

The aim of this study is to examine factors which may influence the psychological reaction of patients on haemodialysis in Singapore and to determine the prevalence of psychiatric disorders in this group of patients.

MATERIALS AND METHOD

All patients on dialysis in the Singapore General Hospital were interviewed at the Renal Unit by a psychiatrist and a psychologist. A scale has been constructed to rate psychological reaction to illness and covers questions on Denial, Anger, Depression and Acceptance (DADA). Psychiatric symptoms were assessed using the Brief Psychiatric Rating Scale (BPRS) (4) and personality profile by the Eysenck Personality Questionnaires (EPQ) (5). There were 33 patients with 23 males and 10 females. Most of them (82%) were between 30 to 49 years and the mean age was 36.7 years. Marital status and racial distribution are shown in Table 1. The mean duration of illness was 5.1 years.

There was no significant relationship between BPRS scores and sex or duration of illness but younger patients (below 37 years) tended to have fewer symptoms. It was found that those with high scores on anxiety and depression also scored high on neuroticism scale of the EPQ — significant levels were 0.01 and 0.02 respectively (using Fisher's exact probability test). However BPRS scores was not related to extra-version-introversion or psychoticism axes of the EPQ.

DISCUSSION

A well rehabilitated patient accepts the full implication of the treatment regime and should ideally maintain sufficient independence to function well at home and work, within the limitation of his disability. Hagberg and Malmquist (6) have reported that good adjustment is related to family attitude but social isolation and poor interpersonal relationship are predictive of psychiatric problems.

In this study the sample was selected from a

Table 1
CHARACTERISTICS OF PATIENTS ON HAEMODIALYSIS

Characteristics	Male (N = 33)	Female (N = 10)	Total (N = 33)	Percentage
Age in years				
20 — 29	3	2	5	15.1
30 — 39	12	3	15	45.5
40 — 49	7	5	12	36.4
50 — 59	1	0	1	3.0
Marital status				
Single	3	2	5	15.1
Married	18	6	24	72.8
Widowed) Divorced)	2	2	4	12.1
Race				
Chinese	18	8	26	78.8
Malay	1	1	2	6.1
Indian	4	1	5	15.1

RESULTS

On the DADA scale (only 28 completed the questionnaires), 25 patients (89%) were found to be in the acceptance phase, 3 still expressed anger/depression and there was none in the denial stage. Statistical analysis (using chi-square) showed that the phase of psychological reaction was not related to sex, age or duration of illness. There was no relationship between the DADA scores and personality axes (neuroticism, extraversion-introversion, psychoticism) of the EPQ.

On psychiatric assessment 11 patients (33%) scored 22 or more points on the Brief Psychiatric Rating Scale (BPRS). All the abnormal scores were in the depression and anxiety subscales. There was no abnormal score in the psychotic subscales. Eight patients had mild anxiety-depression, 2 with moderate depression and only one was severely depressed.

population of patients with chronic renal failure. The nephrologists would have excluded those with other contraindications like cancer or severe mental subnormality and hence patients selected were deemed to be 'reasonably' good candidates for dialysis. One would therefore expect the majority of patients in the acceptance phase of the DADA scale. But contrary to expected results, the length of illness was not significantly related to psychological reaction.

The frequency of psychiatric symptoms was 35% and of the 11 patients, 8 had only mild symptoms which did not require treatment. The other 3 patients were referred to the psychiatrists for treatment of depression. Due to the poor state of their renal function, antidepressant could be hazardous and psychiatric intervention was mainly psychotherapy. The patients were allowed to ventilate pent-up feelings of anger, frustration, fear and sadness. They needed

reassurance, encouragement and explanation of somatic symptoms. During the psychotherapeutic sessions all had expressed resentment of their dependency on the machine, nursing staff and family members. Two patients improved considerably after 6 months but the third has still intermittent bouts of depression.

The 'N' scale of EPQ measures neuroticism which include personality traits like nervousness, excitability and emotional instability. The result indicated that patients with these characteristics were more likely to develop anxiety and depression.

In Kaplan's study, (7) there is a high incidence of moderate and severe depression (53%) amongst patients on dialysis. Depression is the concomitant of loss and patients suffer enormous loss — physical function, employment, finance and not uncommonly family stability. Suicide rate is generally low (0.7% in Abram's series) (8) and suicidal tendency may be expressed as refusal to cooperate in dialysis or dietary indiscretion. Psychosis is rare (9) during dialysis and may be due to both organic and functional factors. Alfrey (10) has described a progressive dementia in patients on dialysis with early clinical sign of speech disturbance like dysarthria and dysphasia.

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