



INSTRUCTIONAL METHODS AND TECHNIQUES

One Year's Experience with a Program to Facilitate Personal and Professional Development in Medical Students Using Reflection Groups

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ABSTRACT Purpose: (1) to integrate sociobehavioral science concepts into the early curriculum through a continuity ambulatory clinical experience in primary care, and (2) to expose students to a learning environment in which self-awareness and emotional development are nurtured in the context of dealing with the stresses of an early clinical experience.

Methods: Second-year students spent half a day twice monthly in a primary care community practice, kept a journal of their experiences, and attended biweekly 60-minute Reflection Groups designed to foster personal awareness and empathic witnessing. Analysis of journal entries and Reflection Group field notes identified stressors occurring during the students' clinical encounters.

Results: Three sources of stress are illustrated: the role and responsibility of the physician, death and dying, and racial issues. Reflection Groups provided students with opportunities to identify and describe stressors, to feel less isolated, to begin the process of self-awareness development, and to integrate behavioral and social science concepts into clinical practice. Our program incorporates students' early clinical experience with facilitated opportunities to reflect on the emotional challenges of becoming a physician.

KEYWORDS Humanism, undergraduate medical education, professional development.

... the salvation of this human world lies nowhere else than in the human heart, in the human power to reflect, in human modesty and in human responsibility. (Vaclav Havel, Speech to the US Congress, 1990)

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Diverse professional groups including the Project Panel on the General Professional Education of the Physician (Muller, 1984) and the American Board of Internal Medicine (1992) have recommended educating physicians to become more self-aware as a way of recognizing and dealing with stress in their patients and themselves. This need is underscored by the rapidly changing role of the physician in society, and as more medical graduates enter primary care medicine, and focus on disease prevention and health promotion priorities. Increased economic and social pressures in health care have resulted in less time being allocated per clinical encounter (Glass, 1996), and increased numbers of patients are scheduled in a day. As a result, physicians must be very skilled in forming relationships with patients, and in helping them deal with the biological, psychological, and social impact of illness and disease.

Much of the effort to teach medical students the social science content of humanism, social responsibility, and compassion has occurred in the context of classroom teaching in such courses as Medical Ethics, Self and Society, and Literature and Medicine (Tresolini, 1994; Sahler, 1995). As vital as these courses are, our own experience has been that students find them to be isolated from the bulk of their other learning experiences and difficult to integrate into clinical practice. Behavioral science concepts, usually taught in the classroom during the first two years of medical school and without a clinical context, are difficult to translate into the world of practice. The difficulty of integrating sociobehavioral science concepts is further highlighted by clinicians teaching in the third and fourth years who either do not value, or fail to model the concepts and behaviors taught during the pre-clinical years. One challenge then is to more fully integrate sociobehavioral science concepts into the overall medical school curriculum.

A second challenge for medical education is to provide learning experiences that nurture a trainee's self-awareness and emotional development. Resident support groups (Addison, 1989; Williamson, 1991) and Balint groups (Brock, 1990) among practicing physicians have been used successfully in a variety of settings. These activities have typically been carried out with physicians already caring for patients and not with medical students. A growing body of evidence suggests that physicians who can utilize their own self-awareness are more effective, satisfied and efficient in providing care (Novack *et al.*, 1997), and that physicians' humanism correlates with patient satisfaction and adherence to medical advice (Hauck *et al.*, 1990). There is also evidence suggesting that current methods of training are abusive and that medical students tend to lose their humanistic and altruistic attitudes and values during medical school training (Coombs & St. John, 1979; McKegney, 1989; Kay, 1990).

Increased self-awareness allows the physician to use him or herself as an instrument in the process of caring for patients. The ability to be compassionate is linked to physicians' own emotional responses and the ability to accurately identify emotional states and responses in patients. Emotion without benefit of

self-awareness may actually inhibit compassion and become a source of stress. By contrast, where physician self-awareness is a mediator of emotion it has been shown to have a protective effect on stress and its consequences (Novack *et al.*, 1997). It is critical that students develop self-awareness skills as early in their training as possible.

