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Carry on shrinking: career intentions and attitudes to psychiatry of prospective medical students

AIMS AND METHOD

There is a shortage of doctors in the UK, particularly in psychiatry and pathology. Little is known about prospective medical students' career intentions or attitudes. This study aimed to report on the career intentions and attitudes to psychiatry of 819 attenders at a sixth-form conference for prospective medical students.

RESULTS

A much higher proportion of students expressed favourable attitudes to psychiatry as a career than might have been expected. The most popular career was paediatrics and the least popular was genito-urinary medicine.

IMPLICATIONS

Medical schools need to be proactive in providing information, career advice and positive role models. This may counteract negative propaganda and encourage career choice in tune with students' earlier feelings and patients' needs.

There is a shortage of doctors in the UK, particularly in specialities such as psychiatry and pathology. Only 3.9% and 1.3%, respectively, of new doctors intend to pursue these shortage specialities (Lambert *et al*, 2001). British medical schools have never produced enough graduands aiming for psychiatry (Brockington & Mumford, 2002). The overall lack of doctors is being partially addressed by increasing the number of medical students and schools, but this does not address the more specific issue of shortages in specialities. There is considerable information on new doctors' career intentions (Lambert & Goldacre, 1998; Lambert *et al*, 2001; Brockington & Mumford, 2002). There is also a great deal of literature looking at medical students' attitudes towards psychiatry (e.g. Burra *et al*, 1982; Singh *et al*, 1998). However, as Brockington & Mumford (2002) point out, little is known about prospective medical students' career intentions or attitudes before they start their medical studies and how these compare with those of medical undergraduates. A positive attitude to psychiatry is, unsurprisingly, linked to the likelihood of becoming a psychiatrist (Nielsen, 1980; Clardy *et al*, 2000). Equally important, such positive attitudes may make doctors more responsive to the psychological dimension of physical illness and thus benefit patients, whatever their primary diagnosis (Nielsen & Eaton, 1981).

Particular subgroups of students may have more favourable attitudes to psychiatry, even before their clinical attachment. Two studies found that female students had significantly more favourable attitudes at the beginning of their attachment (Alexander & Eagles, 1986,

1990), although one further study did not (Galletly *et al*, 1995).

Aims

Using standardised questionnaires, the present study aimed:

- to report the attitude of prospective medical students to psychiatry
- to examine the links in this sample between attitude to psychiatry and intent to pursue it as a career.

Participants

Students attending a national sixth-form conference about medicine as a career ('Medlink') took part in the study.

Method

We distributed questionnaires to sixth-form students on the third day of a four-day Medlink conference.

Measures

1. Demographic data: we recorded age, gender, self-reported ethnicity and type of school attended



2. Career preference was measured using a 5-item rating scale (McManus *et al*, personal communication) with possible responses ranging from 'definite intention to pursue' to 'definite intention not to pursue'. Students were asked about intent to pursue individual specialities and, using the same scale, about their intent to pursue a medical career.
3. Attitudes to psychiatry were measured using the 30-item Attitudes to Psychiatry Scale (ATP-30; Burra *et al*, 1982). This scale measures attitudes using a 5-point Likert scale with questions about attitude to psychiatric patients, illness and treatment, psychiatrists, psychiatric institutions, teaching, knowledge and career choice. It has been used internationally in many studies and has demonstrated validity and reliability (Burra *et al*, 1982). It generates a global score between 30 and 150, with higher scores indicating more favourable attitudes to psychiatry.

Statistical analysis

Data were analysed to generate descriptive statistics, means and standard deviations (s.d.). For the ATP-30 measure, there was a single 'outlier' whose score was 15 points lower than any other. A decision was taken to exclude this person's data from the analysis as we doubted whether the responses were genuine. Univariate analyses were used to find significant associations between attitude to psychiatry and demographic data for each group (Mann-Whitney, Kruskal-Wallis, *t*-tests). Comparisons were made between mean ATP-30 scores for all the groups (Kruskal-Wallis test). Non-parametric correlations (Spearman's rho) were calculated to identify the relationships between attitudes to psychiatry and intentions to pursue different medical specialities as a career. On the career preference measure, if a question choice was left blank or rated at the mid-point of the 5-point scale (indicating neutrality), the response was

excluded from the analysis. Variables are reported as significant if, in the univariate analysis, they showed 5% or more significance level and with a correlation coefficient at or above 0.20, following the recommendation of Cohen & Holliday (1982).

Results

Participants

The questionnaire was completed by 837 out of 840 potential respondents (99.6%) with 97.8% (819) providing useable data. One student was excluded as an outlier. Five hundred and forty-four (66.4%) were female. Ages ranged from 15 to 21 years (mean=16 years, s.d.=0.6). Types of school attended were: 228 (27.8%) independent day; 200 (24.4%) sixth-form college; 169 (20.6%) comprehensive; 140 (17.1) grammar and 25 (3.1%) other.

