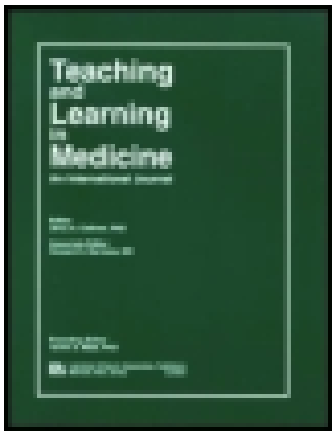

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A Model for Educational Feedback Based on Clinical Communication Skills Strategies: Beyond the "Feedback Sandwich"

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Background: *Feedback is an essential tool in medical education, and the process is often difficult for both faculty and learner. There are strong analogies between the provision of educational feedback and doctor–patient communication during the clinical encounter.*
Description: *Relationship-building skills used in the clinical setting—Partnership, Empathy, Apology, Respect, Legitimation, Support (PEARLS)—can establish trust with the learner to better manage difficult feedback situations involving personal issues, unprofessional behavior, or a defensive learner. Using the stage of readiness to change (transtheoretical) model, the educator can "diagnose" the learner's stage of readiness and employ focused interventions to encourage desired changes.*
Evaluation: *This approach has been positively received by medical educators in faculty development workshops.*
Conclusions: *A model for provision of educational feedback based on communication skills used in the clinical encounter can be useful in the medical education setting. More robust evaluation of the construct validity is required in actual training program situations.*

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Feedback is a critical element in effective clinical education. Ende[1] described feedback as "information describing students' or house officers' performance in a given activity that is intended to guide their future performance in that same or in a related activity. It is a key step in the acquisition of clinical skills" (p. 777). Educational feedback is intended to stimulate behavior change, analogous to an important goal of the physician–patient interaction. The literature on feedback has emphasized the importance of objectivity, of reducing emotionally charged situations, and of assuring a climate of trust and comfort.[2,3] These qualities are also characteristics of effective communication between patients and physicians. Thus, both the intention and the desired environment of educational feedback are highly analogous to those of communications between doctor and patient. To our knowledge, there is no literature describing the application of clinical communication skills techniques to educational feedback. We have observed that two communication techniques apply to the feedback process in complementary ways. The Partnership, Empathy, Apology, Respect, Legitima-

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tion, Support (PEARLS)[4] approach focuses on creating a supportive climate, and the stages of change model (transtheoretical)[5] addresses the learner's receptivity to the process. To investigate the applicability of these techniques to the feedback process and disseminate their use, we developed a faculty development seminar that presented a new model for delivering educational feedback. In this article, we present a description of the components of our feedback model, demonstrate its utility with vignettes from the faculty development videotape, and summarize our experience using the model in faculty development.

Description

Given the strong analogy between the educational feedback process and the doctor–patient communication in the clinical encounter, techniques intended to facilitate the establishment of a comfortable, trust-based clinical relationship can also be useful in the feedback setting. As described in the *Kalamazoo Consensus Statement*[3] on clinical communications, a strong and effective relationship is the sine qua non of the clinical interaction. Building a therapeutic relationship through empathy and rapport development has been promoted as the "first function of the interview"[2] (p. 14). In the provision of educational feedback, an effective interaction depends on assuring a climate of trust and comfort for the learner, being objective, and reducing emotionally charged situations.[6] The same rapport-building skills that can be used effectively to establish trust in the doctor–patient relationship can be effective with the learner. The "PEARLS mnemonic"[5] describes one set of skills that is commonly used to convey empathy and build trust. When adapted to the educational setting, these skills include the following: partnership for joint problem solving, empathic understanding, apology for barriers to the learner's success, respect for the learner's values and choices, legitimation of feelings and intentions, and support for efforts at correction (Figure 1).

Basic educational feedback approaches are usually sufficient in situations in which educational issues requiring attention have been directly observed and the elements can be objectively evaluated. Several well-known techniques such as the feedback sandwich[7] (reinforcing positive as well as deficient aspects of the learner's performance) and "I" statements[8] (avoiding the accusatory "you") have been developed to organize and provide structure for the feedback process. By coupling these techniques with clinical communications skills intended to enhance the trust relationship, a faculty member can give feedback regarding specific elements of performance and can offer learners constructive guidance for improvement; and the recipients generally are able to receive the information comfortably and apply it.

