# WORKING IN THE SHADOWS: THE EXPERIENCE OF SOCIAL SUPPORT FOR OLDER WOMEN RECOVERING FROM AN ACUTE CARDIAC EVENT

By

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This thesis is dedicated to my family- my husband, Kevin and our children, Brad and Allyson

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### **Abstract**

Coronary heart disease is an age related chronic illness which increases in prevalence over each decade of the life span. Women are older when diagnosed with the illness and they may not have support available to them because of age related changes in their social network. Retirement, loss of lifelong acquaintances and possibly the death of the life partner places women at risk for social isolation. Yet, there is a limited knowledge about the social experience of women with coronary heart disease. The purpose of this research was to examine the process of social support for women recovering from an acute cardiac illness.

This qualitative, grounded theory study examined the experience of social support of 8 women, who were recovering from an acute myocardial infarction or unstable angina. Study respondents ranged in age from 56 to 82 years. Data were collected, between the 4th and 8th week post hospital discharge, through in-depth face to face interviews and a written demographic questionnaire. The data were analyzed using the constant comparative method.

Findings revealed a basic social process of Working in the Shadows. This core process illuminated the visible and invisible work of these women as caregivers and providers of support in their social networks. In the recovery period, the women employed cognitive, behavioural and affective strategies to preserve the continuity of self, which emerged as the transcending process. The categories of giving and receiving: conflicting boundaries, balancing mismatched needs and supports and minimizing the self explained the processes of social support for the women in the study.

The category of giving and receiving: conflicting boundaries captured the compromises and conflicts between the giving and receiving of support. The support that the women received from the social network did not always match the needs of the women and this dynamic interplay was reflected by the category of balancing mismatched needs and supports. The women also were performing closely to role expectations and thus were oriented to others. These women minimized the self in the processes of selfless giving and denying needs.

Nurses may use the findings of this study to improve the quality of care for older women recovering from acute episodes of cardiac illnesses. For example, nurses might intervene by making suggestions to family members about how they could be most helpful to the women during recovery or by mobilizing lay helpers to facilitate coping.

### Acknowledgements

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Learning by distance has its own unique challenges. I was grateful that the members of my thesis advisory committee supported me in the use of communication technologies to overcome the physical barrier of distance. I was able to communicate over electronic mail, via teleconference and facsimile. I realize that

just a few years ago this type of learning would not have been possible, or at least, not as easy.

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Lastly, to my husband and children, they have been wonderful sources of support for me. My children have never known a time when their mother was not studying so we are all looking forward to spending more time together as this project reaches its conclusion.

### CHAPTER I

### Statement of the Problem

From my novice days of nursing practice in the coronary care unit to the present, I have observed the profound impact of cardiac events, such as myocardial infarction and angina, on individuals and their families. An insult to the heart, that part of the body symbolically linked to human emotions and feelings, threatens physical wellbeing but even more significantly, leaves an individual at risk for psychological distress because of the insult to their sense of being (Dracup, 1994). The individual and the family confront a range of emotions, including the fear of death, anxiety, depression and uncertainty about the future (Gorkin, Follick, Wilkin & Niaura, 1994).

Through my work with patients and families in the coronary care unit, I have observed a gender difference in the management of this period of psychological distress. Female patients, even when gravely ill and exhibiting serious sequelae of coronary heart disease, were attempting to nurture others. During a time of personal crisis women tended to be providing support to family members and friends, offering reassurance and thinking about matters related to the home. In contrast, the male patients received support and reassurance from family members, specifically from the

spouse.

It was very striking to observe this difference between men and women who were confronting the same stressor. I had questioned the meaning of this gender difference and its' potential impact on the recovery of women after they have been discharged from hospital. Social relations with family, friends and acquaintances make our lives meaningful and indeed are necessary for survival. It is a common perception that women are more skilled than men in building and maintaining relationships and in providing support to others (Antonucci, 1995). In the recovery phase of a cardiac illness, do women provide more support than they receive and if so, how does this influence recovery?

The geography and culture of my home province and the site of most of my clinical practice adds another dimension to my observations. Prince Edward Island, Canada's smallest province, is surrounded by water and thus, physically isolated from the rest of Canada. The population is 130,000 persons (Statistics Canada, 1993). The population is stable; Statistics Canada (1993) reports a variance of less than 1 % over the past 10 years. The people tend to be conservative and slow to adopt change.

The main economic engines of the province are agriculture, fishing and tourism. Most of the

population is dispersed over the rural areas of the province, close to the resources which drive the economy.

Family members, in keeping with the tradition of family farming and fishing, often live in close proximity to each other. Roots are deep and loyal; the family is valued. Communities also tend to be close knit and caring. This environment would seem to provide a number of possible sources of support for women recovering from an acute coronary event. I had wondered if these women access the support available and if so, who is/are the person(s) most likely to provide the support and in what form is the support delivered. As well, I had pondered what meaning the traditions of rural farming and fishing life may have on how women are perceived after an acute coronary event. Is it likely that women are perceived as nurturers rather than as persons requiring nurturing?

Perception of the type and quality of social support available has consistently been identified as influencing successful recovery after an acute coronary event, irrespective of the measure used to define recovery (Dracup, 1994; Ell & Dunkel-Schetter, 1994). However, this knowledge has been generated largely from the study of white, middle-aged male subjects (Wenger, 1990). The results have been generalized to women,

although for the most part women were excluded or comprised a small proportion of the study samples (Beery, 1995; Meagher-Stewart, 1994).

Preliminary results of studies in the emerging field of cardiovascular health for women have challenged the assumption that social support needs during recovery from an acute coronary event are the same for men and women. For example, Riegel & Gocka (1995) in a study of gender differences in adjustment to an acute myocardial infarction found that women in the sample wanted, received and gave more support at 1 month than did the men.

Other research findings indicate that men and women differ in their perceptions of social support (Flaherty & Richman, 1989). Antonucci & Akiyama (1987) reported that women had larger social networks and received support from more sources when compared to men. Further, the investigators found that women's satisfaction with support depended more on reciprocity than did the men's satisfaction.

My observations that a gender difference in social support exists appeared to have some empirical basis. The process of how and why social support influences adjustment to the cardiac event is unclear. As well, gender differences in perceptions of support needed and provided and the quality of support are not well

articulated in the published literature.

### **Purpose**

The purpose of this research was to examine the process of social support for women who are recovering from an acute coronary event so as to gain a greater understanding of what type of support is needed, who provides the support, how the support is provided, and how the support is reciprocated.

The grounded theory methodology guided the collection and analysis of the data for this research. The strength of this method is that theoretical explanations are grounded in the social processes described by the participants in the study. The results of this research may be used to add clarity to the existing literature on social support (Hutchinson, 1993, Boyd & Munhall, 1993; Polit & Hungler, 1995; Strauss & Corbin, 1990; Carpenter, 1995).

### Research Ouestion

In the grounded theory method the research question is stated broadly to lend focus and clarity to the study (Brockopp & Hastings-Tolsma, 1995; Carpenter, 1995; Hutchinson, 1993; Stern, 1980). For the purpose of this research the following question guided the study: For women recovering from an acute cardiac event, what social support do they perceive as needed and how is the support reciprocated?

### Specific Objectives

- 1. To describe what women perceive as their social support needs in the early convalescent period.
- 2. To identify who provides social support to women in the early convalescent period.
- 3. To determine what types of support are provided.
- 4. To clarify if the support provided meets the perceived support needs of the women.
- 5. To discover if it is important to achieve reciprocity in the relationships perceived as supportive.
- 6. To identify how reciprocity is achieved.

  The operational definitions for this study are included as Appendix A.

In summary, the purpose of this study was to gain insight into the processes of social support for women recovering from an acute cardiac event. Traditionally, women are perceived as support providers. It was unclear from the published literature how an illness changes the provision of support by women. Also, the experience of women as support recipients had not been well described in the existing literature.

### CHAPTER II

### Literature Review

In this study, the literature was examined to increase conceptual sensitivity, to guide the development of the initial interview guide, to develop questions for the data analysis, and to validate the findings of the study (Morse & Field, 1995; Strauss & Corbin, 1990). Specifically, the published literature was reviewed to identify the etiology, signs and symptoms and epidemiology of coronary heart disease, the illness affecting the population under study. The literature was examined for gender differences in mortality, morbidity, diagnosis and treatment of coronary heart disease, to gain insight into issues influencing the experience of women with coronary heart disease. Similarly, scholarly works related to social support were explored for conceptual definitions, relevance for health and coronary heart disease and the special considerations of social support for elderly women.

### Coronary Heart Disease : A Profile of the Illness

Cardiovascular disease is an umbrella term which refers to disorders of the heart and blood vessels (Davidson, 1994). The diseases include disorders of cardiac rhythm, disorders of myocardial perfusion,

heart failure, inflammatory cardiac disorders, disorders of peripheral tissue perfusion and cerebral blood flow disorders (Lemone & Burke, 1996).

Coronary heart disease, also commonly referred to as coronary artery disease or ischemic heart disease, is a disorder of myocardial perfusion. It is a progressive, degenerative disease which causes a narrowing or occlusion of the coronary arteries, the vessels which carry oxygen and nutrients to the heart muscle (Davidson, 1994: Lemone & Burke, 1996; Griego & House-Fancher, 1996; Thelan, Davie, Urden & Lough, 1994). The disease is more prevalent in the elderly (Thelan et al., 1994).

Coronary heart disease can be caused by atherosclerosis, thrombosis, coronary vasospasm, coronary dissection and aneurysm formation (Thelan et al., 1994). The most common pathology is, however, atherosclerosis.

Atherosclerosis is characterized by the formation of plaque in the intimal and medial layers of the coronary arteries (Lemone & Burke, 1996). Although the exact pathogenesis is unclear, plaque, composed of lipoproteins and fibrous tissue, builds up over time in the arterial walls and causes obstruction or reduction of blood flow through the artery and loss of vessel elasticity (Thelan et al., 1994). Usually 75 % of the

arterial lumen is obstructed with plaque before symptoms of the disease appear (Lemone & Burke, 1996; Griego & House-Fancher, 1996).

The rate of plaque accumulation is influenced by the presence of risk factors (Cunningham, 1992). Risk factors are similar for men and women although the relative contribution of risk differs between the genders. For example, women who smoke have a fourfold increase in risk over non-smoking women to develop heart disease whereas the male smoker has three times the risk over the non-smoker (Newton & Froelicher, 1995).

For women, risk factors are potentiated by the use of oral contraceptives and menopause (Rankin, 1992).

For example, use of the birth control pill combined with cigarette smoking increases the risk of myocardial infarction by twenty times (Davidson, 1994).

The female reproductive hormone, estrogen, is believed to delay the process of atherosclerosis by exerting a positive influence on the lipoprotein profile of women. Estrogen increases the circulating levels of high density lipoproteins and therefore facilitates removal of cholesterol from the body (Castelli, 1988; Curnew, 1992; Flavell, 1994; Kannel, Hjortland, McNamara & Gordon, 1976; Keresztes & Dan, 1992; King & Kerr, 1996; Lemone & Burke, 1996; Lobo,

1993; O'Toole, 1993). As well, estrogen indirectly inhibits the oxidation of low density lipoproteins in the tissues by depleting available iron through menstruation (Flavell, 1994; Keresztes & Dan, 1992; Sullivan, 1992).

The beneficial effects of estrogen disappear after menopause. The cessation of estrogen production by the ovaries is associated with a rise in total serum cholesterol, low density lipoproteins and very low density lipoproteins (Lobo, 1993). As well, high density lipoproteins tend to decrease over time after menopause (Matthews et al. 1988). It is postulated that the change in the ratio of high density lipoproteins to low density lipoproteins can contribute to an increased rate of atherosclerotic buildup in the vascular system, especially the coronary vasculature (Flavell, 1994; Dunstan, 1990; Kannel et al, 1976; Keresztes & Dan, 1992; Weingert, 1992; Curnew, 1992).

The cardinal symptom of coronary heart disease is chest pain. Chest pain results when there is a discrepancy between the myocardial demand for oxygen and the supply available through the coronary arteries. Oxygen insufficiency and lack of glucose cause myocardial cells to shift from aerobic to anaerobic metabolism for energy production. Lactic acid, a byproduct of anaerobic metabolism, accumulates in the

myocardium and produces squeezing chest pain (angina pectoris). When the disparity between supply and demand continues over a prolonged period of time, myocardial cell death occurs and results in permanent injury to myocardial muscle (myocardial infarction).

Coronary thrombosis and coronary vasospasm can also affect the balance between myocardial oxygen supply and demand. It is believed that women experience more coronary vasospasm than men although there is little evidence to support this suggestion (Flavell, 1994). It is, however, known that women with chest pain tend to have angiographically normal coronary arteries more frequently than men (Kennedy et al., 1980; Kennedy et al., 1981).

The goal of medical treatment for the client with coronary heart disease is to control symptoms and to slow the progression of plaque accumulation by modifying risk factors. Thus, the client may have to increase physical activity, decrease dietary fat and sodium and stop smoking.

Coping with the diagnosis of coronary heart disease, particularly when hospitalization is required, can be difficult (Dracup, 1994). The first manifestation of the disease may be a myocardial infarction, angina, or sudden cardiac death (Cunningham, 1992). Severe chest pain often occurs

suddenly, without warning, and may be associated with nausea, shortness of breath and feelings of dread and apprehension. Urgent medical attention is frequently required. Following a cardiac event, the client attempts to come to terms with the diagnosis, contemplating the meaning of the illness and its impact for the present and future (Johnson, 1991). The early recovery period is characterized by fatigue, recurring chest pain, dependency on others, and tension in social, family and sexual relationships (Dracup, 1994; Rankin, 1992; Waltz, 1986). A significant minority (approximately 25% - 33%) of patients experience long term psychological and emotional distress, family disorganization and occupational problems, and do not return to previous levels of sexual activity (Dracup, 1994; Ell & Dunkel-Schetter, 1994; Mayou, 1981; Rankin, 1992).

There is little extant research on the adaptation of women to coronary heart disease. However, the available data do suggest that women are less active physically, socially and sexually after a myocardial infarction than are men (Boogard, 1984; Mickus, 1986; Rankin, 1992). Alterations in usual caregiving and homemaking roles may be responsible for higher levels of depression and anxiety found in women after a myocardial infarction.

In sum, coronary heart disease is a chronic degenerative illness with an insidious onset. The first indication of disease may be a episode of potentially life threatening chest pain accompanied by feelings of dread and anxiety. The client confronts mortality and attempts to manage the physical and emotional sequelae of the cardiac event. In the recovery period the individual struggles to regain independence and control of their lives (Johnson, 1991). Successful adaptation requires reexamining values and beliefs, creating new ways of living and new expectations of the self within a chronic illness.

### Epidemiology of Coronary Heart Disease

The Canadian profile. Diseases of the cardiovascular system are prevalent in Canada. Although mortality rates have been in decline since the 1960's, deaths from cardiovascular causes still account for 39 % of all deaths in Canada (Heart & Stroke Foundation of Canada, 1995; Health Canada, 1995). Coronary heart disease accounts for 22 % of those deaths, of which more than half are the result of myocardial infarction (Heart & Stroke Foundation of Canada, 1995).

Mortality rates for coronary heart disease are approximately equal in men and women at 37 % and 41 %, respectively ( Heart and Stroke Foundation of Canada, 1995; Health Canada, 1995; Johansen, Nargundkar, Nair,

Neutel & Wielgosz, 1990). However, there is a distinct difference in the mortality pattern between genders. In women, the greatest number of deaths from cardiovascular causes occur after the age of 65 years, whereas male mortality is almost double that of women in the 45 - 54 and 55 - 64 age groups (Heart & Stroke Foundation of Canada, 1995).

Coronary heart disease is an age related phenomenon in both men and women. In men, the incidence of the illness increases steadily from the fourth and fifth decades of life and in women, the frequency rises swiftly after the menopause, usually at the mid-point of the fifth decade (Flavell, 1994; Heart & Stroke Foundation of Canada, 1995). In both sexes, incidence rates spiral upward markedly in the older age groups.

Incidence and mortality rates for coronary heart disease take on heightened importance when the profile of Canada's population in the 21st century is considered. The National Advisory Council on Aging (1989) estimates that one in every five Canadians (20%) will be over the age of 65 by the year 2021 and that women will constitute a majority of that group.

Increased longevity and the changing demographics would suggest that the incidence of coronary heart disease in women will continue to grow.

The Prince Edward Island profile. Cardiovascular

disease is the leading cause of death on Prince Edward Island. The death rate for Islanders from the effects of cardiovascular disease is 536 per 100,000 of population; a rate of 334 for males and 202 for females (Heart & Stroke Foundation of Canada, 1995; Health Canada, 1995). A comparison of age-standardized mortality rates across the Canadian provinces confirms that Prince Edward Island has the second highest mortality rate for coronary heart disease for both genders in the country (Hayes, 1996; Heart & Stroke Foundation of Canada, 1995).

In the 1988 joint federal provincial Heart Health Survey of adults, aged 18 to 74 years, living on Prince Edward Island, 64 % of respondents had one, two, or three of the major risk factors (smoking, high blood pressure and elevated plasma cholesterol) for cardiovascular illness. The prevalence of combined risk factors increased with age (Prince Edward Island Department of Health and Social Services and Department of National Health and Welfare, 1989).

It seems reasonable to conclude that heart disease will continue to be a common health problem on Prince Edward Island because of the prevalence of risk factors in the adult population. Further, the proportion of the population that is over age 65 is the highest in the country, at 13.1 % as compared to the national average

of 12 % (Statistics Canada, 1992). Also, the population is small and stable and therefore it is probable that the genetic material, which increases the susceptibility to coronary heart disease, will be passed to future generations.

In summary, coronary heart disease is a significant health problem for both men and women in Canada and on Prince Edward Island. Increased longevity, the aging of the baby boomer generation, and declining birth rates are predicted to change the demographics of the population to one that is more old than young (Miller, 1995). As the population ages, it can reasonably be postulated that the incidence of coronary heart disease will remain at least constant, but more likely will increase. This seems especially likely for women as the average lifespan for a woman exceeds that of a man by 7 years (National Advisory Council on Aging, 1993).

## Women and Coronary Heart Disease

The 1951 Framingham, Massachusetts epidemiological study of cardiovascular disease is considered to be a classic (Dawber, Meadors, & Moore, 1951). The study of 5209 men and women, aged 30 to 62 years, was implemented in 1948 to develop an understanding of the evolution of cardiovascular disease in the general population.

The widely held belief that coronary heart disease was not a significant health problem for women had its origin in the conclusions of the Framingham data (Wenger, 1990). It was deduced from these data that angina was a benign condition in women (Lerner & Kannel, 1986). Also, the small number of women who presented with myocardial infarction masked that first infarctions were more likely to be fatal for women. Sixty - eight per cent of all coronary deaths for women occurred at first infarction as compared to 49 % for men (Kannel, 1976; Kannel & Abbott, 1987; Murdaugh & O'Rourke, 1988; Wenger, 1990; Wenger, Speroff & Packard, 1993; Wenger, 1995). The one year mortality rate after myocardial infarction was 45% for women and 10% for men (Wenger, 1990).

