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Behavioural sciences teaching in UK dental schools

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Summary. A survey was conducted of the dental schools in the UK, inquiring about the teaching of psychology, sociology, epidemiology and psychiatry to dental undergraduates. Epidemiology was the most frequently taught and assessed subject, followed by psychology and sociology. Overall, the results indicate an increased concern with and attention to behavioural sciences teaching.

Key words: Behavioural sciences/*educ; *education, dental; Great Britain; psychology/educ; sociology/educ; epidemiology/educ; psychiatry/educ; educational measurement; teaching/methods

Introduction

As Kent (1983) pointed out, the teaching of behavioural sciences to dental students is a relatively new area of instruction in the United Kingdom. While it is well established in the United States, there may have been a reluctance to include such subjects as psychology and sociology in dental curricula in the UK (Lindsay *et al.* 1982). This could be due both to pressure on curriculum time and to the fact that psychologists and sociologists have only recently turned their attention to dentally related problems such as anxiety and preventive care. With the arguments put forward by the General Dental Council (1985) and the Nuffield Foundation (1980), however, there is increasing interest in the inclusion of the behavioural sciences in dental curricula. The Nuffield Foundation, for example, suggests that undergraduate training 'should pay particular attention to the skills of communication and to interpersonal relationships' (p. 45).

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The aim of this paper is to report the results of a survey on behavioural sciences teaching to dental students in the UK. Epidemiology is included as well as psychology and sociology, and reference will also be made to the clinical discipline psychiatry. Although epidemiology is not traditionally considered a behavioural science, the study of the susceptibility of various groups to disease is often related to behaviour and societal influences, such that the distinction between epidemiology and sociology is often blurred. Similarly, the teaching of psychiatry frequently includes content related to psychology. Rather than providing a list of dental schools and the extent of the teaching in each, the results are organized by the content of the courses, their timing, assessment and teaching methods over the country as a whole.

Method

The survey was conducted in 1984 and updated in late 1985. The first step was to identify the lecturers involved in the teaching of psychology, sociology, epidemiology and psychiatry. This was accomplished by writing to the Deans of the 16 dental schools in the UK, asking them to name the staff (if any) responsible for the teaching of these four subjects. A 100% response rate was achieved. The named lecturers were then contacted individually and asked to complete a questionnaire outlining their contribution. Here, 39 of the 44 named individuals (89%) replied.

The questionnaire contained items about several aspects of their teaching. The aim of

this survey was to gather information about the extent and content of *formal* teaching in the behavioural sciences, so that staff were not simply asked to confirm their Dean's report and to describe briefly their contribution, but also to give a list of titles of lectures in the specified subject. Further questions asked when the teaching was given, whether the learning was assessed, and to describe other teaching formats besides lectures, such as videotapes, tutorials or research projects.

Results

As mentioned above, the replies were not organized on a school-by-school basis. It would be misleading to present the data in this way because many respondents volunteered the information that their institutions were currently revising their curricula with an increase in behavioural sciences teaching in mind. Certainly, there will be some schools who did not provide teaching at the time of the survey but who do so now. It should also be pointed out that some staff, while not providing formal lectures, claimed that they included some psychology informally during clinical instruction or that students were strongly encouraged to read research papers. In these respects, the following results provide an underestimation of the current situation.

Extent of teaching

With the above provisos, it is useful to note that most schools provide some formal teaching in at least one of the subjects, three schools having lectures in all four areas. In the two cases where no behavioural sciences were given, respondents indicated that the teaching was under review and additions hoped for. More specifically, eight schools provided formal teaching in psychology, seven in sociology, eight in psychiatry and 13 in epidemiology. There was a wide range in the number of hours devoted to these subjects, from only a few in some schools to about 60 and much small-group teaching at Glasgow. When the number of contact hours in each of the four subjects was examined, there was a clear emphasis on epidemiology, followed by psychology and sociology, with psychiatry being a distant fourth.

Content

Although there was a wide range in the extent of teaching, there was much agreement about which topics within a subject were most important. Table 1 presents a summary of the lecture titles cited most often, with the most frequent topics listed first. Thus, where lectures in psychology were given, for example, patient's anxiety was the most popular area, followed by lectures on encouraging preventive care, dentist–patient communication and pain. In addition, several topics were mentioned less frequently, such as care for elderly and handicapped people and hypnosis. These may have reflected personal interests of the lecturers.

Analysis of the content of lecture titles also indicated that the inclusion of epidemiology and psychiatry in this survey was merited. Many of the topics covered by psychiatrists (especially phobias) could have been taught by psychologists. Similarly, lectures in epidemiology often included areas which could be considered under sociology, such as 'social structure and its relation to dental health' and 'social determinants of oral health'. Although many lectures covered such topics as the conduct of clinical trials, incidence of disease and methodology, roughly one-third of the teaching in epidemiology appeared to deal with sociological factors in dentistry.

