"I Tell My Partner Everything . . . (or Not)": Patients' Perceptions of Sharing Heart-Related Information With Their Partner

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"I Tell My Partner Everything . . . (or Not)": Patients' Perceptions of Sharing Heart-Related Information With Their Partner

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Abstract

This study is grounded in theories of information management. Patients with a diagnosed heart-related condition (N = 253) completed a survey regarding their perceptions of sharing/not sharing information with a partner about their health condition. Data were analyzed using descriptive and inferential statistics. Results indicated that although most patients reported sharing "everything" with their partner, others reported not sharing certain topics such as health issues and physical symptoms/ailments. In addition, patients who reported sharing everything with a partner reported significantly greater communication efficacy, and breadth, depth, and frequency of communication about a heart-related condition compared with those who reported not sharing certain topics. Finally, as hypothesized, there were no significant group differences in terms of sharing specific physical and psychological health information. We discuss the findings and implications of the study for nursing practice.

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Heart disease is the leading cause of death in the United States, affecting people of all ages and backgrounds. Like other chronic health conditions (e.g., diabetes, stroke, and cancer), heart disease is prolonged in duration and is rarely cured completely (Centers for Disease Control and Prevention [CDC], n.d.). Little research has focused on disclosure/avoidance in the context of heart-related conditions[1] (for exception, see Goldsmith, Lindholm, & Bute, 2006). A better understanding of disclosure/avoidance among patients with heart conditions may be useful for nurses and other health care providers in terms of helping patients manage not only their health information but also their heart condition.

It is important for people managing heart conditions such as coronary artery disease (CAD) and heart failure (HF) to recognize physical symptoms (e.g., fatigue, shortness of breath, weight gain) and psychological/emotional symptoms (e.g., moodiness, depression, decreased libido) associated with their condition. Recognizing symptoms of a myocardial infarction (MI or heart attack) may help patients avoid delay in getting to a hospital or seeking help (Horne, James, Petrie, Weinman, & Vincent, 2000; King & McGuire, 2007; Quinn, 2005; Zerwic, Ryan, DeVon, & Drell, 2003). Because depression is common for patients with heart disease, and is associated with increased morbidity and mortality (Nicholson, Kuper, & Hemingway, 2006; VanMelle et al., 2004), recognizing symptoms of depression may be an important first step in seeking appropriate treatment. Although people with heart disease should be encouraged to report any new or unusual symptoms (e.g., chest pain, arm pain, nausea) to a health care provider, it is likely that they will initially disclose such information to a significant other such as a spouse or a partner.[2]

One key facet of managing a health condition is making choices about sharing information. Sharing health information with a partner is important for managing one's health condition (Checton, Greene, Magsamen-Conrad, & Venetis, 2012). Greene (2009) suggested that "people are constantly in a process where decisions have to be made about sharing updates, not simply the initial diagnosis" (p. 232). Making ongoing decisions about sharing health information with a partner is especially salient for people managing a heart condition. For example, treatment guidelines for HF patients emphasize daily weight monitoring to reduce rehospitalizations and mortality rates (Goldberg et al., 2003; Horowitz, Rein, & Leventhal, 2004). Whether patients share their

daily weight with their partner may influence how well they manage their heart condition. Similarly, whether people with CAD disclose a lack of interest in sex to their partner may affect not only management of their health condition (e.g., possible side effect of medication versus symptom of elevated blood pressure) but also the quality of their relationship with their partner.

Communication privacy management (CPM) theory (Petronio, 2002) posits that individuals purposely select what information to share or withhold from others. The notion that people do not always communicate openly (known variously as nondisclosure, topic avoidance, and concealment)[3] has been reported in a variety of relationship types such as dating relationships (Knobloch & Carpenter-Theune, 2004; Sargent, 2002) and marital relationships (Dailey & Palomares, 2004; Finkenauer & Hazam, 2000). Furthermore, couples managing one partner's cancer may actively engage in topic avoidance (Donovan-Kicken & Caughlin, 2010, 2011; Goldsmith et al., 2007; Venetis, Greene, Checton, & Magsamen-Conrad, in press). The purpose of this study is to (a) explore the kinds of information that people with heart-related conditions report not sharing with a partner and (b) examine differences in perceptions of disclosing health information for those who report sharing *everything* with a partner and those who report that there are some topics they do not typically share.