At least one author has suggested that this subset of data went largely unheeded for many years because clinicians may not have had the skills to interpret the data for clinical use. Wenger (1993) states "in prior years there was less experience with extrapolation of epidemiologic data to clinical care, and these incongruities went largely unchallenged "(p.29). This author further states "that clinical manifestations of the same pathophysiologic problem, coronary atherosclerosis, could have such disparate outcomes should have raised concern as to the credibility of the

Framingham epidemiologic data; however, little concern was voiced "(Wenger, 1990, p.557).

In sum, the study of women with cardiovascular disease was not a priority on research agendas for at least three decades due to, in part, the conclusions of the Framingham study. The scientific community, physicians, health care providers and the public placed complete confidence in the interpretation of the data put forward by the investigators of the benchmark study. The advent of new technology, allowing direct visualization of the coronary arteries, raised important questions about the conclusions drawn from the Framingham Heart study and challenged researchers to reconsider the data, especially the data for the women in the sample.

### Gender Differences and Coronary Heart Disease

Gender differences in diagnosis and treatment.

Tremendous progress has been made in the diagnostic and treatment options available for individuals with coronary heart disease. Diagnostic tools, including stress testing and cardiac catherization, enable physicians to evaluate the extensiveness of underlying atherosclerosis in the coronary arteries. Treatment modalities such as thrombolytic therapy, coronary angioplasty, coronary artery bypass grafting, heart transplantation and implantable defibrillators can be

used to control a patient's symptoms and thus improve quality of life.

In the latter part of the 1980's and early part of the 1990's astute investigators identified that the improvements in diagnostic and therapeutic technology were not being used as frequently in women as in men (Ayanian & Epstein, 1991; Steingart and others 1991).

A number of arguments have been advanced to explain the differential use of diagnostic and treatment measures for women. One of the more compelling arguments is that a sex bias may exist against women (Beery, 1995; Steingart et al. 1991, Wenger, 1990; Wenger, Speroff & Packard, 1993).

The sex bias argument against women with coronary heart disease is complex and multifactorial (Beery, 1995). Historically, women's health problems have been attributed to problems in the reproductive system or to be psychologically based (Beery, 1995; Ehrenreich, 1974; Verbrugge, 1985). Women, presenting with chest pain, may not benefit from early and aggressive treatment if the physician does not take the complainant seriously. The prior history and duration of the physician – patient relationship may influence the interpretation of the symptom of chest pain. Frequency of contact between the patient and physician over the course of the relationship, as well as, the

perceived credibility of the patient has an impact on the meaning attached to the symptom (Fields, Savard & Epstein, 1993).

A second factor which may contribute to bias in the diagnosis and treatment of women is the assumption that chest pain is a benign problem in women (Wenger,1993). This ubiquitous belief results from widespread knowledge of the conclusions of the Framingham investigators. Although new contradictory evidence has been published in reputable, peer-reviewed medical journals, diffusion of the new evidence to primary care providers and the public does not seem to have happened as quickly. On other hand, the findings from Framingham may be so entrenched that practitioners may have a bias against new, conflicting information.

Clinical presentation. Gender differences in clinical presentation may result in women receiving inadequate care. Women's symptoms are evaluated against diagnostic criteria for heart disease developed from the study of males with coronary heart disease by mostly male researchers. Further, the symptoms are usually evaluated by physicians, a male dominated profession, who may not value or understand the female perspective (Beery, 1995; Dempsey, Dracup, & Moser, 1995; Parchert & Creason, 1989; Fields et al., 1993; Pittman & Kirkpatrick, 1994; Rankin, 1993; Warner, 1995;

Wenger, 1990; Wenger, 1993). Because the presenting symptoms do not always fit the textbook diagnostic criteria, symptoms may be attributed to some other cause or minimized (Fields et al., 1993). The consequence is that the underlying pathology can proceed to advanced stages before a conclusive diagnosis is made (Curnew, 1992).

Women may also contribute to the minimization of symptoms by accepting physician evaluation of symptoms as nonimportant and through delays in seeking treatment (Beery, 1995; Dempsey, et al., 1995; Murdaugh, 1990; Warner, 1995). Some investigators reported that women with an acute myocardial infarction delayed seeking medical help 20 - 60 minutes longer than men (Alonzo, 1986; Moser & Dracup, 1993). Such delays can increase the risk of damage to viable myocardial tissue.

Therapeutic modalities. The development and use of revascularization techniques, like thrombolytic drugs, intracoronary stents and angioplasty, have offered new hope and promise to many patients diagnosed with coronary heart disease. Regrettably, women do not benefit from the deployment of these procedures as frequently or as quickly as their male counterparts. The scientific evidence to support this assertion is clear; 48 % of coronary events occur in women but revascularization procedures are used from 2 to 4 times

more frequently in men (Ayanian & Epstein, 1991; Black, 1992; Pittman & Kirkpatrick, 1994; Steingart, et al., 1991; Travis, Gressley, & Phillipi, 1993).

Early reports from major clinical intervention trials may have influenced physicians' clinical judgements about the usefulness of some of these revascularization procedures (Wenger, 1990). For example, results of the Coronary Artery Surgery Study (CASS) indicated a higher perioperative mortality rate for women than men (Coronary Artery Surgery Study, 1983; Douglas, 1981). Early results of The National Heart, Lung and Blood Institute Percutaneous Transluminal Coronary Angioplasty Registry showed that the procedure was less successful for women than men and also that there was higher death rate post procedure for women (Cowley et al., 1985).

Clearly, it is evident that the male model of coronary heart disease is not a good fit for women. The tools used routinely for diagnosis and treatment have not been tested in clinical trials with sufficient numbers of female clients to generate conclusive data about the usefulness of the test and to determine a range of expected findings for women. The gap in the knowledge base is significant and suggests that women are receiving sub-optimal medical treatment as a consequence.

event. The goals of convalescence after a cardiac event are to "assist individuals to achieve an optimal level of physiologic, psychologic, and vocational functioning and attempt to prevent the progression of underlying disease" (Fleury, Kimbrell, & Kruszewski,1995,p.474). There is evidence to suggest that there is a gender differential in achieving these goals, with women experiencing poorer outcomes.

Women resume physical activities sooner than men, however, female activities differ in quality and quantity when compared to men (Johnson, 1991; Parchert & Creason, 1989). Women tend to perform household duties, like vacuuming and laundry, which are largely anaerobic in nature and are of little value in improving the fitness of the cardiovascular system (Parchert & Creason, 1989). By contrast, men do more aerobic activity, like walking, which is beneficial to the development of collateral circulation and myocardial muscle tone (Lemone & Burke, 1996).

Mickus (1986) reported that women were less active after myocardial infarction when compared to preinfarction status. A study of men and women recovering from coronary artery bypass surgery found that women experienced greater difficulty with ambulation, such as walking for distance, up inclines,

and walking with speed at three and six months

postoperatively when compared with men (Artinian &

Duggan, 1995). The authors postulated that this might

be the result of greater prevalence of lung disease and

arthritis in the female study participants. Women

frequently have more co-morbidities than men.

Return to work has been used as a measure of vocational status after cardiac events. Riegel and Gocka (1995) reported no significant gender differences in return to work after myocardial infarction. Others have noted that women withdraw from paid employment by 24 months post infarction (Chirikos & Nickel, 1984). The authors attributed the exit from the work force to behavioural rather than physical responses to the illness. Questions have been raised as to the relevance of the return to work measure as an indicator of adjustment for women (Wingate, 1995). The age differential between men and women in disease onset means that some women may have already left the workforce through retirement. Alternatively, some women may never have worked in paid employment outside the home so the return to work measure is not useful for these women.

The return to the usual pattern of sexual activity has been examined as a facet of adjustment and again, gender differences have been detected. For example, of

those women who were sexually active prior to an infarction, 27% to 60% did not resume usual sexual activity, or if they did so, it was at a significantly longer delay than for men (Boogaard & Briody, 1985; Papadopoulos, Beaumont, Shelley & Larrimore, 1983; Parchert & Creason, 1989; Stern, Pascale & Ackerman, 1977). On the other hand, Mickus (1986) reported that 65% of the women in her sample returned to normal sexual activity. Many women report anxiety, fear, and other worries about sexual activities (Papadopoulos et al., 1983; Stern et al., 1977).

Women, as well, have more emotional distress after cardiac events than their male counterparts (Mickus, 1986). Anxiety and depression are prevalent in women (Guiry, 1987; Mickus, 1986; Riegel & Gocka, 1995). Some authors have hypothesized that the higher levels of emotional distress in women are merely a reflection of women's greater willingness to report on emotional status (Artinian & Duggan, 1995). Riegel & Gocka (1995) reported that overall emotional distress, anxiety and depression scores did not differ between the genders post infarction. They also reported significant decreases in the scores of these variables at one and four months post infarction for both men and women.

Social support has been linked to reduced emotional distress after myocardial infarction for men

and women, however, the evidence is contradictory. For example, social support was an important predictor of reduced emotional distress for the women in the Riegel and Gocka study sample but not for the men. Conversely, Boogaard (1984) and Johnson (1991) found women discouraged attention from others after myocardial infarction whereas men interpretated the attention as love and concern.

To conclude, the variables of emotional distress, perceptions of functional ability, return to sexual activity, and return to work are important indicators of adjustment in men and women. Despite the areas of shared concern between men and women, there are unique issues within each area for women recovering from cardiac events that merit further consideration and research.

### Social Support

Social support is a new name for an old idea. The importance of interpersonal relationships, the significance of loving and caring for others and feeling loved and valued in return has been with us for all of human history. More contemporary interest in this age old phenomenon can be traced to the seminal works of John Cassel (1974), Gerald Caplan (1974) and Sidney Cobb (1976). These pioneer authors proposed that social processes had an impact on human health. This

relationship between the social environment and health has been conceptualized as social support (Sarason, Sarason & Pierce, 1990).

What is social support? Social support is a term with considerable colloquial meaning (Antonucci, 1985; House, 1981). Early definitions of social support were broadly stated and lacked the precision and clarity necessary for developing operational definitions and measures of social support in research investigating the relationship between social support and health (Barrera, 1986; Tilden, 1985). However, the construct of social support held a great deal of appeal for explaining the etiology of some illnesses, as a mechanism for promoting recovery and for integrating a host of psychosocial factors thought to influence health (Brownell & Shumaker, 1984; Cohen & Syme, 1985). The enthusiasm to obtain research evidence to support the relationship between social support and health resulted in researchers developing conceptual definitions that fit with the dominant research themes in their field of study (Kasl & Wells, 1985), from personal experiences of social support or from intuitive knowledge of social support (House, 1981). Definitions used in research studies were circuitous, for example, "Social support [is] support" (Lin, Simeone, Ensel & Kuo, 1979, p.109), vague, " resources

provided by other persons ", (Cohen & Syme, 1985, p.4)
and lacked conceptual clarity. The resulting morass of
research has not achieved consensus about the precise
nature of social support nor clarified the relationship
between social support and health (Barrera, 1986; Bloom,
1990; Sarason et al., 1990; Stewart, 1989a; Stewart,
1993; Stewart & Tilden, 1995; Tilden, 1985). Schwarzer
& Leppin (1989) suggest that social support has become
"'an omnibus term' referring to all kinds of different
aspects of social relationships" (p.1)

Despite the numerous and varied conceptualizations of social support three main categories of definitions can be discerned: network structure (sources of support), functions of support (support resources) and the nature of relationships (Barrera, 1986; House & Kahn, 1985; Sarason, 1994; Sarason et al., 1990; Stewart, 1989b; Stewart & Tilden, 1995).

Structural aspects of social support. When social support is conceptualized structurally, the focus of study is typically the social network (size, density, durability and frequency of contact) and the social relationships (number and type of relationships) of an individual (House & Kahn, 1985).

Social network has been referred to as the social surround (Mitchell & Trickett, 1980) or the formal and informal environment within which an individual lives

and works (Dimond, 1985). Network analysts describe the network as a set of nodes tied together by the relationships between them (Berkman, 1984; Hall & Wellman, 1985). The emphasis is on a focal individual and his/her linkages with other individuals rather than the characteristics of the individual (Hall & Wellman, 1985; Gibson, 1992). Social support is given and received within the context of the social network and is described as the flow of resources between the ties.

The structure of the network influences the flow of resources through specific ties ( Hall & Wellman, 1985). The key characteristics of the network include : a) size (the number of people in the network); b) density (the extent to which members of the network know and interact with each other); c) intensity (the strength of the tie); d) duration (length of time the relationship has been in existence); e) multidimensionality (the number of support functions served by the relationship); f) directedness and reciprocity (the extent that support is given and received within the relationship); g) dispersion (geographical proximity of network members to the focal person); h) frequency (frequency of contact between the focal person and members of the network); and I) homogeneity (extent to which members of the network share common demographic, personal, or social

attributes) (Berkman, 1984; Hall & Wellman, 1985; Kahn & Antonucci, 1980; Mitchell & Trickett, 1980; Mueller, 1980; Pearlin, 1985; Pender, 1987). The quality of the interaction in combination with the structural aspects of the network influences social support (Gottlieb, 1988).

The network perspective facilitates considering all relationships of the individual. It is a portrait of the support perceived as available, proximity of the support to the focal person, frequency of contact, duration of the relationship, reciprocity between members and the focal person, and the pattern of communication between members (Pearlin, 1985). The network is described metaphorically by Kahn & Antonucci (1980) as a convoy. "The convoy is a structural concept, shaped by the interaction of situational factors and enduring properties of the person, and in turn, determining in part the person's well-being and ability to perform successfully his or her life roles" (Kahn & Antonucci, 1980, p.269). Schematically, the convoy is a series of three concentric circles drawn about a focal person. The innermost circle is comprised of the most intimate relationships of the focal person and typically includes the spouse and family members. The membership of the inner circle tends to remain stable over the life course. The membership of the two

outer circles is more dynamic and may change depending on the role and geographic location of the focal person.

The overall network is comprised of family, friends, neighbours, fellow workers, and other acquaintances in the community who are considered as sources of support (Pender, 1987; Stewart, 1993; Tardy, 1985). Tardy (1985) also includes professionals as members of the support network.

The primary relationship of marriage has been the focus of considerable attention in the social-psychological literature. The emotional intimacy of the relationship along with the ongoing mutual commitment of the partners to common responsibilities and goals makes marriage an unique type of relationship.

Marriage provides a health advantage for both well and ill, a benefit that has been attributed to social support (Berkman & Syme, 1979; House, Metzner & Robbins, 1981; Revenson, 1994). The intimacy of the marital relationship nurtures each partner and can build up self-esteem (Cutrona & Russell, 1990). As well, the spouse provides more of all types of support than do other members of the social network (Revenson, 1994).

The married tend to have larger social networks because of extended family connections created by the

union of two families. Consequently, there is a greater likelihood of matching support needs to support available because of access to many sources of support (Cutrona & Russell, 1990). Marriage also protects the partners from social isolation, a risk factor for both physical and mental illness (Shumaker & Brownell, 1984).

The quality of the marital relationship impacts on the health benefits of the marriage (Schulz & Tau, 1985). Marriages of better quality are characterized by love, affection, effective communication and social support resources. These characteristics assist to reduce the threat of various stressors on the selfesteem of marital partners and bolster coping efforts by reducing emotional distress, reframing stressors and increasing motivation to act on stressors (Revenson, 1994; Schulz & Tau, 1985). Of course, not all spousal support is perceived as helpful by the recipient. In some relationships, one partner may become overprotective and overinvolved or in contrast, underinvolved (Coyne et al., 1990; Coyne, Wortman & Lehman, 1988). In either circumstance, these relationships are vulnerable to failing as sources of support.

The quality of supportive relationships is often overlooked in social network measures. Measures

typically focus on the number of interpersonal connections of a focal person assuming that access to a relationship is equivalent to support (Barrera, 1986; Bruhn & Philips, 1984).

More recently, the concepts of social network and social support have been differentiated (Berkman, 1985; Stewart, 1989b). It has been acknowledged that relationships in the social network can be a source of conflict and stress as well as support (Fisher, Goff, Nadler & Chinsky, 1988; Hall & Wellman, 1985; Tilden, 1985; Tilden & Galyen, 1985).

Functions of social support. Conceptualizations of social support by function allude to the range of interpersonal behaviours that members of the social network may provide to a focal person to facilitate coping with stressful life events (Cutrona & Russell, 1990). Different theorists have advanced models of social support that have differing components. For example, Cobb (1976) identified emotional support, network support and esteem support as the main components of social support. Weiss (1974) identified 6 categories of social support: a) attachment, b) social integration, c) opportunity for nurturance, d) reassurance of worth, e) sense of reliable alliance, and f) availability of guidance from professionals during crisis. Schaefer, Coyne & Lazarus (1981)

distinguished three components of social support: a)
emotional, b) informational, and c) tangible. Kahn &
Antonucci (1980) defined social support as
"interpersonal transactions that include one or more of
the following key elements: affect (expressions of
liking, admiration, respect or love); affirmation
(agreement, acknowledging the appropriateness or
rightness of some act or statement of another person);
and aid (direct services or material aid)" (p.267).

House (1981) compared a number of conceptual definitions of social support for similarities, commonalities, scope and differences. He then proposed a four part definition of social support that integrated the common concepts of the definitions which he had reviewed. He proposed four categories of social support: "a) emotional support (esteem, affect, trust, concern and listening); b) appraisal support (affirmation, feedback, social comparison); c) informational support (advice, suggestions, directives) and d) instrumental support (aid in kind, money, labor, time)"(p.23). House and Kahn (1985) suggest that the term social support be reserved for the functions of social support.

Nature of Relationships. Social support has also been conceptualized within the context of interpersonal relationships. Conceptualizations within this category

focus on the support exchange and include perceptions of support available, actual support given and received, the adequacy of support, appropriateness of support and the amount of mutual sharing and reciprocity within the relationship (Barrera, 1986; Dimond, 1985; Gibson, 1992; Jacobson, 1986; Sarason et al., 1990; Stewart, 1989b). These conceptualizations are reflections of the complexity of human interactions and consider the important cognitive appraisal processes involved in social support (Coyne & DeLongis, 1988).

Perceived social support is a generalized appraisal that "individuals are cared for and valued, that significant others are available to them in times of need, and that they are satisfied with the relationships they have" (Heller, Swindle & Dusenbury, 1986, p.467). A number of research investigations have concluded that it is perceived support rather than the support received that is health protective. For example, Antonucci & Israel (1986) examined the interview responses of 218 principal respondents and 497 network members in the Social Networks in Adult Life study for veridicality, meaning the congruence of perceptions on whether social support was provided or received. Veridicality was then compared to the feelings of intimacy within the relationship and to

well-being. The veridicality of the exchange of specific types of support within relationships ranged from 49% to 60%. The more intimate the relationship, the greater the veridicality score for both specific and overall support; veridicality was highest between spouses, then family members and finally, friends.

Veridicality was not related to well-being as measured by life satisfaction. The results imply that the degree of intimacy within the relationship influences congruence of perceptions of social support.

Similarly, Wethington & Kessler (1986), in a cross-sectional study of 1269 adults, between the ages of 21 and 65, assessed the effects of perceived and received social support on the relationship between life events and psychological distress. When the questionnaire data were analyzed through regression analyses, perceived support was found to be more predictive of adjustment to stressful life events than received social support. The statistical analysis revealed that the effects of received support may be mediated by perceived social support. Past support was found to promote psychological health by influencing perceptions of support.

