

Communication About Lifestyle Change Between Cardiac Patients and Their Partners

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Abstract

Although adherence to a heart-healthy lifestyle can improve recovery from a heart attack or bypass surgery, compliance with recommended behavior modifications is generally low. A spouse or partner can influence patient lifestyle change but much remains to be learned about what types of interactions facilitate adherence versus produce overprotection or resistance. We interviewed 25 persons who experienced a cardiac event in the past year and 16 partners. Our goals were to describe how couples talk about adherence and to identify features of communication that were variable, meaningful, and potentially consequential. Couples varied in how often they talked about adherence and those who talked a little, a lot, or occasionally differed not just in quantity of talk but also in the meaning of talk and strategies for regulating its frequency. Adherence talk occurred in various speech events, including praise, problem-solving discussion, acknowledgment, meta-communication, argument, and compliance-gaining. Different types of episodes entailed different roles and relational qualities. When partners engaged in compliance-gaining, the style in which they attempted social control (e.g., direct or indirect, humorous or serious, ritualistic or not, verbal or nonverbal) shaped its meaning. Our findings are consistent with Goldsmith's (2004) theory of social support and have implications for how we conceptualize and measure couple communication about adherence. Our descriptions of behavior may help couples understand why they experience interactions as supportive or not. Describing behaviors can also give validation to couples experiencing communication challenges as well as offer a range of possible alternatives for interacting.

For the married or partnered, coping with a heart attack or heart surgery is a “dyadic affair” (Coyne, Ellard, & Smith, 1990, p. 133). Although it is the patient who has coronary heart disease (CHD) and undergoes treatments, spouses or partners¹ are also deeply affected. Partners are often called upon to provide home care and assume household responsibilities immediately following a myocardial infarction (MI, commonly called a “heart attack”) or coronary artery bypass graft (CABG) surgery. Both patients and partners may experience uncertainty, anxiety, anger, and depression. Patients are typically advised to engage in (and partners may be called upon to cooperate with) what are often challenging lifestyle modifications, including activity restrictions, exercise, dietary changes, smoking cessation, and stress management.

For those who have experienced a cardiac event, lifestyle modifications can improve recovery, facilitate return to valued activities, and may even slow or reverse the progression of heart disease (Miller, Taylor, Davison, Hill, & Krantz, 1990). Yet, compliance with these recommendations is poor (for reviews, see Conn, Taylor, & Hayes, 1992; Haynes, 2001; Miller, Hill, Kittke, & Ockene, 1997; Oldridge, 2001). Social support from a partner may significantly improve the chances that a patient will succeed in adopting a heart-healthy lifestyle (for a review, see Sher & Baucom, 2001), and including partners in lifestyle change interventions for CHD patients can improve adherence with dietary and exercise recommendations (Barnard, Akhtar, & Nicholson, 1995; Cohen et al., 1991; McCann, Retzlaff, Dowdy, Walden, & Knopp, 1990; Morisky, DeMuth, Field-Fass, Green, & Levine, 1985; Newell, Bownman, & Cockburn, 2000). However, a partner’s good intentions do not always produce the desired results. For example, a partner’s “support” for lifestyle change can result in overprotection, patient resistance, and reduced patient self-efficacy with negative consequences for patient behavior change and health (Coyne, Wortman, & Lehman, 1988; Rohrbaugh et al., 2001). We know a partner can have an important influence on the patient’s lifestyle change but much remains to be learned about the conditions under which that influence will be positive rather than negative.

The American Heart Association (AHA, 2005) reports the following statistics. One in four Americans currently has some form of cardiovascular disease. Currently, 7.1 million Americans have had an MI; each year an estimated 565,000 Americans will have a new coronary attack and 300,000 will have a recurrent attack. Of the 865,000 new and recurrent MIs, 79.25% survive. Cardiovascular operations and procedures have increased 470% from 1979 to 2002; for example, an estimated 515,000 CABG surgeries occurred in 2002. Thus, many couples find themselves coping with a cardiac event and how well they cope together affects survival, recovery, and rehabilitation (Allen, Becker,

& Swank, 1991; Helgeson, 1991; Riegel & Dracup, 1992; Waltz, 1986; Yates, 1995).

Although research is beginning to document the important role partners play in recovery from a cardiac event, we know surprisingly little about how couples communicate following an MI or CABG. In this study, we focus on one particular facet of couple communication—talk about adherence to a heart-healthy lifestyle. Understanding how couples talk about these issues yields theoretical insight into how, why, and under what conditions a partner may facilitate a patient's recovery and is also essential to developing practical recommendations for couples.

One body of research relevant to understanding couple communication about lifestyle change includes studies of the social support provided by the partner of a person with CHD. The Dietary Alternatives Study tracked 254 men with high cholesterol for two years following a couple intervention to improve diet. The men were better able to sustain dietary goals when their spouse provided high levels of support for dietary change (Bovbjerg et al., 1995). The frequency of verbal praise and encouragement was related to adherence but the strongest effects were for what the researchers characterized as “direct forms of support,” such as purchasing and preparing food (McCann et al., 1990). Doherty, Schrott, Metcalf, and Iasiello-Vailas (1983) examined partner support for adherence to medication and diet among 150 men with high cholesterol. Couples reported on the occurrence of behaviors from a checklist (e.g., advice, help, encouragement, information). Patients whose wives provided high levels of support were more adherent than those whose wives provided low levels of support. Men were more adherent when their wives “showed an interest in the program” and “reminded him to take his medication” and were less adherent when their wives “nagged him about his medicine or his diet.”

