from usual functions rather than long-standing traits. In Dr Foulds' terms, true positives with the GHQ are 'personally ill'. In my terms, they typically have mixed affective disorders, often with somatic symptoms, when seen in a primary care setting. Acute psychotic patients almost invariably have high scores, but some chronic psychotic states and manic patients may be missed.

Finally, in their original paper (p. 175) the authors wish to refute the suggestion that a psychiatric illness is an illness that should be referred to a psychiatrist. No psychiatrist would make such a suggestion. We could no more cope with all the psychiatric illnesses than dermatologists could cope with all the rashes, or paediatricians with all the sick children, in the community. The adjective 'psychiatric' connotes the area in which a patient experiences his symptoms, not the nature of the specialist to whom he should be referred.

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ANDROGENS IN SEXUAL DYSFUNCTIONS: A PLEA FOR CAUTION

DEAR SIR,

We consider that a strong caution should be issued against the possible temptations of widespread and perhaps indiscriminate use of androgens in sexual dysfunction clinics which may follow upon the publication by Carney *et al* (*Journal*, October 1978, **133**, 339–46). They state that no virilizing side effects were observed nor reported from their treatment with testosterone, but we consider there is insufficient information about the effect of repeated or prolonged courses of androgens upon women.

A further important issue is the possible effect of androgens upon the foetus. We note that the authors requested that adequate contraceptive measures should continue throughout the trial but gave no reasons for this request. We therefore assume that they did not discuss with the couples the possible effects of exogenous testosterone upon a foetus were the woman to become pregnant. The dosage of testosterone administered is unlikely to give rise to physical intersex states, but, in their review, Goy and Goldfoot (1976) do not rule out the possibility that the administration of androgens at certain critical periods of human intrauterine development may modify future sexual behaviour of the foetus.

Although we occasionally prescribe short courses of testosterone to women with persistently low sexual arousal, we (1) take great care to explain that the effect of androgens on the foetus is not yet established and (2) strongly advise effective contraception throughout the course. Were conception to occur during treatment we would consider recommending termination of pregnancy, although this situation has not yet arisen in our practice. Until more facts are available we hope other therapists will prescribe androgens to women of childbearing age with extreme caution.

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Reference

GOY, R. W. & GOLDFOOT, D. A. (1976) Neuroendocrinology. Animal models and problems of human sexuality. In *New Directions in Sex Research* (eds. E. A. Rubinstein and R. Green). New York: Plenum Publishing.

MALIGNANCIES IN SCHIZOPHRENIC PATIENTS

DEAR SIR,

The clinical observation on lung carcinoma in schizophrenia made by Dr David Rice (*Journal*, January 1979, **134**, 128) has prompted us to write about some of the relevant preliminary findings of a study on mortality in psychiatric patients which has just been concluded and is at present being analysed.

The data for the study were collected from the records of patients who died in Prestwich Hospital during the 30 year period 1947–76. All the relevant information was collected from the Death Register and the case notes at the hospital. The cause of death was ascertained and in the case of deaths due to neoplasms this was confirmed in most cases either on the operating table or after autopsy. There was thus little chance of misdiagnosis. The psychiatric diagnosis was made by assessing the symptomatology as recorded in the case notes. Since some cases of neoplasms were admitted because of symptoms resulting from cerebral secondaries, only those patients who had been in-patients for a duration greater than 12 months are included in this report.

The table following gives the incidence of various types of malignancies seen in schizophrenic patients. The preliminary results showed no significant difference in the overall incidence of neoplasms in schizophrenia. However, a detailed analysis suggested that there was a significant excess of all types of gastro-intestinal tract neoplasms and a much lower incidence of lung carcinoma in schizophrenics

compared to the general population in Salford (North West Regional Health Authority statistics). This difference appears to have persisted throughout the 30 year period of study.

The significance of these findings is at present obscure. In the case of lung carcinoma, the low incidence is unlikely to be related to less smoking, for, as Dr Rice points out, chronic patients probably smoke more; and is also unlikely to be related to lower environmental pollution, as Prestwich Hospital is situated only 4 miles from the centre of Manchester. The high incidence of gastro-intestinal tract carcinomas may be due to a number of causes:

(a) the diet of psychiatric patients may lack adequate fibre (unlikely, since analysis of diet sheets going back to 1959 shows no significant difference from the average diet of Mancunians).

(b) the schizophrenic patient may not eat adequately and no doubt constipation is a frequent problem in chronic wards of psychiatric hospitals (it would probably not explain the high incidence of oesophageal and gastric malignancies).

(c) the pollutant may be in the Prestwich Hospital area (unlikely because similar figures are found in the community patients and in two other psychiatric hospitals; findings to be published later).

There are two other explanations which need to be considered:

(i) that the drugs with which schizophrenics are treated may have a carcinogenic potential. This is not acceptable, since the incidence of malignancies was similar before the advent of these drugs for regular use in Prestwich Hospital in 1961.

(ii) that there is a constitutional factor in schizophrenics which offers protection against neoplasms of the lung but makes them more susceptible to gastro-intestinal tract malignancies. If the reciprocal relationship between lung and gastro-intestinal tract malignancies in schizophrenia is true, further studies are indicated to elucidate the mechanisms involved.

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TABLE

Deaths due to malignancies in schizophrenic patients

	Gastro-intestinal tract neoplasms						
	Oesophagus	Stomach	Colon/Rectum	Misc. (Liver/Pancreas S.I. etc.)	Total	Pulmonary neoplasms	All others
1947–51	6	8	11	6	31	4	8
1952–56	7	12	7	4	30	6	14
1957–61	2	7	7	2	18	6	19
1962–66	6	11	9	4	30	3	12
1967–71	3	7	7	2	15	4	14
1972–76	4	9	14	4	33	3	17
	27	54	55	22	151	26	84