# Teaching Psychosocial Aspects of Coronary Care

Thomas R. Egnew, MA, and Jay M. Jones, MSW Tacoma, Washington

For the past two years, Tacoma Family Medicine, Tacoma, Washington, has integrated a curriculum in psychosocial aspects of coronary care with the Coronary Care Unit rotation taken by third-year residents. Goals of the curriculum are to provide specific psychosocial information, to foster the development of psychosocial strategies for patient and family care. and to develop greater insight and awareness on the part of residents regarding the psychosocial aspects of coronary care. Attempts are made to meet these goals in a context as closely tied to the clinical management of patients and families as possible. Topics addressed include the biopsychosocial medical model, patient and family responses to cardiac illness, sexual concerns of the coronary patient and spouse, and issues related to cardiac rehabilitation. The format for the curriculum involves didactic presentations, group discussions, and case consultations.

Training residents to be family physicians implies providing them with a thorough exposure to the principles of family medicine as an important part of their residency experience. Basic principles of family medicine include a health orientation, comprehensive attention to the family, and continuity of care. Strategies for teaching these principles are varied, though a basic curriculum

of experiences is required to include training in the behavioral sciences.<sup>2,3</sup> Most training programs have responded with longitudinal behavioral science curricula, but these curricula have been criticized as being too esoteric, unrelated to a family physician's daily management of clinical problems.<sup>4,5</sup> A task for behavioral science faculty in family practice residencies, it would seem, is to meld behavioral science concepts with the principles of family medicine in a teaching context closely tied to the residents' experience of practicing family medicine. This paper describes such an attempt through the development of a curriculum for teaching psychosocial aspects of coronary care, which has been implemented at Tacoma Family

From the Family Practice Residency Foundation, Tacoma Family Medicine, and the Social Work Service, Saint Joseph's Hospital, Tacoma, Washington. Requests for reprints should be addressed to Mr. Thomas R. Egnew, Tacoma Family Medicine, Suite 204, 721 Fawcett Avenue, Tacoma, WA 98402.

Medicine, Tacoma, Washington, during the past two years.

### The Teaching Setting

Tacoma Family Medicine is a community-based, university-affiliated program providing training for 12 residents. The coronary care rotation is required of third-year residents, who take the rotation together. The residents staff the nine-bed Coronary Care Unit (CCU) at Saint Joseph's Hospital for four weeks. Attendance is provided by four community cardiologists, with residents changing attending physicians weekly to facilitate exposure to differing styles of cardiac care. Residents provide support to the CCU on a 24-hour basis, providing in-house call while on rotation. In addition, each resident is required to present a case at a Cardiac Grand Rounds once during the course of the rotation.

The curriculum described is taught conjointly by the authors, who are both trained as social workers. Goals of the course are to provide specific, accurate information regarding psychosocial aspects of coronary care, to facilitate the development of strategies for dealing with psychosocial problems related to coronary impairment, and to foster a greater understanding and appreciation of psychosocial aspects of cardiac illness. Strategies of the curriculum involve didactic presentations, group discussions, and case consultations.

McWhinney<sup>6</sup> has noted that physicians use three types of knowledge: information, clinical craftsmanship, and insight and awareness. The curriculum is thus designed to provide an experience involving these knowledge bases. Information is disseminated through didactic presentations, group discussions, and case consultations. Didactic information is presented in one-hour weekly conferences integrated with the rotation schedule. Topics addressed are (1) the biopsychosocial model of medicine, (2) patient and familial reactions to coronary disease and hospitalization, (3) sexual concerns of the coronary patient and spouse, and (4) issues related to cardiac rehabilitation.

Case consultation is provided by the authors,

both as a part of didactic discussions and within the CCU itself. Consultations are utilized to impart information as well as to comment on aspects of clinical craftsmanship. Psychosocial approaches to patient and family care are discussed and implemented, and their efficacy, along with tips on implementation, is then discussed in succeeding didactic sessions. Topic selection for didactic sessions is influenced by an attempt to integrate the principles of health promotion and continuity of care.

