

Recruitment into psychiatry[†]

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Background Despite improvements in psychiatric teaching, British medical schools have never produced enough graduands aiming for psychiatry.

Aims To inform the strategy for improving recruitment.

Method A literature review.

Results The number of psychiatrists required depends on the role of psychiatry, which is constantly changing. The present requirement is about 250–300 per year, including replacements and new posts. The number of psychiatric trainees has always been higher than expected from the career plans of newly qualified doctors, but the number of British graduates passing the Royal College of Psychiatrists' Membership examination has still fallen short, requiring a supplement of foreign medical graduates. The recent 50% expansion in medical students may make this country self-sufficient.

Conclusions To improve recruitment, the College should focus on influences before and after undergraduate training – the kind of student entering medical school and the factors favouring sustained psychiatric practice after graduation.

Declaration of interest None.

Concern about poor recruitment into psychiatry started in the 1970s and has followed different but parallel paths in the USA and Britain. The American position has been reviewed by Sierles & Taylor (1995) and Weissman (1996). The number of psychiatrists rose from 3000 (23 per million population) in 1949 to 37 000 (142 per million population) in 1992. Before the Second World War the proportion of doctors entering psychiatry was already increasing – from 2.7% in 1925–1929 to 4.7% in 1935–1939 (mean annual percentages). During the war it reached 5.1%. From 1945 to 1969 it averaged 6.9%. In 1970–1976 it fell to 5.2% and in 1977–1979 it fell to 4.1%. Since then it has varied between 3.1% (1979–1985) and 4.3% (1986–1990). Only 507 new residents were appointed in 1994. In Britain, the number of psychiatrists reached 1475 consultants in 1980 plus 2446 non-consultant staff (Walton, 1986). This is 26 per million – the pre-war American figure. Concern about recruitment came to a head in the 1970s, related to the rapid expansion in consultant posts. Editorials had titles like 'Not so popular psychiatry' (*BMJ*, 1973) and 'Who puts students off psychiatry?' (*Lancet*, 1979). A national conference reviewed 'Education and Training in Psychiatry', including recruitment (Walton, 1986). Recently, Jenkins & Scott (1998) reported a conference of the National Health Service (NHS) Executive, the Royal College of Psychiatrists, the National Association of Health Authorities and Trusts and the Trust Federation Working Group on medical staffing in mental health. The present review covers 244 references, almost all from Britain or America (full reference list is available from the authors upon request). There are a few Canadian articles, and, since 1985, a sprinkling of studies from other countries – Chile, France, Hong Kong, Malaysia, Norway, Nicaragua, Saudi

Arabia, Sri Lanka, Sweden and Venezuela. It will deal with:

- The number of psychiatrists required at present.
- The supply of psychiatrists at the training stage.
- Future requirements.
- Factors affecting recruitment.
- Possible remedies.

PRESENT REQUIREMENT FOR CONSULTANT PSYCHIATRISTS

There are at present about 3000 consultant psychiatrists from all specialities. This figure is based on 2655 psychiatrists in England and Wales recently contacted by the Royal College of Psychiatrists about proposed reforms in the Mental Health Act (Hansard, written replies to questions, 4 July 2001). We have added rather more than 10% for Scotland and Northern Ireland.

The need is to replace those ceasing to practise and fill new posts. If 'mental health officers' were appointed at age 33 years and retired at 59 years we would need 115 new consultants each year. If the consultant body expanded by 5% per annum, then an additional 150 posts per year would be needed. The total requirement, therefore, lies between 250 and 300 new consultants per year, to which replacements and new posts make an approximately equal contribution.

SUPPLY OF CONSULTANT PSYCHIATRISTS PRACTISING IN BRITAIN

The number of British medical graduands expressing an interest in psychiatry has always been below this requirement. Tables 1 and 2 summarise data on students planning to enter psychiatry at graduation.

