

Physicians' Perceptions of Clinical Teaching: A Qualitative Analysis in the Context of Change

LYNN V. KNIGHT* and JOHN BLIGH

*Peninsula Medical School, Universities of Exeter and Plymouth, Portland Square, Drake Circus, PL4 8AA, Plymouth, England (*author for correspondence, E-mail: lynn.knight@pms.ac.uk)*

Received 24 January 2005; accepted 12 October 2005

Abstract. *Background:* Change is ubiquitous. Current trends in both educational and clinical settings bring new challenges to clinicians and have the potential to threaten the quality of clinical teaching. *Objective:* To investigate hospital specialists' perceptions of clinical teaching in the context of change. *Design:* Qualitative study using in-depth semi-structured interviews. *Setting:* Three hospital trusts in the United Kingdom associated with a new medical school. *Participants:* A purposive sample of 15 clinicians from each of the three participating hospitals was approached. A total of 13 participated in the in-depth interviews: three from hospital A, six from hospital B and four from hospital C. *Results:* The two main themes of 'Characteristics of Good and Bad Teachers' and 'Clinical Teaching Approaches' emerged. These were underpinned by a number of sub-themes; including some seen by participants as potential barriers to teaching and learning, for example, organisational and personal issues. *Conclusions:* Potential barriers to teaching and learning, including why good clinical teachers may at times seem to be intimidating or to cause humiliation and problems of engaging with new educational practices, can be understood within the context of change resistance. Knowing more about how clinical teachers think about their task as educators is essential and this should underpin staff development and training programmes.

Key words: change context, clinical teaching, hidden curriculum, qualitative research, role models

Introduction

Excellent clinical teaching is multifaceted. Clinical knowledge and skills, good communication and empathy with patients, a high degree of professional ethics and humanistic qualities and an interest in teaching and learning comprise only a few of the qualities required of an effective clinical teacher (Wright et al., 1998; Paukert and Richards, 2000; Wright and Carrese, 2001; Stark, 2003). However, recent trends in both education innovations and in the clinical environment have combined to bring new challenges to clinicians involved in educating tomorrow's doctors (von Glasersfeld, 1995; Irby and Wilkerson, 2003). Such innovation may be perceived by clinical teachers as

being unnecessary and may threaten their ability to teach effectively. For example, some of the environmental challenges involve strong demands on clinicians' time that has led to teaching being 'crowded out' of doctors' busy schedules with the concern that this may erode standards and effectiveness of clinical education experienced by students (Ludmerer, 1999; Busari et al., 2002).

ROLES OF CLINICAL TEACHERS

A number of roles of effective clinical teachers have been identified (see Table I for an overview). For example, it has been shown that most behaviours and characteristics of excellent clinical teachers could be found in the four roles of *physician* (knowledgeable, professional), *teacher* (listening, encouraging), *supervisor* (observes, provides feedback), and *person/supporter* (provides support outside the ward) (Ullian et al., 1994). These roles subsume a number of characteristics and values that the effective clinical teacher should portray: being self-critical, taking responsibility, recognising their own limitations, not appearing arrogant, showing respect for others, having self-confidence, and demonstrating sensitivity to others (Irby, 1978). It is the combination of roles, characteristics and values that are unique to educators in the medical setting and that contribute to an understanding of both implicit and explicit learning experiences. However, such experiences might be subject to extraneous influences, for example, lack of engagement in the teaching process caused by factors such as stress. As such, one further implication for clinical teachers is adapting to change.

Coping with change can be stressful. Indeed, emotional reactions to change have been shown to be similar to the experience of grief (Carr, 2001), and are strongly associated with stress and anxiety. Moreover, changes or innovations can anticipate resistance, especially if the changes alter values related to the existing context. Changes that concur with one vision of the future can reduce satisfaction with other groups; the endurance of one set of values might well be at the expense of the other. Therefore, resistance to change is a common reaction. Such a resistance has been shown to have a number of specific contributory elements (Trader-Leigh, 2002). These include, among other factors, *psychological impact*, (as perceived in job security, professional expertise and social status), *culture incompatibility* (for example, a clash between an academic- and professional-oriented culture) and *tyranny of custom* (the tendency to be caught up in traditional ways of doing things).