Health Information Management

Theories of information management (Greene, 2009; Petronio, 2002; see also Donovan-Kicken & Caughlin, 2010, 2011; Goldsmith et al., 2007) provide frameworks for examining how people with heart-related conditions manage their health information. CPM (Petronio, 2002) focuses on privacy boundaries and rules, whereas disclosure decision-making (Greene, 2009) and topic avoidance (Donovan-Kicken & Caughlin, 2010, 2011; Goldsmith et al., 2007) literatures explain strategies people use to manage their information and relationships.

CPM (Petronio, 2002) serves as a broad framework for understanding how people manage their private information. It is a rules-based management system beginning with the premise that people own and control their private information. CPM uses a metaphor of boundaries to represent the border around private information. Coordinating the boundaries of one's health information (e.g., choosing not to disclose weight gain to a partner) is complex and involves multiple levels. For example, some individuals may have wide boundaries (e.g., "I tell my wife everything"), whereas others maintain smaller and less permeable boundaries (e.g., "I don't like to talk about my health"). Similarly, spouses of patients who recently experienced a MI

reported avoiding difficult discussion topics, hiding their fears, and pretending that everything is in order (Salminen-Tuomaala, Åstedt-Kurki, Rekiaro, & Paavilainen, 2013)

Couples managing cancer avoid discussing numerous topics such as emotions, fears, worries, changes in daily life, relationship issues, sex, cancer treatments, future plans, death, being a burden (Boehmer & Clark, 2001; Goldsmith et al., 2007), and topics that may worry their partners (Manne, Dougherty, Veach, & Kless, 1999). A recent study of older patients, however, found that most participants were comfortable discussing sexual health with their physicians (Farrell & Belza, 2012). Less research, however, has explored specific topics people with heart-related conditions do not share with a partner. Thus, we ask,

Research Question 1: What topics do patients with heart-related conditions report *not* sharing with their partner?

Strategies for Managing Health Information

People use strategies such as disclosure/nondisclosure and avoidance to manage their private information. For example, Greene's (2009) Disclosure Decision-Making Model (DD-MM) explains the process of health disclosure decision-making. The DD-MM posits that when deciding whether to disclose a piece of health information (e.g., a diagnosis), individuals assess factors such as (a) the information, (b) the receiver (relational quality, anticipated response), and (c) their perceived ability to share the information (i.e., disclosure efficacy). If assessment is favorable, a person will likely disclose the information (Greene et al., 2012). Although the DD-MM focuses on one-time, isolated disclosure decisions, researchers have begun to examine ongoing disclosure patterns (Checton & Greene, 2012). For example, people with CAD or HF may wish to tell a partner about a distressing new symptom (e.g., shortness of breath) or discuss uncertainty about their prognosis, but may not feel confident that they can find the right words to begin the conversation. They may decide not to disclose, to disclose the information at a later time, or avoid discussion altogether.

One mechanism influencing people's disclosure decisions is efficacy or perceived ability to communicate some type of information to a specific person (T. D. Afifi & Steuber, 2009; W. A. Afifi & Weiner, 2004; Greene, 2009). Empirical evidence links perceived efficacy with likelihood of disclosing health information (Greene et al., 2012); intentions to seek sexual health information from partners (W. A. Afifi & Weiner, 2006); perceptions of better management of a chronic health condition (Checton et al., 2012); and greater

breadth (range of topics), depth (level of intimacy), and frequency of patients' communication with their partner about a heart-related condition (Checton & Greene, 2012).

Although people may choose not to disclose health information for reasons other than perceived efficacy (e.g., self- or other-protection), it is expected that perceived ability to communicate to a partner should be greater for individuals who report openly disclosing information to a partner about their heart condition (e.g., "I tell my wife everything") compared with people who report that there are some topics they do not share with their partner (e.g., "I don't talk about my prognosis"). Thus, we hypothesize,

Hypothesis 1: Patients who report sharing "everything" with a partner will report significantly greater communication efficacy than patients who report not sharing certain topics with their partner.