The data show a low but stable level of interest (in the range 2.9–4.2%, mean 3.6%), with a slight preponderance of women (mean: males, 3.5%, females, 4.3%). At the present level of medical student numbers (3614), the number aiming for psychiatry is in the range 105–152 per year, which is well below the required number. With an expansion to 5652 per year it could, at the most optimistic prediction of graduand choice (4.2%), reach 237 per year, which is close to the required number.

[†]See editorial, pp. 296–297, this issue.

Table 1 The Parkhouse series

Year of qualification	Reference	Number of graduands	First choice psychiatry	Proportion of women
1974	Parkhouse & McLaughlin, 1976	2348	3.7%	67%
1975	Parkhouse & Palmer, 1977	2218	3.0%	32%
1976	Parkhouse & Palmer, 1979	2543	3.0%	39%
1977	Parkhouse <i>et al.</i> , 1979	2745	4.0%	49%
1978	Faragher <i>et al.</i> , 1980	2747	2.9%	31%
1979	Parkhouse <i>et al.</i> , 1981b	2778	4.0%	40%
1980	Parkhouse <i>et al.</i> , 1983	2854	3.4%	35%

The number entering psychiatric training, however, has been greater than that expected from the career aims of graduands. Table 3 summarises data supplied by the President (R. E. Kendall) for those passing the Membership examination.

The number of successful British candidates has varied from 183 to 238 during the past 10 years, with a mean of 203. The number of medical graduates from continental Europe training in Britain is germane. Data supplied by Damon Ralston showed that the first candidate passed in 1980, and the next in 1989; thereafter, there have been 7–19 per year (mean 13), which is a rather small contribution. Those from the Republic of Ireland will raise the total, but the combination of successful British, Irish and European candidates is below the number required to fill consultant posts. It remains to be seen whether the increase of medical students now in the ‘pipeline’ will make up the difference.

Overseas recruitment in Britain and America masks poor local recruitment. The number of ‘international trainees’ has been rising steadily in the USA (Balon & Munoz, 1966; Weissman, 1996). This may not be true in Britain because of emigration rules. The number of successful overseas candidates has been high in recent

years – at least 70 per year since 1989. If candidates from other countries were allowed to stay, and wished to do so, they should supply any remaining deficit.

FUTURE REQUIREMENTS

The number of psychiatrists required depends on the role of psychiatry, which changes from generation to generation. It also varies from country to country, so that international comparisons may not be relevant to Britain.

The level of morbidity in the population is fundamental. New research may eliminate diseases, but it is more likely that new social conditions will increase them, as we have seen with the growth of substance misuse.

The threshold for involvement of specialists has great influence. Much diagnostic assessment and treatment is carried out in primary care. Even in Britain, some has been taken over by private practice. There is some pressure to restrict public sector funding to the most seriously ill –

Table 3 Candidates passing the Membership examination

Year	From UK	Total
1989	193	272
1990	238	318
1991	223	319
1992	204	301
1993	195	311
1994	183	287
1995	198	330
1996	201	314
1997	197	299
1998	199	338

Table 2 The Oxford Medical Careers Research Group¹

Year	Men	Women	Total
1974	3.3%	4.2%	3.6%
1977	2.8%	5.2%	3.6%
1980	3.3%	3.5%	3.3%
1983	3.8%	4.6%	4.1%
1993	4.2%	4.1%	4.2%

1. Data from Lambert *et al.* (1996a,b).

psychoses or those requiring in-patient admission (the old asylum role).

In general psychiatry, a crucial question is whether the consultant’s role is confined to diagnosis and prescription (or care planning) or whether it also involves psychological treatment. Comprehensive assessment can be done only by doctors, but psychotherapy and continuing support can be provided by nursing staff, psychologists, social workers and other professionals.