Sarason (1994) proposes perceived social support as a "stable characteristic that develops as a function of both earlier and present day relationships

[that] may serve to enhance adjustment or health by producing feelings of self-worth and efficacy that may lessen the amount of perceived stress" (p.46). Stewart (1993) noted the similarity of perceived social support to the information and feedback functions first described by Cassel and Cobb. These social support functions are esteem enhancing.

Received support can be conceptualized as either enacted support or received support (Sarason et al.,1990). Enacted support reflects conceptualizations of social support as the actions that others may carry out to assist a particular focal individual (Sarason et al., 1990; Stewart, 1993; Tardy, 1985) whereas received support focuses on the recipient's view of the support that she/he received from others and the degree of helpfulness of support (Sarason et al., 1990). Investigators have reported modest levels of agreement between the perceptions of the provider and the recipient about the type and usefulness of the support exchange (Antonucci & Israel, 1985; Wethington & Kessler, 1985).

Social support has not been studied extensively from the provider's point of view. However, the body of literature on the provider clarifies some important influences on support provision. Support may be actively sought, or offered by members of the network

may require in terms of support to cope with stressful situations (Dunkel-Schetter & Skokan, 1990).

The visibility of the stressful life event may influence offers of support from the network (Fisher et al., 1988). Visible problems, those events which can be observed or have been made public to the network by the focal individual, typically evoke spontaneous offers of support. Less visible stressful events or events which threaten the well-being of the network members are less likely to generate offers of support (Fisher et al., 1988).

A potential provider of support may be unwilling to offer support if she/he perceives that the focal individual has violated network values. Thus, the network may impose sanctions on the dispensing of support and react negatively to a request for help. Negative reactions may include "nonverbal and verbal forms of rejection, physical avoidance, blocking of open communication, harmful attempts to influence coping or adjustment, inept support attempts and blaming the victim "(Dunkel-Schetter & Bennett, 1990, p.276). Support providers may also withdraw their offers of support if there is no evidence of improvement in the recipient in the direction anticipated by the support provider. The provider may

become disillusioned about the effectiveness of his/her efforts and decide to discontinue the support. These reactions may cause further distress in the focal individual. In turn, the focal individual may then behave in ways that may increase the need for attention from potential support providers or alternatively, present a facade of effective coping (Dunkel-Schetter & Bennett, 1990). Support from the social network may also be withheld if the resources of the network are stretched to the limit (Fisher et al., 1988) or if the support provider and recipient disagree on the type and amount of support required.

Providers may offer support out of a sense of social responsibility (Dunkel-Schetter & Skokan, 1990) to help others who are in need. Societal expectations to fulfil the obligations of helping others in need may make the support offered more acceptable to the recipient.

The degree of intimacy within the relationship may influence the provision of support (Dunkel-Schetter & Skokan, 1990). The perceived availability of support is typically greater from the relationships characterized by intimacy and closeness and likewise, these support providers do provide more of all types of support.

Social support is usually conceptualized as a positive influence. Indeed, the benefits of social

support are numerous and include "cognitive and affective support,.... practical assistance, improvement in emotional and physical state, enhanced level of functioning, supporter intervention, closer relationships with the supporter, and relational obligation "(Stewart, 1993, p.15).

Acknowledgement of the possible negative effects of social support is a recent phenomenon (Coyne & DeLongis, 1986; Coyne et al., 1988). Research investigations have tended to assume that all social support is beneficial and helpful, yet intuitively, people recognize that human relationships tend to have peaks and valleys and can be sources of conflict as well as support. Malone (1988) describes social support along a continuum, anchored by social dissupport at one end and social support at the other.

The costs of seeking and receiving support and providing support have been termed the darker side of social support (Tilden & Galyen, 1987). The negative aspects of social support have been conceptualized as social conflict, social network stressors, negative interactions, negative social support and social strain (Stewart, 1993). Conceptual definitions which take into account the negative aspects of social support may be informed by the threat to self-esteem model, equity theory, reactance theory and attribution theory (Fisher

et al., 1988; Stewart, 1993).

These models and theories provide a mechanism for thinking about the costs of seeking and receiving support. For example, the threat to self-esteem model "assumes that aid that is experienced as selfthreatening is costly to the recipient " (Fisher et al., 1988, p.272). The authors of this model predict that persons with low self-esteem will be more willing to seek support from others than will a person with high self-esteem. Persons with high self-esteem do not like to expose inadequacies; help-seeking from the support network implies an inability to cope with stressful demands and is threatening to self-esteem. Although, as Dunkel-Schetter & Skokan (1990) point out, persons with high self-esteem usually receive more support and thus might not need to request support. When the source of support is perceived as being quite similar to the recipient but is successful in an area where the recipient is having difficulties, the social comparison may further damage self-esteem and generate feelings of inferiority and failure (Fisher et al., 1988).

Equity theory suggests that interpersonal relationships are likely to maintain a balance between giving and receiving support. When the balance is altered and one partner is receiving more support there

is an associated psychological cost. Reactance theory " predicts that assistance that restricts the recipient's freedom exacts psychological costs for him or her and is avoided" (Fisher et al., 1988, p.272). Fisher, among others, (1988), hypothesizes that help seeking is influenced by the nature of the task. The costs of social support for the recipient include " hindered growth, feared lack of support in the future, cognitive distortion of social exchange, advice that constrains options, learned helplessness, incurred relational costs, diminished trust in times of diminished resources, and balancing strong and weak relationships " (Stewart, 1993, p.16). Likewise, the providers of support may incur costs. "Providers may experience drainage of personal resources (such as time, energy and emotional nurturance), 'social contagion', social stress or uncertainty about invading privacy or invalidating receiver perceptions" (Stewart, 1993, p.15).

The reciprocal exchange of social support resources within interpersonal relationships has also been a focus of study. Shumaker & Brownell (1984) conceptualized social support as "an exchange of resources between at least two individuals perceived by the provider and recipient to be intended to enhance the well being of the recipient" (p.13) thus,

emphasizing the bidirectional nature of social support. "Reciprocity in relationships preserves self-esteem and prevents feelings of inadequacy and lack of control in recipients and feelings of burden and strain in providers" (Stewart, 1993, p.14). Ongoing support that is not reciprocated, or can not be reciprocated, can result in feelings of resentment and exploitation and may put the recipient in an uncomfortable state of indebtedness to another individual (Greenberg, 1980). Lack of reciprocity increases power differences in relationships and this, in turn, can cause feelings of dependence and may eventually result in termination of the relationship (Van Tilburg, Van Sonderen & Ormel, 1991).

The rules of exchange vary with the nature of the relationship (Antonucci & Jackson, 1990). Clark (1984) described two types of relationships: communal and exchange. Communal relationships are characterized by mutual obligation and a sense of duty. As well, the relationships have a history of supportive exchanges and a future of continuing aid between interactants (Rook, 1987). Inequitable exchanges in the communal relationship can be tolerated because the partners understand that there will be an opportunity to reciprocate in the future (Walster et al., 1978). Antonucci & Jackson (1990) describe the long term

accounting system of social exchanges as a "Support Bank" (p.179).

The idea of the Support Bank is that individuals continually calculate the amount of support they give to and receive from others....if people have made sufficient deposits into their Support Banks - "deposits" made when their resources, power and prestige were at a maximum - they will have deposits on which to draw (Antonucci & Jackson, 1990, p.179).

Therefore, social support can accumulate in intimate and ongoing relationships. The provider of support may give to the recipient with the expectation that support will be reciprocated in the future when needed.

Similarly, the recipient may be more willing to accept support with the expectation that they will return support in the future. Antonucci & Jackson (1990) refer to this concept as life span reciprocity.

Exchange relationships, by contrast, typically evolve from common business, social or professional interests of the participants (Clark, 1984). The recipient of support tends to reciprocate promptly either by returning exactly what was received or by returning something of equivalent value (Antonucci & Jackson, 1990).

Reciprocity in relationships seems to influence

the impact of support. Jung (1990) studied 70 introductory psychology students to determine the relationship between reciprocity of support and physical and psychological symptomatology. Data analysis showed that support exchanges, characterized by reciprocity, were predictive of reduced symptoms, particularly when there was reciprocity with family members. Neufeld and Harrison (1995) interviewed 20 mothers of premature infants and 20 women caring for an older person with a cognitive impairment about their perceptions of reciprocity in relationships where the recipient of support is limited in the ability to respond. The data analysis revealed that reciprocity was present and important in the women's relationships with family members and friends. The women achieved reciprocity in the relationship with the care recipient by constructing reciprocity through observation and interpretation of the nonverbal cues of the recipient. Antonucci, Fuhrer & Jackson (1990) found reciprocal relationships were positively associated with life satisfaction when compared to both receiving more and receiving less support in a sample of white and black Americans. However, Ingersoll-Dayton & Antonucci (1988) in a study of 718 middle-aged and older adults found that reciprocity in confiding relationships did not predict life satisfaction.

The significance of reciprocity is that some people may not be willing to seek support or accept offers of support if they believe that their ability to reciprocate is limited. Further, for some individuals, it may not be feasible to reciprocate, a frequent happening for the physically and psychologically ill (Stewart, 1993).

In sum, the conceptualizations of social support that consider the nature of relationships focus on perceptions of social support or the support delivered and received by network members. These conceptual definitions are reflective of the broad scope of social support.

## Impressions of social support

For the novice, the field of social support
literature is daunting because of its complexity and
vastness. When sifting through the descriptive and
research literature it is clear that social support is
a multidimensional construct. It is a protean concept;
dynamic in terms of time and space (Gottlieb, 1988).
Indeed, it is easy to be left with the impression that
social support is a panacea for every problem.
Researchers have made noble efforts to capture its form
and its influence on health. However, there has been
little progress toward a coherent theory of social
support (Sarason et al., 1990). Many of the conceptual

definitions used to guide research have lacked conceptual clarity and have not been derived from explanatory theory (Tilden, 1985). There have been few definitions developed through inductive data analysis. As well, most of the social support research has been cross-sectional in nature and does not reflect the temporal and spatial influences of social support.

Barrera (1986) proposed that the term social support is too broad in depth and breadth to be useful. Similarly, Heller and colleagues (1986) indicate that the concept of social support needs to be refined to allow researchers to study the process of social support. As an alternative, Barrera (1986) suggests that the global construct of social support should be abandoned in favor of the more precise categories of social embeddedness, perceived social support and enacted support. Social embeddedness " refers to the connections that individuals have to significant others in their social environments" (Barrera, 1986, p.415). Perceived social support " characterizes social support as the cognitive appraisal of being reliably connected to others" (Barrera, 1984, p.416) whereas enacted support is "actions that others perform when they render assistance to a focal person" (Barrera, 1984, p.416). Likewise, Dunkel-Schetter & Bennett (1990) argue that distinguishing cognitive appraisal forms of

social support (perceptions of support) from behavioral aspects of support (receipt of support) may provide greater insight into the relationship between social support and health.

To adequately conceptualize social support for study, House (1981) has recommended that investigators attempt to answer the question "Who gives what to whom regarding which problem" (p.22). Pearlin (1985) proposed that the question "with what effect" (p.58) should be added to House's compelling query. Similarly, House and colleagues argue that if the theory of social support is to be advanced, researchers must examine the quantity of social relationships, the formal structure of the relationships and the social support content of these relationships in the same study (House, Landis & Umberson, 1988).

For the purpose of this study, the conceptual definition of social support proposed by Kahn & Antonucci (1980) was used. This definition is derived from role and attachment theory and proposes social support as "interpersonal transactions that include one or more of the following key elements: affect, affirmation and aid" (p.267). Reciprocity is implied in the definition because each exchange of aid, affect or affirmation involves at least two people at one time and thus, there is an opportunity for bi-directional

exchange of support resources (Antonucci & Jackson, 1990).

## Social support and health

Social support has been implicated in health promotion and maintenance, the etiology of illnesses, symptom reporting and recovery from illness (Cohen & Syme, 1985). Social support is posited to influence health by impacting on feelings of general well-being (main effect model) or by cushioning the effect of stress on health (buffering effect model).

The main or direct effect hypothesis of social support suggests that support has a positive effect on well-being and is health enhancing, irrespective of the level of stress (Bloom, 1990; Cohen, 1988; Cohen & Syme, 1985; Cohen & Willis, 1985; House, 1981). "Such a direct benefit could occur as a result of the perception that others will provide aid in event of stressful occurrences or merely as a result of integrated membership in a social network" (Cohen & Syme, 1985, p.6). Integration in a social network provides ongoing access to positive experiences, a sense of predictability and stability in day to day living and enhanced recognition of self-worth through the fulfilment of role expectations (Cohen, 1988). Cohen & Willis (1985) indicate that social network support "could be related to physical health outcomes

through emotionally induced effects on neuroendocrine or immune functioning or through influence on health-related behavioural patterns such as cigarette smoking, alcohol use or medical help-seeking\* (p.312). This is consistent with the social inoculation theory (Stewart, 1993) which emphasizes the role of social support in primary prevention.

The buffering or indirect effect model of social support argues that support protects individuals under conditions of high stress from the pathogenic effects of such stress (Cohen & Syme, 1985). Much of the social support research has focused on this stress buffering role within the context of the human stress model of illness (Gottlieb, 1983). This illness model postulates that exposure and reactions to stressful life events have health consequences. Stressful life events " refer to undesirable conditions that disrupt usual activities either acutely or chronically" (Thoits, 1986, p.416). Accumulations of stressful life events or long term exposure to a stressful life event can increase susceptibility or vulnerability to illness. It is not well understood how the physiological and psychological responses to stress may alter susceptibility, however, it is believed that these responses alter the delicate neuroendocrine balance and influence the immune system (Allen, 1992; Sarason et al., 1990; Stewart, 1993).

Stress can be defined as a "particular relationship between the person and environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p.19). This definition emphasizes stress appraisal as a cognitive process. The stress response is activated when an individual perceives stress in the cerebral cortex as injurious or damaging to the self, as potentially damaging or challenging to present resources (primary appraisal) and as exceeding coping resources (secondary appraisal). The appraisal process is unique to each individual (Lazarus & Folkman, 1984).

Appraisal of a stressor as harmful or potentially harmful stimulates the sympathetic division of the autonomic nervous system and the hypothalamus-pituitary gland system (Allen,1992). Together these pathways increase blood pressure, cause carbohydrate and protein catabolism for energy, increase metabolic rate, stimulate gastrointestinal activity and speed up cerebral processes (Allen,1992). There is concomitant psychological distress when an event is appraised as stressful (Cohen & Willis, 1985). The individual may experience feelings of helplessness attributed to a perceived lack of control or inability to cope in the stressful situation. There is the potential for loss of

self-esteem " [if] the failure to cope adequately is attributed to one's own ability or stable personality traits, as opposed to some external cause " (Cohen & Willis, 1985, p.312). Furthermore, emotional reactions to the situation, such as intense anxiety, despair or other upset can be threatening to self-control or interfere with the ability to problem solve (Lazarus & Folkman, 1984; Thoits, 1986). These enduring physical and psychological consequences of stress alter the homeostasis of the human body and thus, increase susceptibility to physical, mental and emotional illness.

The stress buffering model of social support
posits support as an environmental variable which may
play a role at two points along the stress-illness
continuum. First, the perceived availability of social
support resources can influence the stress appraisal
process by refining the threat of harm or potential
harm or through enhancement of perceived ability to
cope, thereby minimizing psychological and
physiological distress associated with a stressful
event. Second, " adequate support may intervene between
the experience of stress and the onset of pathological
outcome by reducing or eliminating the affective
reaction, by directly dampening physiologic processes
or by altering maladaptive behaviour responses "

(Cohen, 1988, p.278). The buffering hypothesis emphasizes the role of social support in the primary and secondary appraisal of the coping process.

The relationship between social support and health has been tested with various stressors on a variety of physical and mental health outcomes. The categories of stressful life events include maturational or developmental life transitions, acute situational stressors or chronic situational stressors (Stewart, 1989a; Stewart, 1993). Absence of an interaction between the stressful life event and social support provides evidence for the main effect model while the presence of an interaction is assumed to provide evidence for the stress buffering model (Cohen & Willis, 1985).

The proliferation of conceptual definitions of social support and instruments to measure social support variables has made it difficult to draw conclusions about how social support affects health.

Indeed, Bloom (1990) argues that it is no longer necessary to carry out research that has as its purpose detection of a relationship between social support and health. Alternatively, Bloom advocates for research designed to gain insight into how the process of social support influences health.

Social Support and Coronary Heart Disease

Social support has been studied within the context of coronary heart disease. The areas of investigation include mortality, morbidity, risk factor modification, long and short term recovery and adaptation (Davidson, 1994). This next section will provide an overview of some of the results of research undertaken to study social support and coronary heart disease.

Mortality. Early research investigations of social support focused on the relationship between the social network and the relative risk of mortality for men and women. The first longitudinal study to assess this relationship was the Alameda County, California study of social networks and mortality. The investigators reported a linear relationship between social support and mortality; the greatest risk of mortality was to those persons with the least amount of social support.

Investigators in North Karelia, Finland similarly studied the relationship of social ties and other common risk factors to all cause mortality with a specific interest in the mortality from cerebrovascular and coronary heart disease (Puska, cited in Orth-Gomér, 1994). A sample of 13,000 men and women between the ages of 39 to 59 were followed over a five year period. A Social Connections Index was created from five indicators: marital status, frequency of visiting friends and relatives, number of people encountered

daily and formal/informal group and organization participation. The Index scores were divided into quintiles. The greatest risk of coronary heart disease mortality was for male subjects in the study, especially the men in the two lower quintiles of the Social Connections Index. The female study participants, whose Social Connections Index scores were in the two lowest quintiles, also had increased mortality over the women in the upper quintiles. When the mortality rates of the men and women were compared, after controlling for other cardiovascular risk factors, the Social Connections Index scores remained predictive of male but not female mortality. These findings are suggestive of a main effect model of social support on coronary heart disease mortality for men but not women (Orth-Gomér, 1994).

Research has also demonstrated an increased risk of mortality after myocardial infarction, revascularization or both for those persons with low levels of social support. For example, Ruberman and colleagues (1984) followed 2320 males for a three year period following a myocardial infarction to determine the effect of social isolation and high life stress on mortality. After controlling for risk factors, the investigators reported that patients who were socially isolated and had a high degree of life stress were four

times more likely to die when compared to men who were experiencing less stress. The results cannot be generalized to women, however, as there were no female participants in the study. Berkman, Leo-Summers & Horwitz (1992) found that elderly men and women, who did not report a source of emotional support postmyocardial infarction, had twice the risk of death within the first six months of follow up as compared to those who did report a source of support. When baseline clinical variables were controlled, the patients without support had a threefold increase in risk over those with at least one supportive source. Similarly, Case among others (1992), studied 1234 patients, who had an enzyme documented acute myocardial infarction, for a period of one to four years to determine if disrupted marriage or living alone were predictive of mortality. The investigators reported that living alone at the time of study enrolment was predictive of mortality, usually within six months from the initial cardiac event (Case et al., 1992). Another study found that low levels of support and economic resources were predictive of mortality, independent of other medical risk factors in patients with coronary heart disease documented by angiography (Williams et al., 1992). In contrast, a second study of economic and support variables on mortality after an acute myocardial

infarction reported that only economic variables influenced mortality (Greenwood, Packham, Muir & Madeley, 1995).

