Women's Experience Following a Cardiac Event: The Role of the Self in Healing

This study explored the role of the self in the experiences of women living with cardiovascular disease. The study, which used a naturalistic design, involved interviewing 13 women with a diagnosis of coronary heart disease (CHD) and analyzing their reports through constant comparative analysis. For women, living with CHD was characterized by changing images of the self. Women reported engaging in processes involving seeking meaning, creating mastery, and accepting the self. These processes were marked by the overarching theme of connectedness with significant others. The study findings enhance understanding of the role of the self in recovery for women with diagnosed CHD. Key words: *heart disease, recovery, self, women*

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Coronary heart disease (CHD) is the leading cause of death and disability in American women.[1] Clinical and empirical findings have shown that, during the first year following a cardiac event, women not only experience a greater risk of death, cardiac distress, and reinfarction,[2] but also are less physically, sexually, and socially active than men following myocardial infarction (MI) or coronary artery bypass graft (CABG) surgery.[3] Women evidence higher levels of depression and anxiety following CHD diagnosis, return to work less often, experience more cardiac symptoms, and report lower levels of satisfaction with social support during recovery.

Women also report that they have greater difficulty managing CHD-related stress due to multiple role demands in family and work settings. In addition, women are less likely to enter and more likely to drop out of cardiac rehabilitation programs compared with men.[4] Even in the absence of physical symptoms, the psychological stress stemming from difficulties in carrying out activities of daily

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living, managing cardiac symptoms and treatment, balancing multiple roles, anticipating the future, and being socially active can be functionally debilitating for women.[5,6] This psychological distress may affect women's motivation and involvement in risk factor modification including participation in programs of regular physical activity, dietary changes, smoking cessation, and medication adherence.[5] These deficits and problems with adjustment represent a significant individual and societal dilemma, affecting emotional and physical well-being as well as health care delivery and spiraling health care costs.[7]

Although many women appear to return to pre-illness levels of functioning after an acute cardiac event, others have significant and sometimes lasting difficulties in psychosocial functioning. Many psychosocial factors have been proposed as risk factors for the development of heart disease, yet few studies have examined the nature of the stressors that arise after the onset of heart disease in women.[8] The growing number of older women in society and their lower levels of physical and psychosocial function provide incentives to better understand concepts central to women's psychological and social function and to identify effective strategies for meeting women's needs following a cardiac event.

THE ROLE OF THE SELF IN RECOVERY

The self system is increasingly being recognized as an important antecedent or correlate for understanding health behaviors.[9] Recovery from any major life event involves both physiologic and psychosocial stress, which require acknowledgment, analysis, and attention to the self.[10] Indeed, the goals, motivations, affect, and actions involved in the recovery process are intimately linked to the self system, as the self is the central point of reference for cognition, emotion, motivation, and social behavior.[11–13] The self system facilitates the transition from physical and psychological stress to healing and recovery[14,15] by mediating the relation between the individual system and sociocultural institutions.[16] How the self is defined determines what goals will be meaningful, which in turn determines what behaviors will be enacted to meet those goals.[17]

When an illness such as a cardiac event occurs, physiologic, emotional, cognitive, and social resources are recruited so that the loss can be placed in perspective and subsequently managed or dismissed.[18] Such processes assist the individual to reappraise the illness as a reversible event, construe the illness as relatively unimportant to the self, and maintain the integrity of the self.[19] Indeed, the self guides the process of meaning making, which contributes to the understanding of the experience of illness and functions to stabilize the self.[20] In summary, the self likely plays a pivotal role in regulating individual thoughts, motivations, and decision-making activities relevant to health behaviors and in the formulation of goals for recovery.

