Medical Education

What do young doctors think of their training and themselves?

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Of the British qualified doctors whose career preferences and progress we have been surveying, our first group has been in medical practice for 10 years. We thought that this would be a good stage to ask for views about medical training and its effects. Some tentative questions were therefore added to the latest questionnaire, which we sent in 1983 to those who qualified in 1974. We wanted to see if our respondents were interested in a qualitative study of their medical education and, further, if they were willing to engage in a frank self assessment exercise about their own competencies and deficiencies.

Methods

We wrote to 2348 doctors who were known to have qualified in 1974 from medical schools in England, Scotland, and Wales, obtaining addresses and using the methods described for our previous career preference surveys.¹⁻³ The general findings, about choices and career progress, will be reported separately. A covering letter gave a brief idea of our thoughts about assessment of training, and self evaluation. We took five major elements of medical practice, which we thought would be relevant to the work of all doctors: clinical skills, teaching ability, research, administration and management, and communication with patients and colleagues. For each of these elements, qualifiers were asked to grade: (a) its importance for their career, using the responses "not important," "minor importance," and "major importance"; (b) how well their undergraduate and postgraduate training had met their requirements—as "not at all," "adequately," or "very well"; and (c) their need for further competence or training, or both—as "no need," "some need," or "great need."

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Results

Towards the end of January 1984, when this analysis was made, the response rate was 80%. Further replies have come in since, and the final response will be comparable to that of our previous surveys. Several doctors criticised the layout and wording of the questions on the quality of training and self assessment, finding them difficult to answer. Nevertheless, 92% completed the table successfully and a further 4% left only five or fewer boxes blank. Many helpful comments were made, and there was obvious support for a more detailed study.

Some respondents found it difficult to decide whether to rate an element as important because it was helpful in passing examinations and obtaining promotion during training, or because it was likely to play an important part in the work they would do when trained. Also, if an element was rated as not important, it was difficult to interpret comments about whether training had in that respect been satisfactory. For example, of the 533 doctors who considered research unimportant, 390 said that undergraduate training had not met their requirements.

The analysis for each element of medical practice (see table) therefore concentrates on respondents assigning major career importance to that element. Responses were also analysed according to the choice of career. Below, specialties refer to those respondents who gave each as his or her first choice and, unless otherwise stated, percentages refer to respondents rating the relevant elements as being of major career importance.

CLINICAL SKILLS

Clinical skills were regarded as of major career importance by over 86% of all doctors in the main specialties, including general practice, except radiology (64%), community medicine (63%), and pathology (63%). Among those giving it major importance, doctors choosing medicine and radiotherapy and oncology were the most satisfied with undergraduate training; in anaesthetics and radiology only about 20% of the respondents felt that the undergraduate course had met their requirements "very well." Postgraduate training was highly rated by 74% of anaesthetists and psychiatrists, but only by 39% of doctors in community medicine. A "great need" for further competence or training was felt most commonly in surgery—by 27% of these respondents, nine years after qualification.

Respondents assigning major career importance to elements of medical practice

	No (% of all 1889) respondents giving major career importance	How well training met requirements (%)						Need for further competence/training (%)		
		Undergraduate			Postgraduate			Great need	Some need	No need
		Very well	Adequately	Not at all	Very well	Adequately	Not at all			
Clinical skills	1638 (86.7)	45*	45	9	60	36	2	16	71	12
Teaching ability	725 (38.4)	20	37	41	37	51	10	19	66	13
Research	451 (23.9)	9	22	67	39	39	20	33	50	16
Administration and management	821 (43.5)	1	6	93	16	49	32	36	56	8
Communication with patients, colleagues	1684 (89.1)	19	56	23	46	44	8	12	57	30

*Percentage of those assigning major career importance to the element concerned.

TEACHING

The proportion of all respondents who regarded teaching as of major importance was only 38%, varying from 28% in general practice to 57% in psychiatry. These doctors generally thought that undergraduate training had not met their requirements (only 8% of anaesthetists were very satisfied with this aspect of the undergraduate course). Postgraduate training was more favourably regarded, although only 15% of those in community medicine thought it very satisfactory and, over all specialties, 19% of respondents felt the need for further competence or training.

RESEARCH

Research was rated as of major importance by 55% of those in medicine but only by 4% of those in general practice, the average for all respondents being only 24%. Among such doctors undergraduate training was thought to have been no help at all in research by 67%. Some doctors were very satisfied with their postgraduate training, the highest percentage being in community medicine (61%), but 33% felt a "great need" for further competence or training.