Currently, little formal opportunity exists for students to integrate behavioral science concepts and clinical experiences in a way that is mutually reinforcing and leads to increased self-awareness and knowledge. To address these challenges we designed an innovative program called Medicine—Preventive and Ambulatory Care (Med-PAC) that incorporates in students' early clinical experiences a facilitated opportunity to reflect on the emotional challenges of learning to be a doctor, in general, and of developing relationships with patients, in particular. The program aims to help students in the second year of medical school develop humanistic skills through increased personal awareness using a continuity experience in primary care as a living laboratory for exploring the challenges of training and patient care. Several scholars have commented on the use of reflection in medical training but have not linked the method to early clinical continuity experiences (Schon, 1987; Westberg & Jason, 1994; Branch *et al.*, 1995). Additional objectives of the ambulatory experience were to meet the need to increase ambulatory care training, to train more primary care physicians, to teach students about poverty and diversity, and to incorporate preventive medicine into clinical practice. Here we report on the self-awareness component in the first year of the program.

Sample Selection

A convenience sample of second-year students was drawn by announcing and describing the program to the entire class of 75 students and asking them to volunteer for participation. From the 26 students who volunteered for the program, a stratified randomly selected group of 20 students was assembled. Each student was assigned to a community preceptor and to one of the two Reflection Groups. The students worked individually with the preceptor and only came together for the Reflection Groups, where they were randomly assigned into two equal groups of 10, which were stratified for gender and race. The students were informed that research was being conducted on the process of reflection and that a second faculty member would be present to observe and take field notes. Students were assured that while their responses were being observed and recorded, all information from the Reflection Group would remain anonymous. The project was approved by the East Carolina University School of Medicine (ECUSOM) Institutional Review Board (IRB).

The role of the observer was to record, as close to verbatim as possible, the conversations that took place during the Reflection Groups. In addition, the observer took notes on non-verbal behavior and other aspects of the group

process that seemed pertinent. The observer attended all of the Reflection Group sessions and generated 48 pages of notes and impressions. The field notes from each session formed the basis of our analysis of the group process. Additional materials for the analysis came from the journals kept by the students, documenting each of their ambulatory clinical experiences.

Program Elements and Instructional Methods

Ambulatory Care Experience

The students were assigned to primary care practices in the community where they spent half a day on alternate weeks. In their assignments each student was paired with one primary care physician, and followed at least three patients in order to appreciate the importance and rewards of continuity of care in clinical practice.

The participating physicians attempted to direct students to patients with problems referable to the organ systems and topics being studied concurrently in the medical school courses in medicine, pathology, pharmacology and microbiology, thus fostering students' understanding of the relevance and application of basic science scholarship to the practice of medicine. During the clinical experiences the physicians reviewed the pathophysiology, diagnosis, and natural history of common diseases in ambulatory settings. Additionally, principles of health maintenance and preventive medicine, the effects of lifestyle on morbidity and mortality, the impact of psychosocial factors on illness, and adherence to treatment plans negotiated between patient and doctor were discussed, thus allowing integration of behavioral science concepts in a clinical context. Students also had opportunities to observe and practice clinical skills.

Journal

Students were required to keep a journal in which they recorded the problems of the patients they encountered and pertinent learning issues. In addition, students were encouraged to describe in the journal their personal reactions to their Med-PAC experiences. They also conducted a home visit to one patient of their choice, and wrote a report about the patient entitled "The biography of a person with an illness" (Novack *et al.*, 1986) using the framework of the biopsychosocial approach to health care (the interdependence of biological, psychological and sociocultural issues) (Engel, 1977).

Reflection Groups

Students met in a Reflection Group with a trained faculty facilitator to reflect on the process of doctoring. Reflection Groups were faculty facilitated small group meetings in which students were encouraged to share as little or as much as they feel comfortable about their emotional responses to their ambulatory patient care experiences. In this pilot project, the same facilitator was used for

all Reflection Groups to minimize the effect of facilitator variability. The groups met biweekly for one hour to foster the exchange of ideas and experience among students. No explicit instructions or expectations were set for the groups. However, they were told their journal entries from the previous week could be used as a basis for the discussion. Taken together these clinical experiences and reflection components of the program constitute what Freire identified as an action–reflection cycle (Freire, 1986). The Reflection Groups were open-ended and non-directive, following a Rogerian (Rogers, 1967) approach to small group process.