Managing Health Information and Disclosure Patterns

People's reasons for engaging in nondisclosure and topic avoidance regarding their health focus primarily on protecting themselves, their relational partner, and their relationship with others (Goldsmith et al., 2007; Greene, Derlega, Yep, & Petronio, 2003; see also Donovan-Kicken & Caughlin, 2010). For example, individuals may avoid sharing information about their health to prevent opening themselves up to stigma or discrimination (Greene et al., 2003; Greene et al., 2012), to protect a partner from unnecessary worry or concern (Lewis & Manusov, 2009; Manne et al., 1999), or to avoid conflict in their relationship (Goldsmith et al., 2007). Regardless of the reason for nondisclosure/avoidance, however, perceived ability to share information influences the likelihood of disclosure (Greene, 2009). Even under conditions of illness uncertainty, patients' perceived ability to talk to their partner positively predicted the depth (i.e., level of intimacy), breadth (i.e., range of topics), and frequency of talk about their health condition (Checton & Greene, 2012). Thus, it is expected that people who report openly communicating information about their heart-related condition with their partner are more likely to report greater disclosure depth, breadth, and frequency compared with people who report that there are some topics they do not share with their partner.

Hypotheses 2a-c: Patients who report sharing "everything" with a partner will report significantly greater breadth, depth, and frequency of disclosure about their heart-related condition with their partner compared with patients who report not sharing certain topics with their partner.

Managing Physical and Psychological/Emotional Health Information

Although disclosure is associated with greater satisfaction for marital (Fincham & Bradbury, 1989; Finkenauer & Hazam, 2000) and cohabiting couples (Lippert & Prager, 2001), topic avoidance is a common and functional relational event (Caughlin & Vangelisti, 2000; Dailey & Palomares, 2004; Finkenauer & Hazam, 2000). That is, healthy relationships are characterized by a balance between openness and closedness (T. D. Afifi, Caughlin, & Afifi, 2007; Greene, Derlega, & Mathews, 2006; Petronio, 2002). According to CPM, privacy rules regulate the degree of access to or protection of private information (Petronio, 2002). For example, patients recovering from coronary artery bypass graft (CABG) surgery may not disclose fears about their prognosis or future, but may openly share cardiac rehabilitation successes ("I walked one mile on the treadmill today!").

Uncertainty surrounding an illness influences how people manage their health information (Goldsmith, 2009), and uncertainty is an underlying feature of health disclosure decision-making (Greene, 2009). Prior research indicates that uncertainty about whether particular symptoms (e.g., chest pain, indigestion, diaphoresis) are heart-related may cause people to delay seeking care (e.g., King & McGuire, 2007; Zerwic et al., 2003). Horne et al. (2000) found the most common symptom *expected* by patients who experienced a MI was central chest pain (followed by radiating arm or shoulder pain and collapse). The most common symptom *experienced*, however, was sweats or feeling feverish (followed by chest pain, and arm, shoulder, or radiating pain). Moreover, patients who experienced a discrepancy between expected and actual symptoms were more likely to have a third party (e.g., partner) call for help, suggesting that partners (and others) play an important role in helping patients seek medical attention. Partners also play a critical role in helping patients recover from acute cardiac events (McLean & Timmons, 2007). Thus, it is important for people to recognize symptoms associated with heart disease, accurately label them (Quinn, 2005), and share the information with others (e.g., partner, health care provider).

Although it is important for people managing a heart-related condition to disclose health information to their partner, people have legitimate self-, other-, and relationship-focused reasons for not sharing (Greene et al., 2006). Thus, we expect that in terms of sharing specific physical and psychological/emotional health information (e.g., feeling depressed, experiencing weight gain, indigestion), people who report sharing "everything" are no more likely to report sharing such symptoms with their partner than are those who report not sharing certain information.

Hypothesis 3a: There are no significant differences in sharing physical health information with a partner for patients who report sharing everything and those who report not sharing certain topics.
Hypothesis 3b: There are no significant differences in sharing psychological health information with a partner for patients who report sharing everything and those who report not sharing certain topics.

Method

This study is part of a larger study of disclosure among patients with a heart-related condition. Participants were recruited from a private medical office in a suburban area of the northeastern United States. The 20-physician practice specializes in cardiovascular diseases with physicians board certified in both internal medicine and cardiology. Participants were of age 18 or older and had a previously diagnosed heart-related condition. This process excluded, for example, patients at initial consultation or cardiac pre-operative clearance for an unrelated condition.