Longitudinal mortality studies point clearly to a link between social integration and mortality from coronary heart disease. Many of the studies cited found mortality to be two to four times greater in the less socially integrated. Also, there is a negative correlation between the level of social support available and coronary heart disease mortality. The results are more consistent for men than women.

Morbidity. Social support has also been studied prospectively to predict morbidity from coronary heart disease. The Israeli Ischemic Heart Disease study followed 10,000 male Israeli civil servants, aged 40 years or greater, for a five year period to investigate the influence of psychosocial and other risk factors on the development of angina pectoris and myocardial infarction (Medalie & Goldbourt, 1976). Reported family problems were predictive of angina in the multivariate analysis. The love and support of the spouse was found to reduce the risk of angina pectoris in men with high levels of anxiety. The findings remained consistent when other risk factors were incorporated into the regression analysis. The study results lend support to the stress buffering role of social support.

Reed and colleagues (1983) investigated the effect of social support on the incidence of fatal myocardial infarction, nonfatal myocardial infarction, angina pectoris and risk factor modification in a sample of 4,563 Japanese American Men living in Hawaii. A Social Network Index was constructed from 9 items, five of the items measured intimacy of relationships and the remaining four items measured ties at work, church and a variety of social organizations. The Index scores, which were not predictive of age-adjusted mortality from myocardial infarction did, however, predict the incidence of nonfatal infarction and angina pectoris after controlling for other risk factors. When age was incorporated into the multivariate analysis, Index scores were no longer predictive, however (Reed et al., 1983). The men in the study with higher network scores had lower levels of risk for blood pressure, serum glucose, alcohol intake, physical activity and diet but only physical activity and diet reached statistical significance (Reed et al., 1983).

In a cross-sectional investigation of 119 males and 40 females referred for coronary angiography because of possible coronary heart disease, Seeman & Syme (1987) found that study participants with more instrumental support and perceived emotional support had less evidence of atherosclerotic buildup in the

coronary arteries than those participants with less support. These findings were adjusted for age, gender, income level, angina, presence of hypertension, serum cholesterol, smoking practices, diabetes, family history of coronary heart disease and type A behaviour pattern. Network size was not related to the degree of coronary occlusion caused by plaque.

Likewise, Blumenthal and colleagues (1987) in a study of 113 patients referred for coronary angiography, found that Type A patients who reported little perceived social support had more advanced obstruction in the coronary arteries on angiography than those Type A patients with high social support. Type B patients with both low and high social support had more serious disease.

These studies linking social support to the development of coronary heart disease provide some evidence for the stress buffering role of social support. As well, greater perceived availability of social support is linked to a reduced risk of developing coronary heart disease and to lessened disease severity (Yates, Skaggs, Parker, 1994). The evidence does not provide useful information about the relationship between social support and coronary heart disease morbidity in women because of the very low numbers of women included in the study samples.

Recovery from illness. Successful adjustment has been described as coping with a complex set of social and psychological demands following the coronary event (Ben-Sira & Eliezer, 1990). The provision of social support during convalescence can facilitate recovery by assisting the client to cope with anxiety, pain, fear, denial and the adoption of behaviours to minimize risk and disease progression (McCauley, 1995; Moser, 1994). Convalescence is divided into three phases:
hospitalization, early recovery (up to 2-3 months after the event) and late recovery (from 3 months and beyond) (Dracup, 1994).

The crisis phase (hospitalization) of the cardiac event is characterized by anxiety (Moser, 1994;
Thompson, 1989; Yates et al., 1994), management of symptoms (Yates et al., 1994) and fatigue. Dhooper (1990) reported that emotional and instrumental support are the most relevant types of support during the crisis phase. Emotional support communicates caring and concern for the patient while instrumental support focuses on assisting the patient with tasks that they are unable to do on their own (Yates et al., 1994).

Simpson & Shaver (1990) reported that family visits in critical care areas resulted in lowered systolic and diastolic blood pressure. The investigators inferred that the presence of family members has a soothing

effect on the patient. Likewise, Kulik and Mahler (1989) reported that married persons with high levels of social support, who had undergone cardiac surgery, had better outcomes than those with lower levels of support. The better supported experienced less post operative anxiety, required less pain medication, ambulated earlier and had a reduced length of stay. The authors suggested that the more favourable outcomes could be attributed to the spouse encouraging ambulation, deep breathing and coughing and facilitating rest (direct effect) or to the caring, concern and compassion demonstrated by the spouse in frequent visits and hand holding (indirect effect).

Social support is also beneficial in both the early and late convalescent period. For example,
Fontana, Kerns, Rosenberg & Colonese (1989) studied 73
men recovering from myocardial infarction and coronary
artery bypass surgery to determine if social support
ameliorated psychological stress, physiological
distress and cardiac symptoms. The findings indicated
that social support was more important for recovery in
the first six months than in the second six months.
Social support in this study sample was associated with
a reduction in psychologic distress, fewer complaints
of dyspnea and reduced feelings of fear of subsequent
cardiac events.

Likewise, Derenowski (1988) studied 106 post myocardial infarction patients to a maximum of 247 days to assess the impact of social support systems, health locus of control, health value orientation, and wellness motivation during three phases of cardiac rehabilitation. The social support variable of helpfulness was positively correlated to wellness motivation at 7 days, 6 months, and 9 months after the infarct. Thus, in this sample, perceptions of helpfulness from significant others increased study participants desire to stay engaged with wellness behaviours. The investigator reported that the strength of the correlation between the two variables diminished over time as the distance from the infarction increased. She concluded that social support may be more relevant in the early phases of cardiac rehabilitation with support needs decreasing as the patient acquires greater autonomy in rehabilitation efforts. However, in a later study of wellness motivation this investigator found that the relationship between social support and health did not reach significance in a sample of 52 post-infarction patients (Derenowski Fleury, 1991). It should be noted that although the second study of wellness motivation measured the same variables as the first study, a different operational definition and measure of social

support was used. In the second study, social support was measured with the Norbeck Social Support

Questionnaire, an instrument with sound psychometric properties (Stewart, 1989b). The use of different measures could account for the contradictory findings in the two studies.

Rodeman, Conn & Rose (1995) studied the relationship between perceived social support of myocardial infarction survivors and their adherence to self-care behaviours several weeks post discharge. The interview data of 39 male and 23 female subjects revealed a low but statistically significant relationship between perceived social support and smoking cessation behaviours and exercise adherence. Social support perceptions were not predictive of adherence to medication use, diet and stress management techniques.

Yates (1989) studied 94 male patients diagnosed with coronary heart disease and 85 partners (83 female and 2 male) who were recovering from coronary artery bypass surgery, myocardial infarction and percutaneous transluminal angiography to determine if there was a relationship between stress and physical, psychological and relational well-being. The author made four conclusions:

(a) that increased support from the partner was

associated with decreased stress levels for patients but not for partners; (b) that greater nonsupportive exchanges between dyad member[s] was associated with greater stress levels for both the cardiac patients and their partners; c) of the factors considered, stress was the strongest correlate of psychological recovery outcomes but partner support was the strongest correlate of relational well-being for patients and partners; and (d) different factors are associated with each of the different types of recovery outcomes (Yates, 1989, p.7)

Information for the spouse and family has been consistently identified as a support need during recovery from a myocardial infarction. Thompson (1989) studied first time myocardial infarction patients and their partners to determine if a supportive-educative intervention in hospital would modify anxiety and depression in patients and their partners. The 60 couples who participated in the study were randomized to a treatment and a control group. Couples in the treatment group were seen by a coronary care nurse for 30 minutes at 24 hours, 48 hours, 72 hours, and 5 days. During each session with the nurse, the couple were provided with information about the anticipated recovery from infarction. The information was presented

verbally and at the beginning of each session the couple was given an opportunity to clarify concerns and questions. The couples in the treatment group had more favourable outcomes than those on the control group.

The patients had a statistically significant reduction in anxiety and depression and the partners reported decreased anxiety as compared to the control group.

The importance of spousal support for recovery is noteworthy, but, it is not the only source and type of support that influences recovery. Ben-Sira & Eliezer (1990) reported self-efficacy was as important as spousal support. Similarly, Miller and colleagues (1989) found that the patients themselves were the most important source of support postinfarction whereas support from the spouse, children and family was ranked third (Miller, McMahon, Garrett & Ringel, 1989).

The support of the spouse has also been found to have a negative impact on recovery outcomes.

Overprotection (excessive support) has been linked to cardiac invalidism. The Michigan Heart Study studied 56 couples, in which the husband had experienced an uncomplicated myocardial infarction on average six months prior to the investigation, to determine if overprotectiveness influenced adaptational outcomes (Coyne, Ellard & Smith, 1990; Fiske, Coyne, Smith, 1991). The researchers hypothesized that spouse

overprotectiveness had two components, a hostile critical attitude and protectiveness. The hostile critical-attitude was predicted to have negative effects on the patient whereas protectiveness was predicted to have a neutral or positive effect on adaptation. Protectiveness was related to an increase in the couple's closeness following a myocardial infarction whereas hostility was associated with a decrease in closeness and a lack of useful discussion about how to deal with difficulties. The authors concluded that overprotectiveness arises from the spouses's feelings of burden and lack of confidence in the efficacy of the patient to manage recovery rather than from the spouse's feelings of hostility (Coyne et al., 1990; Fiske et al., 1991). The spouses who became overprotective were psychologically distressed, had limited contact with medical personnel during the initial phase of the heart attack and their partners had perceptions of low self-efficacy.

The research evidence does point to social support as an important predictor of recovery from cardiac events. The effect of emotional or overall support to psychological outcomes or emotional well-being has been the most frequent type of research investigation in the population with coronary heart disease. (Yates, 1995). However, few investigations have attempted to determine

what type or types of support is (are) most beneficial in relation to the stage of recovery and to various physical and psychological outcomes.

The study of women's social support needs after a cardiac event is very limited. Riegel & Gocka's study of gender differences in recovery after myocardial infarction points to the significance of social support on reducing anxiety, depression and emotional distress in the early recovery period for women. At one month, women reported wanting more support than the men and receiving more support at both one and four months. Both men and women reported that the spouse was the primary provider of support. The widowed women reported that a daughter was the primary source of support. There were no widowed men in the sample to provide comparison data. Women reported giving more support than the men at both 1 and 4 months. The researchers attributed this to the women's desire to achieve reciprocity in the supportive relationships. Over time, women reported less giving of support and this was associated with an increase in reported stress in the supportive relationship. The researchers suggested that the inability of the women to reciprocate might have been the cause of increased stress.

#### Summary

The gaps in the research literature are evident.

The physiological and psychosocial knowledge base about coronary heart disease has been generated almost exclusively from the study of men. Women are receiving care that may or may not be appropriate. Heart disease is not usually detected until the sixth or seventh decade of life for women. At that point women may well have lost their spouse and also many lifelong acquaintances. The social network decreases in size and raises questions about possible sources of support for women. Traditionally, women are the support providers but it is unclear whether they might accept support from others when they are in need. Yet, the benefits that can accrue from receiving support are compelling reasons to undertake study to further develop the knowledge base of social support for women.

#### CHAPTER III

### Methodology

## Grounded theory methodology

The qualitative methodology of grounded theory was used to guide the data collection and analysis in this study. This approach elicits descriptive data from participants and permits discovery and exploration and thus, fit with the nature of the research question that was posed in this study.

Grounded theory was developed in 1967 by Barney
Glaser & Anselm Strauss, two sociologists affiliated
with the School of Nursing, University of California,
San Francisco. The methodology fits within the
hermeneutics research paradigm. Hermeneutics is the
theory and practice of interpretation (Van Manen,
1990). The emphasis is on achieving clarity about a
phenomenon through the interpretation of "meaningful
expressions of the active inner, cognitive or spiritual
life of human beings in social, historical or political
contexts" (Van Manen, 1990, p.181).

Grounded theory methodology is rooted in the theoretical framework of symbolic interactionism as described by George Herbert Mead (1934/1964) and Herbert Blumer (1969). Symbolic interactionism is a theory of human behaviour (Chenitz & Swanson, 1986) which is based on two assumptions:

(1) Social worlds are created and sustained by temporal patterned processes of human interaction and (2) individuals' interpretations of meanings, and their taking others into account imaginatively, determine their individual actions and thus the course of patterned group interactions (Schwartz & Jacobs, 1979, p.29)

Mead (1934/1964) articulated the importance and centrality of the concept of self to the theory of symbolic interactionism.

The self is something which has a development; it is not initially there at birth but arises in the process of social experience and activity, that is, it develops in the given individual as a result of his relations to that process as a whole and to other individuals within that process.

(Mead, 1934/1964, p.199).

The sense of self develops through social interaction and enactment of roles. Mead placed special significance on the role of childhood play as contributing to the development of self. The concept of self is unique to humans.

Blumer (1969) elaborated on the work of Mead. He proposed that symbolic interactionism rests on three simple premises:

1. Human beings act toward things on the basis of

meanings that they have for them.

- 2. Meaning of such things is derived from or arises out of social interaction that one has with one's fellows.
- 3. Meanings are handled in, and modified through, an interpretative process used by the person in dealing with the things he encounters (p.2).

The self is key to the process of interpretation. The individual "indicates to himself the things toward which he is acting. The making of such indications is an internalized social process in that the actor is interacting with himself" (Blumer, 1969, p.5). In this process of self-communication, the individual finds meaning in the symbols and gestures of the social situation. This is a formative process in which the created meanings are used as a guide for behaviour (Blumer, 1969). "The human ability to hold a concept of self and for self-interaction is the basis for the formulation of meaning and experience in the world" (Chenitz & Swanson, 1986, p.5).

Social meanings are conferred upon social events by the interacting individuals (Schwartz & Jacobs, 1979). The individuals first interpret the social context and then develop a definition of the situation based upon biographical and situational factors, nonverbal communication and the language which

characterizes the interaction (Schwartz & Jacob, 1979). The meanings, in turn, constitute the real world within which individuals live and work.

The implication of symbolic interactionism for research is that social action must be studied in its natural form (Blumer, 1969). The researcher seeks to understand the process of interpretation of symbols by the study participants and the resulting forms of social interaction (Schwartz & Jacobs, 1979).

The grounded theory methodology is consistent with symbolic interactionism. The goal is to "construct what the interactants see as their social reality" (Stern, 1994, p.215). Glaser and Strauss (1967) saw the need to gain access to the world of the individual in order to inform sociology. Paradoxically, they also accepted the positivist's paradigm that theories are needed to explain and predict social reality (Glesne & Peshkin, 1992). Thus, they discovered grounded theory methodology with the intent to develop theory inductively from empirical data. The process of inductive data analysis increases the likelihood of the researcher identifying multiple realities in the data that might not be explained by a theory chosen a priori. Also, when the data are considered inductively, the context is more fully described and this facilitates recognition of factors that influence

behaviours (Glaser & Strauss, 1967; Lincoln & Guba, 1985; Schwartz & Jacob, 1979). The resulting theory is more responsive to the social context and the interactions which occur within that context (Chenitz & Swanson, 1986).

The theory is a description of the abstract concepts found in the data and the relationship between the concepts (Carpenter, 1995; Chenitz & Swanson, 1986). There are five steps in the process of theory generation: a) collection of empirical data, b) concept formation, c) concept development, d) concept modification, and e) production of the research report (Stern, 1980). Since the original publication by Glaser & Strauss in 1967 a number of variations of the grounded theory methodology have evolved. In this study, Strauss & Corbin's (1990) approach to grounded theory was used.

# Data Collection

Study participants. The sample for this study was a convenience, non-random sample of 8 women who had experienced hospitalization for an acute cardiac event. Participants for the study were recruited from the discharge records of a 300 bed acute care facility located in Charlottetown. The facility provides critical care services to the residents in the catchment area served by the Queens, Eastern Kings and

Southern Kings Regional Health Authorities.

All women with a discharge diagnosis of myocardial infarction (ICD-410) or angina/unstable angina (ICD-411) were eligible for the study. Other inclusion criteria included: a) all study participants were 4 - 8 weeks post hospital discharge to provide a consistent time window in the convalescent period; b) the ability to comprehend and communicate in English; c) age of 55 years or greater and; and d) no evidence of dementia or psychological disorders which might impede clarity of thought processes. Women with terminal cardiac or other illnesses were excluded from the study. These criteria fit with Glaser & Strauss's (1967) suggestion that study participants must be experiencing the circumstances under investigation in the research.

Potential study participants were identified in two ways. A critical care instructor at the aforementioned acute care facility identified possible participants who met the inclusion criteria. The staff member introduced the project to eligible subjects in the progressive care unit (Appendix B). If the woman expressed an interest in the study, the critical care instructor requested permission to pass the woman's name and telephone number on to the researcher. A written overview of the project was left with interested participants by the staff member

(Appendix C).

Some women, who met the inclusion criteria, had been discharged from hospital at the beginning of the data collection period. These women were identified and contacted by the liaison nurse for the cardiac rehabilitation program. The liaison nurse, during a routine follow up phone call to the individual women, acquainted each of them with the research project and requested permission to release their name and telephone number to the researcher if the woman was interested in learning more about the project (Appendix B).

The researcher, upon notification by the critical care instructor or the liaison nurse, called potential subjects. During the telephone call, I identified myself as a nurse researcher and refreshed their memories about the research project. For those woman who had been contacted by the critical care instructor, I confirmed that they had an opportunity to read the written material left with them and clarified any questions that they might have about the study or what was expected of them if they agreed to participate. Some women had misplaced the material; a second copy was sent to those women by mail.

For those women who had been contacted by the liaison nurse, I confirmed their interest, provided a

brief overview of the study and obtained their mailing address to send them written information about the study to contemplate and consider at their leisure (Appendix C). I followed up with a phone call, one week after the mailout. When a respondent had confirmed their willingness to participate in the study, I made an appointment to interview the respondent in their home at a mutually agreeable time. I called the day prior to the appointment to verify the arrangements.

I obtained the names of 12 women, who met the inclusion criteria, over the 6 month data collection period. Two of these 12 women declined to participate. One woman had a tremor which worsened with anxiety or tiredness and she felt that the interview would be tiring and thus aggravate her tremor. No further effort was made to re-contact this woman because at initial contact she was in her 5th week post discharge. The second woman was uncomfortable with the interview process. One woman had undergone further diagnostic testing at a tertiary care facility after her discharge from hospital. Those tests indicated that the woman did not have coronary heart disease, therefore she not fit the inclusion criteria. A fourth woman, who initially agreed to participate, was unable to be reached between the 4th and 8th week of convalescence. As I determined later, she had been in hospital during part of that

time undergoing coronary artery bypass surgery and then was recuperating in the home of a family member. Data were saturated after 8 interviews. Saturation refers to the completeness of category development, when no new conceptual information is available to indicate new categories or expansion of existing ones.

Data collection methods. Data for this study were collected through face to face, in-depth semistructured interviews and observation. As well, each respondent provided some demographic information (Appendix D). These approaches to data collection are consistent with the grounded theory methodology (Glaser & Strauss, 1967). Data were collected over a 6 month period.

An interview guide (Appendix E) was developed by
the researcher for this study. The initial interview
guide contained 7 open-ended questions designed to
elicit descriptive responses from study participants.
The questions were developed from the existing
knowledge of social support and coronary heart disease.
Question # 1 explored the woman's life before the acute
coronary event; question # 2 helped to paint a picture
of how her life had changed because of the coronary
event; question # 3 assessed the woman's coping
efforts; questions # 4 evoked descriptions of the
social support needs in the recovery period; questions

# 5 and 6 were intended to explore reciprocity issues
and question # 7 explored changes in the close
relationships because of the coronary event.