Personally defined goals for recovery, also known as possible selves,[21] serve as motivators and regulators of behavior.[22] Possible selves elicit problem solving and emotional regulation in response to stressors,[23] thereby enhancing psychosocial adjustment. Possible selves give the individual behavioral direction and guide choices of everyday action that are crucial to the enactment of risk-reduction strategies.[10] Developmental theorists have conceptualized possible selves as blueprints for personal change, growth, and adaptation to new roles across the lifespan.[21]

Research with individuals diagnosed with chronic illness has helped elucidate the importance of acknowledging and accepting a self that is changed by illness.[24,25]

The individual who copes successfully thinks and restructures the self.[24] The process of adjusting to illness involves searching for meaning in the experience, attempting to gain mastery over the event and one's life, and restoring the integrity of the self through appraisals that enhance the positivity of the self.[19] More specifically, patients recovering from a cardiac event may acknowledge the diagnosis and restructure the self-image to manage future implications of the illness.[26,27] Notably, most difficulties with restructuring the self in chronic illness revolve around the loss of valued attributes, physical functions, social roles, and personal pursuits.[24,28,29] Difficulties related to recovery include a loss of positive and valued aspects of the self—both personal and social.[28]

The present research builds on previous qualitative research to explore how women maintain or regain their psychological well-being following the diagnosis and treatment for cardiovascular disease. Understanding the personal and social context of women's experiences in recovery following a cardiac event as intrinsically linked to psychosocial adjustment and motivation in cardiovascular risk reduction is essential to facilitate rehabilitative efforts. The data reported herein are part of a larger study designed to describe the experience of women's recovery following an acute cardiac event.[14] This article provides a secondary analysis of inductively generated data, using a naturalistic study design.[30,31] The goal was to identify and describe the experiences of women in constructing a changed self following diagnosed CHD. The effort was guided by the belief that a clear understanding of the self, particularly how self-definitions and meanings develop and change in response to the challenges of chronic illness, is essential to designing and testing clinically relevant interventions to promote psychosocial adaptation and well-being for women with diagnosed CHD.

The individual who copes successfully thinks and restructures the self.

METHOD

Participants

The sample consisted of 13 women who had experienced an acute cardiac event. Their ages ranged from 42 to 78 years, with a mean age of 58 years. The majority of participants (n = 11) were Caucasian, 1 participant was Hispanic, and 1 was African American. Four participants attended the group sessions following an acute MI; five participants had undergone CABG surgery; two had undergone percutaneous transluminal coronary angioplasty (PTCA); and two participants had undergone exercise testing that indicated myocardial ischemia. Time after cardiac event ranged from 8 weeks to 3 years at initiation of the study, with a mean time after cardiac event of 8 months. Two participants were employed full time, five were employed part time, four were homemakers, and two had retired. Seven participants were married, while six were widowed or divorced. Participants represented a range of socioeconomic groupings and included individuals who attended cardiac rehabilitation on government assistance as well as those who came on a self-pay basis.

Data collection

Data for the primary study were collected from women in a group format facilitated by the investigators. Participants were referred to the group by cardiac re-

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habilitation coordinators, word-of-mouth, and through advertisement in local media. Procedures for the protection of participants were followed throughout the study. Informed consent was obtained from each participant following an explanation of the study purpose, methods, and assurance of individual confidentiality. Data collection took place in weekly, 1-hour group sessions for a period of 9 months, with the majority of participants attending each weekly session. As the primary purpose of the group was to provide support for women who had experienced a cardiac event, the group process continued following data collection and analysis.

Consistent with methods outlined by Mishel and Murdaugh,[32] the group format for data collection, including the emphasis on group interaction on a regular basis over time, was developed to encourage individual sharing and problem solving that may not have been possible in individual interviews. Group dynamics allowed the development of a level of trust and friendship that honored the lived experience of each member. The role of the researchers in data collection was to facilitate the group process in exploring individual experiences.

Group meetings were structured to focus on any topic related to the recovery process expressed by group members as a concern. At the beginning of each group session, the participants were asked: "How are things going for you?" Over time, participants became more comfortable in sharing their experiences, allowing a greater focus and elaboration on emerging conceptualizations. At the request of participants, and to maintain an open atmosphere, the group sessions were not tape-recorded. Respect for the wishes of the participants enhanced rapport, increased trust and openness in the depth of information shared, and maintained participant willingness to be involved in the research process over a period of time. Following each group session, the investigators recorded field notes that included a discussion of the session in detail and documented observations, content discussed, group dynamics, including individual responses and conversations, and thoughts about what occurred during the group session. The validation of emerging conceptualizations by group members over time ensured the authentic interpretation of women's experiences following a cardiac event.