Participants

Because this study focuses on patients sharing information about a heart-related condition with a partner, the subsample reported includes the 253 patients who completed questionnaires (~15 min) in relation to their current partner. Of these participants, 159 (63%) were male and 92 (37%) were female (two did not report gender). Individuals ranged in age from 36 to 93 years (M = 68.45, SD = 11.70; three did not report age). Participants were predominantly Caucasian (91%), followed by African American (3.6%) and Other (<3%); nine people did not report race/ethnicity. Participants reported being in a relationship with their partner from 2 to 70 years (M = 38.75, SD = 15.62). Time since diagnosis ranged from <1 year to 71 years (M = 8.98, SD = 9.92).

Procedure

Two business days prior to a scheduled appointment, patients were notified via an automated phone system about the opportunity to participate in a research study. On arrival at the medical office, a researcher approached patients and asked if they would agree to complete an anonymous questionnaire about sharing information with a partner about a heart-related condition[4]; a second researcher was present in the waiting room for consent and to distribute/collect surveys. All participants were asked not to discuss the

questionnaire with others until they had returned the survey.[5] A Rutgers University Institutional Review Board (IRB) approved all procedures.

Measures

Variables measured included unshared topics, communication efficacy, disclosure (breadth, depth, and frequency), and disclosure of physical and psychological health information. Due to the limited prior quantitative measurement for most constructs, we developed measures grounded in prior research and theory (Checton & Greene, 2012; Checton et al., 2012). The measures were pilot-tested and underwent several revisions, and extensive analyses were conducted to ensure adequate psychometrics. We conducted exploratory factor analysis using principal components analysis (PCA), varimax rotation to evaluate the dimensionality of the measures. Criteria for factor retention included eigenvalues >1, scree plot examination, and parallel analysis (Hayton, Allen, & Scarpello, 2004). Items with primary factor loadings below .6 were deleted; only factors with ≥three items were retained. Composite scores were created by averaging responses to the individual items separately for patients and partners. Reliability was estimated by Cronbach's α.

Coding

One item was free response. One author examined a subsample of responses to develop general coding categories in an inductive process. A trained graduate student independently coded responses, with one author coding 10% in common to establish reliability, and another author resolving any disagreements. All kappas exceeded .9.

Unshared topics. One open-ended question was used to explore the kinds of information that people with heart-related conditions report not sharing with their partner. The item asked, "Please describe topics related to your health condition that you do not typically share with your spouse." The induction process resulted in eight categories. Nothing unshared (n = 110) included statements indicating that there is nothing the individual fails to share with a partner such as "I share everything with my spouse" and "I always share information about our various problems." Health issues (n = 14) included statements indicating that participants avoided sharing health issues, in general, such as "I never share health problems." Physical symptoms/ailments (n = 11) included statements indicating that individuals avoided disclosing specific health issues such as "heart-related symptoms." Minor topics (n = 6)

Table 1. Patients' Reports of Shared and Unshared Topics (*N* = 253).

Topic	Frequency	Percentage	Examples
Share everything (i.e., there is nothing that is unshared)	110	43.5	We share everything I share everything with my spouse There is nothing that I don't share
Health issues	14	5.5	I avoid talking about health Prognosis and test results Blood pressure or anything else
Physical symptoms/ ailments	11	4.3	Heart-related symptoms Weight Gout attacks
Perceived minor issues	6	2.4	Day in and day out things Minor aches and pains
Sexual issues	5	2	Sexual loss Sex drive
Fears	5	2	Burial arrangements Pain, fear, or death
Emotional issues	2	.8	Anxiety, depression, stress management Loneliness, depression
Other (i.e., topics not typically shared with a partner)	6	2.4	I share all things I consider important Things that I think she will misinterpret

included statements indicating that individuals avoided disclosing perceived minor issues such as "day in and day out things." Sexual issues (n = 5) included statements indicating that individuals avoided disclosing sexual issues such as "sexual loss." Fears (n = 5) included statements indicating that individuals avoided disclosing fears such as "fear of dying." Emotional topics (n = 2) included statements indicating that individuals avoided disclosing emotional issues such as "anxiety, depression, stress management." Finally, other (n = 6) included statements indicating that individuals avoided disclosing for other reasons such as "Husband has dementia" (see Table 1). A categorical variable was created by collapsing the unshared topics categories into two groups: those who share everything (n = 110) and those who report not sharing certain information (n = 49).