In almost all specialist areas, there are problems of threshold, for example:

- (a) What proportion of parasuicides should be assessed by liaison psychiatrists?
 - (b) What proportion of patients with dementia require assessment by old age psychiatrists, rather than general practitioners and social workers?
 - (c) What proportion of offenders should be examined by forensic psychiatrists rather than prison medical officers?
 - (d) What proportion of disturbed children require a child psychiatrist’s opinion?
 - (e) What proportion of substance misusers should be treated by psychiatrists rather than lay organisations?
- The answers to these questions greatly influence workforce calculations. As in other areas of medicine, the number required also depends on:
- (a) The working week of consultants.
 - (b) The proportion of work done by consultants rather than staff grade doctors or trainees.
 - (c) The fall-out rate and duration of service.
 - (d) The loss of women practitioners because of family responsibilities.
 - (e) Net migration.
 - (f) Other sources of attrition, including premature death.

BACKGROUND FACTORS AFFECTING THE RECRUITMENT OF PSYCHIATRISTS

Some consider that the recruitment problem is exaggerated by stressful working conditions, and some see psychiatric patients as aversive – ‘anxiety-provoking, unpleasant, untrustworthy and disabled’ (Tucker & Reinhardt, 1968). Scher *et al.* (1983) questioned 209 medical students from eight American medical schools: some

students found psychiatry too slow moving, with too few tangible results – the disorders were manageable but not reversible.

Many have commented on the low status of the speciality and the unsympathetic attitude and lack of respect shown by other professions and faculty members, especially physicians and surgeons. For example, Merton *et al* (1956) found that medical students ranked psychiatry seventh out of seven specialities. Bruhn & Parsons (1964) charted the precipitous decline in the perception of psychiatry at six different points in the medical career: medical students saw psychiatrists as ‘confused thinkers and emotionally unstable – often as abnormal as their patients’. Furnham (1986), who studied 449 London students, found that psychiatry, compared with eight other specialities, was given the most pejorative scores on 26/50 items – it was considered the most ineffective, unscientific and conceptually the weakest speciality. This echoes the public stigma of mental illness (e.g. Dean, 1996): psychiatrists run the gauntlet of the antipsychiatry bias of relatives, friends and the public. Dietz (1977) detailed the antipsychiatric influences of a generation of social research, which ‘socially and legally discredited the profession’.

Adverse financial terms have been suggested as a deterrent. There is concern about the financial effects of the College’s decisions about higher psychiatric training under the Calman reforms (Double, 1998; McCallum *et al*, 1998; Shah, 1998). The relative earnings of consultants, however, will probably have more influence on recruitment.

On the other hand, many doctors enter psychiatry because of a personal concern for the mentally ill. They may have family members with psychiatric disorder. They may have personal experience of it. It is often supposed that psychiatrists are more vulnerable, but the objective evidence shows little difference (if any) compared with other specialities (Mowbray & Davies, 1971; Mowbray *et al*, 1990; Zeldow & Daugherty, 1991).

Social background, personality, attitudes and aptitude are important. Eagle & Marcos (1980) found that psychiatry attracted students from a lower social class, from cities, more often single and politically liberal. Walton and his colleagues (1963, 1964, 1966, 1969) found that psychiatry’s constituency was a group of students who were more reflective and

responsive to abstract ideas, liked complexity and were tolerant of ambiguity. Others have emphasised non-authoritarian attitudes, open-mindedness, greater interest in theoretical issues and social welfare and a preference for aesthetic values (e.g. Pasnau & Bayley, 1971).

Notwithstanding the stigma, psychiatry is ‘an important and interesting part of medicine’, appealing to ‘curiosity and interest in emotions and actions’ (*BMJ*, 1973). In the study of Scher *et al* (1983) mentioned above, some students appreciated its holistic approach and the opportunity to know patients in depth. They enjoyed the breadth of the field and its interactions with other disciplines. Recent neuroscientific findings promised rapid advances.

THE INFLUENCE OF THE MEDICAL SCHOOL

This influence starts with the selection of future medical students (Klein & Mumford, 1978; Cameron & Persad, 1984). A-level requirements may prejudice medical school entry in favour of a background in biological science as opposed to social science or the humanities. For example, Nemetz & Weiner (1965) found that those who entered psychiatry residency programmes had majored more often in humanities or social sciences rather than natural sciences; they seemed primarily interested in ideas – literature, history or anthropology. Donnay (1976) found that many had at least one non-science A-level.