Finnegan and Suler (1985) surveyed 35 heart patients and 29 spouses 18 months following hospitalization for MI or severe angina. They sought to predict the percentage of weeks since hospitalization during which patients had maintained recommended changes in smoking reduction, weight loss, and exercise. Patients and their spouses reported on social support for making these changes. Patient reports of support received and spouse reports of support given were associated with better weight loss maintenance; however, support was not related to exercise or smoking.

Daltroy (1985) examined the effect of spousal encouragement on participation in a three-month cardiac exercise program by 174 patients who had a history of MI, angina, and/or CABG. Those patients whose spouses reported verbally encouraging them to attend the program (a dichotomous measure

taken 4 to 5 weeks into the study) were significantly *less* likely to attend at least two-thirds of the exercise sessions over the three-month period. Daltroy observed that spousal “encouragement” may have been interpreted by patients as pressure resulting in resistance. Alternatively, poor attendance may have stimulated spouses to comment (and of the spouses who reported *not* commenting, nearly all said it was because it wasn’t necessary). Similarly, in a study of 60 couples in which the husband had an MI, Hilbert (1985) found only one significant relationship between multiple measures of spouse support and patient adherence to lifestyle recommendations: a spouse’s report of providing greater support for a patient’s adherence to physical activity recommendations was associated with a patient’s report of *poorer* adherence. Other studies, however, suggest that the lack of spouse or family endorsement of participation in a risk reduction or cardiac rehabilitation exercise program is associated with a greater likelihood of dropping out of the program (Andrews et al., 1981; Heinzelmann & Bagley, 1970; Mann et al., 1969).

Franks, Stephens, Rook, Franklin, and Keteyian (2002) surveyed 61 couples during the first three months of a patient cardiac rehabilitation program and again six months later. They assessed the frequency of spouse support behaviors (listened to concerns, assisted in taking care of health, agreed with decisions, encouraged healthy choices) and spouse control behaviors (prompted or reminded, tried to influence, told him/her to take care because you were depending on them, tried to stop them from doing things). At time 1, a spouse’s report of support was concurrently associated with a patient’s report of better adherence to heart-healthy diet, activity, and stress management. However, when adherence was assessed six months later, spouses’ reports of *support* provided at time 1 had no significant impact on time 2 adherence and spouses’ reports of *control* predicted worse time 2 adherence.

Previous research shows partners can have an effect on patient adherence to lifestyle recommendations. However, it remains unclear when, how, and why partner interaction will be a beneficial force rather than a neutral or detrimental one. The effects of partner social support on patient adherence are not entirely consistent and may be more apparent for patients with high cholesterol who are attempting to change diet than for those who have had a cardiac event and are trying to change exercise or smoking habits. These studies also point to the possibility that *how* a partner attempts to go about providing support may matter.

To better understand how couples talk about lifestyle change we draw on Goldsmith’s (2004) theory of communicating social support. Goldsmith points out that it is not the sheer frequency of social support behaviors that brings about desired outcomes (such as patient adherence) but rather the

meaning of those behaviors. A dozen tactless reminders to exercise that are interpreted as undesired control might well be less effective than a single particularly persuasive plea that is interpreted as caring. Although some interpretations of behaviors may be unique to individuals or couples, there is much meaning that is shared within social groups. For example, some individuals may be particularly sensitive to any attempt to control their behavior but it is also the case that most people will interpret “Why can’t you remember something as simple as reading the label?” as more critical than “I know it’s a drag having to read all of these labels but if we look before we buy it, we won’t have anything we can’t eat sitting around the house.” Thus, common ways of interpreting interactions can be systematically related to the style and form of those interactions.

This set of theoretical propositions directs our attention to the importance of describing how partners communicate as a first step in better understanding why some partner attempts at supporting patient behavior change might be more effective and satisfying than other attempts. There is evidence in previous studies that how a partner goes about supporting behavior change may matter, but we lack description of the range of ways partners may communicate as well as a conceptual framework for capturing this variability. For example, Doherty and colleagues (1983) found “reminding” was associated with better adherence, whereas “nagging” was associated with worse adherence; however, Franks and colleagues (2002) found “reminding” loaded with a set of social control items that predicted worse adherence. In focus group discussions with young, healthy married men and women, Lewis, Butterfield, Darbes, and Johnston-Brooks (2004) found that participants described nagging as very frequent telling, asking, reminding, or discussion. Apparently, reminding is only helpful up to some point. In Franks et al. (2002), “encouraging” is one of the behaviors associated with concurrent adherence to a range of lifestyle changes (and not associated with those changes in a prospective analysis), but in the Daltroy (1985) study, “encouraging” was prospectively associated with poorer exercise program attendance. Both Franks et al. and Daltroy acknowledge that the negative association between some partner behaviors and patient adherence might be because partner behaviors produce a negative reaction but could also be because nonadherent patients elicit more attempts at influence. Coyne and colleagues (1988) have described how well-intentioned efforts a couple undertakes to cope together with adjustments following a cardiac event may devolve into partner overprotection and patient resistance. Findings such as these show behaviors must be interpreted in the context of the relationship and recovery trajectory.