Communication efficacy. Items measuring individuals' ability to share information about a health condition with their partner was adapted from the literature on revealing secrets (T. D. Afifi & Steuber, 2009) and disclosing a health condition (Greene, 2009) using four 5-point Likert-type items with responses ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Results indicated a single factor (eigenvalue = 2.81, 70% of the variance, four items

loading above .79). A sample item included, "I am confident that I can share information about my health condition with my spouse when I want to." Higher scores indicated a greater communication efficacy. Reliability was good ($\alpha = .84$; $M = 4.48$, $SD = 0.59$).

Disclosure breadth. Breadth or the range of topics individuals disclose to their partner about their health condition was measured by six 5-point Likert-type items developed by the authors, with responses ranging from 1 (s*trongly disagree*) to 5 (s*trongly agree*). Results indicated a single factor (eigenvalue = 2.51, 58% of the variance, six items loading above .66). A sample item included, "I discuss a wide variety of issues related to my health condition." Higher scores indicated a greater disclosure breadth. Reliability was good ($\alpha = .85$; $M = 3.64$, $SD = 0.87$).

Disclosure depth. Depth of disclosure to a partner about a health condition was measured by four 5-point Likert-type items developed by the authors with responses ranging from 1 (s*trongly disagree*) to 5 (s*trongly agree*). Results indicated a single factor (eigenvalue = 2.33, 58% of the variance, four items loading above .70). A sample item included, "I have heart-to-heart talks with my spouse about my health condition." Higher scores indicated a greater disclosure depth. Reliability was good ($\alpha = .75$; $M = 3.81$, $SD = 0.83$).

Disclosure frequency. How often patients disclose to a partner about the health condition was measured by four 5-point Likert-type items developed by the authors, with responses ranging from 1 (*strongly disagree*) to 5 (s*trongly agree*). Results indicated a single factor (eigenvalue = 2.69, 67% of the variance, four items loading above .68). A sample item was "We often talk about my health condition." Higher scores indicated more frequent disclosure. Reliability was good ($\alpha = .84$; $M = 3.08$, $SD = 0.87$).

Disclosure of health-related information. Whether or not patients with heart-related conditions share specific physical and psychological/emotional symptoms with a partner was measured with 15 items created by the authors based on standard health assessment forms used in the cardiology practice, with responses ranging from 1 (*never*) to 5 (*always*). The instructions began with the stem, "These questions ask what you do or do not tell your spouse about your health. I tell my spouse if . . . " Results indicated that two factors underlie the dimension. Factor 1 (eigenvalue = 7.32, 48% of the variance, 12 items loading $\geq .60$) was named physical health information. Sample items were "I

have palpitations" and "I have shortness of breath." Higher scores indicated more likelihood of disclosing. Reliability was good (α = .92; *M* = 2.44, *SD* = 0.90). Factor 2 (eigenvalue = 1.33, 9% of the variance, three items loading above .78) was named psychological/emotional health information. A sample item was "I feel depressed." Higher scores indicated more likelihood of disclosing. Reliability was good (α = .81; *M* = 2.71, *SD* = 0.87).

Results

Preliminary Analyses

Data were screened for normality and outliers, and no transformations were needed. To test these cross-sectional data, we employed bivariate correlations and *t* tests. Before testing our hypotheses, we conducted preliminary analyses. To identify any demographic differences in the variables in the study, we evaluated sex, age (≤age 67 and >age 67), time since diagnosis (≤6 years and >6 years), and relationship length (≤ 42 years and > 42 years) by conducting appropriate *t* tests. Results document no systematic differences. Due to the number of *t* tests conducted, modified Bonferroni adjustments were employed.

Main Analyses

We conducted two sets of analyses to evaluate hypotheses. First, we computed zero-order correlations for all the variables in the study (see Table 2). Results of bivariate correlations demonstrated that as expected, communication efficacy is positively associated with disclosure breadth, depth, and frequency, and not associated with disclosing physical or psychological/emotional health information. Next, we employed independent samples *t* tests to test our hypotheses. Results will be presented by research question and hypotheses.