Parker (1958) noted an antagonism of medical students to psychiatry and called for education emphasising psychosocial functioning and relating symptoms to the wider context of the patient’s life. This was followed by Sir Denis Hill’s article (1960) on ‘whole patient medicine’:

‘Most of medical education would seem almost expressly designed to shield the student from awareness of the patient as an individual.’

He advocated preclinical teaching of psychology and sociology. The same points were made eloquently by Iago Galdston (1968), who criticised ‘the dismemberment of man’, who needs to be understood ‘holistically, ecologically and existentially’. The biological bias of medical education was demonstrated by a videotape study (Silverman *et al*, 1983): two-thirds of Boston medical students failed to list a single social or psychological item as being

relevant to the investigation of a man with chest pain and a woman with abdominal pain. These early papers set the scene for a more effective presentation of psychiatry to the medical student.

Historically, the speciality has reacted to the recruitment problem by focusing on the undergraduate curriculum. Much of the literature deals with this. This resulted in a range of ideas for improving the presentation of psychiatry:

- (a) *The behavioural science course.* Pre-clinical teaching in psychology, social science or behavioural science was first suggested by Weiner (1961) and is now widespread.
- (b) *The psychiatry module or clerkship.* Many studies have reported a beneficial effect on attitudes to psychiatry. Unfortunately the improvement in attitudes is not maintained. For example, Wilkinson *et al* (1983) studied 94 London students: the proportion with favourable attitudes rose from 23% to 61%, and this was maintained a year later. The number who considered specialising in psychiatry rose from 6% to 17% and was still 14% a year later. The same team followed these students to the end of the pre-registration year and found that those with positive attitudes had fallen to 46%.
- (c) *Other forms of teaching.* A considerable number of other teaching suggestions and experiments have been made, especially in the USA. Several transatlantic teams have given students *clinical responsibility*. For example, Miles *et al* (1974) placed fourth-year students in charge of two psychiatric wards! *Liaison psychiatry clerkships* may have a special value. Scott (1986) has suggested increased psychiatric involvement in the *intercalated year*, and *student electives*.

There are data comparing the success of different medical schools in motivating students to enter psychiatric training. In the USA, medical schools with the strongest academic departments had the best recruitment (Nielsen, 1979; Sierles, 1982). In Britain, we have the Brook (1961–1970) and Parkhouse (1974–1980) data, which are summarised in Table 4. In 1976, Brook reported the medical school training of 531 psychiatrists who qualified between 1961 and 1970, and arrived at percentages for each medical school; these were extended and revised in a later paper (Brook, 1983). The Parkhouse surveys (Parkhouse

Table 4 Comparison of British medical schools¹

School	Brook (1983) ²			Parkhouse ³						
	1961–1965	1966–1970	1971–1975	1974	1975	1976	1977	1978	1979	1980
Birmingham	2.8	3.9	5.4	6	4	6	5	3	7	3
Bristol	4.0	5.5	3.6	1	4	3	6	2	4	2
Leeds	3.5	6.4	5.3	2	2	3	4	8	4	4
Liverpool	1.4	3.5	4.5	4	1	4	1	2	6	3
Manchester	1.4	2.6	4.0	5	2	2	3	1	2	4
Newcastle	3.3	3.8	4.1	3	2	3	3	2	5	5
Oxford	(4.5)	(3.5)		5	8	0	4	2	3	5
Sheffield	4.3	4.3	2.3	6	4	0	3	2	2	4
Charing Cross	2.4	3.9	1.7	0	0	2	2	1	2	4
Guy's	1.9	5.0	4.2	5	1	1	3	3	6	5
King's	2.5	4.7	3.8	4	3	5	4	4	2	2
The London	5.1	3.4	1.8	2	3	3	2	3	4	2
Middlesex	8.5	5.8	6.0	7	1	1	4	1	3	4
Royal Free	3.1	3.8	2.7	1	4	3	2	3	1	2
St Bartholomew's	3.4	3.7	2.3	0	4	5	5	4	5	4
St George's	2.9	4.0	3.6	5	5	6	7	6	15	8
St Mary's	1.7	2.2	3.0	3	1	0	5	3	5	2
St Thomas'	5.7	3.9	4.3	0	3	1	3	1	1	0
University College Hospital	8.1	6.3	9.2	2	5	2	5	3	6	2
Westminster	0.9	3.8	3.7	3	0	0	0	2	2	3
Wales	0.8	2.1	3.2	1	3	0	2	6	3	2
Aberdeen	2.6	4.5	5.7	6	6	6	3	5	2	8
Dundee	2.9	6.0	5.7	8	1	3	0	3	2	2
Edinburgh	2.8	4.6	5.0	6	4	3	3	3	4	3
Glasgow	3.4	4.0	3.1	3	4	3	5	2	10	4
Belfast	2.7	4.0	4.8	–	4	4	6	3	3	3