The present study proposes a descriptive framework for capturing differ-

ences in how couples talk about adherence. We were guided by two questions: How do couples talk about adherence? What features of communication are variable, meaningful, and potentially consequential?

Method

Participants were 25 patients who had experienced an MI ($n = 6$), CABG ($n = 8$), or MI and CABG ($n = 11$); 15 spouses of these same patients; and one spouse of an MI/CABG patient who did not participate in the study. Participants were recruited through flyers in cardiologists' offices, announcements at support group meetings and cardiac rehabilitation classes, posters at local churches, and referral by other study participants.

The mean age of participants was 64.78 years ($SD = 10.99$; range = 37–81 years). Our sample was predominantly European American.² Participants reported a variety of present and pre-retirement occupations in government, ministry, industry, agriculture, medicine, trades, and small business. The most common occupations were in education ($n = 8$), factory work ($n = 5$), clerical work ($n = 3$), and sales ($n = 3$). Four spouses indicated they were full-time homemakers, and 22 participants indicated they were retired. Almost one third, 29.3%, of our participants had a high school degree, 26.8% had completed some college, 17.1% held a college degree, and 28.8% held graduate or post-graduate degrees. All participants were married ($n = 40$) or involved in a committed romantic partnership ($n = 1$). The average length of relationship was 36.09 years ($SD = 16.08$; range = 3–55 years), and responses to a measure of relational satisfaction (the Marital Opinion Questionnaire; Huston, McHale, & Crouter, 1986) indicated the sample was generally quite satisfied ($M = 5.35$ out of a possible 7; $SD = 1.38$; range = 2.55–7.00). Four participants had children under age 18 currently living with them, and 36 participants had grown children.

Participants engaged in a 60- to 90-minute interview about changes they had experienced since the patient's cardiac event; topics that were easy to discuss, difficult to discuss, and sources of argument; and recall of one especially good and one especially bad conversation about the heart condition. In addition, the interview asked participants to reflect on whether they had experienced some of the common challenges associated with recovery from a cardiac event and, if so, how they had handled them (e.g., adherence to diet, physical limitations, concerns about recurrence, changes in roles, sex, talking to others outside the primary relationship, depression).

Interviews were transcribed verbatim. Identifying information was obscured, and each participant was given a pseudonym. We reviewed audiotapes and transcripts in order to identify (a) challenges, difficulties, and rewards as

sociated with talking about adherence and (b) features of couples' talk about adherence. Using open coding methods of grounded theory (Strauss & Corbin, 1990), we developed categories in a sample of 15 transcripts configured in such a way that each of the transcripts was read by all authors and analyzed by two of the three authors. After meeting to discuss our categories, we returned to a second sample of transcripts organized similarly. Through this iterative process, we reviewed all transcripts and developed a preliminary characterization of features of couple communication about adherence. All three authors then returned to the full set of transcripts to seek modifications, refinements, and illustrative examples of these features. In this study, we report on three features of couples talk: frequency, speech event, and style. Other themes that emerged from our analysis are reported in Goldsmith, Bute, and Lindholm (2005).

Results

All of the patients had undertaken one or more lifestyle changes in response to the cardiac event and had talked with their partner at least once about adherence to these changes. The research questions that guided our inquiry focused on how couples talked and what features of their communication were variable, meaningful, and potentially consequential. We found the following: (1) different *frequencies* of talk had different meaning and significance, (2) talk about adherence occurred within different types of *speech events* that shaped interpretations, and (3) talk about adherence occurred in different *conversational styles* that shaped interpretations.

Frequency of Adherence Talk

Couples varied in how often they discussed issues related to diet, activity restrictions, exercise, smoking, and stress management. Some talked a lot (*unrestrained talk*), some talked very little (*infrequent talk*), and some fell in between (*occasional talk*). These groupings differed not only in quantity of talk but also in the meanings attributed to the frequency of talk, in the rationales given for deciding how much to talk, and in the strategies for regulating talk.

Unrestrained talk. Some couples reported unrestrained talk about all issues surrounding the patient's heart condition and regimen, including adherence to lifestyle changes. For example, Larry reported: "As far as I know there is nothing in our lives that we don't discuss. Or haven't discussed. From operations, heart, health, family, children, sex....We just don't have anything we don't talk about." Likewise, his wife Carol said, "We talk about all of it. We talk hours every day. We love talking with each other and we never yet have

covered everything.” Later in the interview, each provided several specific examples of their conversations about diet and exercise. For this couple, frequent talk was central to their relationship and adherence was simply one topic among many that they discussed frankly when they needed to coordinate or when one of them had concerns.

Infrequent talk. Some couples reported infrequent talk about lifestyle change. Sometimes, a low frequency of talk arose from feelings of constraint about talking by one or both partners. For example, Kathy reported that she would like to talk about her husband’s adherence more often than he would, but that there were costs associated with their discussing adherence:

I probably would be more prone to want to get everything out there, and then either we’re yelling or crying or whatever, and I think, ‘It’s not worth it.’ You know. I don’t think you have to be as open as everything you read says that you do. Because sometimes, it’s just as well. ‘Cause you can’t take them back. Once they’re out there, they’re there.