Unshared Topics

Research question 1 asked participants to describe topics related to their health condition that they do not typically share with their partner. Of those who responded (*n* = 159), nothing unshared (*n* = 110, 43.5%) captured the most responses, followed by health issues (*n* = 14, 5.5%), physical symptoms/ailments (*n* = 11, 4.3%), minor topics (*n* = 6, 2.4%), other (*n* = 6, 2.4%), sexual issues (*n* = 5, 2%), fears (*n* = 5, 2%), and emotional topics (*n* = 2, 0.8%) (see Table 1).

Table 2. Bivariate Zero-Order Correlation Matrix for Study Variables.

	1	2	3	4	5	6
1. CommEff	1.00					
2. Breadth	.56**	1.00				
3. Depth	.55**	.72**	1.00			
4. Frequency	.25**	.53**	.48**	1.00		
5. PhysicalSymp	.01	.11	.19**	.20**	1.00	
6. Psych/EmotSymp	.10	.22**	.23**	.30**	.70**	1.00

Note. CommEff is communication efficacy; Breadth is disclosure breadth; Depth is disclosure depth; Frequency is disclosure frequency; PhysicalSymp is sharing physical symptoms; Psych/EmotSymp is sharing psychological/emotional symptoms.
**$p \leq .01$, two-tailed.

Differences in Communication Efficacy

An independent samples *t* test was conducted to test Hypothesis 1. Results indicated significant differences in communication efficacy, $t(64.49) = 2.92$, $p < .01$, such that patients who reported sharing everything with their partner reported a greater communication efficacy ($M = 4.65$, $SD = 0.48$) than did patients who reported not sharing certain topics with their partner ($M = 4.30$, $SD = 0.77$). Thus, Hypothesis 1 was supported.

Differences in Disclosure Breadth, Depth, and Frequency

Independent samples *t* tests were conducted to test Hypotheses 2a-c. Results for Hypothesis 2a indicated significant differences in disclosure breadth, $t(152) = 7.37$, $p < .001$, such that patients who reported sharing everything with their partner reported more disclosure breadth ($M = 4.01$, $SD = 0.60$) than did patients who reported not sharing certain topics with their partner ($M = 3.08$, $SD = 0.96$). Similarly, results for Hypothesis 2b revealed significant differences in disclosure depth, $t(152) = 7.32$, $p < .001$, such that patients who reported sharing everything with their partner reported more disclosure depth ($M = 4.20$, $SD = 0.59$) than did patients who reported not sharing certain topics with their partner ($M = 3.31$, $SD = 0.90$). Finally, results for Hypothesis 2c revealed significant differences in disclosure frequency, $t(78.84) = 3.94$, $p < .001$, such that patients who reported sharing everything with their partner reported more disclosure frequency ($M = 3.31$, $SD = 0.78$) than did patients who reported not sharing certain topics with their partner ($M = 2.70$, $SD = 0.92$). Thus, Hypotheses 2a-c were supported.

Differences in Disclosing Physical and Psychological/Emotional Health Information

Independent samples *t* tests were conducted to test Hypotheses 3a-b. Results indicated no significant differences in sharing physical health information, $t(98.90) = .33$, $p > .73$, such that patients who reported sharing everything with their partner were no more likely to share physical health information with their partner ($M = 2.58$, $SD = 1.03$) than were patients who reported not sharing certain topics with their partner ($M = 2.52$, $SD = 0.90$). Similarly, results for Hypothesis 3b indicated no significant differences in sharing psychological/emotional health information, $t(103.22) = .82$, $p > .41$, such that patients who reported sharing everything with their partner were no more likely to share psychological/emotional health information with their partner ($M = 2.65$, $SD = 0.88$) than were patients who reported not sharing certain topics with their partner ($M = 2.53$, $SD = 0.80$). Thus, Hypotheses 3a-b were supported.

Discussion

Many people are living with chronic heart-related conditions and making ongoing decisions about sharing their health information. Framed in theories of information management (Greene, 2009; Petronio, 2002; see also Donovan-Kicken & Caughlin, 2010, 2011; Goldsmith et al., 2007), this study explored how people with heart-related conditions manage sharing health information with their partner. We discuss findings, limitations, and future research next.