Partnership for joint problem-solving
Empathic understanding
Apology for barriers to the learner's success
Respect for learner's values and choices
Legitimation of feelings and intentions
Support for efforts at correction

Figure 1. PEARLS for the learner.

Some feedback situations, however, are complicated and/or emotionally charged. Students may be "problem learners" characterized by significant affective, cognitive, structural, and/or interpersonal difficulties.[9,10] Learners in difficulty may be experiencing serious personal or family problems (illness, financial difficulty, substance abuse, etc.), they may have demonstrated serious unprofessional behaviors (harassment, inappropriate sexual behavior, lying, cheating, etc), or the learner may have exhibited significant defensiveness in prior feedback encounters. These situations will have a much higher inherent level of tension than most basic feedback situations, and the recipient is likely to react in a defensive and negative manner. Because of the discomfort that can result from a defensive interaction, even experienced faculty rarely respond to behaviors identified as significantly problematic in the clinical setting.[11] However, the identification and management of such complicated issues must be part of any effective remediation plan. When faced with a difficult situation with a learner, another clinical approach, the stages of readiness to change (transtheoretical) model (Prochaska et al.[5]) that assesses the learner's stage of readiness to change his or her behavior, can be useful.

The ability of a student to modify his or her academic performance in response to feedback is analogous to the ability of a patient to respond to advice about behavior change. The stages of readiness to change model[5] (Figure 2) proposes that at any time, individuals are in one of several stages of change: precontemplation, contemplation, determination (or preparation), action, maintenance, or relapse. Patients commonly move from one stage to another as they attempt to make health-related behavior changes and may repeat the process several times before accomplishing progress. The clinician can identify the patient's readiness by listening for prototypical statements, observing actions, and soliciting the patient's perspective on his or her motivation and barriers to change. The clinician can then initiate stage-appropriate interventions designed to assist the patient in moving from one stage to the next.[12] This motivational

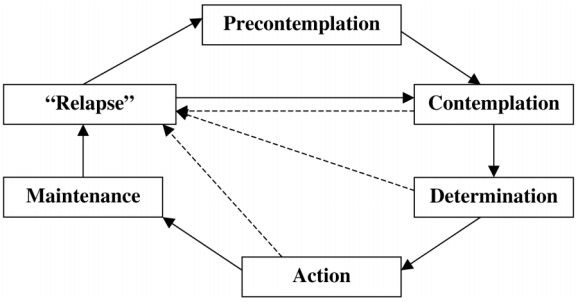

Figure 2. Transtheoretical (stages of change) model.[5]

style of interacting is designed to respect the patient's autonomy and access personal values as the impetus to change. This model has been extensively tested in the medical setting and has been shown to be useful in counseling patients to change a variety of health behaviors.[13–17] Medical educators can apply this model to the educational setting. During the feedback process, the educator can "diagnose" the learner's stage of readiness and employ focused interventions to encourage desired changes. The educator can help the learner to identify discrepancies between current behavior and stated goals as well as barriers to change. Movement in the change cycle may be an acceptable and desirable educational outcome of the feedback process.

The following dialogue of a feedback scenario illustrates the use of the stage of change model in the medical education setting (Figure 3). The excerpts are from a videotape we have used in our faculty development program on giving feedback. In this scenario, an attending physician has called a medical intern (Peter) into her office midway through the month to discuss her concerns about the intern's performance on the inpatient service. The intern has missed several conferences, is having trouble getting his work done, has been late to rounds and seems distracted:

Attending: So how do you think the month has been going?

Peter: *Well, it's been busy. I've had lots of admissions, and my patients are really complicated and very sick. You know at other hospitals these patients would be in the ICU. Discharging them is impossible so they stay on my service forever.*

Attending: It sounds as if it's been a pretty tough month.

Peter: Yeah, I think it's been the toughest of the year so far.

