PRACTICE OBSERVED

Shortlisting Trainees

Changing the method of selection at Northwick Park

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The Northwick Park general practice vocational training scheme, like others throughout Britain, has had to deal with an increasing number of applications from doctors seeking a career in general practice. Undoubtedly the recent mandatory requirement for three years of postregistration experience has contributed to this upsurge in demand, but the net effect is that the number of candidates applying for structured vocational training programmes now seems to exceed considerably the number of places available. For example, our training scheme in suburban London received almost 200 applications for the five positions advertised as being available in September 1982. We were faced with the problem of selecting from this vast pool of potential talent, aware that few established methods seemed to exist to deal with the question of selection in the medical field, and aware also that there was little agreement about the need to establish criteria for selection for training.

We aim in this paper to show the need for proper personnel selection and to describe our attempts to evolve a selection procedure for general practice training that is fair and effective.

Background

The established procedure for choosing members of the Northwick Park general practice vocational training scheme had developed as an adaptation of the system used throughout the hospital for all medical appointments. After the post had been advertised, a brief job description and the standard hospital application form was sent to all inquirers. The completed forms were shown to the participating general practice trainers and hospital consultants, each of whom was invited to construct

a short list. These lists were combined, resulting in a consensus about whom we should interview. These shortlisted candidates were invited to visit the hospital and practices and attend for a selection panel interview. The panel was composed of all the trainers and consultants available—usually about a dozen people—who spent about 15 minutes with each candidate. On the basis of this brief and often uncomfortable interview the jobs were offered to the chosen candidates, provided that they had satisfactory references.

Unfortunately, this procedure was both unreliable and unfair. The shortlisting was based on a two-day training course that provided only the basic facts about our candidates. The subsequent interviewing was susceptible to all the disadvantages of the unwieldy panel—there was little consistency, with some members of the panel asking all the candidates the same Delphi questions and others feeling uncertain whether to inquire about career aspirations or about the minutiae of their own particular interest. The eventual choice seemed to be made largely on the basis of gut-feeling about personality without any attempt at agreeing what kind of person was likely to be effective at either the hospital jobs or general practice.

It was perhaps no surprise that when our trainees subsequently completed several tests examining personal characteristics, two-thirds of those who had been selected by this method had high scores for extraversion, while less than half of the one-year trainees, who had not been subjected to this ordeal, had similar scores. Clearly, our selection procedure was conspiring to choose the extravert (who could stand up to this very public scrutiny), though we were all aware that most general practice work involves consulting with only one or two people at a time. Thus, we were picking candidates by at least one criterion of particular relevance to the candidate's future work.

Moreover, while most of the doctors picked for the scheme have in fact become successful general practitioners, an appreciable minority had proved to be badly chosen. Some of these left prematurely having changed their minds about their careers, while a few of the trainees were ineffective in some of the component hospital posts in the job rotation or inadequate

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while working in their training practices. Others seemed unable to attend or join in actively in the half-day release course held each week as part of the training for general practice, and since it was considered that this course, run as a peer-learning group, is an important and highly valued experience for the participating doctors their defection was a cause of great concern.

Because of these considerations we felt the need to review the whole approach to the way we set about choosing our trainees.

How we did it

Being aware that personnel selection is a well described professionally conducted activity in industry and other areas of the world of work, we decided to seek the help of an occupational psychologist who specialised in recruitment and selection. In an attempt to systematise the whole procedure to make it both more efficient and more valid the first suggestion made was that we should try to define the job description of each component part of the training scheme with an accuracy that would then enable us to agree a list of criteria for selection based on the work described. We first had to define the job, and then describe the person who could do it. Meetings were held for the trainers and consultants concerned, and after a great deal of debate lists of criteria for selection and for rejection were constructed (see the table). Looking at the list now, much was

Northwick Park general practice vocational training scheme: criteria for selection