In all four subjects, the topics seem to have

Table 1. The topics most frequently included in behavioural sciences courses

Psychology:	Anxiety, motivation and prevention, dentist–patient communication, pain, special topics
Sociology:	Social class, health education in the community
Epidemiology:	Social class, statistics, measurement
Psychiatry:	Phobias, identification of psychiatric difficulties, drug abuse

been chosen on the basis of their applicability to dental practice, such that there is an emphasis on applied knowledge rather than on basic research. This may be due partly to student feedback, but it also suggests that lecturers aim to provide practical information for their students. Certainly, at Sheffield, the author has found it necessary to justify theoretical discussion in terms of its relevance to practice (Kent 1985).

Timing

The General Dental Council's most recent recommendations (1985) do not specify when behavioural sciences should be taught (suggesting that they can be taught concurrently with other subjects common to both medicine and dentistry). One rationale for early inclusion is that the students should be prepared before meeting patients, but the argument against this is that preclinical students often find the practical implications of the material irrelevant to their academic concerns. The survey indicated that most schools provide behavioural sciences during the clinical years, but at some the lectures are split between the preclinical and clinical years, for instance, giving talks on preventive care early but on anxiety later in the course.

Assessment

The importance of assessment cannot be overestimated. In terms of the survey it gives an indication of how seriously the subjects are taken by dental school staff, and in terms of students' perceptions how important these areas are for their future practice. The survey indicated that the presence of assessment was closely related to the extent of the teaching in the various areas and the number of hours provided. Epidemiology again led the list: of the 13 courses, 10 were assessed; of the eight psychology courses, five were assessed; of the seven sociology courses, three were assessed; and of the eight psychiatry courses, two were assessed. In some schools assessment took the form of specific MCQ or essay-type questions in an examination, whereas in others it involved a student's ability to integrate social and psychological concerns into their responses to questions on other topics.

Teaching methods

The most commonly used method was the lecture, but several respondents expressed their dissatisfaction with this approach, preferring small group teaching instead. While lectures were seen to be appropriate for the transmission of factual information, small-group work was deemed necessary for the teaching of communication skills and for reflection on the current philosophy of dental care.

There were some notable additions to the traditional lecture teaching method, more in line with the Nuffield Foundation's (1980) recommendations. Some staff reported the use of videotapes, either for direct teaching or to provide stimulus material for discussion. Videos included set-pieces where patients and dentists were portrayed by actors, recordings of consultations between qualified dentists and their patients and, occasionally, recordings of students themselves. At Glasgow, students are required to conduct a small research project on some behavioural aspect of dental care. Assessment of this project constitutes a full third of the marks in the behavioural sciences course.

Conclusions

Perhaps the most striking feature of the results is the increasing concern with the teaching of behavioural sciences over recent years. In some respects, the situation now, 6 years after the publication of the Nuffield Foundation report, is similar to that pertaining to medical schools in the years after the 1968 Royal Commission on Medical Education. It recommended a substantial increase in behavioural sciences teaching in medical schools, with the result that virtually all medical undergraduates in the UK now receive some psychology and medical sociology. It seems that the teaching of behavioural sciences is now becoming firmly established in dental schools as well.

The survey also indicates that epidemiology is seen to be the most important subject area of those considered here. Not only is it most frequently included, but also given the most

hours and most likely to be assessed. By contrast, psychiatry is the poor cousin. This requires further consideration. Many people in the general population who are severely depressed or otherwise disturbed do not consult their general medical practitioner (Goldberg & Huxley 1980; Horwitz 1982), and the dentist may well be the only health professional they meet. It is important that students be aware of the signs of major psychiatric difficulties and know how to refer patients sensitively.

Although the survey was not specifically designed to examine this, it would seem that in many schools behavioural sciences are not taught as part of an integrated course, as Blinkhorn *et al.* (1979) recommend. While there are some pioneers (again at Glasgow, and at Sheffield there is a fifth-year course titled 'Patients as People' which includes talks on handicapped and elderly people), these appear to be exceptions to the general rule that students are given a fragmented picture of the area. Related to this problem is that the qualifications and addresses of many of the respondents—particularly those teaching psychology and sociology—indicated that they were not based in dental schools. This might suggest that much of the teaching in these subjects is dependent on their goodwill. If this were the case it would now seem to be appropriate to formalize the teaching in some way; it is unsatisfactory that the teaching could lapse if a lecturer moves elsewhere and the replacement has less interest.

Finally, there seems to be much consistency in the aims of staff. The content of the lectures—indeed the reliance on the lecture format itself—indicates that the emphasis is on the transmission of facts about practical areas of patient management. While a problem-centred approach would seem to be appropriate, helping a patient cope with his or her anxiety, for example, is not simply a technical question requiring a technical answer. It is an interpersonal problem as well (Hillman 1962). In this regard, it is noteworthy that at no school was there any indication that time was set aside to deal with students' anxiety and stress, which studies conducted in the USA (e.g. Sachs *et al.* 1981; Simpson *et al.* 1982) indicate can be considerable. It can be argued that one of the most effective ways of helping patients with their difficulties is first to help students with their own.

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