The guide was piloted with a woman who had experienced a myocardial infarction to determine relevance, clarity and usefulness. This woman provided some useful feedback about the language in the interview guide and had suggested that the questions be more plainly stated. These comments sensitized me to the issue of language and I made a consistent effort during the interviews to use less complex language.

After the first interview, using the interview schedule, I recognized a need to add a question about the hospitalization period and what led to the woman seeking health care. This question enlarged the context for interpreting the data but also was non-threatening and helped to build rapport between the interviewee and the researcher. This question was included for the remaining 7 respondents. I sensed that most women had not had an opportunity to talk about their heart attack with anyone thus, answering this question may have been therapeutic for the women.

All interviews were conducted in the participant's homes between the 4<sup>th</sup> and 8<sup>th</sup> week post hospital discharge. For this study, the timing of the data collection was important. As Jacobson (1986) notes,

social support needs change over the course of stressful life events. The implication for studies pertaining to social support is that all potential participants must be in the same phase of the stressful life event to avoid contaminating the data. The focus of this study was on women's perceptions of support after a coronary event, thus the early convalescent phase was most relevant to the study question. This phase is considered to be that period of time from hospital discharge up to 2 - 3 months after the coronary event (Dracup, 1994) and is parallel to Jacobson's (1986) transition phase of a stressful life event. I had selected the time window of the 4th to the 8<sup>th</sup> week to conduct interviews so as to reduce any possible stress that the interview might cause study participants. Usually by the 4th week, individuals are feeling better, returning to pre-coronary daily routines and some are thinking about the return to paid employment.

The interviews were between 60 and 90 minutes in duration. The questions from the interview guide were answered by all respondents, although the sequence differed, depending on individual responses. Probes were used, as needed, to elicit more descriptive responses from each woman. For example, one woman mentioned that it was difficult for her to ask others

for help. I used the probe of "How did it make you feel to ask for help?" to obtain greater depth in her response. All interviews were audio taped and transcribed verbatim within 1 to 2 days of the interview.

Data were also collected by the researcher through the process of observation. These observations were documented in field notes, using a format suggested by Morse & Fields (1995). Field notes included the interview date, starting and ending time, preinterview goals, location of the interview, people present, description of the environment, nonverbal behaviour, notation of key words or phrases that stood out during the interview, researchers's impressions, beginning analytic notes, and any technological problems encountered. These notes were written within a few hours of the interview when details of the setting were easily recalled by the researcher. The field notes provided information about the context of the situation and were important as sources of data.

A log was maintained by the researcher throughout the data collection period. I recorded feelings, ideas, impressions, reflections, speculations and early interpretations of the data in the log. These notes or "memos", contributed to the analysis of the data (Glaser & Strauss, 1967).

## <u>Data Analysis</u>

Data were analyzed using the constant comparative method (Glaser & Strauss, 1967; Strauss & Corbin, 1990). Constant comparison requires that processes of data collection, coding and analysis occur simultaneously (Carpenter, 1995; Liehr & Marcus, 1994; Strauss & Corbin, 1990). As the data were collected, the process of coding began.

Coding occurred at three levels (Carpenter, 1995).

Level I coding consisted of a line by line examination of the textual interview data (Carpenter, 1995; Corbin, 1986; Liehr & Marcus, 1994; Strauss & Corbin, 1990).

Each discrete incident, fact and observation in the data was examined and in vivo or substantive codes were generated. These codes represent the substance of the data and are created from the exact words of study participants (Hutchinson, 1993; Stern, 1980). For example, one respondent stated: "Well, I just feel like I am being smothered. Like, you know, ... leave me alone, I'm fine. You are crowding me sort of thing."

Smothered, leave me alone and crowding me were included as in vivo codes. The goal was to recognize the underlying process in the data.

After the first 2 interviews were coded, the substantive codes were collapsed into 11 major concepts, through the use of constant comparison

(Level II coding). Pieces of data were compared for similarities and differences and clustered into categories. "Categories are abstractions of phenomena observed in the data "(Corbin, 1986, p.94). Data displays, diagrams and questions were used to develop the conceptual categories and to facilitate the analysis. Some examples of the questions used included: "Whose purpose is being served in this situation?", "How might I come to understand this situation differently?", "What has the woman not said?", "What have I learned about social support?", and "What have I learned about the needs for support?"

Level III coding involved making linkages between the identified categories (Corbin, 1986; Carpenter, 1995). Glaser (1978) described the 6 C's family of theoretical codes as a means of organizing categories, clarifying the relationships and then developing links between the categories. The 6 C's are causes, contexts, contingencies, consequences, covariances and conditions. The emerging categories were compared with each of these theoretical codes to gain greater insight into the process underlying the data (Glaser, 1978).

In this study, coding of the data was facilitated with the software tool, NUD•IST®, version 3.0. NUD•IST® is an acronym for Non numerical, Unstructured Data • Indexing, Searching and Theory-Building. The software

was developed at LaTrobe University in Australia, to assist qualitative researchers in the organization and management of data and the creation of theory (Weitzman & Miles, 1995).

ASCII DOS text files. Saving the raw data in this format creates single line text units and therefore facilitated line by line coding of the data. "Coding is conceived of in NUD\*IST\* as a process of indexing your text, so that your coding scheme can be used as an index for retrieving text " (Weitzman & Miles, 1995, p. 241). Each index category or in NUD\*IST\* language, a node, has a title, a node address, a definition, and a reference to the indexed data or memo. As the researcher codes the data, the raw data is pulled into an editing window. The researcher highlights text units using the mouse pointer and names a reference node for the data.

The search capabilities of the software greatly reduced the tedium of cutting, pasting, sorting and storing data (Taft, 1993). The text was searched for specific strings of words, nodes were compared and contrasted and the output of these searches were printed or stored at a new node. The cut, copy and merge commands enabled this process.

The process of constant comparison of the data

between study participants was also enhanced with NUD•IST•. The software helped my conceptual thinking by allow me to search "for co-occurring codes and [to] identify relationships among codes" (Taft, 1993, p.381).

A core category emerged from the analysis. This core variable or basic psychological process is the foundational concept for generating theory (Glaser & Strauss, 1967). The core variable has six essential characteristics:

- 1. It recurs frequently in the data;
- 2. It links the various data together;
- 3. Because it is central, it explains much of the variation in the data;
- 4. It has implications for a more general or formal theory;
- 5. As it becomes more detailed, the theory moves forward;
- 6. It permits maximum variation and analyses (Strauss, 1987, p.36).

The core variable of "Working in the Shadows" was developed through reduction of categories, selective sampling of the literature and selective sampling of the data (Stern 1980). Hutchinson (1993) refers to this process as theoretical sampling. The researcher attempts to saturate all categories until no new data

are found. The researcher, by repeatedly checking and asking questions of the data, ultimately achieves a sense of closure (Hutchinson, 1986, p.125). The theory developed in this study will be described in the subsequent chapter, supported by examples from the data.

# Trustworthiness of the data

Qualitative researchers work with "thick" data which does not lend itself to quantification.

Therefore, traditional positivist measures of reliability and validity are not appropriate for natural inquiry. However, the qualitative researcher is as concerned with rigor as the quantitative researcher. Guba (1981) developed four criteria for qualitative researchers to demonstrate the trustworthiness of data:

a) credibility; b) dependability; c) confirmability and d) transferability.

Credibility includes all those activities which the researcher might do to increase the probability of the findings remaining true to the data. In this study, after the interview data had been transcribed from the audiotape, a copy of the transcript was sent to all but one member of the study sample. I confirmed through a follow up telephone call that the transcripts accurately reflected our conversation. One member of the sample requested that I not send the transcript to

her house because she had been very frank in her conversation with me and was not sure that her mail would be secure from her husband.

Also, in this study, the emergent theory was consistently checked with the narrative data to look for specific examples to support the theory. I remained open to negative instances in the data. The credibility of the study findings have been further strengthened by checking the emergent theory with one member of the study sample. The member check validated the theory.

Conceptualizations, as they emerged from the data, were validated with a nurse who has expertise in the field of cardiac nursing, a qualitative researcher and the thesis supervisor. Literature was reviewed to collect further data to validate the coding and decisions about naming categories.

Dependability is linked to obtaining credible findings. Lincoln & Guba (1985) suggest that an inquiry audit be used to establish the dependability of the analysis. The process of collapsing the substantive codes into 11 major concepts has been included to authenticate the process of data analysis (Appendix F). Also, the stability of the data is further supported by recording identified patterns from the data and analytic insights in the research log and in the form of memos. The process of the interpretation of the

data, supported by examples, are elaborated in the findings chapter.

Confirmability is a criterion that requires the researcher to provide the evidence and the process through which conclusions were developed (Lincoln & Guba, 1985). I have been thorough and systematic in the data collection and data analysis and have documented my research process in a research log to increase the reliability and validity of the findings. I met with an experienced qualitative researcher on 2 occasions to explore possible interpretations of the data. I also met with two members of my thesis committee to discuss the possibilities of my data.

Transferability refers to the fit that the findings have for others in situations similar to those of the study participants (Lincoln & Guba, 1985). This criterion has not been evaluated in this study because of lack of availability of such a group.

## Ethical considerations

The researcher sought and was given approval for this research study from the Ethics Review Committee of Dalhousie University and the Ethics Committee of the Queens Regional Health Authority, Charlottetown, Prince Edward Island.

<u>Informed consent.</u> Each potential study participant was given a full explanation of the study (Appendix C).

The explanation included what the study was about, the reasons why it was being conducted, handling of the study results, risks/benefits to the participants, the nature of the time commitment from the interviewee and a description of how the participant was selected for the study (Munhall, 1993). Permission was sought, as well, to audiotape the interview. Each participant was asked to sign a consent form (Appendix G) with the understanding that they were free to withdraw from the study at any time without fear of reprisal. The investigator also signed the consent. A copy of the consent form was returned to the participants. There was no direct benefit, financial or otherwise, to participants. Each participant requested a summary of the findings when the study was completed.

Confidentiality. All study participants were assured of the confidentiality of their data. Tapes were labelled with a number and were erased as soon as possible after the data had been transcribed. All references to the participants were by code number issued by the researcher or by a fictitious name created by the researcher.

Professional responsibility. There is potential during data collection for the professional nurse as researcher to feel obligated to take on other nursing roles, for example, clinician or teacher (Liehr &

Marcus, 1994). If I encountered either a patient question or a patient teaching issue during the interview I recorded the question or issue and provided the information at the conclusion of the interview. For example, one woman mentioned that she found it difficult to identify low fat foods. At the conclusion of the interview, we talked at length about reading food labels to interpret fat content.

In sum, this chapter has described the methodology and methods used to guide the data collection and analysis for this study. As well, techniques to ensure trustworthiness of the data and the protection of human rights were described.

#### CHAPTER IV

## Findings and Discussion

This chapter is divided into two sections. The first section will describe the characteristics of the study sample and the second section will describe and interpret the findings of the study.

# Characteristics of the Sample

Eight women were included in the study sample. They ranged in age from 56 to 82 years of age; the average age was 69 years. Five of the 8 women were married, 2 were widowed and 1 was divorced. Seven of the 8 women were retired from paid employment, however, one woman, who was retired, continued to do professional work on a contract basis for her previous employer. One woman had never worked in paid employment outside the home. The length of time since retirement ranged from 3 to 18 years.

Two women in the sample had not attended school beyond the elementary level. One woman had some high school, one woman had a university degree and the remaining women had college education. The family income ranged from under \$10,000 to over \$50,000. The lowest income was for an elementary educated, widowed woman. Two women did not provide information about income; one woman cited privacy as a reason for non-disclosure of financial information and the second

woman did not know what her income was because her sonin-law managed her finances and she simply requested money as needed.

All women were of Caucasian ethnicity. Five of the 8 women lived in the family home, one woman lived in an apartment in a seniors complex, one lived in an apartment with her spouse and another woman lived with her husband in the home of their son. Three of the women lived alone, the remaining women lived with their husbands.

Several of the women were managing other illnesses or conditions. One woman had osteoarthritis and had required a hip replacement 8 years prior to this illness. That surgery left her with a residual limp that impeded her ability to walk for distance. Three women had diabetes, two were controlled by diet and the other by oral agents. Three women had hypertension, regulated by medications. One woman had hypothyroidism, managed with an oral supplement. Two women were plagued with muscular disorders that were stable at the time of data collection. One woman had chronic bronchitis and peripheral vascular disease. She had also developed congestive heart failure along with these cardiac problems.

## **Findings**

This section describes and probes the meaning that

these eight women attach to social support in the recovery phase of an acute coronary event, four to eight weeks after hospital discharge. The findings are my interpretation of their stories, an interpretation arrived at by examining their narratives through the constant comparative method and listening for the inner dialogue.

Comparatively speaking, the process of data analysis was similar to building a giant jigsaw puzzle, without the picture on the box as a quide. It was an extraordinarily complex process. The greatest challenges were thinking inductively, disentangling the enmeshed issues, and developing conceptualizations from plain words, words that were frequently contradictory. I was also faithful to using gender as an analytic tool. Feminist theorists are increasingly advocating that gender is a social construct and that each individual's understanding of gender influences meaning in their lives (Stewart, 1994). The concepts of power and dominance are central and recurring themes in feminist scholarship. In the analysis I examined the women's narratives for words and actions that would suggest power issues.

The core category that emerged from the data analysis to explain most of the variation in this grounded theory was Working in the Shadows. For these

women, working in the shadows meant continuing to fulfill their role expectation as the support provider to the family after hospitalization for an acute cardiac illness. The lives and identities of the women in this sample were built around meeting the needs of the family. The women were preoccupied with the expectations of their roles, specifically with domestic labour and nurturing the family members. Ilich, as cited in Angus (1994), refers to this emotional labour as shadow work. Shadow work alludes to all activities that support the formal market economy by sustaining workers so that they can function productively in the workforce and contribute to the gross domestic product. This complex work is often unacknowledged by both the women and the family because it is entangled with domestic work (Angus, 1996a; James, 1989). Because of their illness, the women in this study were cast into the unfamiliar role of receiving support. Overwhelmingly, the women perceived loss of control, loss of privacy, loss of independence and loss of personal space in the early recovery period because of feeling dependent on others to take care of the tasks related to the women's usual roles in their families.

The underlying and unstated phenomenon that was revealed through the analysis was, paradoxically, the dependency of the family on the women. The importance

of the women was illuminated by the reactions of family members to the threatened loss of the cornerstone of the family.

The women employed emotional, cognitive and behavioural strategies for Preserving the Continuity of the Self, which emerged as the transcending process. The supporting processes identified in the analysis were : Giving and Receiving : Conflicting Boundaries, Balancing Mismatched Needs and Supports and Minimizing the Self. These processes reflect the interaction of the getting and receiving of support, of matching the needs for support with the getting of support and the blending of the needs for support and the giving of support (Figure 1). The figure can be thought of as a prism, a tool used to separate white light into a spectra of colours. In the figure, the white light is depicted by the categories of Giving and Receiving : Conflicting Boundaries, Balancing Mismatched Needs and Supports and Minimizing the Self. The wide arrow represents the point where the light is filtered. The full spectra of colours are revealed through the interacting arrows around Working in the Shadows. spectra of colours is a metaphor for the complexity of the human experience and speaks to the underlying and often invisible dynamics that influence social relationships. The supporting processes of the theory

will be elaborated upon in the following sections of this report.

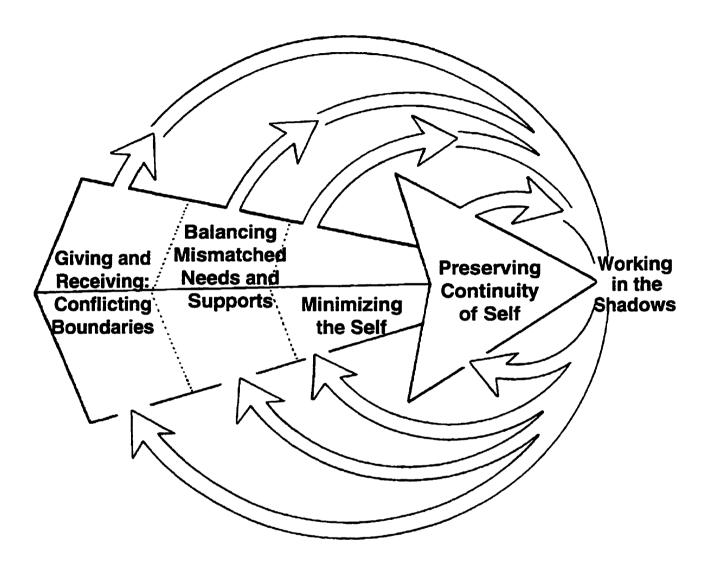


Figure 1

# Giving and Receiving: Conflicting Boundaries

The category of conflicting boundaries arose from the tension created in study respondents by the getting of support and the giving of support. The interaction between giving and getting resulted in negative mood states for the women. In the next sections of this chapter, I will describe the giving of support and the getting of support by the study participants. A discussion of the interaction between these subcategories will follow.

# Giving support

Angus (1996a) explains ".... the experience of gender includes an individual's accountability to behave in a manner that is consistent with cultural norms. This accountability is as much to oneself as it is to others, for identity includes self as a gendered subject" (p.9). Study respondents were performing closely to traditional role expectations of women. Their everyday experiences of managing the household and nurturing others reflected what they believed about the role of women in the family and society. Implicit in this work of women is the provision of support and the maintenance of social relationships.

Managing the household. The house was perceived by the women in the study sample and their families, to be the domain of the women. They were accomplished at running the household smoothly and efficiently. Their narratives were replete with examples of domestic work - I cook, I clean, I do service. Mrs. C. D. recounted her pre - myocardial infarction routine as:

"Well, get up, wash your face & hands, have breakfast, do dishes and, eh, then you do your housework - vacuum, make beds, scrub, whatever, your wash. That was my daily routine. And, then sometimes, I would go for walk if it wasn't too late, like, in the afternoon before supper. I would go for a walk and then I would come back and cook supper."

The management of the house was also related to creating a comfortable physical environment for others.

Mrs. E. F. elaborated:

".... Because I love to keep house. Its been my... Even when I worked, I loved housekeeping... I just love it. I love fixing up a place. During the war.... we moved 17 times. Yet, every place I put up curtains and I would make a bedspread and I, two rooms sometimes, and I would make it that people would all come, would love to come and you know, it was something I loved doing. So, eh, I thought, while I'm here this is home. And, I will fix it up, make it cute, and sometimes it was pathetic but... I did my best, yeah. So,...."

The domestic work of women has been described as a form of support provision (James, 1989). Women help to create a soothing and comforting environment that provides physical and emotional sustenance for the members of the family. A house that is clean, neat, organized, and decorated, contributes to an ambience of

caring and comfort.

In this study, some women pushed past their physical limitations imposed by the cardiac illness to resume the traditional work of managing the home. For example, A.B. described going downstairs to do laundry:

"But, eh, I'm scared of stairs too because it said no stairs until such and such a time and, eh, I know that I was down there much earlier than I was supposed to be, but, I thought, what the hell?. I'll crawl up. I'll not walk up, I'll crawl up. Its easier. (Laughing). You know, you find a way."