- Essential**
- (1) Fully registered for less than 5 years
 - (2) Medical Defence Union or equivalent membership
 - (3) Good references
 - (4) Good health
 - (5) Medically competent
 - (6) Able to drive
 - (7) Personally fit and mentally stable
 - (8) Adequate
 - (9) Carrying attitude
 - (10) Able to work alone and in a team
 - (11) Expressed wish to enter general practice

- Desirable**
- (1) British graduate
 - (2) Concerned with interpersonal relationships
 - (3) Good organiser of self and others
 - (4) Able to accept responsibility and to choose
 - (5) Conscientious
 - (6) Can cope with tiredness and stress
 - (7) Good communication skills
 - (8) Stable social life
 - (9) Outward interest
 - (10) Sense of humour
 - (11) Lived within 5 miles of work

- Undesirable**
- (1) Incompetence
 - (2) Lack of initiative
 - (3) Unreliable
 - (4) Patient has a commitment away from the area
 - (5) Lateness
 - (6) Poor personal hygiene

- Disqualifiers**
- (1) Aged over 50
 - (2) Aged personality
 - (3) Highly interested in people as individuals
 - (4) Does not fully accept commitment to the job—for example, night work
 - (5) Living down street
 - (6) Poor stamina
 - (7) Physically disabled
 - (8) Failed hospital specialist

of it seems quite obvious, though some of the items are still disputed—for example, how could we reject the physically disabled doctor without knowing more about his capabilities, particularly when it was the International Year of the Disabled?—but the process of having to discuss the minutiae of what a houseman or trainee actually did during a working day, and therefore what attributes were necessary to do the work, was completely novel. It was salutary to realise that while all the trainers and consultants were experienced at being the members of job selection panels, none had previously experienced the discipline of trying to define exactly what was being looked for.

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To make decisions on selection based on these criteria it was essential to improve the quality of the information that we obtained. Systematic selection has little room for erratic interviewing, and accordingly a two-day training course in the technique of interviewing for job selection was offered to the trainers and consultants who had shown an interest in the problem. It was interesting that in a group of doctors, who by and large were familar with the techniques of counselling, the discipline of systematic selection interviewing was perceived very much as a separate skill.

Trainees from neighbouring schemes were recruited as voluntary "guinea pigs," and as each course proceeded they were interviewed in depth both in observed one-to-one interviews and by panels of up to four interviewers working as a team. The interviewing skills were developed, based on refining technique and improving coverage. The "seven point plan" by Professor Alex Rodger¹ was used as the structural basis for these interviews, emphasis being placed on studying each subject's achievements, including those at college and at school, to seek positive evidence for the existence of the qualities for which we were looking.

The procedure for selecting next year's trainees was now replanned. The job description was rewritten and the application form changed to make it more informative. Applicants were invited to outline their spare time activities and interests as well as their professional past, and were asked to write about themselves as people, as well as to describe their exam successes. These forms were again used democratically to evolve a common shortlist. Then all the chosen doctors were invited to come for an extended personal interview with one of our recently trained interviewers and to visit the hospital and practices and to try to see as many of those concerned in the scheme as possible before the final selection day.

This time the panel had detailed reports of the preliminary in-depth interviews and could focus discussion with the candidates either on material in the reports that was unclear or was unsatisfactory, or on other matters of concern. The candidates were also asked to complete the same psychometric tests that the course members had done in previous years, but these were not collected until after the selection had been made, so that they served to monitor, and not influence, the selection process.

Results of changing the method

In a couple of cases the preliminary interview revealed information that influenced the panel against selecting particular candidates, and one doctor withdrew from pursuing a career in general practice after the long interview. All the candidates were invited to write comments on how they had experienced the selection procedure, and those that did so were unanimously appreciative of the serious attempt that had been made to understand what they were really like. Finally the panel was still faced with most acceptable candidates who were invited to offer, but it was felt that decisions this time were being made on rational rather than intuitive grounds. Furthermore, when the psychometric tests were scored only one of the five doctors appointed this time had scores that were outside the range of scores that this year's recruits prove to be better general practice trainees than their predecessors, but they were most certainly more carefully chosen.