Analysis

The observer's field notes and students' journal entries were independently read by two members of the research team, one on site at ECU SOM, the other from another institution. Using an iterative consensus-building process, analysis proceeding each major idea unit was first underlined by each reviewer using a highlighter. An idea unit was defined as a single unambiguous idea expressed by an individual. Differences in identifying idea units were noted and reconciled. Most frequently, differences were minor and involved overlapping idea units. Consensus was reached in all cases (Patton, 1980). Next, the idea units were organized into themes. Again, a consensus-building process was used to generate the themes with each reviewer independently identifying possible themes comparing the results and coming to agreement. Finally, the themes from the Reflection Group sessions and the journal entries were compared to identify where and to what extent ideas and topical development in the Reflection Groups were based on experiences documented in the student journals. Journal entries that were not discussed, as well as group discussions for which there were no journal entries, were noted. Also noted was the extent to which a journal-entry-inspired discussion progressed in terms of depth and breadth of discussion about emotional stressors. Finally, discussions based on journal entries which then progressed across multiple Reflection Group sessions were noted. These discussions typically reached the greatest degree of depth and breadth as the students focused on common issues, and worked through their feelings about them. In essence, these were the most mature discussions, indicating a high level of functioning within the group and a healthy collective process. As a rule, such ongoing discussions were more typical of later, rather than earlier, Reflection Group sessions.

Results

Analysis of the reflective journal entries and Reflection Group discussions revealed a series of stressors occurring during the students' clinical

encounters (Table 1). We have selected three of these issues for illustration: fear of assuming the responsibility of the physician role, death and dying, and racial issues. Broader analysis of these themes is the subject of another manuscript.

Fear of Assuming the Responsibility of the Physician Role

Below is an example of a topic spontaneously generated during a Reflection Group. No evidence of concern about this issue was found in the written journal entries from the week preceding the Reflection Group.

Note that in addition to its spontaneity, the topic of emotional response to the burden of physician responsibility does not really develop in a shared manner. Rather, S1 and S4 raise parallel concerns about giving bad news and feeling helpless to help patients, neither of which is responded to by other members of the group. This, despite the facilitator’s empathic reflection “That’s quite a responsibility” after S1’s description of their emotional challenge. Suchman *et al.* (1997) characterized these moments as empathic opportunities and noted a typical pattern in which the expression of emotion by a patient is terminated by a change of topic by the physician. In terms of group dynamics one can observe a certain hesitation or resistance by the group to dealing with the emotions raised by S1 and S4.

Table 1. Themes discussed in Reflection Groups

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Table 2. Fear of assuming the responsibility of the physician role: Reflection Group Session 1

S1	Well, there's a 65 year old chain smoker. No drinking. Felt like the flu. We did a physical exam: physician did it and then I did it. Began the abdomen exam, noticed that there was a large mass on the right side. It was so large that I could feel it. Seemed like an enlarged liver. When we started talking to the man he said he had not noticed it and asked the physician if he should start "writing his will". He was looking to the physician for things to tell him that he was alright. The patient puts a lot of emphasis on what you say and how you tell them. This guy was looking so much to the physician to tell him that he was alright. (Field note: it is so quiet in the room, I can hear my pencil write.)
S9	And if the physician is to say something then it becomes real.
S8	Yes, as soon as I tell my wife that will make it real, and that is the same with the doctor. As soon as I tell the doctor, it makes it real.
Facilitator	That's quite a responsibility
S1	It's scary
S4	You certainly have extremes... When the patients are on crack, HIV, and have 8 kids. Last year, I would cry and beat myself up on why I could not help everyone. So much one needs to know about, like herpes. So the responsibility falls on the physician, but you cannot beat yourself up about everyone or every patient who does not come in or does not come in on time.
S5	The test in our training is to maintain being humble because people take your word as gold and so many take it to heart.