Data analysis

The constant comparative method was used in data collection and analysis during the primary study.[31,33] Secondary analysis involved an evaluation of data obtained from the group sessions and the coding of these data into relevant thoughts and phrases. As group members were experiencing all stages of recovery following diagnosed CHD, meanings relevant to different stages in the recovery process and to variables within each stage were present. An exploration of the recovery process with women in differing stages allowed for the generation of rich data, which reflected the shared experience of women in the group.

The techniques used to ensure the trustworthiness of the primary data generated and the adequacy of the process of inquiry were based on criteria established for maintaining rigor in naturalistic inquiry.[30,34,35] Dependability, stability of the data, and the ability to track variance over time were maintained through the use of process and analytic memors during the secondary analysis. Memoranda included decisions about the data to clarify patterns identified. These decisions were reviewed and discussed with peers to ensure accuracy and consistency in secondary data

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analysis and interpretation. Confirmability, or interpretational objectivity of the data, was maintained by considering alternative explanations. Credibility, or confidence in the truth of the findings as experienced by the informants, was established during secondary analysis by comparing the developing conceptualizations with related data sources. Through a review of literature, data relevant to the discovered categories were used to ground coding and categorization decisions. Maximizing the range and content of data generated during the initial study provided a basis for determining relevance to related contexts. Acknowledgment of the plurality of women's experiences provided a forum for discussion and refinement of investigator conceptualizations.

FINDINGS

The interview data provided a detailed description of the processes and challenges experienced by women in constructing a changed self following diagnosed CHD in the context of societal and familial expectations. Women described how self-definitions and meanings developed and changed in response to the many challenges of chronic illness. Three categories identified provide a framework for understanding women's struggle to restore the integrity of the self during recovery following diagnosed CHD. These categories are seeking meaning, creating mastery, and accepting the self. These categories are characterized by an overarching theme of connectedness with significant others.

Seeking meaning

Seeking meaning provided women with a tentative framework for understanding physical and psychological challenges, changed roles, and changed relationships within the process of recovery. In their search for meaning, women asked "Why did this happen to me?" as they began to make sense of the cardiac event and allowed themselves to explore the fear and uncertainty surrounding their experiences. Through searching for meaning, women examined potential risk-producing behaviors in relation to valued ways of living. They reviewed past behaviors as a basis for comprehending the cardiac event and for structuring life change. Women sought information related to cardiovascular disease and risk modification as a guide for understanding the event and future implications. Although seeking for meaning enabled women to establish direction for risk-modification efforts, the process was often associated with feelings of anger at themselves and guilt at having "caused" the cardiac event.

In seeking meaning, women reflected on the fragility and impermanence of life and a "taken for granted" future, and they began to reexamine their personal goals and life plans. Women expressed great thankfulness that they had been granted a second chance at life, and they experienced a renewed awareness of their own mortality. This recognition led women to reconsider what was truly important in their lives and to examine the meaning of chronic illness for their future. Seeking meaning also reflected an openness to exploring alternative definitions of self following a cardiac event. Women began to focus on the discovery of "Who am I now?" and "What can I expect from myself?" in light of the many physical and emotional challenges they faced. Through clarifying personal values and reformulating personally relevant goals, women began to "let go" of previous conceptions and expectations of the "right way to do things," and they began to approach their lives with an awareness of multiple possibilities and alternatives for

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living. Through seeking meaning, women sought time and space for themselves to focus on moving past personal loss to a new awareness of inner strength and purpose. As part of seeking meaning, women consciously struggled toward a reevaluation of previously held roles and personal worth, both for themselves and in the context of their social relationships.

