incontinence, or behaviour disorder with restless wandering. The last factor is the most common reason for the services of a mental hospital rather than a geriatric unit or residential home. This last group may well require some special provision since the patients are often physically and socially preserved and do not really require full hospital services, apart from their tendency for "restless wandering."

Like Dr. Parnell, I see objections to the term dementia, both senile and arterio-pathic, if used for potentially reversible syndromes. Other popular terms—confusional states, symptomatic psychosis, and acute organic reaction—can also be used in an imprecise way. Frequently further investigation, treatment, or time alone permit an exact diagnosis.

These potentially reversible syndromes in which both physical and psychiatric factors are relevant should ideally be admitted to a joint assessment unit (under the combined supervision of geriatrician and psychiatrist) situated in the general hospital with full diagnostic facilities. Maximum improvement can then be obtained before deciding if the patient needs long-term care, and what type of hospital or hostel is required, thus avoiding multiple transfers of one patient. In the Reading area this ideal has not been reached, but Dr. Vine, the consultant geriatrician to the Reading Group of Hospitals, and I make regular visits to each other's units and consult together each week. We have easy access to each other's beds for cases seen at home and for transfers between geriatric unit and mental hospital, so that with present facilities "the right patient gets the right bed."

Discussions between the medical officers of health, geriatrician, and psychiatrists take place at several committees and all are members of the medical advisory sub-committee of this hospital.—I am, etc.,

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Malaria Strains Resistant to 4-Amino-quinoline Drugs

SIR,—I welcome Professor G. Macdonald's letter (24 July, p. 229), with its warning against the use of the 4-amino-quinolines as a malaria prophylactic. Many of us who work in East Africa have been issuing this warning for many years now.

In these present times, when droves of volunteer helpers are being sent out to aid the underdeveloped countries, we find that not only are they consistently recommended to use the 4-amino-quinolines as a prophylactic but are advised inadequate dosage anyway. Dr. Macdonald's last paragraph implies sharp local variations in effectiveness of prophylactics, and we who are working in the field will certainly confirm this. For some years a particular prophylactic found to be almost ineffective in Tanzania at the same time was the most efficient used in Uganda.

In addition to the localities where the 4-amino-quinolines are the only effective prophylactic I would suggest a further indication for their continued use would be in the areas where endemic amoebiasis is concurrently of high incidence, and the prophylactic

would therefore have a useful double function.

I would like to make this letter a plea to the appropriate departments both in the United Kingdom and the United States of America who are responsible for the medical care of volunteer workers overseas to make a periodical survey of such reception areas and contact local practitioners in these areas for up-to-the-minute local opinion.—I am, etc.,

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Diagnosis of "Hysteria"

SIR,—The confusion generated in the minds of the non-psychiatric reader by Dr. Eliot Slater's paper (29 May, p. 1395) may be guessed at by the subsequent correspondence. Various readers have found in it confirmation for the hypothesis that "hysteria is not due to emotional conflict," and that it is "wise to regard all hysteria as probably organically determined," and for the diametrically opposed hypothesis that it is a form of adaptation in which there is an assumption of the role of a sick person as a means of manipulating others.

Far from it proving Dr. Slater's own hypothesis that hysteria as a meaningful syndrome does not exist, it is difficult to know what his paper does prove:

(1) The selection of patients in the sample is heavily biased in an organic direction by at least two preliminary screenings. The general practitioners initially would have

tended to exclude the obviously functional cases and referred to the National Hospital those cases where they suspected the possibility of a neurological lesion. Secondly, the physicians in the out-patient diagnostic clinics, by virtue of their greater experience, would have excluded a further functional group and only admitted for investigation those patients where there was a considerable element of doubt about the diagnosis. Given this doubly sifted sample, it is perhaps surprising that 7 to 11 years later, in as many as 40% of the group, "no evidence for organic disease has yet been found," and that 25% to 27% (two patients in this section of the paper were not accounted for) of the group fall into the category of hysteria as defined by two authors who are quoted.

(2) Another possible source of error arises from the fact that the diagnosis of hysteria was made by a psychiatrist in only 31% of the cases. Is Dr. Slater implying that the psychiatrist's criteria for diagnosis would be identical with the neurologist's criteria? It would have been of considerable interest had he informed us of the comparative accuracy in diagnosis at follow-up of these two groups.

(3) Dr. Slater dismisses the stated fact that "some evidence of psychogenesis . . . was found about twice as commonly in the non-organic patients as in the organic ones"; by saying, in effect, "we all have troubles," he hardly accounts for the difference found between the two groups.—I am, etc.,

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Whooping-cough

SIR,—Dr. Allen T. Wilson and his colleagues have given an excellent account of an outbreak of whooping-cough in their practice (11 September, p. 623). It has been suggested in later correspondence "that a report of work conducted in a single locality shall not be allowed to damage the prestige of an immunological procedure of which many experienced workers have proved the overall value . . ." (Dr. Guy Bousfield, 25 September, p. 757) "but that if a variant should become prevalent, we must think again."

I should like to report an outbreak of whooping-cough which occurred in this area between September 1963 and March 1964. During this period 180 cases of whooping-

cough were diagnosed on clinical grounds. This affected 149 out of 779 children in this practice aged 0-12 years.

The gross figures for all children under 12 were that 105 out of 511 (20%) of the immunized children and 44 out of 268 (16.6%) of the non-immunized contracted the disease. The incidence by age groups is shown in the Figure. These figures suggest that the epidemic was not caused by the usual strain of organism against which the vaccine was prepared.

Neither the duration nor the severity of the disease was affected in any way by inoculation. Like Drs. Bethune and Marshall (25 September, p. 757) I found this was not a mild epidemic. Thirty-seven children

EFFECT OF IMMUNISATION IN EACH AGE GROUP