Attending: It can be hard to keep up as in intern with such a busy service. I remember that from

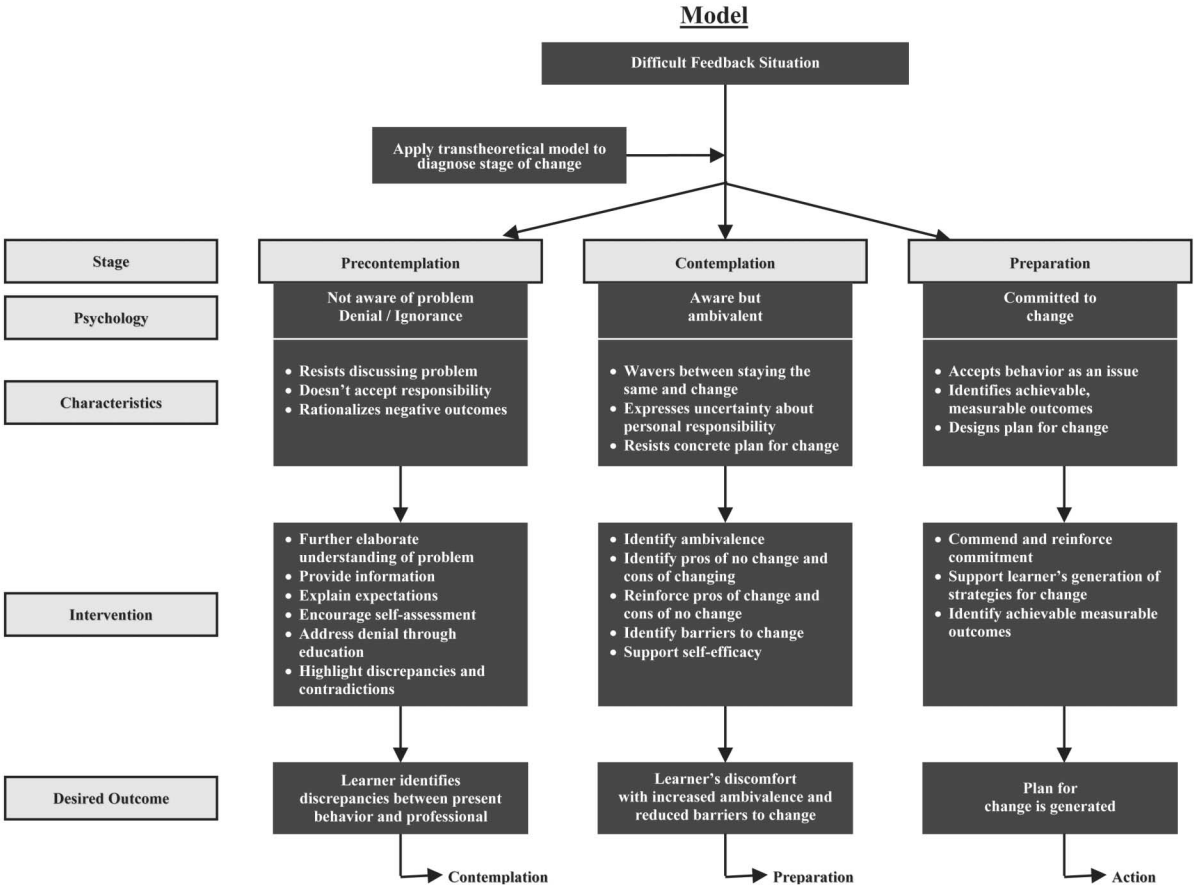

Figure 3. A model for stage appropriate educational feedback.

when I was an intern. Have you found it hard to keep up with your work?

Peter: *Well sure it's hard, but I think I'm doing as well as anyone else. The real problem is that the hospital administration doesn't know how to run the place.*

The comments in italics identify Peter as a precontemplator with regard to his behavior on the inpatient service this month. He is not aware that his behavior is a problem, but rather he defines the problem as being one of an inefficient and busy hospital. Although this may be a contributing factor, the intern does not seem to take any responsibility for his performance. Because the precontemplative learner is in denial of the existence of the problem or its importance, he or she may resist discussing it. Strategies might include conventional elaboration of expectations and encouragement toward self-assessment (Figure 3). Peter's attending demonstrates a stage-specific intervention:

Attending: *I know the hospital can be a frustrating place to work, but we're not going to be able to change that. I know the service has been busy lately, but it really seems like you are feeling overwhelmed. You've been late to rounds, missing conferences and you seem distracted. You didn't seem to have a good handle on last night's admission today at rounds. I'm concerned with how you are doing. How do you think you're doing?*

Peter: I suppose it may have been a little tougher lately. … I haven't told anyone but my grandfather is sick. He had a big MI 3 weeks ago. He's in the CCU and everyone in my family is a wreck. I'm on the phone all day long with his doctors.