# **Biopsychosocial Medical Model**

The curriculum begins with an overview of the course structure and a didactic review of the biopsychosocial model of medicine, which is receiving increasing attention.7-9 The biopsychosocial model includes psychologic and sociologic variables with the biologic aspects of patient functioning in managing patient problems. Pertinent psychologic and sociologic variables are discussed in light of their applicability to coronary care. The goal of the session is to assist residents in understanding and appreciating the impact of psychologic and sociologic variables in the care and rehabilitation of the coronary patient and his family. As the biopsychosocial model is based on a systems approach,10 the curriculum focuses on the individual, two-person, and family systems.

The residents have previously been exposed to the biopsychosocial model as a part of the behavioral science training at Tacoma Family Medicine. Abilities to apply this model are dependent upon a physician's flexibility, clinical experience, sensitivity, and self-awareness.11 Beginning the curriculum by reviewing the model gives the instructors insight into how each resident relates to the model. Instructors compare observations following each session and identify areas in which each resident might use support in applying the concepts of the model. Flexibility, sensitivity, and self-awareness are stressed in case consultations, and any discomfort with the model is addressed. The clinical experience of the residents aids in assimilating elements of the biopsychosocial model, as residents can observe the psychologic and sociologic

variables discussed while attending to the biologic needs of the patient.

### Patient and Family

Janeway<sup>12</sup> indicates that family health care involves focusing on the family in an attempt to combine health promotion and illness care for the family as a whole. The second didactic session provides residents with information that will assist them in addressing psychosocial concerns of both the patient and his family in response to the coronary artery disease. The goal of this session is to heighten resident awareness of the interplay of patient and family psychologic and sociologic variables in the course of hospitalization and rehabilitation. Strategies for managing these variables are discussed, with the residents providing clinical material from their experience in the CCU.

The patient's response to illness will, to a large degree, be determined by the meaning of that illness and subsequent hospitalization for the patient.13 Understanding the patient's past experience with illness facilitates insight into the meaning of the illness for the patient. Although appreciation of the meaning of the illness for the patient may be difficult in the context of a four-week CCU rotation, it is stressed that, as family physicians familiar with their own patients, the residents will have much of this information readily available. Residents are encouraged to place the patient in his primary social context, the family, and to examine any special stresses the patient may experience as a result of his role within the family. For example, a patient who is the sole income source for an economically oppressed family is apt to be more anxious regarding prolonged hospitalization and incapacitation than would be a patient whose family is less dependent on his economic viability.

In general, patients respond to cardiac illness with a "no feeling" response of denial, followed by feeling responses of anxiety and depression. 14 Whether patients are depressed or anxious appears dependent on whether they feel in control. Thus, residents are encouraged to assist the patient and family to feel a realistic amount of control in light of the biologic facts. Depression

is linked with fears of invalidism and loss of autonomy and independence.15 Depending upon patient response, two approaches are discussed. Nondepressed patients are apt to be hypomanic and thus need restraint, while depressed patients need encouragement, as they are apt to be fearful and preoccupied with symptoms.16 Discussion centers on methods for conveying encouragement and for assisting patients to feel greater control. Accurate, timely information for patients and families is emphasized as a means of assisting adjustment to the acute cardiac event, subsequent hospitalization, and rehabilitation. Residents are encouraged to present information in a positive fashion and to provide time for dealing with patient and family questions, particularly since patients and their families are not apt to specify their worries to the physician.17,18