The current study was designed to investigate clinical teachers' perceptions of their role as a teacher at a new medical school that actively encourages educational innovation. A qualitative methodology was utilised to explore clinical teachers' perceptions of the characteristics required of good clinical

Table I. Roles, characteristics and values of good clinical teachers (role models)

*Strong clinician; ^{b-d,f}
*Knowledgeable; ^{c,d}
*Professionally competent; ^{b,d}
*Patient Centered; ^{b,d-g}
Compassionate; ^{b,e,f}
Emphasis on psychosocial aspects of patient care; ^g
Fully informs patients; ^{b,e}
Good rapport with patients. ^{b,d}
*Interprofessional attitude; ^b
*Positive outlook; ^{a,b,d,f}
*Enthusiastic; ^{a,b,d,f}
Friendly; ^{d,f}
Easy-going; ^{d,f}
*Humorous. ^f
Commitment to excellence and growth; ^f
Creative;
Inquisitive;
*High standards.
*Integrity; ^{b,e,f}
*Ethical and Moral standards; ^{b,f}
Trust and Honesty; ^e
Leadership qualities; ^{a,c,e,f}
Inspirational; ^{a,c,f}
Team builder; ^f
Influential; ^f
Non-judgmental; ^{e,f}
*Interpersonal skills; ^{a-g}
*Good communication skills; ^{a,b,d-f}
*Supportive; ^{c,d,f,g}
Caring; ^{c,d,f}
Respectful of others; ^{b,e,f}
Teaching and learning; ^{a-d,g}
Interested in teaching and learning; ^c
*Creating positive learning environment; ^{a,b,d,g}
*Curriculum development; ^g
Establish rapport with learners; ^{b,d,f,g}
Approachable; ^{d,f}
Non-confrontational; ^{d,f}
*Patient; ^b
*Interested in the learner as a person; ^g

Table I. Continued

*Committed to growth of learners; ^{b-d,f,g}
Spends time with learner; ^{c,d,f,g}
*Gives feedback; ^{f,g}
Thoughtful advisor. ^{b,d,f}

Note: *Denotes themes also emergent within this study (^aBoendermaker et al., 2003; ^bElzubeir and Rizk, 2001; ^cPaukert et al., 2000; ^dUllian et al., 1994; ^eWright and Carrese, 2001; ^fWright and Carrese, 2002; ^gWright et al., 1998).

teachers within this climate of educational change, the roles they need to adopt, and the attitudes and values they wish to impart.

Method

We used an inductively based approach using individual semi-structured interviews and a systematic non-random sampling to ensure that specific people with relevant characteristics for the focus of the interview were approached (Denzin and Lincoln, 2000). A purposive sample of 45 clinicians who had expressed an interest in teaching (15 from 3 hospital trusts) from diverse specialities was contacted via letter (details of which were anonymous to the researchers). These hospital trusts were located around a new medical school in the United Kingdom and had not previously been teaching hospitals. Thirteen clinicians contacted the researchers for participation in the study: 3 from hospital A, 6 from hospital B and 4 from hospital C. Two participants were women, 11 were men with a variety of experience (mean length as consultant 13 years; range 4–24 years) and length of time working at the hospital (mean length 9 years; range 1–22 years). All interviews were conducted within a 3-month time period towards the end of 2003, 9–12 months before the first students entered Phase 2 of their curriculum (years 3 and 4, where students rotate through a series hospital placements), prior to the recruitment of teaching posts and the start of the medical school staff development programme for clinical teachers. Three NHS Local Research Ethics Committees gave ethical approval.

During the course of each interview, clinicians were asked to reflect on their own learning experiences, to describe a good and bad teaching and to consider the role of clinical teacher at the new medical school. Finally, they were asked about how they felt about the development of the new medical school, and whether their thoughts had changed over time as the new curriculum emerged.

Interviews were conducted by the first author and lasted between 42–86 min (mean length: 72 min). They took place in the offices of the interviewees and were recorded and transcribed verbatim. The validity of the information was checked in the following ways: (1) during the interview, the interviewee was asked to clarify their statements with the use of examples of their own personal experience; (2) following the interview, the transcript was sent to each participant for verification before being fully analysed; and (3) during the analysis, particular attention was paid to negative instances.

The analysis was undertaken in a bottom-up grounded approach. Themes, sub-themes and main issues were allowed to emerge from the data. The process of analysis was partly interwoven with data collection (interviews) such that whenever new themes emerged, they were explored further in subsequent interviews until no new themes were uncovered (point of saturation).