Attending: I'm so sorry, that is a really tough situation. No wonder you've had trouble keeping up with your work.

Peter: Listen, I had an off night. That happens to everyone. Overall, I think I'm doing fine. I haven't had any major screw-ups yet, have I?

Attending: *Even though you had a busy night, I'm wondering whether the effect of these problems with your family is interfering with your ability to keep up with your work and with your perspective. Are you worried that you might have a major "screw-up"?*

The goal of this particular intervention is to help the individual identify the incongruity between present behavior and personal ideals and professional standards. Ideally, the learner should begin to experience some inner conflict around this discrepancy.

In the contemplation phase, individuals experience ambivalence about their present behavior. They waiver between reasons to stay the same and reasons to change.[12] In the same scenario, the following dialogue illustrates an intern (Becky) in contemplation with regard to her readiness to change her behavior. Her response is noticeably different from Peter's:

Attending: So how do you think the month has been going?

Becky: Well, it's been busy. I've had lots of admissions and my patients are really complicated and very sick. It's hard to discharge them so my service has gotten to be pretty big.

Attending: It sounds as if it's been a pretty tough month.

Becky: Yeah, I think it's been the toughest of the year so far.

Attending: It can be hard to keep up as in intern with such a busy service. I remember that from when I was an intern. Have you found it hard to keep up with your work?

Becky: *Well, maybe I've had a little more trouble keeping up this month. I know my presentations on rounds haven't been up to speed. And I guess I've been late to a few conferences but you know they never start on time anyway.*

Becky's last statement (in italics) illustrates the ambivalence of the contemplator. Although she is aware of the problem to a significant degree, she remains ambivalent about owning the responsibility for changing her behavior. Intervening with the contemplative learner can utilize a "decision balance" discussion that prompts the learner to weigh the costs of staying the same against the personal benefits of change by exploring the pros and cons of each[13] (Figure 3). Then, using reflective listening, the educator can summarize what the learner has articulated about the dilemma and amplify discrepancies between values and actions. Intervention with the contemplators focuses on identifying barriers to change and supporting self-efficacy. This approach, in italics in the following, allows the teacher and learner to identify barriers that are not normally addressed in traditional educational supervision:

Attending: *You mentioned that you've had some trouble keeping up this month. You've been late to rounds and seem a little distracted. It seems like something is getting in the way of you doing your best.*

Becky: I know I've been a bit distracted but there is so much paperwork and nothing in this hospital ever works the way it should.

Attending: I know the hospital can be a hard place to work, but I was wondering whether there was anything else going on, I mean how are you?

Becky: Well. … I haven't told anyone yet but my grandfather is really sick. He had really big MI 3 weeks ago, and he's still in the hospital. His EF is less than 20% so he keeps going into pulmonary edema. Everyone is pretty worried, of course so I've been spending lots of time on the phone talking to the cardiologist and then to my family.

Attending: I'm so sorry for you and your family. It is clearly a very difficult situation. I can understand why you've been having so much trouble keeping up. I'd like to help you think of a solution to this problem.

Becky: I'll be OK. I know I haven't done the greatest job lately but I'll be fine.

Attending: *I know you want to do better than you're doing now. Let's talk about what you see as the barriers to fixing this problem.*

For learners in the preparation stage, feedback should focus on specific actions (Figure 3). Learners accept the problem and may identify achievable, measurable outcomes. Learners are most successful when they design their own plan and can anticipate problems for which they provide their own solutions. The educational intervention should involve reinforcing the commitment to change and strengthening self-efficacy. The educator and learner may agree to assess progress and outcomes at a specific future date.

The following dialogue is the response of an intern (Robert) in the preparation stage in the same scenario:

Attending: So how do you think the month's been going?

Robert: It's been really, really busy. I have so many really sick patients on my service.

