



COMMUNITY-RELATED ISSUES

Introducing Community-based Teaching of Third Year Medical Students: Outcomes of a Pilot Project One Year Later and Implications for Managing Change¹

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ABSTRACT Introduction: *British undergraduate medical education is undergoing change, including a greater emphasis being placed on community-based teaching. These changes need to be evaluated for their educational outcomes, but there also needs to be a review of the process of introducing change and its subsequent management.*

The setting: *During the academic year 1996/97 a new project was piloted at Leeds University. Fifty-three third year medical students were attached in groups of four to general practitioner tutors in a primary care setting for four days in order to improve consultation skills. There was an emphasis on adopting a patient-centered approach, particularly asking patients about their concerns.*

Method: *These students were asked to fill in a questionnaire to determine whether the community-based teaching has made any lasting impression on their attitudes and performance. The response rate was 80%. The students commented that even only four days of community-based teaching had helped them realize the importance of asking about patients' concerns. They also reported beginning to concentrate on psychosocial issues while talking to patients, issues that are often ignored by medical students. The students' comments are contrasted with those of the hospital-based tutors, some of whom have looked less than favorably on the project.*

Discussion: *The introduction of any new learning experience needs to be evaluated both in the short term and in the long term. This study begins to address long-term evaluation and suggests that a brief attachment can be memorable to students and beneficial one year later.*

Introduction

Traditional medical undergraduate curricula in the United Kingdom have

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focused on hospital-based teaching of clinical skills to students. Any community-based teaching and experiences talking to patients in their own environment have been restricted to that offered during general practice attachments, usually to more senior students. These attachments typically last four to six weeks in the five year course.

British medical schools are now in the process of changing their curricula, partly in response to the document *Tomorrow's doctors* (General Medical Council, 1993), partly in recognition of the need for more community-based education as recommended by the World Federation for Medical Education (1994), a recommendation that has been followed by many international institutions. An important development in the UK has been an increase in the amount of, and a shift in the focus of, community-based teaching. There are many possible approaches to incorporating a community teaching and learning focus into a previously hospital-dominated program of education (Kantrowitz *et al.*, 1987) and a variety of settings may be chosen (Boaden & Bligh, 1999). Managing these changes in medical education ideally requires a process of setting up demonstration (pilot) projects and implementing an evaluation strategy to maximize success (Gale & Grant, 1997). Short-term evaluation is helpful for adjusting elements of new courses to make them more acceptable to and beneficial for students and staff. Longer-term evaluation is more difficult and should ideally involve a patient perspective for measuring outcomes (Neuberger, 1998).

Community-based teaching is becoming established in various formats in the United Kingdom (McCrorie *et al.*, 1993). Often these changes have been achieved when the previously existing curriculum is totally reworked or as new modules are inserted into a curriculum that is changing more slowly.

In this paper I describe a pilot community-based teaching attachment for third year (first clinical year) medical students at Leeds University and its evaluation one year later. The findings are limited to the self-reported perceptions of medical students and teachers. During the community attachment, there was an emphasis on adopting a patient-centered approach, particularly asking patients about their concerns. The holistic, patient-centered approach recognizes that a patient's problem may be defined in terms of physical, psychological and social components (Weston & Brown, 1995). The cause of the problem, how the patient handles it and its course are determined by the patient's emotional response to what is happening (Pendleton *et al.*, 1984).

The general practice (GP) tutors during the attachment were asked to highlight the importance of exploring patients' psychosocial histories as well as their physical problems. This was thought to be important because medical students are rarely taught to routinely assess psychosocial factors (Williams *et al.*, 1997) and often use distancing tactics to avoid dealing with awkward questions (Cantwell & Ramirez, 1997). Because of the tendency of doctors and thus medical students to adopt a biomedical model (Fisher & Todd, 1993), they are likely to approach patients' problems in a way that abstracts them from the

“social, cultural and institutional contexts within which they occur” (Mishler, 1981). Engel (1977) suggested that a different setting than the traditional hospital base could focus attention on a wider bio-psychosocial model of medicine.

We have evaluated the project by focus group interviews at the end of the attachment (Thistlethwaite & Jordan, 1999). The present report focuses on a longer-term evaluation.

The Setting

In the academic year 1996/97 we piloted a new community-based attachment at Leeds University in collaboration with local GP tutors. This involved first year clinical students (third year medical students) spending one day per week for four weeks in a primary care setting with a GP tutor. During the third year students are attached, in rotation, to four hospital-based firms for six weeks each. The four days in the community took place during one of these firms.

The course in clinical medicine in the third year has three main aims:

- to provide the experience during which students acquire the skills of history-taking, clinical examination, differential diagnosis and management;
- to stimulate the acquisition of a basic knowledge and understanding of the clinical features and management of the conditions seen in medical practice; and
- to encourage the development of the attributes of the caring physician.

The community attachment helped to fulfill all the above aims apart from clinical examination. Several new objectives were added to the list that followed on from the other aims of the third year. These were:

- to understand how physical, psychological and social factors contribute to ill health;
- to be competent in adopting a patient-centered approach to a consultation; and
- to elicit the patient’s ideas, concerns and expectations.