Death and Dying

Table 3 is an example of a reflective journal entry subsequently brought up in a single Reflection Group session for discussion.

In this journal entry and from the Reflection Group dialogue S4 raises three stressful concerns. One has to do with her emotional reaction to her sense of being unable to do anything to help a dying patient. A second issue is her reaction to the patient's sense of isolation expressed in his comments about the lack of touch. The third concern is the student's reaction to the notion that AIDS is a just punishment and that the patient deserves to die because of his lifestyle. After a clarification question by S1: "he was upset with his family?," S2 responds to S4's story by identifying its theme as one of prejudice. The accuracy of S2's assertion is reflected by S4's response: "yes, prejudice." Following S2's understanding response, S1 raises a new concern which is "touched off" by S4's discussion of talking with a dying patient but is not directly related. S1 is fearful of the possibility of a patient dying on "his shift" and not wishing to be present for this event. Despite the direction in which S1 takes the conversation there is evidence that S4's concern about prejudice is shared by at least one other group member (S1). In essence, the topical development we see in this example is from the student's journal entry, reacting to the response it engenders in the Reflection Group. S4's concerns about

Table 3. Death and dying: Reflection Group Session 2

Journal entry

S4 I was very interested in the patient with AIDS. I spent about 20 minutes talking to him about depression. He was very open and honest with me. He went into great detail about how he contracted the virus. He was very open about his sexual and drug use history. I was very interested in his story. I began to feel so helpless—I know that there is very little we can do for him. He is going to die! He has lost 105 pounds in less than a year. I feel so hollow when I look at him. I feel so sorry, sad, mad, everything. I'm mad because I can do so little to really reverse these horrible syndrome/virus... I hope to follow him for as long as possible.

Reflection

Group

S4 The next person was an AIDS patient. I'm going to be following him. We have not done another CD-4 count and because he cannot get financial help if his count goes up. He is 40 years old and very depressed. We just talked for about 20 minutes. I asked him if he had any suicide thoughts. He said no. He asked me if I knew how he had gotten this and I said I did not, and so he began telling me. I just touched him even though I didn't realize I didn't have any gloves, and he said, "Do you know how long it's been since someone has touched me?" I just sat there. I was really upset. The family said that AIDS was a punishment for his being homosexual. I was really angry and shook up. The patient was so open; not at first, but he was after he said how he contracted the disease. I was listening and I was so comfortable. I must have done something right for him to open up to me... It was a good day but kind of sad. AIDS must be the most horrible virus.

S1 He was upset with his family?

S4 Yes, he knew he was dying. He had already lost 100 pounds and he was really sad... The patient was telling me that he had two sisters that were lesbians and not treated well by the family. He also said that, "I live in a small community and everywhere I go people see me and they talk about me and do not touch me." It made me ashamed for being human and for people to be so ignorant.

S2 There is a lot of prejudice.

S4 Yes, prejudice.

S1 Yes, I did have something that was different and took me off guard which was good. It was an 80 year old man being taken care of by his daughter and her husband. The son-in-law said that the patient had said that "today was the day that he was going to die." I kept thinking please do not die while I am here. It was unnerving to hear a patient say that today was the day he was going to die.

Facilitator I can see that was.

S1 Yeah, it really got my heart going.

prejudice are confirmed by one group member and become the point of departure for another. While not a fully fledged discussion of prejudice, S1's response is likely to be beneficial to students like S4, who may be feeling isolated and depressed by their individual experiences with patients, and are likely to benefit from such discussions by discovering that others have similar experiences.

Racial Issues

The following extended examples of Reflection Group discussions show how race as a topic was identified and developed over multiple sessions. Note that although S6, the student who raises the issue of race, describes writing about it in her journal, although no such entry could be found.