And, S.T., as she organized and prepared the food for a family reunion, three weeks post hospital discharge stated:

"I get shortness of breath still every... a little bit all the time, doing anything, so... I just push past that. I can't be bothered with worrying about that as...."

These findings are similar to the results of other research investigations that suggest that it is difficult for women to give up the responsibility of the housework even when their health is threatened (Boogaard, 1984; MacKenize, 1993). Persisting with carrying out the housework may be a mechanism for affirming their value in their home. Indeed, King & Jensen (1994) speak of the centrality of participation in housework to the self-concept of women.

Resuming housework in the early recovery period of a cardiac illness may place additional stress on an

already compromised heart and thus impede recovery. Housework is an anaerobic activity and is not useful in developing collateral circulation (Parchert & Creason, 1989). Likewise, maintaining the house limits the amount of rest time, an important component of healing the myocardium (Lemone & Burke, 1996). The activity level of women during recovery differs from men. Men recover through a program of rest, relaxation and walking. These activities promote well-being and help to develop collateral circulation (Boogaard, 1984; Johnson, 1991).

Nurturing others. The women in this study also engaged in more explicit emotional labour, again performing closely to role expectations as providers of support. One woman described this incident with her husband while she was in hospital:

".... I thought that he was just going to take a nervous breakdown. I really did. That's how bad he was... He was terrible.... just terrible. He would phone me up and he would be crying, you know. Oh my God, I would say please don't hang up on me [husband], please don't hang up on me. 'Cause he was in this hotel by himself, eh? I was more worried about him than I was myself 'cause he was there all by himself. For how many days we were there he was by himself, it wasn't very nice. I mean, I had lots of people around me. I had nurses and doctors, people, people I didn't even know would come into visit over there. You know. But he had nobody. But, he was a wreck."

The support provision was not limited to family members. A.B. talked about reassuring a close friend

when the friend learned that A.B. had a heart attack :

".... With J., the one that is closest with me, I had to work a little bit at reassuring her because she got very upset. Very upset."

Western gender stereotypes would suggest that women typically provide most of the emotional and instrumental support to members of the social network (Antonucci,1994). Women are perceived to be empathetic, socially skilled and concerned with personal relationships (Barbee et al., 1993). In this study, even during a time of personal vulnerability, the women continued to meet the emotional needs of others. They seemed to accept this as natural and did not perceive it as inappropriate. A study by Riegel and Gocka (1995), which compared gender differences in adjustment after a myocardial infarction, also found that women were giving more support than men at both 1 and 4 months.

Support provision, however, can be costly. Women have more extensive social networks than men and are called upon to be support providers more frequently than men (Davidson & Shumaker, 1987). Nurturing others can deplete the energy and resources of women and result in psychological distress and an overload of responsibility (Kessler & MacLeod, 1985).

These potential costs of providing support seem to

be particularly profound for the women in this study when the context of the illness is considered. The investment of emotional energy into interpersonal relationships and associated worry about the well being of others can result in physiological arousal, increased heart rate and an increased demand for oxygen by the myocardium. These physiological changes are not favourable to the healing process (Lemone & Burke, 1996) and may contribute to the mortality rate of women.

To summarize, it was characteristic of the women in this sample to provide support to others. The women were performing closely to traditional gender role expectations and their daily lives reflected a preoccupation with domestic work and nurturing family members. Their contribution to the emotional well-being of others was largely invisible, both to the family and the women themselves. In the recovery period, they continued to provide emotional support to others and some pushed past their physical limitations to do household work. The emotional and physical energy invested in maintaining role expectations may have a deleterious impact on recovery.

#### Receiving Support

An individual's sources of support are typically identified as their social network (Cohen & Syme,

1985). The number of life roles that women assume simultaneously, for example, spouse, mother, homemaker, and paid worker accounts for women having larger social networks than men (Antonucci, 1994). In this study, the women had numerous sources of support available. Study respondents received support from husbands, children, family members (sisters, brothers, grandchildren, sister-in-laws, nephews, and nieces), friends and neighbours. Family members, however, contributed most of the support effort in the time window of this study. The support that the women received was clustered around helping with the housework, monitoring and coaxing.

Receiving help with housework. Overwhelmingly, the support that these women received in the early recovery period was domestic in its orientation. Family members, friends and neighbours visited the woman's home with food, vacuumed, dusted, did laundry and prepared meals for the family when the woman was in hospital.

According to Kahn & Antonucci's (1980) typology of support functions these acts fit in the category of aid. Because the women were performing closely to role expectations of wife and mother and because of the importance they placed on the housework, it seems reasonable to infer that the providers of support would perceive helping with the housework as a significant

contribution to the recovery of the women.

Similarly, support providers may well have been responding to common stereotypes about women. Women tend to be seen as the homemaker and owning the housework (Sanchez, 1994). Thus, it is not surprising that the aid that these women received was largely related to food preparation, laundry, vacuuming and tidying the house.

The acts of domestic help were spontaneous and unsolicited. Heart attacks are perceived by the public as serious and potentially life threatening and people tend to respond with acts of goodwill for the patient and the family (Dunkel-Schetter & Skokan, 1990; Williams, 1995). It was clear, however, that the assistance was time limited. Indeed, at the time of data collection, most women had returned to their usual domestic routine. As Angus (1996b) indicates "the assumption prevails that the recovering woman will return to her customary duties as soon as she is able, and this expectation is perhaps strongest in the woman herself" (p.19).

Marital partners, confidants and close friends have been described as the most valued and as the most valuable sources of support (Coyne, Ellard & Smith, 1990). Marriage is often considered to be distinctive from other family relationships because "it is long

term, affords a central identity, and provides a fundamental resource of social support" (Revenson, 1994, p.122). Clark (1984) describes marriage as a communal relationship emphasizing the obligation of marital partners to care for one another in a general way and thus it is not based on the rules of exchange that govern other types of relationships.

The married women in this study declared that their husbands were an important source of support.

A.B. and L.M. elaborated on the assistance they received from their husbands:

And, [husband] was exceptional, was exceptional to help around the house, like he vacuumed, he did the meals, he made the beds, you know, he was good, that way.

And, [husband], did most of the, most of the housework, actually. He did the dishes and stuff like that for the heat on his hands. He started that, of course we had the dishwasher too but he used to like to do the dishes because the heat helped his hands. I can't push the vacuum because of my back so he did, does, most of the vacuuming and stuff like that. I made the beds, cooked the meals, and did the wash...And, that's about the same as I do now.

There is a scarcity of literature on the meaning of life partner support for women in their adaptation to the cardiac illness to assist with the interpretation of the findings of this study. Prior research on the role of the spouse in recovery from cardiac illness has been carried out almost exclusively

with men, with a focus on the supportive female partner. For men, it is clear that the support of the spouse is central and crucial to successful rehabilitation (Meagher-Stewart, 1994; Riegel & Gocka, 1995; Waltz, 1986).

The spouse has been described as providing more of all types of support (Revenson, 1994). In this study, however, the help provided by the husband was largely instrumental in nature. This apparent contradiction may be explained by the fact that husbands were performing closely to male gender role expectations. Men are socialized to be independent and to be strong, both mentally and physically. Men are not encouraged to be expressive (Chodorow, 1979; Biddle, 1979). Therefore, it is not surprising that the husbands of the women in this sample responded to the illness with instrumental acts of support rather than with affective or affirming acts of support. Helping out with the tasks or other activity oriented behaviour would meet gender role expectations. Men may perceive this type of helping as demonstrating care and concern for the life partner.

The divorced and widowed women in the sample had close friends or family members providing tangible acts of support, similar to the type of support provided by the husband. Again, there is no published literature which could help to interpret the meaning of support

provision by others for women as compared to the support provided by the partner although it is known that women are more likely to have female confidants outside the marriage than men (Antonucci, 1994; Barbee, 1994; Turner, 1994). Similarly, the cardiovascular literature on the recovery of men has not been examined to determine if the same act of support is interpretated differently if provided by a close friend as compared with the spouse.

One divorced woman in this sample, who received support from close friends, did indicate that she was lonely and missed the companionship and financial support of her husband. This would suggest that the support by the close friend does not satisfy needs in the same way that a life partner would.

Being monitored. Family members, friends and acquaintances monitored these women in the discharge period. Friends and acquaintances monitored the women's progress in recovery and their health status through telephone calls and dropping by the house to check in with the women or family members. The women also mentioned receiving greeting cards that conveyed messages of concern. A.B. and S.T. explained:

<sup>&</sup>quot;I, eh, I have had a lot of support, like I mean, all my friends. I don't know how many cards I got...I must have had 50 get well cards and I've had a lot of support and that's important. Knowing that people care, yes, yes, I've had a lot of

support."

"I got some real positive signs of people who care, I mean, that's there and I mean that's a positive thing, you know. Some of them called every day, they were over here wanting to know what I wanted, coming over to visit, my brother called on a regular basis from [city] and you know."

"Oh yes. I got cards from everybody. Yeah, and you know, flowers, beautiful flowers. It makes you humble, ya."

Family members also monitored the activities of the women in the discharge period. This monitoring was of greater intensity than the monitoring by friends and included watching and observing behaviours. The activity level of the woman was watched with vigilance so that she would not overexert herself and cause further heart damage. J.K. recounted Saturday evening visits by her niece:

"....and, she would come up, not now, at first, on Saturday evenings, she would say, if you want to go, because I wasn't going upstairs that much, she would say, "I will stay here if you want to go upstairs and have a bath or anything. And, she would stay while I took a bath in case I would slip or anything."

One woman's family monitored the quantity and quality of the foods that she ate at mealtime. For example, Mrs. C. D. described:

"They watch everything I eat and everything I do. They don't want me to go downstairs, run up and down the stairs, they don't want me carrying laundry...."

The meaning that study respondents attached to the monitoring by friends was of care and concern for their well-being. The women perceived these gestures as affirming their value to others and thus, fit within the affirmation category of Kahn & Antonucci's (1980) typology of support function. The monitoring by the family was perceived as less positive than that of the friends. This is similar to findings reported by Felton and Berry (1992). These authors reported that one type of emotional support, reassurance of worth, had a greater benefit to psychological well-being when provided by nonkin than kin in a study sample of older women.

Receiving encouragement. The women interpretated some actions of others as encouragement to think beyond this point of recovery and into the future. An excerpt from the narrative of C.D.:

"My friends would just talk about the heart attack. They would say, you are going to be fine. And, they would coax me along, like...you are going to get better, you are going to going bowling next year again."

Another woman described some comments from an older sister:

"She said, `Now, don't think now, that this is the end of things for you. People have angina, go back to work, and there, as long as they listen to their body.' You know, she bolts you and she's good for me."

Study respondents suggested that these words from

friends and family members conveyed messages of goodwill and concern for their health. These acts of coaxing fit within the affective and affirmative categories of Kahn's (1980) typology of support functions. These categories include expressions of liking, admiration, respect or love (Kahn & Antonucci, 1980). House (1981) suggests that emotional support (esteem, affect, trust, concern and listening) is the most important type of support for reducing stress and improving health.

## Interaction Between Giving and Receiving Support

Support is an interactional process and recipients do not passively accept support. In this study, the interface between the giving and receiving of support resulted in compromises and conflict. The support that the women received was perceived as negative or positive or a combination of both. The costs of receiving support were perceived to be high; many women were losing as much as they were gaining. Indeed, "receiving support, no matter how needed, creates an emotional cost for the recipient and alters his/her perceived status as an independent member of the social group" (Williams, 1995, p.401). The tangible acts of support, particularly the helping with housework and the monitoring by family members, resulted in tension and negative mood states whereas monitoring by friends

and acquaintances and coaxing were perceived as being more positive.

The conflict between receiving help with the housework and their gender identity resulted in emotional turmoil in the women and the majority of women experienced this as being smothered by others. Some excerpts from narratives help to illustrate these feelings:

"But, if there is anybody home, you can't do that and you can't do the other thing. They just overcrowd me like, they, kinda like get on my nerves, sort of thing."

"Well, I just feel like I am being smothered. Like, you know...leave me alone, I'm fine."

"Not being able to be independent is the worst part, being dependent...I'm not fearful of death or sickness as much as I am of dependence. THAT bothers me the most. It bothered me to have to depend on people for drives, it bothered me to...have to wait for people...and you know that sort of thing."

"Some days, I wished I had been on my own. Like just by myself, and quiet and nobody to bother me, sort of thing. It sounds hateful, doesn't it? Selfish, or what is it...I don't know, but, I get kind of...frustrated with to many around me. Some days with too many around me, I felt like saying, would you please go home....I had to bite my tongue.

The unpleasant feelings that these women experienced may have been related to over benefiting from support. Sprecher (1992) reported that women were more likely than men to experience psychological distress from over benefiting or under benefiting from

support exchanges. Overprotection (excessive support) has been linked to cardiac invalidism, a situation in which an individual does not return to previous levels of social, vocational and other life roles following a myocardial infarction or revascularization, even though there is no medical or physical reason for restricting such activities (Riegel & Dracup, 1992). There is no literature on the impact of overprotection on women's recovery after an acute cardiac event. Overprotection has been studied, however, with the wife as the support partner.

Hilbert (1985) reported that too much partner support and concern were linked to less compliance with physical activities in 60 myocardial infarction patients. Similarly, Miller and colleagues (1989) cited excessive concern and support from family members as the principle reason for a decrease in compliance behaviours between 2 months and 1 year after infarction.

Conversely, Riegel & Dracup (1992) reported that overprotected patients had higher self-esteem, more vigour, and less feelings of dependency as compared to the inadequately supported patients. Also, increased social support was associated with lower levels of anxiety, depression, anger and confusion (Riegel & Dracup, 1992).

The women in this study did not report feeling energized or invigorated by having others around.

Overprotection was perceived as threatening to the independence of some of the participants. Mrs. J.K. explained her feelings about offers from family to stay with her in the house when she returned home from the hospital:

"And, then, I came right home by myself. Lots of people said to me "Are you staying alone?" or "Are you going to stay alone?" I said "Yes". It didn't bother me. I am used to being alone. I have been alone so much. I said, "No, I don't mind being alone". Some said, "" You shouldn't be alone" but I said, "Oh, well". And, I didn't want someone to stay all night. 'Cause if you start something like that, it is a continuation. You want them one night and the next night and then the next night. I said, "No, I am not going to start it".

Another possible explanation for the smothered feeling that these women reported may be related to reciprocity. A number of women in the sample indicated that they would rather give support than receive support. When asked directly about reciprocating support the women answered with concrete examples of how they would like to repay others for the help that they had received. Commentary from Mrs. C. D. helps to illustrate this point:

"Well, I don't know, I guess I have always been like that. When someone does something for me I had to do something to pay them back. You know, and this is what I do. I bake something, like pineapple squares or brownies. All this nice fat stuff that we all like to eat. (Laughs)."

Underlying these explicit answers about reciprocating support, was the fact that women always wanted to giving support and that not being able to reciprocate was stressful for them.

Gouldner (1960) hypothesized that a norm of reciprocity governs relationships within the North American culture whereby recipients of support typically wish to provide support that will benefit others. Social exchange theorists propose that individuals strive for balance of exchanges in interpersonal relationships. The theory posits that inequitable relationships cause distress within the recipient individual and that the individual will take steps to make the relationship more equitable (Walster, Walster & Berscheid, 1978).

The rules of exchange vary with the nature of the relationship (Antonucci & Jackson, 1990). The interactants in a communal relationship are concerned about the general well-being of each other and strive for "equality of affect" (Rook, 1987, p.146) rather than precision in exchange of acts of support. These relationships are typically enduring relationships, such as those with family members and close friends (Antonucci & Jackson, 1990; Clark, 1984). Antonucci & Jackson (1990) describe the long term accounting system of social exchanges in communal relationships as life

span reciprocity. This conceptualization of reciprocity may account for why the women in this study reported a more urgent need to reciprocate to supportive others who were outside the family as compared to those within the family.

Exchange relationships typically evolve from common business, social or professional interests of the participants (Clark, 1984). The participants have no assurance that the relationship will endure into the future so partners feel obligated to reciprocate aid promptly (Walster et al., 1978). As Rook (1987) indicates "[interactants] are centrally concerned with the comparability of the benefits they receive from each other" (p.146). Thus, the recipient tends to reciprocate promptly either by returning exactly what was received or by returning something of equivalent value (Antonucci & Jackson, 1990). In this study, the women returned aid in kind to those outside the circle of close family members. Mrs. J. K. described how she returned support to her nieces and nephews:

I said, of course, you know, when you do something you are going to return it in some way or another. But, like, [nephew and wife] were up here today and they were so good to me, my nephew and his wife. So, today, I had the dinner cooked and she had a big crowd over the weekend. She served 18 for dinner on Sunday....So, did she ever enjoy coming down here today and having dinner today. I had cooked fresh ham and slices. And, she said, "[respondent's name], that meant so much to me". And, I said, I couldn't think of repaying her for

all that she has done for me since I came home from the hospital. Bake things and send them down. She has been exceptionally good. But,...I do try to repay people in just that way. Doing little things back for them."

In a study of 120 elderly widowed women Rook (1987) discovered that reciprocity was an important predictor of the women's feelings of satisfaction, although this differed across relationships and by the type of support exchange. The findings of Rook's study help to validate the experience of these women.

One woman in the sample alluded to a different type of reciprocity. Mrs. S. T. observed:

"Ah...I don't feel as obligated as some but I felt it more during this period of being sick, eh, then I would have otherwise so maybe I do it naturally, you know. But, eh, generally, I feel that....what someone gives me, I'll give maybe not back to them but to somebody else...I feel that the giving and taking evens out over the world so, I don't...but I did feel more of this obligation when I was doing more of the taking."

Williams (1995) reported a similar finding in a study of reciprocity issues for parents, who had a child with cancer. The parents had reported a desire to repay the favour to another in need. Williams labelled this as stepwise reciprocity. "Stepwise reciprocity [means] that the assistance goes to someone new, rather than being returned to the giver" (Williams, 1995, p.407).

At least three women in the study sample reported

that they did not feel any obligation to return support. For example,

"No, no, I don't feel obligated to return. I know that people don't expect it. And, I wouldn't want anyone to feel that they had to do something for me, either. You know, if they had to, you like them to do it just from their own goodwill, But,...yes, if your were very sick and just couldn't go, couldn't go and make yourself a cup of tea or something like that, or... I was always able to do those things. (Pause). I'm sure they would if I couldn't because I, there is a lady in here now, who just came from the hospital, well, she told people to stop bringing her stuff because her fridge was getting full (laughs). But, eh, I felt I was well cared for .... And, they wouldn't, they didn't give me the impression that they expected that. No.... (trails off). But, unconsciously, I suppose I done for them whenever they were... But, then I didn't think a thing about anything I done for anybody when I done it, didn't think a thing about it. (Pause). And, I'm sure that's the way that they felt."

"No, not really, but they will anyway. (laughs) They do anyway. But, I mean, I do what I can for them and if they want to do for me, this is fine. I will take all the help that I can get. But, I don't, eh. . . I don't say... I don't get mad at them because they won't do something.... I guess, because they usually do it. I don't have any problems with it,..."

Although these women did not overtly decide to reciprocate support, they did acknowledge that perhaps acts of kindness and support were remembered and when there was an opportunity in the future to reciprocate they would be support providers. This phenomenon has been described as deferred reciprocity (Ingersoll-Dayton & Antonucci, 1988).