Creating mastery

Creating mastery reflected women's discovery of new sources of emotional and physical capacity following diagnosed CHD. Women sought strength in everyday situations through testing themselves and challenging personal barriers. They focused actively on their personal potential through monitoring progress and attempting to advance their physical activities and regain valued social roles. Women began to take stock of their personal resources and abilities as a basis for generating hope and looking toward the future. In discussing how her view of herself was changing, one woman stated: "I am learning to trust myself, to depend on myself, and to be responsible for my own decisions." Through exploring their strengths, women were able to identify relevant goals for health behavior change and create an enhanced sense of readiness to initiate and sustain health behavior change. In acknowledging the uncertainties related to physical status and future outcomes, women embraced each achievement as a sign of their value and place in the world. Through seeking opportunities to redefine themselves in recovery and creating mastery where possible, women were able to grow, acknowledge their strengths, and become more comfortable with their limitations. In discussing her realization of personal strength, one woman noted: "No one can believe what I have been through. I have a strength that I never knew I had." Through seeking and finding strength in themselves and their experiences, women learned to trust themselves and their own abilities.

An important aspect of creating mastery involved the redefinition of personal and social priorities. Redefining priorities reflected women's needs to structure their own lives and reconsider the relevance of previously held roles. In redefining priorities, women lived patterns that represented a renewed focus on the self. One woman noted: "It's like cutting to the center of things, you realize what is important now. Unimportant things fall away." In recovery, redefining priorities allowed them to move toward a new sense of self with new values and expectations. Women began to redefine priorities, partially as a means of conserving energy and partially to accommodate changing values and a changing sense of what was now important in their lives. For many women, the experience of redefining priorities allowed a sense of control in the recovery process and represented the first time in many years that they became the object of their own care, acting on behalf of themselves rather than for others. This focus on self allowed women to overcome many previous barriers to health behavior change such as allowing time for physical activity or reducing personal stress through limiting involvement in family disputes.

In creating mastery, women reformed personal goals and focused on those activities that provided purpose and meaning in their lives. Creating mastery allowed women to move beyond an emphasis on

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patterns of illness to a consideration of multiple life opportunities and potentials. In creating mastery, they considered alternatives to achieving valued goals and acknowledged possibilities in allowing for personal limitations. As one woman explained: "I am getting to a point where I think anything is possible for me. Before I saw limits, now I see possibilities."

Accepting the self

In learning to accept and value a changing self, women welcomed multiple alternatives in problem solving and approaches to living their lives. In accepting self, women were open to different ways for living their lives, with differing options for self-definition viewed as equally valid. Women attempted to move beyond the "work" of managing the many aspects of their illness to explore new and valued aspects of their changed self. They were able to visualize various plans for risk modification in relation to perceived ability, potential barriers, and past experience.

For women, accepting the self reflected a reemergence of self-integrity experienced by respecting, believing in, and taking care of themselves. Women accepted themselves through remaining flexible in their expectations and not being judged according to the standards others set for worth, value, or beauty. Through changing personal expectations, women were able to explore and incorporate multiple possibilities for how they chose to live their lives and how they chose to define their own worth and beauty. One woman who had experienced scars from CABG surgery stated: "I realize that I am all right, scars and all. I don't try to hide them anymore. . . . This is me, now." Accepting self included accepting personal limitations and incorporating limitations in the creation of new and positive health patterns. In accepting self, women learned to laugh at themselves and their personal frailties as a means of focusing on life changes in a positive and encouraging way. The use of humor assisted women to incorporate the uncertainty of individual setbacks and changes into an opportunity to create challenges and to grow.