1. The new schools (Cambridge, Leicester, Nottingham and Southampton) have been omitted because the early data were missing.

2. Data from Brook's second survey of 1229 psychiatric trainees who entered the preliminary test in 1961–1975.

3. Data from the Parkhouse surveys of career intentions of pre-registration house officers (Parkhouse & McLaughlin, 1976; Parkhouse & Palmer, 1977, 1979; Parkhouse *et al.*, 1979, 1981b, 1983; Faragher *et al.*, 1980).

& McLaughlin, 1976; Parkhouse & Palmer, 1977, 1979; Parkhouse *et al.*, 1981a,b, 1983; Faragher *et al.*, 1980; Parkhouse, 1983) asked graduates in their second pre-registration post about their career choices. On examining Table 4 it is obviously necessary to span several years before reaching any conclusions – Oxford, Leeds, Glasgow and Leicester can single out years when they recruited 8–11% of medical students, but these were isolated triumphs. One decade may contrast with another; for example, Middlesex, whose recruitment was two standard deviations above the mean in 1961–1965, was below average in 1975–1980. In the Brook data, University College Hospital was the only medical school with recruitment more than two standard deviations above the mean in

both quinquennia. In the Parkhouse series, the only medical school that stands out is St George's, which achieved 15% in 1979 (almost three standard deviations above the mean) and an average of 7.4% over the 7-year period. When one compares these figures with St Thomas' or Westminster, the conclusion must be that medical schools can (exceptionally) influence recruitment. Data of this kind have not been available for nearly 20 years but are re-emerging. Dr Goldacre and colleagues will be following up Dr Parkhouse's cohorts of 1974, 1977, 1980 and 1983 and are starting new cohorts for 1993 and 1996 (Lambert *et al.*, 1996a,b).

One should remember that peak interest in American psychiatry was reached in the 1950s and 1960s, when psychiatry

had only a minor role in the curriculum (Weissman & Bashook, 1991). Low levels of recruitment have persisted in spite of a great increase in psychiatry's share of the curriculum time, the introduction of excellent teaching ideas and the establishment of chairs in almost all medical schools.

Student opinion is unstable in the short and the long term. There are great differences between career goals at medical school entry, intentions before and after the psychiatry module, at qualification, after the pre-registration year and when the final decision is made (Held & Zimet, 1975; Matteson & Smith, 1977; Egerton, 1983). Some have found that an initial interest in psychiatry falls steeply during the curriculum (Light, 1975; Zimet & Held, 1975; Pardes, 1982). But Paiva *et al.* (1982) found a drift from other specialities into psychiatry – more than any other speciality. There is some evidence that preference for psychiatry is more enduring than other specialities (Kritzer & Zimet, 1967).