Other couples reported infrequent talk not because they felt constrained from talking but because they felt it wasn’t necessary to talk. These participants said they could talk if they needed to but they rarely did. For example, Mike remarked, “We kinda know each other without talking,” and explained, “After so many years of marriage we breathe pretty easy with each other.”

Occasional talk. These couples said sometimes they talked about adherence issues, and sometimes they didn’t. Rather than conceptualizing them as the middle of a frequency continuum, possessing less of something or more of something, we saw in these couples’ accounts a different way of orienting to communication. They articulated possible risks and benefits of adherence talk as well as strategies they had developed for avoiding problems while reaping benefits of talk. Specifically, we found occasional talk about adherence could arise from (1) being selective about what to discuss and when, (2) setting limits on frequency, (3) talking only when the patient initiated it, and (4) using structure and routines to reduce frequency.

Being selective. Patients and partners reported being selective about when they talked or what facets of adherence they discussed. For example, Simon reported that he and his wife talk frequently about menus and how to prepare foods in appealing ways but that she told him she refused to nag him if he ate something he shouldn’t eat. Another patient, Ben, acknowledged that sometimes he accepted his wife’s pointing out what he shouldn’t eat, but other

times it made him angry. He attributed his different reactions to the timing and frequency of his wife's reminders.

Some partners said they went along with a patient's occasional violation and commented on the nonadherent behavior based on their assessment of whether the patient was generally adherent and/or whether the occasion for nonadherence was exceptional in some way. Joyce described several ways she encouraged her husband's adherence to dietary restrictions, including talking enthusiastically about healthful menu options when they ate out and keeping forbidden foods out of the house. But she also pointed out, "Oh, he loves candy. You know, they say, 'oh, you shouldn't eat too much candy,'...life's short, you have to have a few enjoyments, and if you can get some jollies from a candy bar, let him have them." A similar judgment process is reflected in the comments of partners who monitored a threshold of adherence, withholding comment up to a point and then saying something. For example, Roger reported that he was allowed two or three eggs a week and that his wife would willingly fix them for him but that beyond that, "She'll yell and holler."

Setting limits on frequency. Some partners said they "say it and then let it go." This might involve having one thorough discussion of an adherence issue and then refraining from bringing it up again or it could mean that when the partner observed nonadherence, he or she would make one comment and then not "push" for compliance or further talk. Rita explained, "We like talk it out and, and that's it. But I don't, I mean I don't nag him about it...I figured, you know, he's old enough to know better. You could tell somebody something once." Patrick described a single conversation about his pipe smoking, in which his wife expressed her desire that he give it up completely and he agreed to smoke outside. They haven't talked about it again, even though Patrick knows his wife would prefer he didn't smoke at all. He said he values the acceptance of his decision that she conveys by not bringing the topic up again.

Talking only when patient initiates. Partners reported that they refrained from commenting on adherence unless the patient initiated conversation about the topic. Linda said of her husband's struggle to quit smoking: "I don't bring things up, you know. I let him approach me with it if he wants to talk about it..." She says she told him early on in his recovery from an MI: "I'm not gonna lecture you on it. If you want to quit, you can quit, and I will help you. But...if you pick up a cigarette, I won't say nothing to you about it." She contrasted this with "nagging" and observed, "Cause other people like I said would nag him, you know, otherwise. Wives nag their husbands, or husbands nag their wives. We don't get anywhere like that. We just don't."

Using structure and routines. Couples described how they structured the environment (cf. Lewis et al., 2004) and relied upon established routines to complement, or even to substitute for, talk about adherence issues. Some couples who talked infrequently or occasionally relied on other kinds of interaction patterns to address adherence. Even couples who talked frequently reported structures and routines that obviated the need for talk on some occasions. This suggests that when couples report how frequently they talk, it is based not simply on quantification of conversations but also on a judgment of how much talk occurs relative to a felt need to talk. Less talk may be needed when the environment or ordinary routines facilitate adherence.

In some couples one or both members made prior arrangements to minimize temptations, so that comments on nonadherence were unnecessary. For example, George reported, "We try to keep things out of the house that's really not all that much good for me." Several respondents had moved to a condominium so that they no longer had responsibilities for outdoor maintenance that might be problematic for patients. Structuring the environment could also involve engaging in conscious efforts to make meals or exercise attractive.

Our participants described how ordinary talk during daily activities enabled them to coordinate regarding the patient's regimen without the need for explicitly discussing adherence per se (see also Goldsmith, 2004). Rita said she was leery of constantly reminding her husband of his heart condition and so rather than explicitly initiating the topic, she utilized everyday conversation to monitor his progress and adherence. As examples, she pointed to casual conversation over breakfast, including inquiring how he slept, asking what he was planning to make for lunch for the two of them, and reporting what she planned to make for dinner. She felt these everyday conversations provided ways for her to support diet and activity regimens without explicitly reminding him of his chronic illness and also created openings for him to initiate explicit discussion if he desired it.