Conclusion

Personnel selection takes time and skill. Approaching the problem systematically by defining the job, specifying criteria for selection or rejection, and training selectors in the focused skills of interviewing moves towards increasing the validity of the whole process. Arguably, one of the selectors' important functions is negative—they have to avoid picking people who

will then turn out to be unsuitable for the job. To do this, however, it is still necessary to approach the task positively by using systematic selection procedures in which firm evidence about the candidates leads to selection decisions based on verifiable facts and not unselected impressions.

We hope that we have now trained a cadre of skilled interviewers who are capable of making sensitive and detailed assessments of our shortlisted candidates so that the final selection will be made from among a group of doctors, any one of whom would be acceptable according to the specific criteria clearly agreed by everyone concerned.

Practice Research

Use of an alcolmeter to detect problem drinkers

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Estimates of the number of problem drinkers in England and Wales vary from 700 000 to 1 300 000.¹ Thus, the average general practitioner can expect to have 30 to 60 problem drinkers in his practice, assuming a list size of 2200 patients. It is recognised more and more that alcohol is directly or indirectly concerned in a large proportion of medical work—for example, hospital admissions, casualty attendances, and inquests.² How much it contributes to symptoms in many patients in both general and hospital practice is still unknown.

The aim of this study was to assess the use of the alcolmeter (figure) (Lion Laboratories, Cardiff)³ in general practice to detect patients with alcohol-related problems which would otherwise remain hidden.

Method

Four practices participated in the study, three in inner London and one in a suburban area in Hertfordshire. At the end of each third consultation, after explaining the project, the general practitioner asked patients over the age of 15 to give a breath sample which was analysed by an alcolmeter. The alcolmeter measures ethanol concentrations in a volumetrically trapped breath sample—taken when two lights illuminate (indicating alveolar air)—by electrochemical oxidation and gives a reading of blood alcohol concentration in mg % (mg/100 ml). Regular checks on calibration were performed at weekly intervals by passing a known concentration of alcohol vapour (80 mg/100 ml) through the machine. In addition to the alcolmeter reading, the age and sex of patients, the time of day (morning or evening survey), and the presenting symptoms were noted.

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It is a pleasure to acknowledge the willing co-operation of the consultants and general practice trainers concerned with trying to improve our training scheme. We are grateful to the doctors who came to be interviewed as part of the training courses, and finally we acknowledge the financial support of Sterling Winthrop Laboratories Limited.

Reference

- 1 Rodger A. The seven point plan. National Institute of Industrial Psychology Paper No. 192. Reprinted by NFER Publishing Co.

Results

The total number of patients in the study was 1014. The number of positive readings was 35—24 men and 11 women; eight had positive readings in the morning and 27 in the evening (tables 1 and 2). One hundred and eight patients were unable to blow sufficiently hard or long enough to illuminate both lights, mainly because of obstructive airways disease or being elderly. We do not know if negative results are sometimes due to failure to blow adequately.

Six patients with positive readings were known to be problem drinkers before the study, and as a result of the study an additional 11 patients were thought to have problems related to alcohol. The presenting symptoms of those with positive readings were classified as physical (20, psychological, 3, and social, 3). The commonest physical presentation was musculoskeletal symptomatology related either to injury or to osteoarthritis; this was followed by infective illness (mainly upper respiratory), and by those with ophthalmic pathology. The psychological presentations included anxiety, depression, and alcohol problems.

The alcolmeter.

The alcolmeter is a small, portable, battery-powered device which is used to measure blood alcohol concentration. It consists of a small box with a display screen and a breath sample inlet. The device is used by blowing into the inlet, which causes the breath sample to pass over a sensor that measures the alcohol concentration. The result is displayed on the screen.

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TABLE 1—Number of patients with different blood alcohol concentrations

	Blood alcohol concentrations (mg/100 ml)											
	1-19	20-39	40-59	60-79	80-99	100-119	120-139	140-159	160-179	180-199	200-219	220-239
No. of patients	12	3	5	5	2	0	2	3	1	0	1	1

TABLE 2—Age of patients with positive readings

	Age (years)					
	15-24	25-34	35-44	45-54	55-64	65-74
No. of patients	5	12	4	4	9	1

Social presentations were mainly related to contraception. The classification of the symptoms may well be debatable in some cases but indicates that it is helpful when considering the aspects of alcohol-related problems.