All transcripts were coded line by line by the first author where sub-themes and main issues were identified. A subset of the transcripts (nine) were also analysed independently by the second author. The authors then reviewed the themes; the outcome resulted in the final analysis presented here (numbers in brackets refer to the number of participants that identified the particular theme or sub-theme).

Results and Discussion

Two main themes emerged from the data: ‘Characteristics of Good and Bad Teachers’ (see Figure 1) and ‘Clinical Teaching Approaches’ (Figure 2). These were underpinned by a number of sub-themes and main issues. The

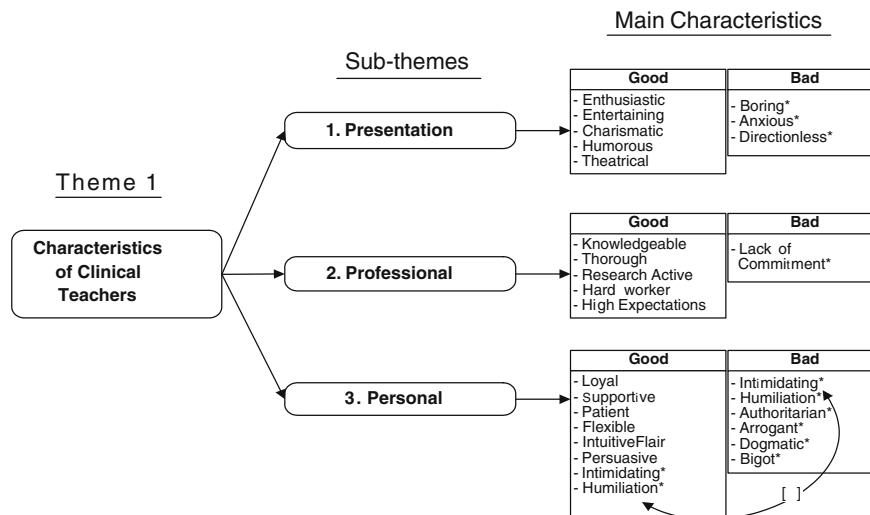


Figure 1. Theme 1: Characteristics of clinical teachers.