Shared activities also provided ways to support lifestyle changes (and monitor adherence) without having to discuss it. Several couples reported walking together. In addition to valued companionship and support, walking alongside a patient in recovery also gave partners a chance to observe for themselves how far the patient could walk without undue duress. Rather than asking, "Are you sure it's all right?" or admonishing a patient, "Don't overdo!" partners who walked along could see for themselves that patients adhered. Some couples had also begun making lifestyle changes prior to the patient's MI or CABG and so adherence was part of a longer, gradual process. Carl described how he and his wife had made a number of changes in diet

over the past 15 years: “Yeah, we just, we’ve always shared a lot of just information about what we’re doing, you know, type things. I guess I don’t consider those things conversations, they’re just sort of a way of life.”

In sum, couples varied in how often they discussed adherence issues and in how they interpreted what it meant to talk as frequently as they did. A number of participants, especially partners, said monitoring how often they talked about adherence was an intentional strategy for avoiding negative consequences, such as being a nag, creating resentment, or taking the joy out of life. Other participants remarked that they didn’t seem to talk much and that felt natural; they felt they could talk if needed but that talking about adherence wasn’t necessary or effective. A few participants reported that they wished they could talk more openly about adherence issues but felt constrained from doing so. Finally, couples reported a variety of broader interaction patterns that complemented or substituted for actually talking about adherence.

Speech Events for Talk About Adherence

A speech event may be defined as “a jointly enacted communication episode that is characterized by an internal coherence or unity and punctuated by clear beginning and ending boundaries” (Goldsmith & Baxter, 1996, p. 88). Talk about lifestyle changes occurred in a variety of speech events, including praise, problem-solving discussion, acknowledgment, meta-communication, argument, and compliance-gaining. The kind of episode in which talk occurred was related to how participants reacted to talk about lifestyle change. The speech event concept helps to focus attention on the conversational context in which talk occurs, including the different types of roles and relationships that are entailed in different speech events.

Praise. Some participants described positive reactions to episodes when a partner praised the patient’s adherence. Paul was pleased with how his wife encouraged his adherence and gave the following specific examples:

She tells me how much better I look from losing weight. And tells me how easy it is to cook for me. And she tells people, “He’s no problem at all in the diets, he just does what he is supposed to do, and he doesn’t cheat.” She says this in front of me, you know.

Carol emphasized the importance of looking for things to praise, saying, “There’s always something they are doing that is good and brag on’em! With Larry, he lost a lot of weight, it’s ‘boy, you look like a kid again! Look, I can count your ribs!’”

Problem-solving discussions. Sometimes a couple talked about a potentially problematic behavior and worked together to determine what to do. These discussions usually occurred when the patient recognized the need to adhere and focused on problem-solving and compromise to achieve it in particular circumstances. For example, George said his work involved being outdoors and that he and his wife talked about whether he should work in the heat and when would be the best time. Similarly, he reported, "...I don't like to exercise, and I don't like the diet...but I know I've got to do it so we talk about it, try to figure out the best way." Most discussions involved partners encouraging patient adherence but some patients reported partners who were not on board with dietary changes and this, too, could result in problem-solving talk. Ted recalled how when he first returned from the hospital, his wife prepared biscuits with gravy, sausage, and hash browns for breakfast one morning.

And I said, "Honey, I'm not gonna eat that. I can't eat it and I'm not goin' to." So, and she got a little frustrated and she said, "Well, that's the last time I'll fix breakfast!" So I said, "Now wait a minute, we need to have a discussion about this. You were there when the doctor said that I needed to cut some of this stuff out." And I said, "It's not worth it. I'm not gonna go through that again."

Open discussion of adherence was important not only for working out a plan of action but also for helping partners feel included in adherence efforts and able to trust the patient. Joyce said her husband seldom talked about his emotional reactions but "if they suggest some change that we can make, well we'll talk about how we can implement that change, you know, what we can do, you know, it's like he has let me in to the situation." Discussion was particularly important to some couples as a patient moved from the restrictions on physical activity imposed immediately after a cardiac event toward a gradual resumption of activities. Ben observed that he needed lots of help in the beginning and that discussions helped him to "accept that and appreciate that. But then you need to expect that you will get back to regular activities and you have to share that with your spouse too." Lois described how she particularly valued a discussion she and her husband had about him mowing the lawn soon after his MI and CABG. By discussing her concerns, his physical sensations while mowing, and his stopping to rest when he tired, she felt greater trust in his adherence to instructions and in his willingness to tell her honestly about his capabilities and limitations.

Acknowledging. Some adherence challenges didn't have ready solutions. A brief but explicit discussion could be useful in simply acknowledging a desire for something that ran counter to adherence. Partners in these episodes did

not attempt to persuade the patient that adherence was desirable or attractive nor did they explicitly aid or affirm adherence. Instead, they simply acknowledged that adherence was challenging. For example, Georgia reported that when her husband says how something tastes better with salt, she'll agree. When asked about conversations that had gone particularly well, Lisa described the following talk about her husband's desire to return to intense physical activities:

[I said] something like, "Does it matter that much to you that you play racquetball?" [she chuckles] He said, "Yeah, I really like it and I really need to exercise." I said, "Will it bother you if you can't play that for the rest of your life?" He said, "Yeah, it probably will, somewhat. But if I can't, there's a lot of other things I can do. I can do this. I can do that." And I thought, "Well good." He wasn't just focusing in on I can't do something but I can do some other things.