Some women reported feeling uncomfortable asking for the help of others. The fatigue associated with the cardiac illness and activity restrictions in the early recovery period forced these women into a role of dependency on others to take care of the housework. The identity of the women was threatened because others were now doing what they usually did. Although they did need some assistance, the women felt conflicted about the support because they were not comfortable asking for or accepting the help of others. For example, A.B. stated:

"I tend to be a person who will go ahead and tackle something on my own. I won't ask for help unless I really, really, really, really need it. But, eh, I had to ask and that was different for me to have to ask because I won't usually ask for help to often. Things, I'll do them on my own."

When probed about how it made her feel to ask for help, this respondent indicated:

"Maybe a little frustrated that I couldn't do it on my own, but, maybe I'm just too independent (laughing). And, men love it when you are not too independent. They love, you know, they like it really when you need their help more, I think."

Some women expressed difficulty in accepting help because the quality of the housework done by the others was not up to their usual standard. J.K. described her husband as he helped with making the beds:

"But some days he rushes in and makes them and oh, my....the sheets are down like this (hand gesture to suggest unevenness) and it drives me crazy.

And, I don't want him to catch me, you know, fixing them up. So, I go all day with the sheets hanging below the spread (laughing) if you can visualize that (laughing)."

Others lowered their usual standards to avoid asking for the help of others. L.M. stated:

"And, if the house is not as clean as we would like it to be, well to heck with it. "

Fisher, (1988), among others, hypothesized that accepting assistance with tasks which are ego-central and therefore, more closely tied to feelings of selfworth, is threatening to self-esteem. Similarly, Williams (1995) suggests that social support can be perceived as unhelpful when self-esteem is sabotaged. For some women in this study, female relatives, acquaintances and husbands were performing the work that they normally do. The social comparison may have contributed to the negative feelings that some women experienced, particularly since household management was important across all respondents (Fisher et al., 1988). Observing others doing their work may have been painful for the women as they began to understand their own mortality and to contemplate what life would be like for the family without them.

Recent literature on the concept of entitlement may also help to explain why women in this study found it difficult to accept support from others. The

division of household labour by gender has become an institution (Sanchez, 1994). Men are privileged by this arrangement of the women preparing meals, washing dishes, cleaning the house, shopping for groceries and other household tasks (Pyke & Coltrane, 1996; Sanchez, 1994). Women and men both tend to value the paid work of the men and undervalue the work of managing the house. Because it is undervalued, women tend not to feel entitled to the assistance of others (Sanchez, 1994).

Despite the frustration and annoyance that respondents occasionally felt with support providers, the women valued the assistance of others. This is clear from these polite comments:

"....the least little thing means so much to you. It means so much. It doesn't matter what they do, it means so much to help you out."

"Everyone has been so good and coming with things"

The politeness may explained as part of the gendered experience of women. Women are stereotyped as kind, pleasant and socially skilled. The expression of negative feelings may run counter to their deeply held views about how women should act.

Clearly, the women in this study were conflicted about receiving help, even in a time of need. The category of conflicting boundaries captures the dynamic

interaction between the giving and getting support. The compromises and conflicts between giving and receiving resulted in negative mood states and unpleasant feelings for the women in the sample.

## Balancing Mismatched Needs and Supports

The women's narratives revealed significant needs for affective support and aid. The support the women received, however, was largely aid with the housework, some affirmation support and little affective support.

The impression that I was left with when I compared needs with supports was of mismatching. The women got what they received rather than receiving what they needed. The support was given without anyone asking "Does this meet your needs?" or "What are your needs?". The women were not asked, but significantly, they did not ask for help either. This mismatching of needs and supports may also have contributed to the negative mood states generated by receiving support.

A diagnosis of a chronic illness is a time of stress and uncertainty for the individual and the family (Strauss, 1984). Coronary heart disease is a particularly distressing diagnosis because of the unexpected onset of chest pain and the risk of sudden cardiac death. Adjustments must be made in routines and health related behaviours to reduce factors of risk and thus, slow the progression of disease. As well,

emotional responses, such as fear, grieving, sadness and anger, are evoked with the diagnosis of a chronic illness (Lubkin, 1995). The chronic illness literature would suggest that support is an important resource for the person attempting to cope with the complexity of an illness trajectory, characterized by plateaus and crises (Primono, 1994). This section describes the relationship between the support needs of the women in the early recovery period and the type of support that study respondents received.

## Needing Support:

When I examined the narrative data of the study participants, I was struck by the minimal number of overt expressions of needs for support across respondents. Most of the needs were implied in bits and pieces of the data. To facilitate organization of this report, I have divided the needing of support into expressed, unexpressed and discounted needs.

Expressed needs. Some women were able to articulate needs for support when asked to describe what they wanted from others. Some excerpts from the women's narratives follow:

"(Pause) Probably that you are going to get better. Emotional- just that you are going to recover, that you are going to get better. And, it is going to change. You just think that you're never going to be well, again. Well, that what I was thinking. Am I ever going to be well again? Day after day, I lay on this couch and day after day, I, eh... And, you go to try to do anything and you have no energy, your shaky, and your feeling, feeling funny. And, your scared if you put your arms above your head that you are going to collapse on the floor, you know, things like that. So, you know, just someone to bring in some positivity to ya. (Pause) Probably that you are going to get better."

"Well, perhaps, I would have liked just to have done nothing for a few days because I was feeling shaky and I guess, I could have stood someone to...but, you know, you don't want to ask people to come in and wait on you"

From these examples, it is clear that the women in the study did have unmet needs for affective support and practical help. It was fascinating that these women told me about their needs but they did not reveal their needs to family members.

Unexpressed Needs. Interestingly, when I asked women in this study about their needs for support, most replied with a description of what they received. However, an examination of the words of study respondents revealed hidden subtexts about needs for support. Some examples from the textual data help to illuminate these needs:

"You were always down, well, I was. I couldn't believe that I took a heart attack to start with".

"...but, I'm a little nervous to start dancing, square dancing again. We go the legion. And, I'm a little scared of getting winded, scared of...a little fear that, what if I'm dancing, because square dancing is pretty strenuous, you are a little afraid that you might collapse, but, if something is really (pause) exertive, the fear is

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there that you might collapse..."

"Ummm, so, the biggest effect of this heart attack is that I had to slow down for a while. As frustrating as that was, it wad good for me. And it also has you think and decide whether you want to live or not, and what you are going to do about it, sort of thing. You have to make that sort of decision...because ...there is a lot of work to living. And you ask people if they want to live, most people would say "What are you talking about?". The truth is sometimes you just exist. So, that decision had to be made this trip."

"I get discouraged every now and again then...but, I figure, I'm lucky to be alive (laughs)."

"I find it very stressful. I really do. I hate making different kinds of meals. That really bothers me. I hate that. But, I do it for my own self."

The women in the study had to make several adjustments in lifestyle behaviours to reduce factors of risk for coronary heart disease. Social support has been linked to successful risk factor modification (Shumaker, 1991). Some examples are included from the narratives:

"The smoking, that's major. It is no fun, I'm dying for a smoke. I did one thing though, which was really hard for me to do, I wouldn't let people smoke in my house, simply... not because... I know I would have been asking for a puff or something. So they all go outside away from me and I have kept it that way for a while until I am absolutely sure that I can do it that's what I am going to do. Now some of my friends leave faster but most of them respect it highly, so..."

"The eating is a problem for me as you can see, it has always been. I eat too much and eat the wrong foods. I would really like to get a handle on that but it is a lot of work. So, I suppose there is a little bit of worry over that. The biggest worry I have at this stage ....is becoming

dependent. So, eh...I am going to do everything in my power to get enough health so that I can stay independent."

"You cannot eat, you have to cook all your meat in the oven. You cannot eat any fatty foods. Or, butter, or bacon or eggs or anything like that....I find it very difficult. I like the greasy food (laughs)...I try not to eat anything. Its killing me but,.... (laughs)...I gotta cook something different for myself and then their meal."

Discounted needs. Mrs. E.F. mentioned that she felt weak and wobbly for the first few days at home and she would have liked the reassurance of having someone with her in the house at all times. However, when her husband checked with her about leaving the apartment for a short time for a outing, she did not express her needs.

"[Husband] did his best but I think he was glad to get out, you know, and I could understand that. He'd say " Do you think you will be alright if I go across to the...." "Of course, I will be ".

Mrs E.F. mentioned that she normally did not mind being alone, "I love to read and I'm never bored to be by myself". The security of having someone nearby was important to her in the early recovery period, however. She talked of how reassured she had felt in the hospital when the nursing staff were checking in with her frequently:

"You know they are awfully good to me. Anyone who complains about...You know, the first night, 3

nurses came in, there was 1 black girl and 2 others. And, they said "Look, there is 3 of us looking after 1 of you. You don't have a worry in the world" You know, it was the most wonderful thing to hear. I thought, they know that I am nervous and they are here and they were in every few minutes. I just felt like hugging them, you know"

Disclosure of feelings to the spouse has been linked to recovery from a cardiac illness. Helgeson (1991) reported that lack of disclosure to the spouse was predictive of a worse recovery as measured by rehospitalization after myocardial infarction, post myocardial infarction chest pain, and perceived health status. Disclosure was operationalized as "my spouse is someone I can really talk with about things that are important to me". The women who disclosed to their spouses were rehospitalized more often than the men who disclosed to their wives suggesting a differential effect between genders. This finding must be interpreted with caution, however, because of the small number of females in the sample.

## Matching Support Needs with Support Type

Clearly, these women had significant needs for support in the recovery period. There was evidence of powerful emotions throughout and across the interview data of study respondents - fear of sudden death, feelings of vulnerability, discouragement, disbelief, grieving over the loss of energy, loss of independence,

loss of privacy and loss of personal space and possible anger about having the illness. The women also had needs for aid (help with the housework and information) and affirmation.

When expressions of need, both overt and covert, were compared with what the women received, the dearth of emotional support was evident. As well, even though the women were receiving practical help and affirmational support, in some cases it was not sufficient to meet their needs. For example, family members, neighbours and friends from the Church brought Mrs. J. K. casseroles and other foods to her house. The textual data of the interview would suggest that it would have been more helpful if someone had come to the house, prepared a meal and then possibly have sat down and shared some conversation with her over the meal:

"Yes, I'll tell you when I was so miserable that I had no desire to get up and get anything to eat. That was, if I could have had somebody to come in and just, maybe that was why I couldn't think of eating because I didn't want to see food to get it ready. If somebody had brought me something and it was all prepared, then maybe I could have eaten. But, I just didn't have the desire to do it myself"

The types and timing of support are important in evaluating whether support is useful and beneficial to the recipient (Cutrona & Russell, 1990; Jacobson, 1986). Social support needs change over the course of a

stressful life event. Jacobson (1986) described three stages of a stressful life event: crisis, transition and deficit. The recovery phase after hospitalization from an acute coronary event coincides with Jacobson's transition phase. Informational support has been identified as the most important type of support during this phase. However, while the women in this study did need information about recovery, their needs were greater than simply information. The work of Jacobson may represent the synthesis of material from studies that reflect the male perspective. Certainly, one of the support needs most consistently identified for men recovering from a myocardial infarction is the need for information by the spouse and the family (Thompson, 1989).

Recent work on matching support needs with the appropriate type of support indicates that emotional support is essential for "reducing the intensity of fear, depression, and anger that can result from physical illness" (Cutrona & Russell, 1990, p.341). These authors concluded this after an analysis of several published research investigations which had looked at the effect of specific types of support on mental and physical health outcomes.

One woman in this study did have her needs for support met by her family. Her experience was different

from the others in the study in that she had had a 3 month hospitalization for treatment of a muscular disorder about 5 years prior to this heart attack. After that long hospitalization she had been very dependent upon her family for the most basic of life needs for several more months. At the conclusion of our interview, the respondent commented that the process of the interview had helped her understand how much the family had learned from that experience 5 years ago. Her daughter had learned to anticipate her needs and actually met her needs before she perceived them to be needs. This respondent did indicate, however, that this had not been the case when she had been hospitalized 5 years ago. Her experience would suggest that support provision by family members may be a learned behaviour. Family members learn to match the type of support provided with the needs of the recipient.

A study by Yates (1995) does provide some preliminary insight into the type and timing of social support for patients with coronary heart disease. In a study of 132 men at 2 months and 1 year after their cardiac event, Yates (1995) compared three types of social support (informational, emotional and tangible aid) and overall support from both health care providers and the spouse. Consistent with prior research, the spouse was found to be the primary source

of support. Spouses provided tangible aid and emotional support followed by informational support. More emotional support and satisfaction with the support provided was related to fewer reports of depressive symptomatology at 2 months and 1 year. Tangible assistance was associated with better short term recovery (Yates, 1995).

The findings of the Yates (1995) study emphasize the importance of emotional support, yet, for the women in this study, that was the greatest support deficit for them. It is tempting to say that the support providers were insensitive to the needs of the women. That explanation, however, only partially explains the mismatching. The women themselves did not express their needs to others, possibly because they were not very practised at perceiving and identifying their own needs. According to Bruhn & Philips (1984) social support is useful only when an individual perceives a need for social support, perceives social support as available and accessible and has the social skills to engage the support.

Perception is an intrapersonal process that allows individuals to create images in their minds from data collected through the senses (Arnold & Boggs, 1995).

Perceptions are highly individual and make an important contribution to identity. Likewise, needs are value

judgements and thus highly subjective (Endacott, 1997).

Dunst (1994), among others, define a need "as a judgement or indication that a resource (information, advice, assistance, etc.) is required or desired in order to achieve a particular goal or attain a particular end" (p.94).

Gender role training may influence the perception of need for support by women. Chodorow (1979, 1989), a feminist psychoanalytic theorist, in her seminal work on mothering, suggests that gender role training is embedded in childhood relationships, particularly the relationship with the mother.

Girls identification processes, then, are more continuously embedded in and mediated by their ongoing relationship with their mother. They develop through and stress particularistic and affective relationships to others...masculine identification processes stress differentiation from others, the denial of affective relation, and categorical universalistic components of the masculine role. Feminine identification processes are relational, whereas masculine identification processes tend to deny relationships (Chodorow, 1979, p.176).

According to this model, girls learn to be like their mother. The woman's perceptions of her gender are

anchored in her early life experiences and are continuously reinforced over her lifetime as she comes into contact with others who teach her about being female. Thus, perception of gender identity is personalized.

Chodorow (1979, 1989) also suggests that women are socialized to respond to other people's needs. Women are intuitive and trained to anticipate needs before they are experienced. They are tuned in to the feelings of others. Men, by contrast, are not intuitive, nor are they relational in orientation, or in tune with other people's needs.

These ideas of gender role training suggest that women are practised at meeting the needs of others. The findings of this study would indicate, however, that women are not practised at perceiving their own needs, or if needs are identified, at expressing their needs to others, even the life partner. Husbands were identified as the primary source of support for 5 of the 8 women in this sample, yet, it is not likely they would detect needs for emotional support or ask about the women's feelings because of their male gender role training. There may not have been an opportunity for the women to express feelings or the women had to work harder at expressing her feelings. This theory may also help to explain why the social support needs of males

and females differ in the recovery phase after myocardial infarction. The supportive female partner anticipates and meets the needs of her husband before the man even has a perception of a need.

Also, the women in this study may have been reluctant to express needs to avoid precipitating an identity crisis. These women had identities as support providers, rather than recipients of support. They were not supposed to have needs. This was characteristic of their lives and it did not change when they became ill.

The balancing of mismatched needs and supports is complex. The women had needs for support that were largely undescribed to the support providers and thus, providers gave the type of support which they thought was most appropriate to the situation. Well meaning people rushed in and tidied up the house but no one asked about the women's feelings. Their emotional responses to the illness were virtually ignored by others. It makes sense to think that if the women were worried about dying and people were talking about everything else except how scared and frightened they were, that these women wouldn't want others around. This may have contributed to the smothered feeling that some of the women experienced.

To summarize, this category reflects the imbalance between the support needs of the women and the support

they received. The lack of balance was a consequence of women not expressing needs to the support providers and support providers not clarifying the needs for support with the women. Gender role training may influence both the perception and expression of need as well as the type of support provided. Women are socialized to be more expressive and intuitive and are more relational with others whereas men are trained to be more action orientated and thus would perceive helping in practical terms rather than listening.

# Minimizing Self

Care and concern for others is associated with women's work (Benner, 1989). The ethic of caring is pervasive and women often feel a responsibility for others in their social network. The women in this study were providing support to others in the recovery period, sometimes at the expense of their own needs. The processes of selfless giving and denying needs were discovered in the analysis. This next section of the report will describe these processes.

#### Selfless giving

Study respondents were focussed on the needs of others, even in times of personal vulnerability. Mrs.

A. B. had 2 cardiac arrests in the hospital and she explains how she worried about her daughter seeing her for the first time after the heart attack and how she

#### comforted her :

"And, the daughter that was here, eh, I didn't want her to see, I saw her after I had the first, the initial heart attack. I didn't want her to see me first because she is, eh, [psychiatric illness], and I knew what it would do her. So, when she did see me it was after the fact, but, she took one look and of course, she was very intimidated by all the I.V's, there was an I.V. in this arm, and an I.V. in this one, and then the monitor. And, eh, it quite scared her.... I had to comfort her, then.

Mrs. S. T. described her son visiting her in hospital after her heart attack:

"....this time he was much better. Still needy though. (Laughing) He comes into the hospital... he just... there is always some little thing he needs or something. (laughs). Oh well, he would come in with his troubles, you know, that kind of thing. He's...did the last time too if I recall...I'm a mother to a lot of people, not just my own children..."

I have labelled this process as selfless giving because the women, in a time of great personal need for support, put the needs of others before their own needs. These behaviours are consistent with mothering. Mothering has been studied within the context of the object relations model.

The object relations model states that it is an important drive within persons to develop and maintain relationships with others. The object is another person in relationship with a subject (Chodorow, 1989). According to this model, the self is developed through a process of social interaction and is continuously

being refined and redefined over the life span, based on participation in social discourses. Women's perceptions of self are influenced and modified from relationships with others, thus the concept of self is a relational self(Chodorow, 1989). Within this context, women learn to nurture others.

Mothers empower their daughters by allowing them to feel successful in their abilities to understand and give support. Being able to perceive, respond, and relate to the needs and feelings of the other person contributes to a sense of empowerment that, in turn, creates a sense of effectiveness and motivates response to one another" (Woods, 1995, p.68)

Unfortunately, the object relations model does not assist in understanding how gender identity is transformed as women age.

The mothering discourse emphasizes self-sacrifice and denial of self (Hartrick, 1997). The women in this study were engaged in intense mothering behaviours. It seemed that everyone's needs came before their own needs. Mrs. E. F. described this incident with her husband about 2 days after her discharge from hospital

<sup>&</sup>quot;Now, a couple of days after I was home, he [husband] had a buddy come in and they were playing checkers and he called out "How about

making us coffee and making us lunch?" Well, you know, I wasn't quite ready for that. But, they don't realize that. I mean, I think, a man does... Then again, he had a wife who was ill for 20 years so I can understand that. He had to wait on her, carry her and do everything for her. It was a difficult time. So, eh, I try not to ....mention this too much."

In this instance, Mrs. E.F. prepared these men lunch and normalized the request by attributing it to her husband's past experiences.