The timing of psychological care is also discussed in this session. Davidson19 notes that psychological care in myocardial infarction begins with the patient's first contact with the primary care physician and continues until successful adaptation occurs. This principle is extended to include family members. Residents are taught to conceive of the process of psychosocial care of patient and family as involving three stages: (1) acute care during the CCU stay, (2) supportive care during the subsequent hospitalization, and (3) continued care throughout the rehabilitation process. Acute care involves the dissemination of information, answering of questions, and preparation of family members for visitation in the CCU. As both patient and family are most likely unaccustomed to the highly technical apparatus of the CCU, they are apt to find the CCU environment both intimidating and frightening. An orientation to the unit can thus avert unneeded anxiety. Information must be titrated for the patient, who, depending upon his condition, may be able to assimilate only small doses of data at a time.20

Supportive care during the subsequent hospitalization involves dealing with both patient and family concerns regarding transition from the highly supervised CCU environment to lesser supervised levels of care and addressing concerns regarding recovery and rehabilitation. At this time, sexual concerns, familial stresses and disorganization, and other pertinent issues can be addressed. Skelton and Dominion<sup>21</sup> note the importance of the physician's assisting in communica-

tion between spouses, as healthy spouses are apt to form attitudes toward the patient that may impede recovery. By mediating communications, the physician can help assure that accurate information is shared and understood.

The importance of meeting with spouses and family is stressed, as the cardiac event may precipitate a crisis in family functioning. Olsen<sup>22</sup> has indicated the following suggestions for dealing with families of seriously ill patients: (1) include the family as much as possible, (2) allow for referral if the family is not functioning well, and (3) help hospital personnel deal with family concerns. Family conferences give all family members a chance to deal with questions and concerns and allow the physician to assess the amount of distress the family may be suffering. In cases in which families need referral for counseling support, family conferences allow the physician to build the rapport and trust necessary for facilitating a successful referral. As the family physician is apt to be familiar with the coping style and family issues of a particular family unit, sharing this information with hospital personnel can result in greater tolerance for and sensitivity to the particular behaviors and needs of the family.

In addition to the didactic information shared in the second session, the residents are able to discuss particular concepts in light of their clinical experience in the CCU. As one instructor provides social work services to CCU patients and their families, he is able to illustrate particular points being made in discussions with case materials gathered from the patients the residents are following. Residents are also able to attend patient and family interviews and, thus, experience modeling for a variety of interviewing techniques.

## Sexuality

Green<sup>23</sup> has noted that sex is on the mind of the coronary patient, that a communication gap regarding sexuality exists between the physician and the patient with cardiac disease, and that an information gap exists for the physician concerning sex and cardiac disease. The third didactic session, therefore, is devoted to a discussion of sex

and cardiac illness to provide pertinent information along with tips on facilitating discussions regarding sexuality. Goals of the session are to provide accurate information, to heighten an appreciation of the issues involved, and to assist in closure of communication gaps between patient and physician.

The residents are first informed of the current concepts regarding sex and the patient with coronary artery disease, and the remainder of the session focuses on the issue of discussing sexuality with these patients. Factors contributing to sexual dysfunction in such patients appear to be psychological, physical, and informational in nature.24 The patient's psychological response is apt to be depression and fear, both of which may lower libido and diminish willingness for sexual expression. Any physical limitation associated with the coronary episode, such as angina upon exertion or sedation from drugs, may hamper sexual functioning. Lack of information or misconceptions regarding cardiac disease and sexuality may greatly hamper sexual expression in both the patient and the spouse. In particular, concerns regarding sudden coital death are debilitating, though generally the risk of such is minimal. 25,26 Such concerns may be expressed through denial, reflected in hypersexuality, or become manifest by a complete avoidance of sexual activity.

The residents are cautioned to avoid relaying vague and nebulous information regarding sexual behavior, as patients and spouses may read into this all their worst fears. Such comments as "take it easy," or "it's okay to have sex if it isn't strenuous," are apt to increase fears and anxieties.<sup>27</sup> Discussion of sexual concerns should begin as soon as the patient is stable and should involve the spouse, so that communication between the couple regarding their sexual adjustment can be facilitated. Naturally, the state of the couple's sexual functioning before the cardiac event will have an effect on their functioning afterward.