During their four days in the community with their GP tutor, students interviewed patients with chronic conditions, made home visits to housebound patients, and had consultations with patients who had more acute problems before they were seen by their general practitioner.

Subjects

There were 187 students in the third year in 1996–1997. Fifty-three of these students were chosen at random by the medical school office to participate in this project. Eventually, all 200 third year students will participate in this attachment.

Table 1. Questionnaire

What positive benefits do you feel the attachment provided?
 Have you used any of the consultation skills since the attachment? If so, which?
 What do you feel now about asking about patients' concerns?
 Have you had the opportunity to practice asking patients about their concerns?

Method

To determine if the community-based teaching had led to any lasting changes in the students' attitudes and performance, we carried out an evaluation of the attachment one year later, in 1997/98.

Fifty-one of the 53 students who undertook the community attachment in 96/97 received a questionnaire (Table 1) by hand to complete during their fourth year, at the start of their four week general practice rotation. Two of the students had taken a year out to study for a Bachelor of Science degree and were unavailable for the survey. If the students had not returned their questionnaire by the end of the rotation, we sent them another copy by post with a stamped, addressed return envelope.

Results

There was an 80% response rate to the questionnaire.

Question 1: Perceived GP Attachment Benefits

Forty students gave positive comments in answer to Question 1. Only one student replied that the attachment had provided "none." The following are some examples of the students' comments:

Encourages me to look more at the patient as a whole before dealing with the "disease." Improved my communication skills. Feedback on history-taking skills at an early part of our clinical studies. It highlighted the psychosocial component of illness.

Question 2: Use of Consultation Skills

The responses to this question are shown in Table 2. Two students mentioned exploring the "hidden side" or "hidden agenda" of the consultation, referring to the fact that the patient's presenting complaint is not always the main or sole reason for the patient to seek medical advice.

Table 2.

<i>Have you used any of the consultation skills since the attachment?</i>		
	Yes	36
	No	3
	Probably/to some extent	2
<i>If so which?</i>		
	Gained confidence	2
	Asking about patients' concerns	11
	Improved communication/consultation skills	6
	Asking about relevant social history	4
	Taking a focused history	8
	Listening	5
	Exploring "hidden side/agenda" of consultation	2
	Giving information	2
<i>Have you had the opportunity to practice asking patients about their concerns?</i>		
	Yes	34
	No	6
	No answer	1

Questions 3 and 4: Addressing Patients' Concerns

In answer to Question 3, regarding asking about patients' concerns, 40 students gave positive responses such as: feeling fine, relaxed, and more comfortable. One student did not answer this question. Examples of students' comments included:

I consider it part of the routine consultation. In doing so the doctor conveys many hidden messages regarding empathy and concerns.

Thirty-four of the students had had the opportunity to ask patients about their concerns, six had not, and one student did not answer this question.

Comments in answer to Question 4 included:

Yes, plenty. I have incorporated this into my history-taking. Yes ... before I had this assignment, this aspect of the consultations had not really been highlighted. Before the attachment I did not really consider asking a patient about their concerns, but now I tend to do it as second nature.

However, there was a perception that asking about concerns was not as easy to do in these settings as in hospital settings:

Not much—you don't really get the chance to do it in hospital—it's quite difficult to do in practice when time is limited.

Students commented on other features of the community attachment:

The only genuine and personal feedback I obtained all [third] year—this was very important. Increased my confidence especially when dealing with sensitive issues. I have asked patients what they feel is wrong with them ... I wouldn't have dreamed of asking this before. Some patients have very strange fears.

Evaluation by GP Tutors

We asked GP tutors to fill in a questionnaire at the beginning and end of their first experience of teaching on the community attachment. Eleven GPs were involved in the pilot project, and all have continued serving as tutors in the subsequent two years, apart from the one who has moved away from the area. These tutors undertake this teaching in addition to their other work as practicing GPs, but find it stimulating and enjoyable. There is an added incentive of payment, but the remuneration is so modest that the doctors do need to gain something personally from the attachment to consider it worthwhile.

Comments as to what tutors gained from the attachment included:

It made me rethink the consultation process. Enjoyed teaching a lively and receptive group of students. Increased confidence with small group teaching: a better idea of what does and doesn't work well as a teaching strategy.

Comments as to what tutors felt the students had gained from the attachment that they could not get in a hospital setting included:

Virgin patients—uncontaminated by previous contact with doctors during acute illness. Close informal supervision with immediate feedback. Access to patients in more natural setting.

Comments from Hospital Tutors

The hospital firms to which the third year students are attached for six weeks at a time consist of a mixture of senior and junior doctors. A firm is generally concerned with one clinical speciality as regards the management of patients under its care, as well as having a role in research and teaching. The head of a firm is a consultant physician or surgeon. The consultant, as well as more junior staff, is involved in teaching and supervising the medical students.