Student preferences are a poor predictor of eventual career choice. Last & Stanley (1968) found that two-thirds changed their minds after leaving the medical school. Mowbray *et al.* (1990) found that 65% chose psychiatry *after* graduation. Three studies are particularly informative:

(a) Hutt *et al.* (1981) conducted a postal survey of 6561 doctors: only 28% chose their speciality before or during undergraduate training, 47% in the next 5 years, 14% 6–10 years after qualifying and 9% after that.

(b) Cameron & Persad (1984) asked 78 residents when they decided to enter psychiatry: 14% decided before entry into the medical school, 28% as medical students and 58% after graduation.

(c) Parkhouse *et al.* (1981a,b) and Parkhouse & Ellin (1988) reported long-term follow-up studies of their 1974 cohort: after 5 years, 41% had changed their career choice; after 11 years, 69% had changed and 9% changed career at least four times. The number destined for psychiatry in 1975 (3.5%) rose to 4.7% by 1981. By far the most important factor influencing a choice of psychiatry was 'aptitude and ability'; this was mentioned by 82%, a higher figure than any factor in any other speciality.

THE PRE-REGISTRATION YEAR

The pros and cons of pre-registration psychiatric posts were reviewed by a working party in 1983, under the Chairmanship of Sir Ivor Batchelor (Walton, 1986). The matter has been discussed by Scott (1986) and recently was the subject of a working party of the University Psychiatry Committee. There is some evidence that this experience, like 6-month psychiatry posts in general practice rotations, is a source of recruits. On the other hand, if these posts just confirmed the interest of those already destined for psychiatry, their main effect would be to reduce psychiatrists' experience of medicine and surgery (R. E. Kendell, personal communication, 2001). Sheffield has the most extensive experience since posts were introduced in 1980. Sheffield data on change in career preference between graduation and the end of the pre-registration year will be relevant here.

IMPROVING RECRUITMENT

It is not an inevitable conclusion that psychiatry needs to improve recruitment. The increase in medical students may solve the problem but much depends on judgements made about psychiatry's specific role. There are great uncertainties about the workforce required to deal with mental illness and there is no point in using personnel with at least 12 years of higher education and training to undertake work that can be done by professionals with a fraction of the salary and much shorter training or even by lay enthusiasts. The influence, power and prestige of the speciality may depend more on the quality than the quantity of consultants, and there needs to be more debate about these issues.

If there is a will to raise recruitment, the College should analyse the pathway to a psychiatry career, including the nodal experiences and filters that determine a career choice in psychiatry (Table 5).

The present data leave many uncertainties, but this brief review suggests that there may be more scope for improving recruitment by influencing the intake of medical students than by focusing on undergraduate teaching. Introducing more pre-registration house officer posts could be tried, preferably with prospective monitoring of its effect. Later career influences seem

Table 5 Nodal points in medical careers

Phase	Focus
Application to the medical school	A-level requirements, liberal interests and personality attributes
Preclinical education	Behavioural science courses, special study modules
Clinical education	The psychiatry module(s)
The pre-registration year	Pre-registration posts in psychiatry
General practice vocational training	The most suitable placements
Senior house officer posts	Drop-out rates
Specialist registrar posts	Fate of those entering and achieving a Certificate of Completed Specialist Training
Consultant posts	Incentives to continued practice in the National Health Service

paramount – why graduates chose psychiatry *after* the pre-registration year, and the attrition of trainees and consultants.

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CLINICAL IMPLICATIONS

- Recruiting medical students with a primordial interest in sociology and psychology will enrich the consultant leadership with individuals who have a broad understanding of their patients.
- Improvement in the number of doctors wishing to enter psychiatry will create more competition, leading to more research effort in the training years and a more talented consultant workforce.
- Recruiting consultant psychiatrists from British medical graduands will ensure that they are deeply versed in their patients' cultural background.

LIMITATIONS

- This is merely a review of the literature. Published work so far has focused mainly on the undergraduate curriculum, with a dearth of data on other factors influencing recruitment.
- There has been a lack of debate on the role of consultant psychiatrists.
- The number of consultants required is crucial to the discussion, but can be estimated only very approximately.

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