Unshared Topics

Most participants reported sharing "everything" about their heart condition with their partner. As the average length of partners' relationships was 39 years, the finding is not particularly surprising. Generally speaking, the longer people are together, the more information they know about each other (Greene et al., 2006). Other patients, however, reported *not* sharing specific information pertaining to health issues, physical symptoms/ailments, sexual issues, fears, and emotional and minor topics. The avoided topics show a considerable overlap with those found in prior research on couples managing cancer (e.g., Goldsmith et al., 2007; Venetis et al., in press; Venetis, Magsamen-Conrad, Checton, & Greene, 2013).

Of particular interest for health care providers are the *un*shared topics, namely health issues and physical symptoms/ailments. The largest category,

health issues, included statements about not sharing "issues related to my heart" and "blood pressure or anything else." Similarly, physical symptoms/ailments included statements about not sharing "heart-related symptoms" and "weight." Patients with heart-related conditions may *say* that they share everything. Yet, the findings suggest that they may not be sharing potentially detrimental health information to the people who may matter most such as their partners, physicians, nurses, and other health care providers. For example, it is especially critical for patients who have been hospitalized with HF (and their partner) to understand the disease process and comply with discharge instructions; hospital readmissions can be prevented when discharge planning includes patient education and timely outpatient follow-up (Hekmatpou, Mohammadi, Ahmadi, & Arefi, 2010). Thus, although patients may have legitimate reasons (protecting a partner from worry, avoiding conflict) for avoiding certain topics, the findings also suggest that if patients are avoiding talk about heart-related issues, how well are they managing their heart condition?

Another explanation for avoiding talk about health issues may be information overload. For example, frequency of communication about an individual's illness may help some patients manage their heart disease (e.g., Rohrbaugh, Mehl, Shoham, Reilly, & Ewy, 2008). However, the current findings beg the question "how much information is too much" (for both patients and partners), and at what point does communication about a health condition take over people's conversations and life (see Goldsmith, 2009). Raising health care providers' awareness of topic avoidance in this population may be one step toward helping patients improve management of their health information and heart condition. Development of role-playing interventions as part of the discharge planning for hospitalized patients may help them begin sometimes difficult discussions. For example, having patients use incremental disclosures in which they "test the waters" to see what kind of response they might receive from their partner may be useful (see Greene et al., 2003; cf. teach-back methods for HF patients in White, Garbez, Carroll, Brinker, & Howie-Esquivel, 2012).

Health Information Management

As expected, patients who reported sharing everything with their partner were significantly more likely to report higher communication efficacy with their partner compared with those patients who reported that there are some topics they avoid sharing with their partner. The finding is consistent with prior research studies in which perceived efficacy strongly predicted intentions to reveal a secret (T. D. Afifi & Steuber, 2009), seek sexual health

information (W. A. Afifi & Weiner, 2006), share heart-related information (Checton & Greene, 2012), manage a chronic health condition (Checton et al., 2012), and disclose health information (Greene et al., 2012). In addition, perceived ability to manage a chronic illness has resulted in better health outcomes (Bodenheimer, Lorig, Holman, & Grumbach, 2002; Leventhal, Halm, Horowitz, Leventhal, & Ozakinci, 2004). Thus, it is important to focus on patients (and partners) feeling confident about their ability to share and communicate to improve overall health management.

Most interesting are the expected findings that there are no significant differences in sharing physical and psychological/emotional health information between the two patient groups. That is, although most patients reported sharing "everything" with their partner, they were no more likely to disclose specific physical and psychological/emotional health information than were patients who reported not sharing certain information with a partner. One explanation for the findings is that people have both personal boundaries (e.g., fears and concerns I keep to myself) and collectively held boundaries (e.g., fears and concerns I share with my partner) surrounding their private information (Petronio, 2002). Furthermore, Greene (2009) explains that people managing a health condition make ongoing decisions regarding sharing their health information. The disclosure decision-making process involves weighing risks/benefits and uncertainties associated with sharing information with others. Thus, people with heart-related conditions may truly believe that they share everything with their partner, but "in the moment" may have legitimate reasons for not disclosing an unusual symptom, results of a diagnostic test, or uncertainty about their future with heart disease.