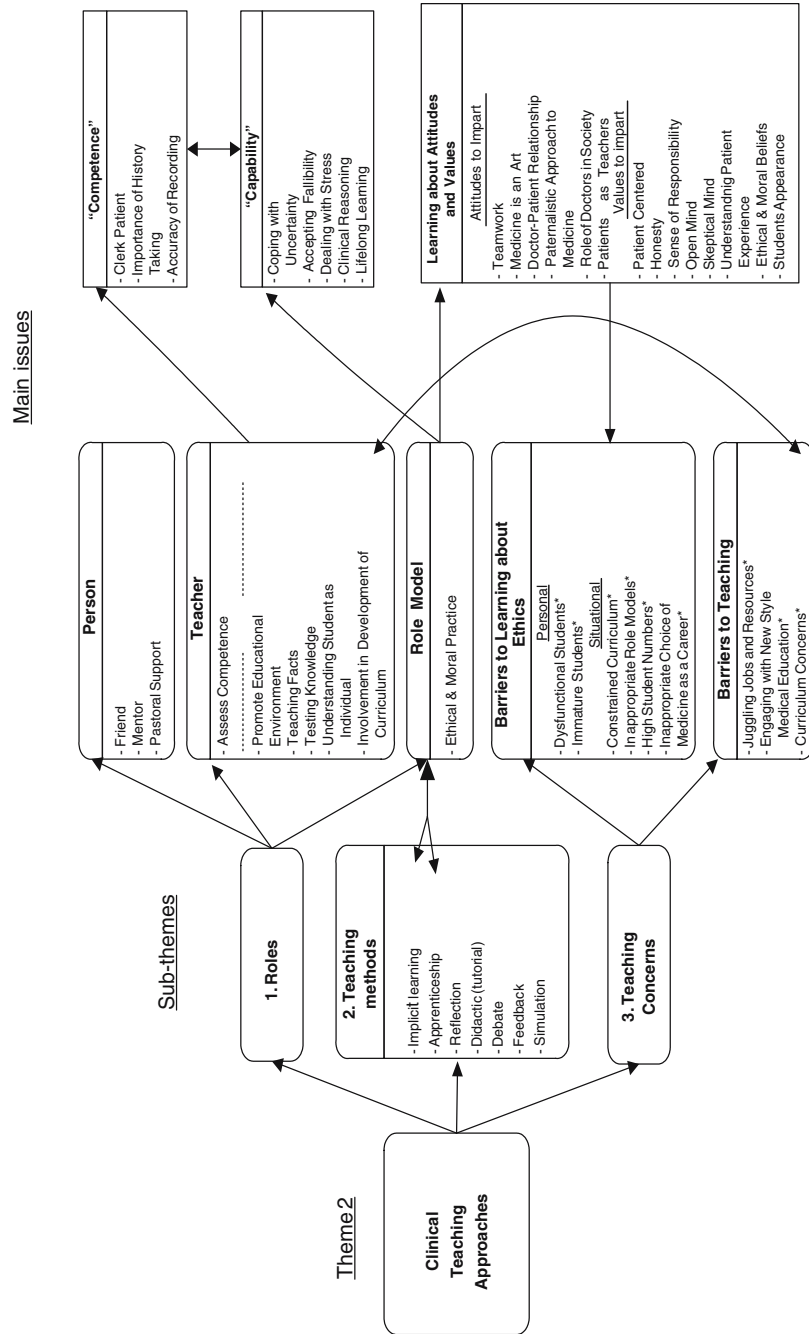


Figure 2. Theme 2: Clinical teaching approaches.

most prominent issues were identified as potential barriers to teaching-learning processes and interacted strongly with sub-themes from the data.

Characteristics of Good and Bad Teachers (GBT)

The characteristics of 'Good' and 'Bad' teachers identified fell into one of three categories: 'presentational', 'professional' and 'personal' (see Figure 1). Most participants agreed about the characteristics of a 'Good' and 'Bad' teacher. Indeed, 'enthusiastic' (8/13) and 'inspirational' (7/13) were mentioned most frequently as presentational characteristics belonging to influential clinical teachers in their individual learning experiences, and to the way in which they set about their own teaching:

The way to teach medicine is to teach enthusiasm, and enthusiasm for the clinical subject is the way that you'll turn out decent doctors. You won't turn out decent doctors on the basis of it all being frightfully politically correct and prescribed (Interview 9).

As for professional characteristics, being 'knowledgeable' (8/13) was most frequently cited. Personal characteristics of good clinical teachers included being 'supportive' (4/13), 'loyal' (3/13), and 'patient' (3/13). These presentational, professional and personal characteristics map onto those identified by Ullian et al. (1994) within the 'dynamic teacher', 'physician role model' and 'supportive person' roles.

Other characteristics mentioned, however, were notably different. Paradoxically, 'humiliation' and 'intimidation' were presented both as qualities of both 'good' (4/13), and 'bad' (3/13) clinical teaching. Some participants highlighted these as negative aspects of clinical teaching today, as one clinician put it:

the only unforgivable thing is the sarcastic bullying teacher, and there are still some around (Interview 1).

Other clinicians were not so negative about these practices. For example, when talking about their own teaching experiences, one participant commented:

he would do bedside teaching in a way some students would find intimidating... some people don't like that kind of teaching but he was a very inspiring character (Interview 13).

However, when discussing their own teaching practices, one participant made the following point:

there's a subtle difference between being dismissive and being challenging and that's quite difficult to get the balance, and I'm sure the best teachers

will get that balance wrong sometimes because it's an interpersonal relationship that's going on and some people will interpret a challenge as being dismissive and some will, you know, will not. So one can never be perfect, really, I've taught people who've thought I've been suggestively dismissive and destructive and I haven't meant to be (Interview 12).

It appears, therefore, that personality factors of the teachers and learners might influence whether an individual is perceived as behaving in an intimidating or humiliating manner. These findings add to those recently reported by Musselman et al. (2005) who identified 'good intimidation' as being related to whether there was a perceived acceptable *purpose*, positive *effect* (pedagogic or clinical) or *necessity* for the behaviour.

We can also see from these comments that 'humiliation' and 'intimidation' were identified as a common theme of teaching and learning practices for previous generations, and still considered to be acceptable practice by some participants. 'Resistance to change' might go some way to explain why these teaching practices still occur. For example, one way that resistance to change has shown to manifest itself is in the tendency to be embroiled in traditional ways (Trader-Leigh, 2002). While the characteristics of 'humiliation' and 'intimidation' are of some concern, other characteristics of 'good' teachers fit well with current teaching needs of students.