Connectedness with others

Women sought meaningful connection with others as a way of obtaining needed emotional support after the cardiac event. Through seeking connection, women attempted to create and integrate a changed self by communicating with those close to them about their feelings, fears, and concerns surrounding the diagnosis of CHD. The support of a partner, friend, or family member often sustained women as they began to seek and to find their own strength in recovery. Women sought to share stories related to their experiences as one way of coming to terms with the magnitude of the changes in their lives. Although family and friends were physically present and provided important tangible assistance, many women perceived that their experience had set them apart from others in their lives and noted that, in many ways, existing relationships did not provide them with the type of support that they needed. In the process of recovery, women began to reach out to others who they felt might understand and reinforce their emerging sense of self. Thus, the validation of others was in many ways a primary source of self-worth for women. In seeking and creating relationships that met their needs for support, women developed a forum for discussing their concerns, interpreting experiences, and setting goals for health behavior change. In their search for mutuality and understanding, women sought to enter as a partner in relationships

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that supported their personal growth and changing world view.

STUDY LIMITATIONS

Data collection for the primary study was completed within a group format. Thus, the theoretical sampling of data occurred through directed questioning and group sharing rather than through the purposeful selection of informants. Similarly, participant self-selection to the group may have influenced the emerging categories. Group sessions were not tape-recorded, potentially limiting both the dependability of the research process and the credibility of the findings.

IMPLICATIONS FOR CARDIOVASCULAR NURSING PRACTICE AND RESEARCH

Inductively generated data provide a framework for understanding the role of the self in recovery among women who have experienced a cardiac event. Although women in the study had experienced different clinical manifestations and interventions, they shared the recognition that personal strength and development were possible in reconstructing their sense of self in the process of recovery. Women engaged in a number of relevant processes that served to protect and enhance their self-image in light of multiple losses and to make meaning out of a threatening experience.[18,20] Findings are consistent with data that emphasize psychosocial adjustment following diagnosed chronic illness as a process of acknowledging and reforming a self changed by illness. This process incorporates struggle to find personal meaning in loss, maintain a positive self image in light of personal loss, and rediscover personal strength and valued roles.[24,26,36]

Qualitative methods have been used to describe and understand the experiences of women who are diagnosed with CHD, and they provide an important method for focusing on the self.[25] The language that individuals use to discuss their trauma and recovery serves as a marker of self-reconstruction efforts,[37] while an individual's stories of illness become a way of recasting reality and of resolving images of self during recovery.[29] Winters[38] explored the experiences of women living with chronic heart disease. Constructing a new and positive self allowed these women to cope better with illness. Helpard and Meagher-Stewart[39] explored the home convalescence and social support needs of elderly women with CHD who described struggling for a new self in the context of cardiac disease. Women in recovery described a blending of the expectations of traditional roles as homemaker and caregiver with the emerging needs of the new self. King and Jensen[26] emphasized the important role of relationships with others in the reformulation of self in women following cardiac surgery.

To meet women's needs after a cardiac event, cardiovascular nurses will need to begin considering the role of the self and psychosocial responses related to rehabilitation and recovery. Study findings have important implications for patient assessment and the development of interventions designed to facilitate psychosocial adjustment in women with diagnosed CHD. Data support individualized assessment and intervention strategies that promote the creation of meaning, personal strengths, self-acceptance, and connection with others in recovering from a cardiac event. Findings from this study and others support the notion that recovery for women is fostered through focusing on a changed self, gaining a sense of mastery and personal value, and refocusing priori-

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ties to include consideration of the self and personal needs.[40] These priorities include evaluating opportunities for self-care and adjusting goals and expectations according to changed abilities and priorities, while attempting to achieve some congruence between one's own expectations and those of others.

For women in this study, the search for meaning involved the need to understand the diagnosis of CHD and its potential impact. Education and counseling congruent with individual resources, values, and goals early in the recovery period may assist women as they attempt to understand the significance of the cardiac event. Assessment of individual knowledge and behavior provides the basis for the development of goals and strategies to support the creation of meaning and promote personal strength in recovery. Exploration of culturally relevant perceptions of the causes of CHD, physical and psychological experiences in recovery, and the perception of potential means to prevent and treat further manifestations of CHD is especially important. Information related to illness trajectory, treatment, and recovery provides a basis for mutual goal setting, feedback on progress toward goal achievement, and reinforcement of progress. By helping women to give meaning to the cardiac event, including exploration of both positive and negative experiences, women may gain increased confidence in coping strengths and perceive greater optimism and control over the recovery process.[41] The timing of counseling and intervention across the trajectory of recovery is important because the early days and weeks after a cardiac event are a transition time when women may experience a great sense of uncertainty and loss related to their diagnosis, changes in physical status, psychological and emotional issues, and changes in perceived support and family function.[42]