Limitations

As with any research study, there are several limitations to be considered. First, the data were collected in a suburban community from one cardiology office, and therefore, the results cannot be generalized. Similarly, the predominantly Caucasian sample limits generalization to other ethnic groups. There are likely differences in how various cultural groups manage their private information (Petronio, 2002) and health (Halm, Mora, & Leventhal, 2006). Another limitation is the use of individual cross-sectional data to examine dyadic relationship processes and make relationship conclusions. Furthermore, partners also engage in topic avoidance (Goldsmith et al., 2006; Manne et al., 1999; Salminen-Tuomaala et al., 2013), and this is untapped in the present study. Thus, future research should recruit couples where one partner is managing a heart condition. An improved study would track

couples across time, including specific health indicators, as well as changes in communication patterns before diagnosis, at diagnosis, after surgery (or treatment), and even longer during health condition follow-up. Finally, as with any study, there are unmeasured variables that were not included and cannot be accounted for in the present data such as partner perspectives.

Implications and Future Research

Many people are managing heart-related conditions such as CAD and HF. Better management of their heart condition leads to better health outcomes (Horne et al., 2000; Horowitz et al., 2004). A key component of managing a health condition is making decisions about sharing health information with others, especially partners. However, people are not constant disclosers and topic avoidance is common in relationships (T. D. Afifi et al., 2007; Goldsmith, 2009). The purpose of this study was to explore disclosure/avoidance for people managing heart-related conditions. A better understanding of the phenomenon may inform nurses and other health care providers, and lead to interventions aimed at assessing patients' health information management.

Although healthy relationships are characterized by a balance between openness and closedness (T. D. Afifi et al., 2007; Greene et al., 2006; Petronio, 2002), our findings suggest that while some patients say that they share everything with their partner, others are not sharing potentially serious issues related to their health condition. Patients' understanding of their illness and its treatment may be an important, potentially modifiable mediator of adherence with medications and self-management behaviors; moreover, suboptimal beliefs about heart disease (e.g., no symptoms/no disease) may interfere with appropriate therapy and self-care and perpetuate poor health outcomes (Halm et al., 2006). Thus, patients' reports of not sharing issues related to "my heart," "weight," or "blood pressure" may negatively influence management of their health condition. Nursing interventions targeting patients' understanding of their heart condition, as well as their communication skills (e.g., efficacy), may improve their ability to begin difficult discussions and better manage their heart condition. Relationships play an important role in helping people maintain their physical and psychological well-being (Uchino, 2004). Future research should explore both relational and health outcomes of the disclosure/avoidance continuum. Heart disease continues to be the leading cause of death in the United States for both men and women (CDC, n.d.). Thus, continued research on health information management is crucial for patients, partners, health care providers, and other caregivers in terms of helping patients manage their heart condition.

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Notes

1. "Heart-related" includes conditions such as high blood pressure (hypertension) and high cholesterol (hypercholesteremia), which increase the risk of heart disease and stroke (Centers for Disease Control and Prevention [CDC], n.d.).
2. Hereafter, the inclusive term "partner" will refer to both spouses and partners in committed romantic relationships.
3. Although nondisclosure and topic avoidance are closely related strategies for managing information, topic avoidance can be viewed as a more strategic attempt to not talk about something or disclose information on a particular topic (T. D. Afifi, Caughlin, & Afifi, 2007; Dailey & Palomares, 2004). The terms nondisclosure and topic avoidance are used interchangeably.
4. Patients reported diagnoses such as coronary artery disease (e.g., "heart attack," "clogged arteries"), heart rhythm irregularities (e.g., atrial fibrillation, premature ventricular contractions, supraventricular tachycardia), hypertension, and hyperlipidemia. Some patients reported reasons for their visit associated with a heart-related condition such as a check-up post angioplasty or coronary artery bypass graft (CABG) surgery, for blood tests (e.g., prothrombin time or "PT"), diagnostic tests (e.g., stress test, echocardiogram), pacemaker checks, and for pre-operative cardiac clearance; patients who did not report a diagnosis (e.g., in testing prior to diagnosis or left the item blank) were excluded. We relied on patient reports of diagnoses. Follow-up analyses based on reported diagnosis indicated no differences across study variables, and thus they were combined for testing.
5. Patients who reported that they did not have a spouse/partner were asked to complete the survey in relation to another person (e.g., child or friend) with whom they share information about their heart condition ($n = 93$). If a patient arrived with a partner or other person, that person was also invited to fill out either a partner version ($n = 15$) or other version ($n = 4$) of the survey. Only data for patients sharing information with a partner were included in this study.

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