Several factors should be considered in a general style for sexual counseling of patients with cardiac disease and their spouses.<sup>28</sup> Timeliness is important, and sexual concerns should be raised by the physician early, before patient and spouse have a chance to develop strong notions regarding limitations. The spouse's needs for reassurance and information must be included, and the information shared must be specific, accurate, and

sensitive to the patient's physical status. The value systems of the couple must be taken into account, along with their pre-illness activity, to tailor advice without offense. Counseling should be supportive and reassuring, with the aim of fostering communication, building confidence, and encouraging healthy functioning. If the issue is approached in this manner, there is little reason to deny the patient with cardiac illness a healthy sex life.<sup>23,29</sup>

#### Rehabilitation

The fourth didactic session is devoted to a discussion of issues related to coronary rehabilitation. As the general thrust of the curriculum emphasizes the need for attention throughout the cardiac event, stress is placed on the need for continued monitoring of the adjustment of both patient and family during rehabilitation. Goals of the fourth session are to provide information related to cardiac rehabilitation and to sensitize the residents to the psychosocial issues involved therein.

The physician's task in cardiac rehabilitation has been described as defining the educational curriculum, specifying what information is presented at each stage of the illness, and periodically reviewing rehabilitation efforts to assess accuracy and provide continuity.<sup>20</sup> Although much may be accomplished by the coronary care staff in tertiary care centers, family physicians in isolated, rural practices may well be the ones responsible for developing rehabilitation programs. To save time, family physicians can delegate the teaching of core parts of the program to their office staff, using flow charts in the patient's record to monitor progress and compliance.

Assessment of the patient's resources should include the following: (1) the natural history of the disease, (2) the physical, social, vocational, and other resources of patient and family, (3) patient and spouse limitations, (4) current environmental demands on patient and spouse, and (5) physiological capacities of the patient.<sup>30</sup> Much of this information will be readily available for family physicians who have been involved in their practices.

They need merely use what they already know about patient and family interests and limitations in tailoring a rehabilitation program to meet interests and resources. Rehabilitation programs can thus be designed to heighten motivation and minimize frustration for the patient and family. In many instances, available community resources can be utilized for added support of both patient and family.

Important in rehabilitation efforts is conveying to the patient and family that they are not abandoned, since many areas of concern and dysfunction will surface only upon return of the patient to the family unit. Continued contact with the patient and family is advisable, and weekly office visits have been shown to be helpful in promoting compliance with rehabilitation regimens.31 Conferences can be incorporated with the patient's visits for cardiac education and thus need not take an inordinate amount of time from the physician's schedule. In cases in which rehabilitative education takes place away from the physician's office, biweekly telephone calls have been recommended.15 The effect of continued contact is to lower anxiety and to provide an open channel through which patients and family can ventilate fears and frustrations and through which the physician can assess family dysfunction and depression during the rehabilitation process. Exercise prescriptions have been shown to be effective in assisting the patient to feel a return to health, in combatting depression, and in providing the patient some measure of control. 15,32 Where available, group programs are useful, as they provide both closer monitoring during exercise and needed social support to deal with anxieties and fears associated with stressing the heart.

As coronary rehabilitation often involves changes in lifestyle to reduce risk factors, the residents are informed of strategies to effect changes in lifestyle, including reinforcement control, stimulus control, and self-control.<sup>33</sup> Reinforcement control involves enhancing motivation to abandon health-threatening behaviors by making the consequences of such behaviors less positive. For example, the patient who smokes can be informed of statistics regarding recurrence of myocardial infarction in patients who continue to smoke following infarct as opposed to those who quit. Stimulus control involves modification of the physical and social environment so the patient is

not tempted with health-threatening activities. The patient who needs to lose weight, for example, might refrain from bringing sweets home. Through family conferences, family involvement and support can be encouraged to augment compliance. Self-control requires teaching an individual to modify his own behavior as he sees fit. Exercise programs can be useful in helping patients see their capacity for growth in ability and strength. In general, a patient's perception of his health is an excellent predictor of morale, and inquiries regarding this perception can be useful for developing rehabilitation strategies.<sup>34</sup>