S6 introduces the topic of race by asserting that her preceptor, whom she characterizes as "a wonderful man," does not see white patients and that this is a problem in terms of her interest in seeing diverse populations. In quick succession several students respond to different aspects of S6's assertion: agreement from S2 about his positive reputation; a clarifying question from S7 about his race; and a candidate solution from S1 about his location accounting for the patient mix. S6 responds by clarifying that she wants to see African American patients but not exclusively. At this point, S8 asks S6 if she has spoken with her preceptor about this issue. She replies that she has not, and a third student S5 presses the issue a bit by asking if S6 plans to discuss it. S6 does not answer the question directly but instead imagines what her preceptor might say. No further mention is made of this issue in Session 3.

At the beginning of Session 4, S6 again returns to the topic of race by posing another hypothetical question to the group. In addition she acknowledges that she and her husband have continued to talk about the topic at home. A general discussion of patient preferences around race of their physician ensues, and questions about S6's preceptor again emerge. S3 reflects, in a continuation of the theme from Session 3, that S6 is lacking important data and asserts "You need to talk to him." S6 ignores S3's assertion and continues to list her concerns at which point S2 reiterates the need for S6 to obtain the missing information by talking with her preceptor. S6 does not respond to S2's directive and S3 then shifts the topic to talk about race more generally.

In terms of group dynamics, one can begin to appreciate how the development of an issue or concern over time moves from a comparison of individual experiences to problem solving or feedback around a focal problem. Although S6 did not respond in Session 4 to the same suggestion made by several group members, she did report in a later session that she spoke with her preceptor who acknowledged that his practice was almost entirely African American and that he was fine with it. One might speculate that part of S6's resistance to having the conversation about patient mix with her preceptor was the feeling that his values, attitudes and reputation as "a wonderful man" might have conflicted with

Table 4. Racial issues

Reflection

Group

Session 3

- S6 Something that I want to mention, is that my physician does not have white patients, and I thought about myself because I want to deal with a diversity of patients, with older patients, and pediatric patients, and white and African American patients... (This is an African American student) My physician is a wonderful man.
- S2 Oh, I've heard about your physician and he has a really good reputation.
- S7 Is he African American?
- S6 Yes.
- S1 Maybe it's his location.
- S6 I'm not saying that he does not have any white patients but on Monday, every other week, all I see are African American patients. It is a concern of mine because I do not want to work with just African Americans, although I do want to work with African American patients.
- S8 Have you talked with your doctor?
- S6 Not very consciously. Just in writing about this in my journal did I think about it.
- S5 Are you going to ask him?
- S6 We have that kind of rapport. He will probably say "Oh, we have lots of patients that just don't come on Mondays."

Reflection

Group

Session 4

- S6 What I've been thinking is, what would my class think about it, if their practice were all Caucasians, or be of any concern to them. No right or wrong answer. I was talking with my husband and we had agreed that in normal life, black kids play with black dolls. But it is strange, no white families play with black baby dolls.
- S2 I would notice if all the patients were white patients. But I do not know what I would do in terms of how to change it... One part is that in medicine, there is a small group of older African Americans who want to see a white male doctor, or there are some that want to see a female doctor, or some that want to see a black male doctor. I don't think that is true with the younger African Americans.

Table 4. (Continued)

S6	I was talking with a physician a while ago, and their preconceived ideas about training. Someone had said something to me and implied that I would feel more secure and patients told me that, I think that you are pretty good but I would not come to you.
S5	I know many friends, and have many friends who are African Americans, but most of my friends are Caucasians and they would probably go to the physician where I would go.
S2	Does your physician practice by himself? Would it be different if he were in a mixed practice?
S3	You need to talk with him.
S6	I am not concerned that he has an all African American practice. It is not the town or the location. If I seek to set up a practice that is diverse, will white colleagues refer to me?
S2	You need to ask your physician S6. Ask him if it bothers him, ask him about the patients that have come to him.
S3	The race thing bothers me inside. It is sad. Everyone feels like we do and it bothers me that I cannot fix it. It's frustrating for me.
S7	We all recognize the issue and attitude and experiences that shape things. Best thing that we can do is talk about it honestly and openly and go outside these doors and have to deal with these issues. It is part of our role.
S5	One of my best friends is African American. We realize our differences and we all have prejudices. We need to talk it out, discuss what bothers us and work through it. It bothers me, and I had the most intelligent roommate, to see how people treated her differently because she was African American. It was a slap in my face too.
S6	When I said that the conversation should not be about race, I did not speak correctly. I do not want the tension to be "Oh, here is S6 talking about race again." As far as talking, that's vital. For myself and others, you do not realize it until until someone else brings it up. One really big thing we do is to have misconceptions about other people, misconceptions about people that we do not have something in common with. I was in a class with 250 students and there were four black people and you felt as if, "Are people accepting me?" Oh, but I'm so different. But you're not really. Often I feel like that now. I felt uncomfortable as I was the only black student. If I had asked questions would they say, "Oh, that dumb black girl".
S10	Interesting to hear your opinion. I'm in the middle. I consider myself Hispanic, and was brought up Hispanic. I was the only one in my Alabama High School that was like me. It was easier for me now because you do not know how to take me, so I can go with either crowd. Neither crowd should feel the victim.
S7	Need to recognize and appreciate it. Not highlighted. Differences are very important and every own person has his own contribution to make.
Facilitator	Now we need to sum up. (It was five minutes after time and the students did not want to leave.)