Attending: It can be hard to keep up as in intern with such a busy service. I remember that from when I was an intern. Have you found it hard to keep up with your work?

Robert: *(looking down and speaking softly) Yeah, I really have had a hard time this month.*

Attending: (pauses, then responds slowly) Do you want to talk about it?

Robert: What do you mean?

Attending: Well, we know that the service is challenging, but it seems lately like you are really feeling overwhelmed. So I wanted to see whether there was anything going on, if you were all right.

Robert: I haven't told anyone yet, but my grandfather is really sick. He had a really big MI 3 weeks ago, and he's still in the hospital. His EF is less than 20%, so he keeps going into pulmonary edema. I'm the only physician in the family, so I've been spending lots of time on the phone talking to the cardiologist.

Attending: *I'm sorry to hear that. This must be really tough on you and your family. It's no wonder that you are struggling. We should talk about how to solve this problem. Do you have any thoughts?*

Robert: *I hate the thought of placing the burden on the other house staff, but maybe we should talk to the chief resident about changing my call schedule or something. I could make it up during my next elective.*

Robert is aware of the problem and ready to take action to change his behavior. The attending's use of reflective listening and expressed concern allows Robert to reveal a personal situation that is impacting on his performance. The attending shows respect for Robert by encouraging him to construct his own solution.

In the action stage, learners should be conducting specific activities intended to achieve their goals.[18] Educators can provide a menu of resources as well as encourage autonomy and personal responsibility. A supervisor should periodically review the learner's performance to ensure durable success with the action phase defined as maintenance. The key goal of the maintenance phase is to transform a newly learned behavior into a self-sustaining integrated part of the learner's armamentarium.

Learners may relapse, ceasing to use newly acquired behaviors. A common cause of relapse is failure to maintain the behavior when the external reinforcement of an educator's scrutiny or the expectations of a specific curriculum are removed. Learners can be encouraged to anticipate the pressure to abandon new challenging behaviors when exposed to the myriad demands of clinical learning environments. A loss of self-efficacy may accompany relapse and become a barrier to future success. Teachers can reframe relapse as a learning experience about what did and did not support the learner's progress. The feedback process can reinforce motivation and redefine future achievable goals.

There are limitations to the application of any educational model when supervising learners in a clinical setting. When responsibility for patient care is coupled with educational duties, the medical educator must balance the needs and stage of the learner with the critical issues of professional standards, patient safety, and ethics. In certain situations, therefore, especially if the student is highly resistant, the appropriate feedback intervention may consist only of the clarification of expectations and a statement of absolute standards of performance. More often, however, the feedback pair

holds shared educational ideals; and the feedback process will assist them in reaching a mutually acceptable plan for progress.

Evaluation

We have presented our model and its application to the provision of feedback in medical education during faculty development workshops both locally and at national meetings. The workshop consisted of a review of feedback principles and skills, a description of the PEARLS and transtheoretical models, and discussion and demonstration of their utility in a variety of feedback situations using the videotape vignettes. Participants engaged in role-playing exercises to practice the new model. At the conclusion of each workshop, we facilitated a discussion eliciting participants' thoughts and opinions about the model's usefulness. The workshop participants believed that the PEARLS and stages of change models are applicable to feedback situations. Many of the participants reported that they were very likely to make a concrete change in their teaching as a result of our workshop. Most of the participants were familiar with these approaches as they applied to the clinical setting, but applying them to the educational setting was a new idea.

Conclusions

We have developed a model for provision of educational feedback based on communication skills used in the clinical encounter that can be useful in complex feedback situations. This approach builds on the principles of patient–physician interaction currently described in the communication skills literature. Complex feedback situations challenge even the most experienced educators and require the use of empathic listening and rapport building to create an environment of trust. Our examples of learners in different stages of readiness to change demonstrate how an educator's intervention can be tailored to the learner's level of readiness to change their problematic behavior. One important advantage of our model is its use of knowledge and skills that are already in the repertoire of most medical educators. The face validity of the approach has been supported by experienced medical educators who have participated in our workshops. More robust evaluation of the construct validity will require a standardized assessment of the acquisition of faculty skills as well as an analysis of learner outcomes of when this approach is applied to feedback interventions in actual training program situations.

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