.,

GERALD M. GOULD.

London E.18.

Burden of Cerebrovascular Disease

SIR,—Originally Professor A. L. Cochrane was courteous enough to communicate his criticisms of our paper "The Burden of Cerebrovascular Disease in the Oxford Area" (13 June, p. 621) to us privately. It was only when we persuaded him that we believed the issues merited public discussion that he wrote to you (18 July, p. 165).

We believe that the basis of Professor Cochrane's concern is summarized at the end of his letter as follows: "[When] record linkage . . . covers general practice as well as hospitals it will be possible to use it for community epidemiology." In our opinion the truth of this statement depends upon both the natural history of the disease under consideration and the organization of, and attitude towards, medical services in the community concerned. Clearly one could learn nothing of the burden of osteoarthritis on the general population from the Oxford data as they presently stand because the majority of patients will neither be admitted to hospital for its treatment nor will it appear on their death certificates. In contrast, there are diseases from which the vast majority of cases will either die within a month, or spend at least one night in hospital, or both. Many cancers, and, we believe in the Oxford area at any rate, cerebrovascular disease of sufficient severity to give rise to symptoms lasting two days or more (Eisenberg's¹ criterion) come into this category. If we are correct, then the proportion of such stroke cases treated at home is so small that it can be safely ignored. Table I compares our estimates of

tive group of cases has been identified. The actual one-year survival rates of the 391 persons who were admitted to hospital in 1963 was 49%.

TABLE II.—Observed Age-Specific Incidence Rates in Two American Communities and Estimated Rates for Oxford Area (All Cerebrovascular Disease, Sexes Combined)

Age (yrs.)	Oxford Area (estimated)	Middlesex, Connecticut ¹	Rochester, Minnesota ⁴
34	0.04	0.02	0.02
35–	0.2	0.1	0.3
45–	0.9	1.1	1.6
55–	3.3	4.0	3.7
65–	7.0	9.4	10.8
75	22.2	21.9	22.3
85 over	85	50.7	37.6
Total cases	630	191	194

Nevertheless, some incidence data are shown in Table II because we are able to include data kindly provided by Dr. J. Whisnant^{2,3} since the publication of our paper. It is relevant that all three sets of data appear to show *higher* incidence rates than those presented by Dr. John Fry⁴ in his book on disease in general practice.

We have two comments to make about Professor Cochrane's finding that 60% of clinical strokes in South Wales never go to hospital. In 1961 in a survey of child health services⁵ one of us found 33% of mothers in the Rhondda Fach compared with 22% in rural Buckinghamshire (a similar culture to that of Oxfordshire) to express the opinion that the general practitioner should provide preventive medical care for preschool children. Imposed upon this apparent tendency to prefer management by the general practitioner has been Professor Cochrane's own campaign in South Wales for the home care of coronary heart disease, and this surely must have affected the disposition of cases of cerebrovascular disease as well. In other words, we question the validity of a comparison between medical practice there today with Oxfordshire in 1963.

community in the Oxford area.—We are, etc.,

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REFERENCES

- 1 Eisenberg, H., Morrison, J. T., Sullivan, P., and Foote, F. M., *Journal of the American Medical Association*, 1964, 189, 883.
- 2 Whisnant, J. P., Fitzgibbons, J., Kurland, L. T., and Sayre, G. P., Paper presented before American Heart Association, March 1970.
- 3 Whisnant, J. P., personal communication.
- 4 Fry, J., *Profiles of Disease*, Edinburgh, Livingstone, 1966, p. 153.
- 5 Acheson, R. M., *British Medical Journal*, 1962, 2, 1355.

Susceptibility to Aspirin Bleeding

SIR,—I write with reference to your leading article (23 May, p. 436) and the subsequent correspondence (27 June, p. 793) about bleeding after aspirin ingestion. In 1968 the United States of America made 30.45 million pounds of aspirin. Thus yearly about 46 thousand million aspirin tablets are swallowed into American stomachs, presumably with some benefit and without an undue number of misadventures. In Portsmouth, England, a small survey showed that 2.2% of all the men and 8.9% of all the women questioned ate aspirin every day of their lives.¹ I end this brief prevalence survey on a personal note. Both my hairdresser and his wife have for years taken three aspirins every night during the winter, but not during the summer—to prevent colds.

The great majority of people with intestinal bleeding and those with chronic iron deficiency are not regular aspirin eaters, and most aspirin eaters are not anaemic. Evidently by coincidence, bleeding and aspirin eating will often be found to co-exist.

All this does not alter the fact that aspirin almost certainly can cause appreciable intestinal bleeding, but only in an infinitesimal proportion of aspirin eaters. Presumably bleeding is then due to personal idiosyncrasy or to overt or as yet undiagnosed minor haemorrhagic diatheses, and these are the problems requiring further investigation as was properly emphasized in your leading article. Nevertheless, considering the gargantuan scale on which this drug is eaten, it must surely be by far and away the safest drug that has a beneficial pharmacological action.—I am, etc.,

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REFERENCE

- 1 O'Brien, J. R., *Lancet*, 1970, 1, 1055.

The Specialty of Haematology

SIR,—Unlike Dr. Mary D. Smith (18 July, p. 161) I found no evidence of muddled thinking in your leading article on clinical haematology (27 June, p. 743). Indeed, I considered it the most coherent

TABLE I.—Actual Survival in Middlesex, Connecticut, and Estimated Survival in Oxford of all Persons Suffering Cerebrovascular Disease

Months Survived	All Cases		Males		Females	
	Middlesex	Oxford (estimated)	Middlesex	Oxford (estimated)	Middlesex	Oxford (estimated)
1	43	43	40	47	47	41
6	33	35	33	37	33	32
12	28	30	29	33	28	28
No. of persons	191	630	91	260	100	370
Mean age (yrs.)	72.9	72.2	71.0	71.0	74.6	73.1

survival for all cerebrovascular disease, calculated on this assumption, with those in Middlesex, Connecticut.¹ Professor Cochrane argues that the similarities in incidence between these two studies shown "must be coincidental." Estimates of survival take into account another dimension—namely, the natural history of the disease. Thus, Table I may either be interpreted as illustrating a double coincidence or of indicating that our methods are not too erroneous. We believe the latter to be true because survival is a much more critical comparison than that of incidence, for while there is no a priori reason why incidence in the two areas should be identical there is every reason why the natural history of the disease should be similar, provided a representa-

In conclusion, the "usual methods", the community survey, which Professor Cochrane has developed to a high degree of perfection, will obviously give the most accurate picture of the burden of any common disease in a community. This is, however, an expensive and time-consuming approach, and few attempts have been made to apply it to the problem of cerebrovascular disease. So in the absence of other data, and in the belief that it is incumbent on us all to try something new, we felt it worth while to explore the potentialities of record linkage in this field. We do indeed believe that although, as we stated in our paper, our estimates are probably a little on the low side, they can be applied with some confidence to the total