Career intentions

Table 1 shows the level of intention by sixth-form students to pursue medicine as a whole and the individual specialities in particular. The total scores and percentages indicate the total number of students who chose each option. As students could, for example, find more than one career choice 'very attractive', the numbers add up to more than the total number of students.

There was a definite intention by 71.1% to study medicine. Only two people (0.4%) had firmly decided against it. On the basis of expressed 'definite intention', the most popular career was paediatrics and the least was genito-urinary medicine. Similarly, on the basis of expressing the intention 'definitely not' to enter a particular speciality, the most unpopular career was medicine

Table 1. Level of sixth-formers' intention to pursue medicine, as a whole and in individual specialities

Specialities	Definitely <i>n</i> (%)	Very attractive <i>n</i> (%)	Not very attractive <i>n</i> (%)	Definitely not <i>n</i> (%)	Total respondents (<i>n</i>)
Paediatrics	145 (22.6)	398 (61.9)	61 (9.5)	39 (6.1)	643
Surgery	139 (20.1)	417 (60.3)	94 (13.6)	41 (5.9)	691
General practice	97 (15.8)	336 (54.8)	110 (17.9)	70 (11.4)	613
Psychiatry	72 (12.4)	281 (48.5)	143 (24.7)	83 (14.3)	579
General medicine	69 (12.2)	407 (71.9)	71 (12.5)	19 (3.4)	566
Laboratory medicine	58 (10.1)	223 (38.8)	171 (29.7)	123 (21.4)	575
Pathology	59 (10.1)	288 (49.3)	149 (25.5)	88 (15.1)	584
Obstetrics and gynaecology	33 (7.7)	117 (27.3)	189 (44.2)	89 (20.8)	428
Infectious diseases	34 (6.8)	286 (57.2)	141 (28.2)	39 (7.8)	500
Ophthalmology	16 (4.7)	110 (32.2)	164 (48.0)	52 (15.2)	342
Medicine for the elderly	14 (2.7)	99 (19.4)	272 (53.2)	126 (24.7)	511
Anaesthetics	8 (1.9)	136 (32.1)	221 (52.1)	59 (13.9)	424
Ear, nose and throat	7 (1.7)	142 (35.2)	205 (50.9)	49 (12.2)	403
Dermatology	7 (1.7)	110 (26.4)	236 (56.7)	63 (15.1)	416
Radiology	6 (1.5)	122 (30.8)	212 (53.5)	56 (14.1)	396
Genito-urinary medicine	5 (1.0)	46 (9.6)	303 (63.5)	123 (25.8)	477
Total	769 (93.9)	3518 (429.5)	2742 (334.8)	1119 (136.6)	819
Medicine as a whole	369 (71.1)	137 (26.6)	7 (1.4)	2 (0.4)	515



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for the elderly and the least unpopular was general medicine.

Attitudes to psychiatry

The students had a mean ATP–30 score of 110.0 (s.d.=12.8; range 71–149). Women had a significantly higher score (111.0 v. 107.8; $t=3.52$, $P<0.001$). No significant associations were found between ATP–30 score and age or type of school attended.

Attitude to psychiatry and career intentions

Positive attitudes towards psychiatry (ATP–30 score) correlated with an intention to pursue psychiatry ($r=0.496$, $P<0.001$) but were not significantly correlated with intention to pursue any other particular medical career.

Discussion

Our main finding was that prospective medical students were fairly clear what they want to do. Ninety-five per cent are able to state a definite intention to go into a specific speciality while also finding another four or five specialities very attractive.

Sixth-form students rate their definite intention of pursuing psychiatry at a similar level to general medicine (12.4% and 12.2%, respectively). This is in marked contrast to recent findings in fourth-year medical students (McParland et al, 2003), only 1.4% of whom expressed a definite intention to pursue psychiatry before their psychiatry attachment. After the attachment, this rose to 4.7%.

This story is mirrored in the attitude data. Sixth-form students have a very positive attitude to psychiatry. Their mean ATP–30 score of 110.0 compares with fourth-year medical students' scores of 102.6 before their psychiatry attachment and 107.7 after it (McParland et al, 2003).

We cannot be sure how many of the sixth-form attenders we studied will actually achieve a place in medical school. Despite this, it is clear that if their interest in psychiatry as a career were to be maintained, psychiatry would no longer be a shortage speciality. Comparison with other studies of doctors' career intentions suggests that undergraduate education has a negative effect on recruitment in these shortage specialities (Lambert & Goldacre, 1998; Lambert et al, 2001; McParland et al, 2003). Earlier studies have found that 'badmouthing' within medical schools influences career choice and that this often occurs in the earlier years (Hunt et al, 1996). Prejudice and poor information may deter people from entering psychiatry and pathology. Medical schools need to be proactive in providing information, career advice and positive role

models as part of undergraduate education. This may counteract negative propaganda and encourage career choice in tune with both the students' earlier feelings and with patients' needs.

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Declaration of interest

C.K. is Dean of The Royal College of Psychiatrists. G.I. is undergraduate tutor in psychiatry for University College London.

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