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In assisting women to create mastery and accept their changing self during the recovery process, cardiovascular nurses guide mutual goal setting; discussion related to life changes, including risk factor modification; and promotion of confidence in individual ability, value, and potential.[19,43] Assisting women to affirm or focus on their strengths and resources may help women to better manage the threat of illness and restore a sense of integrity to their self-image.[43] Through attention to how women view themselves within the experience of illness, and their unique hopes and fears for the future, cardiovascular nurses may assist women to begin to examine and build on their own strengths and resources, consider strategies to anticipate the challenges of illness, and create a self consistent with recovery.[44] Interventions may include an assessment of current and future goals for recovery, particularly in light of changing views of self and valued relationships. Women may be encouraged to identify valued "possible selves," which may include new roles and changed relationships, as a basis for better understanding desired health outcomes for recovery and identifying opportunities for creating mastery.[40]

Recovery following diagnosed CHD in women has been characterized as including the need to protect the self while resolving tension between the needs of others and the needs of the individual.[45] Cardiovascular nursing interventions include working with women and their family members to identify and resolve differing perceptions related to individual

expectations, roles, and abilities within the rehabilitative process. Family members may have unrealistic expectations for women, or underestimate the amount of work involved in household tasks. As one way of creating new ways for living their lives and new expectations of self, women are encouraged to express feelings related to personal loss, fear, and uncertainty. Encouraging the family to support women through these changes can provide additional assistance. Specifically, nurses may work with patients and family members to identify and resolve areas of potential conflict and goal incongruence. Within such interventions, women must be encouraged to communicate openly with others concerning their need for closeness following the cardiac event. They must have the opportunity to tell their story and share their experiences with those closest to them. This type of sharing, in a trusting and safe environment, serves as a basis for creating strategies for lifestyle change, determining personal priorities, and discovering personal strength.

The social environment also may provide an opportunity for acceptance and understanding essential to sustain hope, self-esteem, and efforts at control. The encouragement and instrumental support of others are essential for women to explore fully their personal resources and create new skills consistent with their changing self.[46] Peer support may be particularly relevant in assisting women during the recovery process. Participation in structured support groups may allow open sharing with others who have had similar experiences and concerns. Further, observing others initiate behaviors toward recovery and achieve goals that may be perceived as difficult can enhance expectations at success. Feedback from the group during good days or bad days reminds women of their own unique strengths and abilities.

Additional research is needed to increase our understanding of women's experiences related to cardiovascular disease, particularly the role of the self in recovery. Most studies of psychological and physical recovery after a cardiac event have been conducted on middle-class, middle-aged, white men.[47] As a result, knowledge of women's perceptions and responses to the stressors related to CHD as a chronic illness is limited. There have been very few clinical trials designed to promote psychological recovery in women following a cardiac event. Those that have included women have shown variable effectiveness in outcome measures related to either psychological or physiologic function.[48–50] Lack of significant findings may be due to a failure of currently published clinical trials to acknowledge adequately the unique perspective of women in the recovery process.[51] Ongoing research provides a basis for clinical decision making that acknowledges women's responses so that improved treatment and rehabilitation can occur. Such understanding must include attention to psychosocial responses in women across age groups, social class, and cultural and racial affiliation. Many important questions remain related to the content and timing of interventions to facilitate the process of recovery in women following a cardiac event. Longitudinal research investigating the process of psychosocial adjustment in women who have experienced a cardiac event is essential to further define the most appropriate interventions and to maximize the effectiveness of such interventions. Continued exploration of determinants of psychosocial adjustment in women is essential to further explain the process of recovery as well as increase quality of life after a cardiac event, adherence to health behavior change, and positive rehabilitative outcome.

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