The residents are provided examples of cardiac rehabilitation information materials and explanatory pharmaceutical forms commonly used for coronary patients, which are obtained from a local cardiology group. The residents are further directed to a general bibliography on cardiac rehabilitation<sup>35</sup> to guide their literature searches regarding specific patient problems. Residents are also reminded that their attitudes toward and relationship with the patient and family are not without strong medicinal properties, though these also can have adverse side effects. Thus, the residents are encouraged to be thoughtful in their actions and attitudes toward the patient with cardiac illness and his family.

#### Discussion

The curriculum on psychosocial aspects of coronary care is regarded positively by the residents involved. Setting time aside within the rotation schedule to address the psychosocial issues involved in coronary care is, in and of itself, a strong behavioral statement of the importance of these issues. The residents feel such an integration is particularly helpful, for they can observe in their patient care the issues discussed in the curriculum, receiving timely consultation for approaching patients and family. The curriculum is, however, neither fully comprehensive nor adequate as a vehicle for teaching the biopsychosocial model of medicine. To affect optimally the future life and work of physicians, social science perspectives should be taught with continuity and coherence

throughout medical education, beginning in medical school.<sup>38</sup> For residents trained in a biomedical framework, weekly supervision for at least six months is considered necessary for effective application of the biopsychosocial model.<sup>39</sup> The effectiveness of this curriculum is greatly enhanced by its implementation in the third year of an ongoing, comprehensive behavioral science curriculum that provides social science perspectives throughout the residents' training experience.

Impressions are that the goals of providing information, facilitating psychosocial strategies, and fostering greater psychosocial understanding and appreciation are met through the curriculum. Residents report that the curriculum is particularly useful for providing insights into the management of the patient who, medically "cured" of the acute cardiac event, is now facing the rehabilitation process. Information from the curriculum is considered useful for both continuity of care and comprehensive management of patient and family. Emphasis on cardiac disease as a "family disease" facilitates conceptualization of methods for promoting health in patients and families alike.

The use of two instructors is considered a positive aspect of the curriculum, as residents are exposed to differing working styles and points of view. In-house consultation reportedly is advantageous, as it exemplifies the use of psychosocial skills in the midst of the acute cardiac illness. Observation of social workers interviewing patients and families in these circumstances helps residents legitimize the role of counselor and emphasizes the need for support of families during this critical time. Residents report an appreciation that failure to provide such service can have a tremendous negative impact on both patient and family.

Time spent in didactic sessions is considered useful by the instructors for it provides a forum in which problems in applying psychosocial concepts can be discussed. Physicians have been noted to avoid psychosocial aspects of care because of misconceptions regarding their role as physicians, confusion regarding the expectations of patients, and discomfort with personal reactions to their patients as people.<sup>40</sup> Yet patients expect high levels of involvement and expert help during long-term physical illness, and they desire supportive, sensitive care when depressed, hospitalized, anxious and tense, worried about health, or tired.<sup>41</sup> Discussion of didactic information is helpful in

legitimizing physician psychosocial involvement and dealing with physician misconceptions, confusion, and personal discomfort. By providing conceptual frameworks for addressing psychosocial aspects of care, residents are assisted in providing the care patients desire.

The residents report that the curriculum provides personal support during a very demanding and emotionally draining rotation. Through discussing patient and family reactions to acute serious illness, the residents are able to clarify their own emotional responses to working with lifethreatening illness and can ventilate their fears, uncertainties, and concerns in a supportive, open atmosphere. Although this was not a goal of the curriculum, it is a welcomed benefit that makes matriculation into the rotation more comfortable and possibly more profitable for the residents.

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