Occasionally, partners reported confronting a patient with frustrated desires or motivations. For example, Roger reported a conversation in which his wife claimed he was mowing the lawn just to show people he could do it. Talking about patient motives and feelings might be undertaken with the goal of attempting to change them, but there was also power in just acknowledging that feelings of loss, restriction, or deprivation sometimes accompanied adherence.

Meta-communication. Some patients and partners reported meta-communication (communicating about their adherence talk). For example, Carl recounted a series of brief exchanges in which his wife expressed concern that he was "overdoing" and he told her he found that irritating. She explained that her ongoing comments (e.g., "Don't do that" and "Be careful") came from her own fears and he responded by agreeing to abide by the limits his physician recommended. He reported that she still had a difficult time refraining from comment but that her remarks began to dissipate as she saw him recovering. Both Ken and Rose independently agreed in their interviews that she was the dietary "gatekeeper." Rose reported a recent conversation about this relational dynamic: "Jokingly, I said, 'Do you feel like I've taken all the control away from you and what you eat?' And he said, 'No, never, not at all.'" Ken confirmed that she offered to "let this [diet] go a little bit" to which he replied, "No, I think you're doing a good job. I need your help on that."

Argument. Conversations about adherence sometimes took the form of argument. Ben reported that he and his wife argue when they go out to eat and he orders something he shouldn't:

Oh, there are times, again related to diet, that she said things that I, you know, that I shouldn't be eating and I made some smart-aleck remark about it...."I'll eat any damn thing I want!" [he chuckles] or, you know, or something smart-aleck like that. And then of course she would let me know how she felt about my needing to do this and how, how she's worked to, to do that and so on....There's been positive and negative conversations about diet.

Some arguments about lifestyle change are conversations in which an attempt to persuade goes awry, but it may also be possible that repeated attempts at compliance-gaining or strongly held concerns about adherence might lead one or both partners to enter a conversation with the purpose of expressing disagreement or engaging in argument.

Compliance-gaining. Our participants also reported speech events that resemble Franks et al.'s (2002) notion of social control; that is, episodes in which a partner engages in compliance-gaining when a patient's adherence may be questioned. These episodes were numerous and because they varied considerably in another feature-conversational style-these are discussed in more detail below.

Conversational Styles for Talk About Adherence

Episodes of compliance-gaining were common, and partners varied greatly in how they went about attempting to get patients to alter their behavior. Some were blunt and direct whereas others "said it nicely." Talk might be serious, matter of fact, or humorous, and relied on nonverbal as well as verbal cues. Some conversations had become repeated rituals so that although adherence was the topic, couples recognized other issues between the lines. Because these features involve the "how" of communication, we characterize them as issues of style.

Direct styles. Partners were sometimes blunt and explicit about gaining adherence. For example, some partners simply refused complicity in bad behavior. Georgia reported a time during her husband's early recovery when he was getting ready to bring in firewood as he usually did: "I was rather adamant. I didn't yell. I just said, 'No, I'm going to.' Firmly, so." One couple reported that the partner overstated directives in a blunt fashion that they treated as joking. George laughingly reported how his wife tells him, "If you eat that, you'll die and it's your own fault" and he recounted how, in turn, he "tormented" her by saying he was going to do something nonadherent when they both knew he wasn't going to do it.

Indirect styles. Our respondents gave many examples of conventional indirectness (Brown & Levinson, 1987). That is, when a patient is doing or eating something off-limits, a partner makes a statement that they both know means “don’t do that” but doesn’t literally say that. So, for example, “It’s not good for you” was understood by patients who heard it and partners who said it to be a slightly less directive way of saying that a patient shouldn’t do “it.” For example, Rita said she saw her husband preparing fried bologna and onions and although she knew for certain that this was not part of a heart-healthy diet, she said, “I wonder if you should be doing that.” In his interview, her husband said she “reminds” him when he eats something high in salt or fat.

Routine exchanges. Frequently, a couple’s talk about adherence had a ritual quality: a highly routinized exchange occurred repeatedly and, rather than having some impact on behavior, it appeared to symbolize a relational quality or dynamic. These exchanges occurred in a similar way over and over within a given couple, and there were also strong resemblances among the exchanges reported by different couples. For example, red meat and candy were Wendall’s biggest temptations. When he ate them, he reported his wife would say, “Shouldn’t do that” and he would verbally agree with her, though whether or not he went ahead and ate the food varied. In a situation in which Simon might overexert, he said his wife routinely says, “Now you’re not going to do that, are you?,” to which he replies, “No,” followed by her saying, “You promise?” He said he already knows what he should not do and so the purpose of the exchange was “for her peace of mind.” He didn’t mind that she said it because after this brief exchange, she doesn’t say anything more and because it shows she cares. He added that he’d miss it if she didn’t say it.

Inquiring. Partners might raise a concern about behavior in the form of a question, to which the patient replied with reassurance. These interactions were brief: having been reassured, the partner didn’t persist in talking about the issue even though he or she might still be worried. Ted characterized this way of expressing concern as “saying it nicely” rather than being controlling:

[S]he doesn’t use much pressure, she just says, you know, and she’s a reminder. She just kind of, and she does it in a nice way now, before she didn’t, but now she does it in a nice way, “Are you really sure you’re supposed to be doing that?” ...[Interviewer: You said now she says it in a nice way. How would she have said it before?]...“I wish you would stop doing that.” Or “I need,” or “You need to stop doing that.” It was more of a control type of, “You need to stop doing that” and tell me how to do it and what to do instead of “Should you really be doing that?”