Education committees within the medical school largely set the structure of the teaching year and the learning objectives for students. The consultants were informed that the community-based teaching initiative would be taking place and that some students from their firms would be absent for four days during the six week attachment. During the pilot study only four firms were affected, the heads of these firms having been involved in the development of community-based teaching from its inception.

Because of the success of the pilot project, the community attachment was

expanded to involve 120 students in its second year, and subsequently most hospital firms were involved. In September, 1997, the head of each firm was informed about the aims and objectives of the community attachment, its emphasis on medical interviewing and history-taking skills, and the process by which one or more students would be absent for four designated days. Moreover, consultants were asked to nominate a weekday on which little or no formal teaching was given. There were 17 consultants out of 24 who replied to this request. However, several consultants were not happy for their students to miss any days from the firm. This is a comment as to the suitability of the community experience for students:

I, personally, support the concept of community-based teaching attachments, though I do feel that the students' exposure to genuine and significant pathology will be diluted by such GP attachments.

In spite of the fact that during the year students spend about 120 days on the wards in which to learn and practice clinical skills, and only four days in the community, there was some anxiety expressed that students would be disadvantaged:

... it is difficult enough to ensure that students have an adequate grounding in the skills of clinical examination.

I have made no attempt to formally evaluate the hospital tutors' comments. Only five of the 24 expressed whatever reservations they had in writing.

Discussion

The introduction of any new teaching style or course needs to be evaluated and the results of the evaluation acted upon. Moving the focus of part of the clinical curriculum into the community needs evaluation to ensure that students meet the stated objectives of their courses. Previous studies have shown that clinical skills such as history-taking and physical examination may be acquired by students equally well in hospital and community environments (Murray *et al.*, 1997; Parle *et al.*, 1997). Given the time constraints at present within the primary care setting for additional educational activities and the existing well-established culture of hospital teaching, the challenge is to decide which learning objectives within the medical curriculum are best tackled where. Certainly exposure of students to primary care patients early in their clinical years allows them to see doctors managing ambiguity in patients' presentations and may help the students overcome any aversion to uncertainty (Merrill *et al.*, 1994).

Medical students are sometimes taught communication skills before they learn how to take a medical history, and have subsequently been found to have difficulty integrating these two skills (Clack, 1994). Craig (1992) showed that lack of feedback on technique and lack of encouragement to pursue a patient-

centered approach as students learn medical problem solving can contribute to a decline in interviewing skills.

Doctors practice in two rather different environments: the hospital and the community. A mix of community and hospital-based teaching would appear to offer students a needed variety of experiences and approaches to patient care. Suitably motivated GPs tend to adopt a patient-centered approach (Dixon, 1986) and can demonstrate this approach to students. All these factors were taken into consideration when planning the community-based GP attachment described in this paper.

The introduction of more community-based teaching, incorporating as it does change within a curriculum, needs to be handled well so as not to antagonize existing tutors and cause friction among faculty and other teaching staff. At Leeds we have reached a similar conclusion to that of Skelton *et al.* (1998), namely, that the majority of hospital tutors are happy with the attachment in theory but are unhappy about disruptions to their own teaching.

The community-based teaching was inserted into an existing curriculum rather than being incorporated as an integral part of the third year teaching. Thus the process of change is somewhat different from that reported by medical educators whose medical schools have adopted a community-oriented curriculum, though there are similarities in that both the senior academic staff and the students need to be actively involved in the change (Hamad, 1999). Moreover, the objectives of the changes need to be discussed and monitored on a regular basis (Iwama de Mattos *et al.*, 1998). However, pilot studies may be used as small sequential steps in the process of innovation as has been shown by universities that have adopted more wide-ranging community-oriented curricula (McGrew & Kaufman, 1999). In Leeds, while there was a process of consultation with the teaching staff, this was by written communication, and not all paperwork sent to busy clinicians is fully digested and its implications realized until the change is underway. Change leaders need to listen and respond to the objections and try to be conciliatory (Gale & Grant, 1997). We aim to act upon the students' evaluations and the tutors' comments to improve the attachments in the future.

Conclusions

From the responses to the questionnaires we conclude that even only four days of community-based teaching, with an emphasis on patient-centered consultations and discussing patients' concerns, made an impact on the students who took part. One-quarter of students say that they now ask patients about their concerns routinely. Others feel this approach is important but find it easier to do in a general practice setting than in a hospital setting, further highlighting the need to provide students with multiple learning environments.

The Leeds curriculum is undergoing a complete overhaul in 1999. There will

be an earlier introduction of clinical skills teaching. Both hospital and community settings will be used for this teaching, with the aim of providing students with complementary experiences. Hopefully this will mollify hospital tutors whose own teaching will no longer be disrupted; however, it will not ease the worries of those who consider that clinical skills can only be learned in hospitals.

The community setting will continue to focus on patient-centered consultations and will offer students the opportunity to visit patients in their own environments, so they can see how illnesses affect lifestyles and how lifestyles affect illnesses. We aim to manage this major change with skill, allowing all concerned to become involved in the change process and the evaluation.

Notes

1. Part of this paper was presented as a poster at the Network conference in Albuquerque, New Mexico, October, 1998.

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