As for characteristics of 'bad' teachers, along with 'intimidation' and 'humiliation', 'boring' (7/13) and 'lack of commitment' (4/13) were mainly cited.

Clinical Teaching Approaches (CTA)

The three sub-themes of 'roles', 'teaching methods' and 'teaching concerns' underpin the CTA theme. Additionally, some of the main issues were identified by the participants as potential barriers to teaching and learning (see Figure 2).

ROLES AND TEACHING METHODS

Three main roles were identified: 'person', 'teacher' and 'role model'. The role of 'person' maps neatly onto the 'person' role found by Ullian et al. (1994). Additionally, aspects of the role of 'teacher' bears many similarities to those identified in previous research. However, a number of differences were found: factors such as 'testing knowledge' (5/13), 'understanding students needs' (4/13), 'teaching facts' (4/13) and 'assessing competence' (3/13), are notably different. These differences might reflect the different educational climates in which the studies were conducted, linking into the current concerns of participants.

For example, within the factors ‘teaching facts’ and ‘testing knowledge’, is the understanding that modern educational methods emphasise the use of knowledge rather than its mere possession. Many participants were uneasy with this concept, an approach contrary to traditional medical school training:

I personally think that the problem-based learning leaves people desperate to know a few facts, and I think that the students will grasp at any opportunity for factual knowledge, so I actually think the clinicians are gonna have a very important role, not in just spoon-feeding folks facts but in just really testing the student factual knowledge basically (Interview 1).

Similarly, within the factor of ‘understanding students needs’ one participant commented:

I think its going to be a big problem actually, when you get students here who have been through a problem-based learning program and they’re actually going to be, you know, quite a different breed actually from the kind of medical students that I’ve been teaching up to now who’ve been, for the most part, relatively passive individuals not asking that many questions, quite afraid of asking questions, to a group who will, from the way I perceive it, be very, very different. They’re gonna be constantly challenging what you’re doing and why you’re saying things and so on, which’ll be really good, but you know I need to be able to get inside them, in a sense, so that I can meet their needs (Interview 2).

This clinician is clearly displaying a student-focused approach with an attempt to understand today’s medical students. It must be acknowledged, however, that not all participants felt so positive about this ‘new breed’ of medical students:

Problem-based learning its going to be like having a lot of four-year-olds hanging around going why? Why? Why? all the time... and I think there’s a there’s a strong political agenda driving problem based learning... (‘Engaging with new style teaching’; Interview 3).

‘Involvement in development of curriculum’ (6/13) was also identified as a clinical teaching role:

but going back to the curriculum, it’s not me ignoring the curriculum because the curriculum will be driven by us anyway, because we know what people need to know for the job so its, so in some ways the curriculum will be molded by what, by what we suggest (Interview 11).

This might reflect frustration with not being involved in curriculum planning and concerns about their specialty within the curriculum (for an overview how this might fit with participants’ ‘curriculum concerns’ see Figure 1). Some of these concerns can also be viewed within the context of change resistance. For example, the perceived nature of the curriculum as being:

written by people who don't really understand the clinical field that they're talking about (interview 12).

suggests a culture incompatibility (Trader-Leigh, 2002) whereby the hospital specialists' clinically oriented culture appears to be undermined by academic input to the medical curriculum.

Participants also identified what clinical teachers needed to impart to students in terms of 'attitudes and values' and other aspects previously categorised as 'competency' and 'capability' (Fraser and Greenhalgh, 2001). In order to produce doctors who can adapt and grow with the ever-changing context of health care delivery, educators need to encourage the development of 'capability' in addition to the traditional focus of 'competence'. Fraser and Greenhalgh (2001) define 'competence' as "what individuals know or are able to do in terms of knowledge, skills, attitude" whereas 'capability' is defined as the "extent to which individuals can adapt to change, generate new knowledge, and continue to improve their performance" (p. 799).

The main issues that emerged under capability were 'coping with uncertainty' (6/13), 'accepting fallibility' (4/13), 'dealing with stress' (4/13), 'clinical reasoning' (4/13) and 'lifelong learning' (4/13). For example, participants highlighted the need to accept that sometimes that there are areas of uncertainty and they don't always know the answer:

...and have a debate around those and, you know, lots of, the issues that we discuss there's just no clear right or wrong answer (Interview 5).

...and say 'look', you know, 'you may think that we're senior and coming to the end of our days, you may think us dinosaurs or you may think we're the best thing since sliced bread, but we're all fallible we all make mistakes. We don't know all the answers and you won't know all the answers no matter how much you think you do and always remember a bit of humanity (Interview 4).