Georgia reported intentionally using this style to raise adherence issues: “I don’t belabor it ’cause that would just make it worse I think, he might, might make him more determined to do it....He’s more used to giving directions [chuckles] than, than taking directions.”

Suggesting. Partners made concrete suggestions about alternative courses of action. For example, Lois described a time when she suggested to her husband that he could stop mowing for the day and finish tomorrow (he said he was OK and continued) and another talk when she suggested he “let the boys” lift a heavy salt bag (he laughed, agreed, and went inside to call their son). Irene expressed concern about her husband’s work with a question about lifting heavy seed bags. When her husband said he would let their son do it, she suggested, “Well why don’t you let [son] plant the corn this year?”

Joking. Some patients and partners reported joking about adherence issues. Joyce was pleased when her husband joked about how “we” need to get a new snow shovel and that he might let her pick it out. To her, it was significant not only that he acknowledged this limitation on his physical activity but that he did so in a positive, upbeat manner. Georgia described the humorous give-and-take she and her husband used to talk about restricting his intake of eggs. She might ask, “Well, are you going to poach them, or boil them?,” to which he replies, “Fry them. In canola oil.” She explained, “Well, canola is supposed to be a substitute that is acceptable...we just kind of kid about it really. He knows what I’m probably going to do.”

Nonverbal communication. Several patients and partners described “the look” that conveys disapproval of noncompliance. Some patients responded by discontinuing the nonadherent behavior, while others were reported by their partners to respond defensively or, occasionally, with resentment. Ben claimed his wife “would not say that I get scolded. But I’d say I get scolded” about eating food he shouldn’t eat. In contrast, his wife said, “I’m not sure I ever really even said anything. I think he just knew what I was thinking.” Asked if she ever gave him “a look,” she replied with laughter, “I think the look is what, what must do it...” and went on to describe that he usually reacted by doing what he was going to do anyway, but feeling guilty and resentful about it.

Talking about adherence occurred within a variety of speech events, with implications for the tone of the conversation and the roles and relationships that are enacted. Likewise, even when the episode was clearly compliance-gaining, there were different ways to go about it. Both patients and partners attended to style of talk and the implications style choices had. Choosing to

communicate directly or indirectly, seriously or humorously, verbally or non-verbally reflected not only an attempt to gain compliance but also a desire to convey relational qualities such as closeness, respect, caring, or concern. Routinized exchanges, questions to which both parties knew the answer, and suggestions about alternatives had import not only for patient adherence behavior but also for how the patient and partner viewed themselves, their relationship, and their shared road to recovery.

Discussion

Previous research has shown partners of cardiac patients may influence adherence to lifestyle change—for better or for worse. Our descriptive study of what couples' adherence talk is like and how they interpret it has revealed several communication features that are meaningful to couples, variable across couples and occasions of influence, and potentially consequential to patient adherence. These findings yield theoretical insight into how, why, and under what circumstances a partner may influence patient adherence to lifestyle change, as well as practical implications for those who wish to help couples communicate.

Consistent with Goldsmith's (2004) theory of social support communication, we found that couples were concerned not just with how frequently they talked about adherence, but with what it meant to them to talk as often as they did and how they managed the frequency of talk. Our couples' reports of adherence talk frequency were a matter not only of how often they talked but also of whether they felt they talked often enough. Some couples talked very little and wished they could talk more while others talked very little because they felt it was unnecessary. Even couples who said they talked "all the time" also reported routines and structures that obviated the need for talk on some issues. Some couples had a moderate level of talk because they intentionally balanced the risks and benefits of explicit discussion of adherence. The reasons for frequency of talk and the relational context in which talk occurred made high, occasional, and low frequency qualitatively different experiences rather than points along a single continuum.

Instead of treating the frequency of adherence talk as a unidimensional construct, future research should also measure couple perceptions that they are constrained from talking and the strategies they use to manage the negative effects of too much or too little support or control. For example, who initiated talk about adherence was an important distinction for some of our participants. Allowing the patient to initiate talk could serve face-saving functions, not only for the patient whose autonomy may be threatened but also for the partner, who risks looking like a nag (cf. Goldsmith's, 2000 finding that advice

was less face threatening when it was solicited by the recipient). The strategy of saying something once directs our attention to how talk about lifestyle issues is distributed across topics. If a couple reports frequent talk, this could derive from repeated harping on the same issue, but it could also arise from saying it once but about a range of issues. It may also be useful to explore how frequency of talk about lifestyle issues may be part of broader patterns in the marriage. A couple who reports that they “talk all the time” about a range of issues, including lifestyle change, may respond quite differently than the couple who generally talks little, except where adherence is concerned.