her goal of seeing diverse racial groups. In any case, the example illustrates the development and deepening of a topic and focus for discussion over time.

Discussion

We began with the observation that learning to practice medicine involves the development of humanistic qualities as well as technical and intellectual skills. A second observation was that the behavioral science content of the medical school curriculum is often taught in isolation from clinical practice, which limits its impact and applicability for students.

The use of Reflection Groups during early clinical experiences is one way to bridge the gap between isolated social and behavioral science content, and patient care. For example, students often equate professionalism with affective neutrality, and as a consequence believe that it is appropriate to suppress emotional feelings for patients and their suffering. Students are left to manage strong emotional responses—such as grief and anger in themselves or patients, transference issues, fear of responsibility for care of patients, feeling inadequate to assume the power and authority of the physician's role, and racial tensions—internally and alone. We found through the Reflection Groups that students can develop awareness of the role of emotion in medical practice.

The Reflection Groups provided many powerful examples of students discovering the value of sharing their own feelings with one another, and the pros and cons of using them in working with patients. The students were quick to support one another in their struggles with patients, as well as being genuine in taking on the doctor role. They reported both in the Reflection Groups and their journals that knowing others knew about and shared the same hopes, fears, and stresses was therapeutic, and led them to feel less stress and isolation. The principle of empathic witnessing which the students enacted with one another has a direct parallel in helping suffering patients feel less isolated and alone, a point identified by some of the students in their journals. Although we anticipated that the journal entries would serve as catalysts for Reflection Group discussions, most of the issues discussed in the groups were not preceded by journal comments. This finding underscores the unique role of group reflection and dialogue in addressing the emotional stressors described by the students.

Conclusions

Beyond their immediate use, Reflection Groups are useful in assessing the range of concerns raised by students and may aid in developing additional curriculum offerings to meet these needs. In Reflection Groups, students can learn to recognize strong feelings, like anger, in themselves and in their

patients. We conclude that providing students with an integrated biopsychosocial experience is one important step toward educating physicians to practice medicine in a competent, balanced, and humane way.

Future research on the use of Reflection Groups might profitably focus on their use and impact in later stages of training. Additionally, it will be important to know the long-term consequences on physician performance that increased knowledge and self-awareness bring (Epstein, 1999; Novack *et al.*, 1997). Social and behavioral science concepts, such as justice, equality, empathy, and compassion, which might potentially help students cope with the stresses of clinical practice are often negatively reinforced or left behind as part of the pre-clinical experience. Although no causal inference can be drawn at this time, we suspect that there is a likely association between untreated distress during medical school and a variety of disorders from which physicians suffer, including alcohol and substance abuse, high rates of depression, suicide, and emotional exhaustion resulting in disengagement from patients (Muldary, 1983). As with other disabling conditions, early detection and treatment represent the best and most cost-effective forms of intervention. Primary prevention, as might be provided by early reflection groups, would be even better. Additional research on the effects of increased levels of personal awareness in coping with the stresses of training, and the changing roles of physicians and needs of patients will allow an empirical test of this association.

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