It is interesting to note that in this study, while 'competencies' were generally thought to be learned by students explicitly via the role of the 'teacher' through 'apprenticeship' (12/13), all participants identified aspects of 'capability', along with 'attitudes and values', as being primarily transmitted through implicit learning: 'role models' (13/13). Not everyone used the term 'role model', but when asked how they might impart the attitudes and values they espoused, the answer was ubiquitous:

I think very importantly as role models (Interview 1).

I don't think you can, other than by example (Interview 3).

I think educators do need to set an example of what is expected by the medical profession (Interview 13).

On the subject of role models, many participants accepted that not all role models the students experienced would be good, but they felt that these negative examples were valuable for medical students' learning:

They're going to need strong clinical role models, and they may not all be totally PC, certainly some of mine weren't, but they stand you in good stead when it comes to treating patients which is ultimately what it's about (Interview 3).

Just because he finished his vaginal hysterectomies in quarter of an hour/ twenty minutes, you knew you were gonna be taking one or two of his patients back to theatre that night. While he was slick, you didn't want to be like him. It's again the example, so that's, a lot of the teaching came that way (Interview 4).

Teaching Concerns

'Teaching concerns' were classified as 'barriers to learning about ethics' and 'barriers to teaching'. Participants identified both situational and personal barriers to learning about ethics. Situational barriers included the possibility of experiencing inappropriate role models and concerns that the curriculum was too constrained. Personal barriers were identified as properties of the learner:

I think there's a big problem with believing that you can get the attitudes across, and that is, I think there are psychopathic individuals...somebody who doesn't wish to behave in that way and is a dysfunctional character and if you're successfully dysfunctional and you know, you work with them a lot, you can exhibit the behaviours that the school desires of you, so you can sort of pass all your assessments and still behave in a thoroughly dysfunctional way when you're allowed to, when you're outside the exam situation (Interview 1).

'Barriers to teaching' were the most predominant issues currently occupying the minds of the medical specialists. Concerns about 'Juggling Jobs and Resources' (12/13) were paramount and link in with similar concerns in the US (Irby et al., 2003). Indeed, the problem of time constraints generating stress was highlighted as a '*logistical nightmare*' (Interview 5). When we asked about what kind of support they would need to fulfil their role as an educator, the response was frequently 'time':

Interviewer: What kind of support do you think someone in that in the role of clinician educator will need?

Respondent: Time

Interviewer: Any others?

Respondent: No (Interview 8).

There was also a tension with some participants around the issue of 'engaging with new style medical education' (4/13):

I've heard it said that we're being asked to expect/accept a new way of teaching medicine which is essentially the social experiment which has come from a very small minority of enthusiastic educationalists...what we're being asked to do is so new and so different from what's happened before we could produce a bunch of damaged doctors, have you heard that before? (Interview 12).

Respondent: message being that you are going to get students who you will teach in the way that we want them taught.

Interviewer: and how do you feel about that?

Respondent: Well they can stuff it can't they, I'm not that interested, I'm senior, I'm very busy, if I can help out I will but I'm not going to be pushed around.

Interviewer: and do you think this feeling is, erm, common place here?

Respondent: It's a fairly widespread feeling, yes. (Interview 8).

Conclusion

The in-depth interviews from this sample of consultants' from diverse specialities revealed that hospital clinicians hold a complex set of beliefs and values about their teaching role that have not previously been reported. Some of these value sets may have their origin in previous experiences as a medical student or junior doctor. Others reflect a sensitivity amongst clinical teachers in terms of their approach to teaching, the things they want to teach, their attitudes to students and the problems they face as clinicians in a changing environment, and their conformity to, or degree of comfort with, the perceived directions and aspirations of the medical school. The manifestation of these attitudes during clinical teaching episodes forms part of what is known as the hidden curriculum.

Hospital specialists are aware of a broad-range of qualities previously highlighted as desirable attributes for clinical teachers and of the attitudes, values, competencies and capabilities required by doctors of the future. One notable difference in this study is that 'intimidation' and 'humiliation' were classified as both good and bad characteristics of clinical teaching: one persons' challenge might be another persons' confrontation. Indeed, while a 'non-confrontational' characteristic has been identified as desirable in previous studies (e.g., Elzubeir and Rizk, 2001), this was not mentioned by the participants here. The view that good clinical teachers may at times be intimidating or cause humiliation can sometimes be explained in terms of an individuals' resistance to change: a tendency to stick with traditional ways as

for some, this kind of behaviour was commonplace in role models of their formative years.