Previous research has suggested a distinction between support and control is useful and our findings extend this dichotomy in several ways. First, our findings reveal features of talk that may contribute to the perception that it is supportive versus controlling. For example, it seems likely that some speech events would be seen as supportive (e.g., problem-solving, praise) whereas others are seen as controlling (e.g., compliance-gaining). Even when partners are seen as engaging in compliance-gaining, some attempts at social control may be more controlling than others. Direct ways of exerting influence (e.g., refusing complicity, overstating) are likely to be seen as more controlling than less direct ways (e.g., conventional indirectness, inquiring, suggestions, or joking).

Second, our findings show a range of roles patients and partners may take that go beyond the asymmetrical relationship implied by support or control (i.e., the partner does something for or to the patient). Problem-solving and meta-communication recognize the interdependence of partners and patients. As Coyne et al. (1990) point out, partners are not neutral observers who simply support or control a patient in making an individual change. Partners are affected by the stress of the cardiac event and by the alterations to routines, identities, and relationships that occur during recovery. Problem-solving and meta-communication resemble the active engagement style Coyne and his colleagues have documented as one response to this interdependence (see also Lyons, Mickelson, Sullivan, & Coyne, 1998). Likewise, Lewis et al. (2004) remarked on how often husbands and wives, who were asked about how they influence their partner described, not only unilateral tactics but also cooperative, interdependent means of achieving behavior change.

The conflict speech event occurred infrequently in our data but merits further research. Studies of the health-related conversations of young, healthy couples (e.g., Lewis & Rook, 1999) and of couples coping with one partner's prostate cancer (e.g., Helgeson, Novak, Lepore, & Eton, 2004) have pointed to the detrimental effects of “negative social control” strategies such as appealing to guilt, applying pressure, or criticizing the partner. Conflicts among couples coping with a cardiac event may be particularly important because arguing may

affect cardiovascular reactivity (see Robles & Kiecolt-Glaser, 2003, for a review). Even when conflict doesn't occur, the specter of conflict may shape conversations. Our participants sometimes commented on how the frequency with which they talked or their style of attempting to gain compliance reflected a subtle balancing act that enabled them to address lifestyle topics without arousing disagreement.

Likewise, nonverbal communication bears further investigation. The few mentions of nonverbals in our interviews conveyed disapproval and were associated with some degree of negative reaction by the patient. We did not systematically ask about nonverbal communication and, in retrospect, we noted that our questions tended to focus on "talking" or "saying"; consequently, it may be useful to explore whether nonverbal ways of conveying information about lifestyle behaviors do tend to be seen as controlling or whether they could also be a way of conveying disapproval while simultaneously reaffirming a couple's ability to "read" one another without words.

Our description of the features of talk that were meaningful and variable among couples in our sample can also provide a basis for more nuanced measurement in future research. For example, rather than asking couples how often they remind or encourage or nag, we might ask couples to indicate whether they problem-solve, argue, praise, and the like with respect to adherence issues. Likewise, measures could tap perceptions of the degree to which a partner expresses a desire for behavior change directly or through various indirect means, as well as whether discussions have a joking or serious character and occur primarily in the verbal or nonverbal channel. Previous research has resulted in some ambiguity regarding whether "encouraging" has positive or negative effects or whether "reminding" resembles support or control. Our more specific behavioral descriptors may improve understanding of what couples do and why some patterns may elicit adherence and perceptions of support rather than resistance and perceptions of control.

In addition to suggesting refinements in our conceptualization and measurement of couple talk about adherence, our findings also have practical implications. Our findings show that couples vary considerably in how and how often they talk about adherence. It may be validating for couples to learn of others with similar interaction styles or liberating to consider a different way of responding. By "hearing" others talk about the risks and advantages of different forms of communication, couples may also find they are more aware of their own practices and the advantages and shortcomings of their choices. Advice to "be encouraging but don't nag" is too abstract to be of much use; we suspect most partners desire to be encouraging and few wish to nag. The challenge is in knowing what features of talk are likely to be experienced as en-

couraging or nagging and we hope our descriptive findings provide clues couples can use to decode their own interactions. Our findings also include many specific, feasible behaviors that patients or partners might choose to implement (e.g., say it once and then let it go, wait for the patient to initiate talk, look for things to praise, acknowledge challenges, go for walks together, etc.).

We acknowledge several limitations to our study that also serve as a basis for additional research. Our sample was small, racially homogeneous, and highly satisfied with their relationships. Although CHD affects women as well as men, our sample included predominantly male patients and female partners. In addition, because cardiac rehabilitation classes were a major component of our recruitment strategy, we may have attracted a sample that was more inclined to be adherent to recommended lifestyle changes than the general population of persons who have experienced an MI and/or CABG. Nonetheless, the dimensions of communication we have identified lay the groundwork for a better understanding of the role of couple communication in encouraging life-saving, life-improving lifestyle changes among a significant population of Americans.

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Notes

¹Hereafter, we will use the inclusive term “partner” to include both spouses and committed romantic partners in nonmarital relationships.

²Thirty-two participants circled the response options “European American,” eight circled “Native American,” and one left this item blank. Because of the demographic composition of the community in which the study was conducted, it would be unusual to have such a large proportion of respondents who are American Indians. Instead, we believe it is possible that some participants interpreted the option “Native American” to mean that they were born U.S. citizens. However, one participant mentioned in his interview that he was American Indian.

³We have used pseudonyms to refer to study participants.

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