c foot care is a particular problem
d most deaths are related to violence or suicide
e presentation of symptoms and management of physical illness may be difficult because of their mental disorder.

4 Outcomes of discharge from hospital:
a discharged patients can name more friends and social contacts than similar patients who remain in hospital
b 40% of graduates become homeless after discharge
c discharged patients have a higher death rate than similar people remaining in hospital
d the TAPS project found that 50% returned to hospital within 3 years
e the most likely placement is within a private dwelling.

5 Guidance:
a the needs of elderly graduates have been addressed consistently by guidance papers issued along with the closure programme for mental hospitals
b elderly graduates are specifically excluded from consideration by the NSF for Mental Health
c elderly graduates are specifically excluded from consideration within the NSF for Older People
d the Royal College of Psychiatrists advises that all health and social care communities undertake a systematic review of numbers and needs of elderly graduates
e the College advises that all elderly graduates should become the responsibility of old age services.

MCQ answers

1	2	3	4	5
a F	a F	a F	a T	a F
b T	b F	b T	b F	b F
c F	c T	c T	c F	c F
d T	d T	d F	d T	d T
e F	e F	e T	e F	e F

INVITED COMMENTARY ON
Older people with long-standing mental illness: the graduates

The article by David Jolley and his colleagues (Jolley *et al*, 2004, this issue) raises a number of issues about older people who have enduring mental illnesses. The following contribution aspires to be a complementary article and attempts to expand on some areas that may be of relevance. These concern the disabilities that 'graduates' have (including cognitive deficits), comorbidity, prognosis and management, ending with a note on future research directions.

Social disabilities

Elderly patients with schizophrenia in long-term institutional care are known to suffer from a number of social disabilities. Wing & Furlong (1986) identified five factors that contributed to these disabilities:

- risk of harm to self and others
- unpredictability of behaviour and liability to relapse
- poor motivation and reduced capacity for self-management or performance of social roles
- lack of insight
- low public acceptability.

Different studies have shown social functioning in schizophrenia to both improve and deteriorate over time (Ciompi, 1980; Huber *et al*, 1980; Harding *et al*, 1987). Some aspects of daily living such as coping skills and socialisation with family members tend to improve with age (Cohen, 1993; Cook *et al*, 1994), but most elderly patients with schizophrenia continue to have disabilities in the higher domains of functioning such as finance, transportation, shopping and grooming (Klaplow *et al*, 1997). These all make community rehabilitation a challenge.

Cognitive impairment

Cognitive deficits are well known to be associated with schizophrenia (Cassens *et al*, 1990; Goldberg

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et al, 1993). Specific deficits in the areas of executive function (Shallice *et al*, 1991), use of language (Faber *et al*, 1983), memory function (Saykin *et al*, 1994) and visuospatial tasks (Gabrovska-Johnson *et al*, 2003) have been reported. Cognitive deficits, more than positive symptoms, have been shown to affect the adaptive abilities required for community living (Green, 1996; Harvey *et al*, 1999) and to be responsible for the failure of rehabilitation even in times of remission of illness (Goldberg *et al*, 1993).

Several histological studies have reported a lack of Alzheimer-type pathological changes in schizophrenia (Pantelis *et al*, 1992; Casanova *et al*, 1993), whereas others have shown a higher prevalence than in the general population (Soustec, 1989; Prohovnik *et al*, 1993). These findings suggest that currently available anti-dementia drugs might be of value in older people with schizophrenia.

Physical illness

Some physical illnesses have higher rates in people with schizophrenia than in the 'normal' population (for example, cardiovascular disorders, including coronary artery disease, and diabetes mellitus) (Baldwin, 1979; Tsuang *et al*, 1983; Harris, 1988). A number of other physical disorders such as peptic ulcers, epilepsy, asthma and cancer have also been associated with schizophrenia, but the consequences of these conditions remain generally unappreciated (Jeste *et al*, 1996). Recognition of concomitant physical illness in elderly patients with schizophrenia is particularly important, as there is an increased risk of deterioration owing to lack of insight and the chances of non-compliance with treatment are high (Cohen *et al*, 2000).

Outcome

Kraepelin (1913) gave a bleak prognosis for schizophrenia, but a more heterogeneous outcome has since been described (Bleuler, 1974; Carpenter & Kirkpatrick, 1989). Abrahamson *et al* (1989) found that 25% of patients improved and 10% deteriorated. Cutting (1986) reviewed ten outcome studies and concluded that many patients with chronic schizophrenia continued to have a bad outcome. The five most powerful predictors of poor outcome were:

- social isolation
- having episodes of long duration
- a past history of psychiatric treatment
- being unmarried
- a history of behavioural disturbance in childhood.

Management

There are few studies on the use of neuroleptics in elderly patients with schizophrenia, but older people are known to be at greater risk of developing extrapyramidal symptoms and tardive dyskinesia (Jeste *et al*, 1995). Extrapyramidal symptoms can cause functional disabilities greater than those caused by the disease itself (Jeste *et al*, 1998), and this usually results in the use of smaller doses of antipsychotics for older patients (Jeste *et al*, 1995). It also highlights the importance of combining pharmacological treatments with psychosocial approaches such as group activities (Harding *et al*, 1992). The newer atypical antipsychotics seem to have a reduced tendency to cause extrapyramidal side-effects and to have better effects on negative symptoms (Kumar, 1997).

Conclusions

The literature on older people with schizophrenia is sparse and much remains to be studied. Areas for future research highlighted by Cohen *et al* (2000) include the following:

1 identification of the factors that determine the subjective and objective mental, physical and social well-being of older people who have schizophrenia, with the aim of enabling their optimal functioning in the community;
2 clarification of the factors that predict their levels of positive and negative symptoms, depression and neuropsychological deficits, so that the most effective long-term treatment of these symptoms can be established;
3 identification of the factors that contribute to the burden on the carers of this population and, through comparison with the burden on carers of people with other disorders, the development of models to enhance support systems for older people with schizophrenia;
4 determination of the optimal service mix for older people with comorbid physical and chronic mental illness and development of models of funding their care.

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