Other potential barriers to teaching and learning were highlighted; feelings were strong amongst some clinicians about the new style of educational practices that were being introduced while concerns about the curriculum and time constraints were frequently mentioned. Indeed, curriculum concerns interacted with participants' perceived roles of a clinical teacher and were highlighted as barriers to teaching. Once again, this can be viewed within the context of change resistance as an incompatibility of cultures.

The introduction of new methods in any culture is subject to resistance, often because the survival of one set of values and visions may be at the expense of the existing culture. This study identified some dynamics of resistance that might undermine educational change in the clinical setting. More research needs to be done to assess the effects of this resistance and to consider how this can be managed effectively as a part of the implementation strategy. Understanding potential barriers to the teaching and learning process in a clinical setting is an important process and knowing more about how clinical teachers think about their task as educators should underpin staff development and training programmes.

Finally, it is acknowledged that this study has some limitations in terms of the size of the sample interviewed and that we sampled from three hospital trusts in the UK. Nevertheless, a number of themes that emerged from the data were in accord with findings from previous research, thus suggesting the potential generalisability of our findings.

References

- Boendermaker, P.M., Conradi, M.H., Schuling, J, Meyboom-de Jong, B., Zwierstra, R.P. & Metz, J.C.M. (2003). Core characteristics of the competent general practice trainer, a Delphi study. *Advances in Health Sciences Education* **8**: 111–116.
- Busari, J., Prince, K., Scherpbier, A. & van der Vleuten, C. (2002). How residents perceive their teaching role in the clinical setting: A qualitative study. *Medical Teacher* **24**: 57–61.
- Carr, A. (2001). Understanding emotion and emotionality in the process of change. *Journal of Organizational Change Management* **14**: 421–436.
- Denzin, N. & Lincoln, Y. (2000). *Handbook of Qualitative Research* London: Sage Publications Inc.
- Elzubeir, M. & Rizk, D. (2001). Role models in medical education. *Medical Education* **35**: 272–277.
- Fraser, S.W. & Greenhalgh, T. (2001). Coping with complexity: Educating for capability. *British Medical Journal* **323**: 799–803.
- Irby, D.M. (1978). Clinical teacher effectiveness in medicine. *Journal of Medical Education* **53**: 808–815.
- Irby, D.M. & Wilkerson, L. (2003). Educational innovations in academic medicine and environmental trends. *Journal of General Internal Medicine* **18**: 370–376.
- Ludmerer, K. (1999). *Time to Heal*. New York, NY: Oxford University Press.
- Musselman, L.J., MacRae, H.M., Reznick, R.K. & Lingard, L.A. (2005). 'You better learn under the gun': Intimidation and harassment in surgical education. *Medical Education* **39**: 926–934.
- Paukert, J.L. & Richards, B.F. (2000). How medical students and residents describe the roles and characteristics of their influential clinical teachers. *Academic Medicine* **75**: 843–845.

- Stark, P. (2003). Teaching and learning in the clinical setting: A qualitative study of the perceptions of students and teachers. *Medical Education* **37**: 975–982.
- Trader-Leigh, K.E. (2002). Case study: Identifying resistance in management change. *Journal of Organizational Change Management* **15**: 138–155.
- Ullian, J.A., Bland, C.J. & Simpson, D. (1994). An alternative approach to defining the role of clinical teacher. *Academic Medicine* **69**: 832–838.
- von Glasersfeld (1995). A constructivist approach to teaching. In: *Constructivism in Education*, Steffe and Gale (eds.), New Jersey: Lawrence Erlbaum Associates Inc, pp. 3–36.
- Wright, S.M. & Carrese, J.A. (2001). Which values do attending physicians try to pass on to house officers? *Medical Education* **35**: 941–945.
- Wright, S.M. & Carrese, J.A. (2002). Excellence in role modelling: Insight and perspectives from the pros. *Canadian Medical Association Journal* **167**: 638–643.
- Wright, S.M., Kern, D.E., Kolodner, K., Howard, D.M. & Brancati, F.L. (1998). Attributes of excellent attending-physician role models. *The New England Journal of Medicine* **339**: 1986–1993.