Discussion

The results of using an alcolmeter to screen for problems related to alcohol seem highly encouraging. About 3.5% of the total number of patients in the study produced positive results. Using these results in connection with information that was already known about the patients we found that 49% of patients who had a positive result had a problem handling alcohol. Patients with a positive result in the morning or a result over 150 mg/100 ml in the evening were more likely to have a drinking problem. A negative result does not necessarily indicate that there is no drinking problem, and more research is needed.

The test was remarkably acceptable to patients. There was only one refusal in 1014 patients (this patient was manic at the time) in four practices. The test is non-invasive and the only risk is to the doctor-patient relationship if the consultation is handled clumsily. It may enhance the consultation, however, and be beneficial in a therapeutic way, thus precipitating a useful discussion.

The test was acceptable to the doctors, who had no major problems with it. The explanation to patients, performing the test, and interpreting the results took about 90 seconds for most patients. The capital cost is about £230, and about £40 per year must be allowed for replacement of fuel cells, disposable mouth pieces, and alcohol vapour standards. By any standard, this is cheap for a screening test. Weekly calibration was performed easily and quickly.

Conclusions

We believe that an alcolmeter can be used as a cheap screening test in general practice to discover problems that are related to the use of alcohol. Other ways of using an alcolmeter in screening should also be explored. We intend to follow up the results of treating those patients we have identified as having a problem with alcohol. Further research needs to be done about efficacy (does early detection lead to a better outcome among those who follow advice in general practice?) about effectiveness (does early detection benefit those to whom it is offered?) and efficiency (is screening being made available to those who could benefit from it with optimal use of resources?).

In view of the evidence of the deleterious physical, psychological, and social effects of alcohol abuse⁴ and results of research suggesting that the average general practitioner will have between 30 and 60 problem drinkers on his list, we and others have found that patients who do not have serious withdrawal symptoms are often amenable to advice and counselling in general practice.⁵⁻⁷ The general practitioner is very well placed to make an early

diagnosis and manage this problem, and with an alcolmeter he has an additional useful aid.

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Clinical curio: The devil's grip—modern style

The patient was a 60-year-old man, and by no means a fool. Six years ago he had a colon carcinoma successfully resected. Three years ago he was suddenly stricken with severe subarachnoid pain. An ambulance was called immediately, and he was taken to hospital as a stretcher case accompanied by his wife. En route to hospital the ambulance driver over a ridge in the road with such force that the ambulance attendant accompanied both patient and oxygen face-mask to the roof, and his wife was thrown to the floor. The therapeutic effect was as dramatic as the incident: his subarachnoid pain went at once, and he arrived pain free at the hospital.

Unfortunately, the hospital had been warned of his impending arrival, and as the case notes were available a renal examination was made first, despite the patient's protest. No electrocardiogram was taken or suggested. On challenging the consultant ten days as the real cause of the pain, the patient was told that this was "What we call the devil's grip." The patient objected that as he did not believe in the devil he thought even less of his grip—so what did the term mean anyway? The explanation was uninformative but action was direct: "You can go home tomorrow." And so he did.

Three months ago the devil gripped a second time. On this occasion, however, an electrocardiogram was done which showed evidence of a previous myocardial infarction on the left as well as a recent exercise of his power. The patient is now convalescent after his second coronary or, should one say, devil's grip.

There are three points in this story. Does an intense fright curtail an anginal attack? Would it be better for all patients' notes not to be available at readmission so that the diagnosis at a readmission should not be prejudiced by earlier opinion and findings? It is happily said that the only sufferer from one disease over the age of 60 is to be found in a textbook. Lastly, is it ever really wise to talk foolishly to the intelligent?—P. P. ROY, Rugby.