ADMINISTRATION AND MANAGEMENT

The proportion of all respondents assigning major importance to administration and management was 43%, the range being from 14% in obstetrics and gynaecology to 50% for general practice and 52% for psychiatry. Only five (0.6%) of these doctors felt that undergraduate training had met their requirements "very well," whereas 93% felt it had not met their requirements at all. The proportion who felt that postgraduate training had done very well for them ranged from 0% in paediatrics and obstetrics and gynaecology to 40% in community medicine.

In each specialty at least 32% of respondents felt a great need for further competence or training.

COMMUNICATION

Communication was thought to be of major career importance by 89% of all respondents and, in general, training was felt to have met requirements, more particularly at the postgraduate stage. There was little difference among the specialties, and only 12% of those giving major importance to communication felt a "great need" for further competence or training.

Discussion

Doctors who have kept in touch with us over 10 years seem interested in a study of this kind and generally welcome the opportunity to comment on undergraduate, postgraduate, and continuing education.

Many respondents found it more difficult to answer questions about their own level of competence, and the need for further training, than to deal with less personal questions about undergraduate or postgraduate training. About half of this group of doctors were already settled in career posts: 39% were principals in general practice and 8% were consultants. A further 16% were senior registrars, often nearing the end of their training, and 9% were in academic posts. The fact that it takes much longer to "complete" training in some specialties than in others was reflected in some of the responses—for example, among surgeons. Attempts at self assessment also brought into the open some very wide differences of view about the purpose of training, the need for lifelong learning, and perhaps the impropriety or unwisdom of admitting imperfection. Responses ranged from the view that anyone who did not feel fully competent at the end of postgraduate training should be shot, to the more common feeling that only an insufferably arrogant person would claim to have no professional weaknesses or deficiencies. This seems to show how inadequately we define, or convey, the objectives of medical education at its various stages, and how careful our assumptions must be about the way doctors see themselves in its context.

We gained much from the replies to this preliminary study, and also from a recent two day meeting at the NHS Training and Studies Centre in Harrogate with a group of our respondents. We look forward to the prospect of obtaining more detailed comment and self assessment, on this large scale, and hope this will be useful.

References

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Could ultrasound scanning be used to test whether progesterone treatment early in pregnancy could prevent the onset of intrauterine growth retardation. Could scanning be used to repeat Katharina Dalton's work in 1962 on the prophylactic value of progesterone in the treatment of pre-eclamptic toxemia?

Ultrasound scans can detect intrauterine growth retardation in the latter half of pregnancy by measuring such variables as abdominal girth and biparietal diameter.¹ In testing whether progesterone could prevent growth retardation, however, the first step might be to look at birth weights and neonatal examination; if these suggested that prophylaxis was effective a further study using ultrasound might determine the stage of pregnancy at which the effect was first seen. At term the placenta produces about 250 mg progesterone a day, 10% of which reaches the fetus.² Its function is unknown; there is no evidence that it affects fetal growth, and maternal plasma progesterone concentrations correlate poorly with placental function and fetal outcome.² Nevertheless, theoretically progesterone might prevent some cases of growth retardation.

Decidualisation is a progestogen dependent process, and studies in animals have suggested that birth weight might be related to the extent of decidualisation in early pregnancy.³ We do not know, however, whether this applies to women or whether exogenous progesterone can affect decidualisation in pregnancy. Dalton suggested that exogenous progesterone improved the "skeletal development" of the fetus, but she did not document this effect.⁴ In her study she

did not measure plasma progesterone concentrations and gave progesterone to only 62 women complaining of "toxaemic symptoms" such as lethargy, depression, and backache. These are no longer regarded as symptoms of pre-eclampsia, and this study provides little reason for organising a large scale investigation to test whether progesterone prevents growth retardation. Such an investigation would face several problems. Growth retardation may be a group of conditions with several causes, some of which might be unaffected by treatment in early pregnancy. Since it is difficult to predict the condition, large numbers of apparently healthy women would have to be treated. Because the effectiveness of oral progesterone is uncertain,⁵ rectal, vaginal, or intramuscular⁴ administration would be needed. Progesterone would have to be given very early in pregnancy, according to the theoretical grounds mentioned above, and even if women were recruited early enough they might well be unhappy about taking unnecessary medication at the time of organogenesis.—JAMES OWEN DRIFE, senior lecturer in obstetrics and gynaecology, Leicester.

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