long-stay hospitals (Jancar and Jancar, 1977) we found that only three patients (2 males and 1 female) had died from lung cancer out of a total of 81 cases of cancer deaths. All the patients had had, as a preventative measure against pulmonary tuberculosis, an annual medical examination and regular chest x-rays, and more recently, frequent mass radiography; therefore, very few pathological processes of the lungs would remain undetected. A number of our patients are smokers—some very heavy—smoking both manufactured and home made cigarettes.

The number of deaths from cancer of the gastrointestinal tract in our study was much higher (47 cases out of 81); above the incidence in the outside population; and increased from 1 per cent to 8 per cent over the past two decades. Increased longevity of the patients, due to antibiotics and to better care and treatment, is an obvious factor contributing to this increase in cancer mortality rate, but diet, drugs, genetics, biochemical and biophysical factors have to be taken into consideration when researching the causes of cancer.

In a consultative document by the Medical Research Council (M.R.C., 1977) 'Review of Gastric and Colo-rectal Cancers', it is suggested that in institutions such as mental hospitals, with long-stay patients and uniform well-documented diets, interesting studies could be carried out. It also comments on suggested correlations between gastro-intestinal cancer, smoking and peptic ulcer.

Giel and his co-workers studied mortality in the long-stay population of all Dutch mental hospitals, including those for the mentally retarded, 1,506 deaths reported over a period of 2 years (1970 and 1971). They grouped known causes of deaths and compared them with death rates in the general population. They stated that malignancies, except in females aged 40-64 years, appeared less common in long-stay patients. They recorded a total of 108 malignancies in their study (53 males and 55 females). The authors were surprised to find 15 cases of ileus amongst 36 people dying of a condition of the gastrointestinal system. Gastro-intestinal conditions were much more common in long-stay patients than would be expected. The same applied to hepatic diseases; there were 19 cases, of which four were of cirrhosis of the liver. After listing a number of contributing factors to the mortality of the patients they concluded the paper: 'It would be interesting to compare in-patient death rates from before, during and well after the introduction of phenothiazine derivatives. We feel that our findings warrant a screening of individual records to identify the various and collaborating factors'. (Giel et al, 1978).

Modrzewska and Böök (1979) reported a study of 'Schizophrenia and Malignant Neoplasms in a North Swedish population'. They found that during 1950–70 deaths in this population numbered 1,359, and 166 were caused by malignant neoplasms, corresponding to a ratio of 122 per 1000 deaths as compared with 163 per 1000 in the general swedish population. The types and sites of the malignant tumours were not significantly different in the two populations. However, because of the characteristics of the population, they conclude that 'a biochemical and genetic link between schizophrenia as well as certain carriers and reduced liability for the development of malignant neoplasms is an interesting possibility'.

Miller, in his James Ewing Lecture 'Psychophysiologic Aspects of Cancer' advocates that, in order to improve the prevention and treatment of cancer, much more knowledge must be acquired about the psychologic history and psychodynamics of the individual. (Miller, 1977).

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## A CONTRACT NEEDS A GOAL

DEAR SIR,

The article 'Written Treatment Contracts: Their Use in Planning Treatment Programmes for Inpatients' (Journal, November 1978, 133, 410-15), illustrates a clear discrepancy between the author's statement of intent and his actual practice. This discrepancy could have very serious negative consequences for the client and his or her relationship with the therapist. I say this because the author stipulates that in a written treatment contract the goals of treatment must be 'defined operationally'

(p. 410) and written down (protocol of contract p. 414). However, although in the illustrative cases the author meets some of his own criteria for written treatment contracts, in neither case are there clear statements of the goals of treatment. It is necessary that the proposer of a procedure should at least demonstrate that he himself has been able to follow all the steps in the procedure. For such illustrations the reader is referred to cases described in Schwartz and Goldiamond (1975).

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# BRAIN DAMAGE WITH LITHIUM/HALOPERIDOL

DEAR SIR,

The possibility of a combination of lithium and haloperidol causing brain damage was first suggested by Cohen and Cohen (1), who reported 4 patients with severe extrapyramidal signs and gross confusional states. A further 7 cases were reported by Loudon and Waring (2) with a similar syndrome. In all of these cases the organic syndrome occurred shortly after the combination of lithium and haloperidol was used for the first time.

I would like to report a further case of brain damage which differs in that the patient had experienced previous exposure to a lithium and haloperidol combination.

A 58-year-old woman with a ten year history of manic-depressive psychosis was started on prophylactic lithium seven years ago. This had always been maintained since that time within the normal therapeutic range. Three years ago, during a manic episode, she was treated with haloperidol 5 mgms q.d.s. for three weeks whilst still receiving lithium, and suffered no adverse effects. In July of last year she was again treated with haloperidol 1.5 mgms t.d.s. for a hypomanic swing. Within two days of starting

the combination she developed gross extrapyramidal symptoms with marked rigidity, which made walking unaided impossible, and continual oro-facial dyskinesia. Associated with this was a severe confusional state with total disorientation. During this period all laboratory investigations, including lumbar puncture, gave normal results. An EEG during the episode revealed diffuse slow waves. Both drugs were stopped when the symptoms occurred, and over the following three months the patient has gradually lost all the severe extrapyramidal signs. Unfortunately, however, there is still evidence of severe organic brain damage with considerable disorientation and impairment of memory.

I believe that the course of this patient's illness was due to the haloperidol-lithium combination, as it came on so rapidly after the drugs had been started and so closely resembled the previously reported cases. The only difference was that the patient reported here had experienced the combination previously without developing this syndrome. The possible adverse effect of long-term lithium on psychological memory testing, but without obvious clinical impairment, has been reported (Journal, 131, 453-7) and it is therefore possible that in some patients the addition of haloperidol may result in a subclinical organic impairment being made clinical.

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## CORRECTION

In the paper Vulnerability Factors and Depression in Women by Alec Roy (Journal, 133, 106-10) page 108, column 2, line 5 should read 46.4 per cent and not 41.7 per cent; page 109, column 2, line 22 should read 26.1 per cent and not 13 per cent, line 25 should read 11.9 per cent and not 5.9 per cent, and line 27 should read 39.2 per cent and not 29.7 per cent.