These findings are validated by the results of other research investigations. Huyck (1994) in an exploratory study of the experience of femininity in 136 older women identified 4 styles of femininity among the sample : a) femme; b) nurturer; c) wife/mother; and d) denial of nonfemininity. The nurturer style of femininity was described as being nurturant and affectionate toward others. "She describes herself as sensitive and responsive to the needs and feelings of others, and she feels she is feminine because she is a good friend and a good listener" (p.217). Women described the wife/mother style of femininity "as feminine because of the responsibility they assumed for the emotional welfare of their husband and family. Such a woman even puts their needs before hers at times " (p.217).

Likewise, Hartrick (1996, 1997) examined the experience of self-definition for 7 women, who were

mothers. She uncovered the three elements of nonreflective doing, living in the shadows and reclaiming and rediscovering self within the process of mothers' defining self.

It was remarkable that not one study respondent spoke of having an a-ha! experience in which the heart attack forced them to examine the priorities in their lives and make significant shifts in valuing themselves. A cardiac illness can be thought of as a near death experience. Two women spoke about verbalizing their feelings of love to their family members more often, however, none of the women seemed compelled to reorganize or reframe their lives. The women seemed to view the recovery period as a time of transition, simply waiting to feel well enough to resume her usual care giving roles.

This is in contrast to the findings reported by Fleury et al. (1995). These authors reported that redefining priorities was a component of healing for women after coronary artery bypass surgery. "For many women the experience of redefining priorities 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" (p. 479). This finding also contrasts with the findings of a study by Brown (1996) that examined the meaning that women

attach to cardiac illness and their home convalescence. The women in that study were more assertive in composing a new way of life and a new self after hospitalization for a cardiac event as evidenced by the core variable of Finding a Voice.

These contradictory findings may be partially explained by the predominantly rural culture of Prince Edward Island, where people do not tend to be assertive. There may be competing explanations, however. For example, in a study of gender differences in recovery after coronary artery bypass surgery, Hawthorne (1994) described that men interpreted the coronary problem as a pivotal event which led them to reexamine their priorities and subsequently reorganize family and work commitments to reflect the new priorities. The women in that study made no significant shifts in priorities. It is not clear from the research report if the study participants were rural or urban.

## Mbs. ness

The process of denying needs also contributed to minimizing the self. The women denied the urgency of their own personal health concerns by focussing on the needs of others and managing the household. An important component of recovery from an acute cardiac episode is a regular program of walking to develop collateral circulation. The narratives of these women

were replete with examples of how they understood the importance of the walking, but yet at 4 to 8 weeks post hospital discharge had not incorporated it as a routine part of their day.

"The walking would be a couple of times a week, not every day, and I'm supposed to be now every day and I'm not. Although I'm busy every day, I'm not, and Dr. [specialist-internal medicine], that was the biggest thing he stressed, walking, and one day I said to him "Why do you stress it so much? I can see being active" and he said " It develops auxiliary,...". And that's the big thing, developing, like yer, auxiliary, auxiliary vessels. So, I do my best and it hasn't been that great a spring (pause). I know they don't, I know Dr. [family doctor] impressed upon me, very much, he said, he says, he says, how did he put, female patients with heart attacks under 60 we don't like, he said, female patients under 60 with diabetes we don't like, and we detest female patients under 60 that are diabetics and have had heart attacks."

"... I have been pretty busy the last week too with things.

Yeah...and, eh, I would like to ride my bike again. I did that after the last one and that's what made the big difference...Yeah, I've certainly planned. I've done some walking but I haven't got it into a routine yet. I was on a trampoline last week (laughs) I have one of those ski machines downstairs that I've had for since the last heart attack but I haven't used it yet. But, I will be building in an exercise routine, no question about it. I will be swimming or biking, I think."

Mrs. E. F. described how her husband walked every day and even with the opportunity to have a regular companion to walk with she did not take advantage of the opportunity:

"...used to walk on the Boardwalk but I haven't started it yet. And, I don't know if it would be good for me because I get so breathless. I suppose its because I haven't been. Yes, yes. So, I think we'll start agin, just a little. [Husband] walks every morning, yes, 'round and 'round the track and, eh, it is ideal. Perfect. He is in an ideal location. (laughing)"

It is known that women have lower rates of participation in cardiac rehabilitation programs than men (Moore, 1996). A study of men and women recovering from coronary artery bypass surgery reported that men were walking outside the home during the first two weeks post-operatively while many of the women in the sample reported that they were unable to get out walking by the third week (Moore, 1995). The investigator reported that social, rather than physical factors, influenced the decision of the women to walk outside the home. The women in the sample reported that not having a spouse to walk with them and feeling embarrassed to be in public without a brassiere as barriers to walking activities. Conversely, Yates (1989) found no significant difference in adherence to the recommended frequency of exercise in a sample of men and women recovering from bypass surgery.

Greater age and co-morbidities can explain some of the differential participation rates, however, a recent qualitative analysis of women's experiences of mothering and the reasons that women do not take part in regular physical activity pose an alternative explanation. Drew (1996) discovered that women find it difficult to find the time to exercise and to relax because of their family commitments. The author postulates that women are constrained at both the personal and societal level to legitimately declare time for themselves, even for activities that might improve health and well-being.

The women in this study minimized the self by denying the urgency of their health concerns in favour of the needs of others in their social network. The conception of self as role related, suggests that women need to be focussed on the needs of others to preserve their identity. These two processes help to explain why the women in this study minimized the self.

#### Preserving the Continuity of Self

The transcending process revealed in this data analysis was preserving the continuity of self.

Underlying the conflict between the giving and getting of support, the lack of balance between needs and supports and minimizing the self, was the basic fact that the women in this sample did need aid from others. It wasn't that the women did not want the help of others but what they did not want was for it to be done in such a way that it took away from what they could possibly do themselves. They were trying to protect

their identity as the cornerstone of the family, a role characterized by support provision to others. The women in the study employed cognitive, behavioural and affective strategies to preserve their identities.

Recognizing and accepting their limitations was a cognitive strategy used by the women to confirm their independence in their role. The women understood their bodies and interpretated their signs and symptoms to guide their level of activity. Mrs. J. K. and Mrs. G. H. described this:

"Someone said, " Don't try to overdo it" I said "
No your body will tell you what you can do and
what you cannot do" Some people say " Don't do
this and don't do that". I said " I know my
limits" "I know exactly what I can do and what I
can't do". I find it so easy to, well, if I don't
feel like doing something, just take a look for a
minute, look at the towels hanging there
(laughing). I just leave it. And, when I feel
better. I just go like a whiz, put everything
away..."

"Yes, yes. I felt well enough to do somethings. The lady just across there she'd insist on me not making my bed (laughing). "I'll come in and make your bed" she'd say (laughter). I said "I have to do something " (laughing). It takes me a time. It still takes me a time to make my bed(laughing). I'm kinda slow."

The women in the study also used behavioural strategies to assert their feelings of independence. For example, Mrs. C.D. explained how she did returned to her usual role as household manager when the rest of the family were absent from the home:

"Well, .... I just do whatever I want if there is nobody around. But, if there is anybody home, you can't do that and you can't do the other thing. .... I will do everything when I am alone. You know, I will do the wash, and I'll vacuum and the whole bit."

Mrs. E.F. described how she handled a situation when her husband very kindly prepared her breakfast so that she could rest in bed and not rush to start the day.

"[Husband] wanted to bring the meals in my bedroom but I hate that. I just can't stand it until I get up and take a bath. I just can't stand it. So, eh, he brought in my breakfast one morning -poached egg on toast with a big blob of jam on the egg. It looked it was bleeding. It was...(laughing). I said "Look dear, I'd really rather get up and wash " and so....(laughing). He was doing his best."

The negative moods (smothered, frustration, leave me alone) reported by the women with regard to excessive support were probably communicated to support providers through body language. The process of communication is largely nonverbal and it is known that women tend to make more effective use of non-verbal communication techniques than men (Arnold & Boggs, 1995). Furthermore, body language communicates our true feelings. Support providers possibly felt rebuffed by the women in this sample when their actions began to annoy the women.

In sum, the women in this sample used cognitive, behavioural and affective strategies to preserve the continuity of self in the face of this significant

change in their life circumstances. Chodorow asserts that "we can not step out of being gendered and sexed; that is who we are. We do not... have a separate self apart from our engendering " (1989, p.167). Thus, gender is part and parcel of preserving the continuity of self. It is related to these women feeling comfortable and secure in their basic sense of being women.

#### Summary

The narratives of the women in this study revealed the complexity of social support and the experience of women recovering from an acute cardiac event. The women were performing closely to the expectations of their roles as wife and mother. Their lives were characterized by care giving and support provision to others in their social networks. Some of this work was visible but a significant portion was invisible to both the women and their families. Thus, the core category of Working in the Shadows was identified as a metaphor to explain this support work of the women.

Preserving the continuity of self was identified as the transcending process. In the recovery period, the women employed cognitive, behavioural and affective strategies to protect their sense of identity as women.

The categories of giving and receiving support: conflicting boundaries, balancing mismatched needs and

supports and minimizing the self explained the processes of social support in the stories of the women. Conflicting boundaries captured the dynamic interaction between the getting and giving of support for the women in the study. The daily experiences of these women was of support provision. An important component of their support provision was managing the household. Because of the illness, the women were not able to take care of the house as they usually did. Others moved in and began to do the work of the women. Receiving support resulted in conflict with their usual role expectations and the women experienced this as a smothering phenomenon.

The process of mismatched needs and supports resulted from the imbalance between the support that was needed by the women and the type of support they received. Women did not always ask for support nor did the support providers clarify the type of support needed with the women themselves. Support providers provided practical help with the household chores and some affirmation that they would get better and recover. The feelings of the women were largely overlooked by the providers. Similarly, the women in the sample were not practised at expressing their needs to others. Living up to the expectations of their role would suggest that the women did not have needs because

their lives were dedicated to meeting the needs of others. Thus, expressing needs may have precipitate an identity crisis.

Minimizing the self reflected the ongoing support provision to others in the social network at the cost of denying the urgency of their personal health concerns. This minimization of self reflected the experience of women's identities as a relational self, an understanding of self within the context of a web on relationships that are important to the women.

#### CHAPTER V

Summary, Conclusions and Implications

This study explored the processes of social
support for older women after hospitalization for an
acute coronary event. Eight women were interviewed in
their homes 4 to 8 weeks post hospital discharge to
gain insight into the meaning of their experiences. The
women were eager to participate and to share their
stories with me. Likewise, they were curious about how
their experience compared with other women in the
sample and all requested a summary of the findings of
this research.

A theoretical explanation of the processes underlying the words of the women was developed through the constant comparative method. The core category of Working in the Shadows emerged to explain most of the variation in the data. For these women, Working in the Shadows meant the visible and invisible work of providing support to others that was characteristic of their lives and of their role as women. The daily experience of Working in the Shadows was to Preserve the Continuity of Self as a woman. The categories of Giving and Receiving Support: Conflicting Boundaries, Balancing Mismatched Needs and Supports and Minimizing the Self helped to explain the processes within the data.

The women were surrounded by loving family members and friends as sources of support. The support providers helped with the housework, monitored the progress of the women in recovery and encouraged them to think about their return to previous level of functioning. Although the women in the study appreciated and valued what others did for them they felt conflicted about receiving support because they were performing closely to role expectations as support providers. The compromises and conflicts between giving and receiving were experienced as feeling smothered.

The women had needs for supports which were not expressed or not perceived as needs. Unfortunately, the support provided to the women did not always match their needs. This mismatching of needs and supports may have contributed to the smothered feeling, as well.

The women also minimized their own needs in the processes of selfless giving and denying needs. The women were orientated to the family and to others.

#### Implications for Nursing

As I moved through the process of data analysis, listening to the words of these women and reading and re-reading the transcripts of the interview data, I was also thinking about how the emerging theoretical interpretation could be used by nurses and organized nursing to improve the care of women after an acute

cardiac illness. For the purpose of this report, I have clustered my thoughts around nursing practice, education and research.

#### Nursing Practice

Empathy, warmth and respect are the foundational elements of interpersonal relationships with clients (Gazda, 1982). Within the context of the interpersonal relationship, the nurse creates a supportive and nonthreatening environment for the client to express needs and feelings. Establishing this type of relationship with a woman recovering from a cardiac illness may create an opening for the woman to express needs and feelings. Further, revealing feelings to someone outside the circle of close friends and family members may help the woman to "save face" if she perceives herself as the person in the family who meets the needs of others but does not perceive herself as having needs. The relationship with the nurse is a place to purge feelings. In essence, the nurse becomes a temporary support provider.

As well, nurses need to remember that women do not always reveal their feelings, even when given an opportunity. The implication is that the nurse must carefully gauge and assess nonverbal messages from women that may suggest some inner turmoil. These messages need to be clarified with the women. In the

process of seeking validation of these observations, the nurse may create another opportunity for the women to disclose feelings.

Belenky (1986), among others, described 5 ways of knowing for women. One way of knowing is to have subjective knowledge, where truth is determined from the inner voice of intuition. The findings of this study would suggest that the women were in tune with their bodies and could interpret their symptoms. One woman in this study suggested that the discharge instructions be revised to a more open ended format and thus allow for individual variation in recovery. She indicated that she would prefer a general guide for reestablishing routines based on perceiving symptoms rather than a list of household and other activities and the number of weeks post - hospital discharge when the activities could be resumed. Nurses often write discharge instructions for patients leaving the hospital and thus it would seem reasonable to conclude that nurses could incorporate such a change into the written instructions. This change would acknowledge the value of women's subjective knowledge. Certainly, it is not surprising that discharge instructions take the form of lists of activities, when one considers that the instructions were prepared within the context of the medical model, a model which perceives truth as

objective and measureable. Also, coronary heart disease is stereotyped as a man's disease. Male gender role training includes an orientation to concrete task and activities. Therefore, a list of activities is probably quite appropriate for men who have suffered heart attacks. Nurse need to modify discharge instructions to include both the subjective and the objective perspective.

Several women in this study suggested that the restrictive visitor policies, particularly in the coronary care unit, be examined. One divorced woman in the sample cited a best friend as her chief source of support but according to the rules of the hospital, she was not a family member and therefore could be restricted from visiting. Fortunately, the nursing staff overlooked the policy in her instance and the best friend was allowed to visit. Nurses can advocate for changes in visiting hour policies that reflect the wishes and desires of the patients. It is natural that families would want to be together in a time of crises, such as a heart attack.

The women in this study had access to many sources of support, all of whom wanted the women to have a positive and successful recovery. These support providers were willing to provide assistance and helped out in areas that they perceived to be most relevant

for the women. Regrettably, the support did not meet the needs of the women or in some cases did match but was insufficient. Nurses could have a role in facilitating the matching of needs and supports.

Nurses can work in partnership with the support network to channel the goodwill of support providers into a more effective and meaningful direction for the women. For example, a nurse could encourage support providers to clarify with the women how they could be more most helpful during the time of crises. This approach suggests a valuing of the women's subjective knowledge and gives the women to opportunity to express needs.

The early discharge period after hospitalization for an acute coronary event is identified as a time of great stress for patients and their families. Nurses can teach family members about the feelings evoked by the diagnosis of a chronic illness or an exacerbation of a existing illness. Nurses can emphasize that cardiac patients are often frightened and fearful of sudden death and that patients need the help of the social network to

deal with these intense emotions. Husbands may need help to understand that they could have a role in listening to the feelings of their spouse even though that may not be the thing that they prefer to do. An

emotionally supportive environment forms the centerpiece for effective coping in this transitional time and for successful adjustment to usual living.

Likewise, family members might have to be encouraged to have their needs for emotional support met in different ways, while the women are still recovering. It is important for nurses to recognize and validate the feelings of the members of the support network but also encourage them to use others sources of support and not to rely on the women for comfort and support when they are ill or recovering. Diverting some of the nurturing and provision of emotional support to others may also free up some of the emotional space for women to deal with their own feelings.

At least one of the women in this study mentioned that it would be very helpful to be visited by a woman who has recovered from a heart attack. Nurses could intervene to mobilize this source for support in the early recovery period. Mutual aid typifies the lay helping philosophy, a philosophy that has emerged to provide individuals living with a common problem or condition with information and emotional support to improve individual coping mechanisms.

The findings of this study point out the challenges of managing the fatigue and other symptoms of the illness while simultaneously thinking about the

future course of the illness and attempting to reduce factors of risk. There were several areas that required modification of behaviours for the women in this study. Changing a lifelong way of living is very challenging and the individual attempting to change behaviour needs support to persevere with their efforts.

One challenge for the women in this study was in the area of food support. One woman was advised to change her diet to low fat and she was making noble efforts to honour the advice. However, the culture of the whole family did not change to this new, healthier way of eating. The woman was cooking 2 sets of meals, one for herself and one for the rest of the family. She now had double the burden of meal preparation. Furthermore, this new way of eating felt different and uncomfortable for her. The woman was isolated from the family because she was eating different foods. It would have been easier and more supportive to the woman if the whole family had changed to a low fat diet. Nurses may have to advise members of the support network how they might support the women to incorporate these changes into their lifestyle. The illness prevention effects for the whole family could be emphasized.

Another woman, who lived alone, suggested that a community kitchen for women with cardiac disease be established. In the interview this woman mentioned that

she did not like preparing meals for one and that she is more likely to grab food that is quick and easy. She recognized these behaviours as detrimental to her weight and to the quality of her diet. In a community kitchen several people could participate in the food preparation and then divide the food into single servings which could be frozen until ready to be used. The opportunity to socialize with others would be an added benefit to this activity. Nurses could facilitate the establishment of this type of setting.

Another area of needed lifestyle modification for the women in this sample was incorporating a regular program of exercise into their day. Nurses could encourage members or a designated member of the social network to become a walking companion with the woman and to set a regular time each day to walk.

In sum, the nurse in practice can intervene during the recovery phase from an acute cardiac event to assist the client and family to achieve the best possible outcome. Nursing interventions, geared toward creating an environment that facilitates healing, may mobilize sources of support for the client or alternatively may provide professional nurses as temporary sources of support (Norbeck, 1988; Stewart, 1993; Stewart, 1995).

Nursing Education

The findings of this study have implications for nursing education. First, feminist theory should be incorporated into nursing curricula. The purpose of feminist scholarship is to improve the situation of women by acknowledging the expertise of women in their own experiences. Feminism also acknowledges the social and political influences on women's experiences. Thus, incorporating feminist theory into curricula may increase nurses' sensitivity to the value of women and their experiences. Chinn (1987) stated "feminism values and endorses women, critiques male thinking, challenges patriarchal systems, and focuses on creating self-love and respect for others and all forms of life" (p.23). Nursing students may be challenged in an assignment to critique an aspect of the literature on coronary heart disease from a feminist point of view.

Social support theory also emphasizes the social environment. Incorporation of theory about the importance of social relations to the human experience into nursing education can only strengthen the practice of nursing. The uniqueness of women's relationships, emphasized by feminist theories, could be examined within the context of the social network. Furthermore, nursing students need to have theory and clinical placement opportunities in working as partners with social networks and informal lay helpers.

Incorporation of theory on the lived experience of women recovering from an acute cardiac illness may go a long way to help nurses reject the stereotypes of coronary heart disease and thereby improve the quality of care for women.

#### Nursing Research

Further illumination of the experience of women recovering from an acute cardiac event is required. One area that has yet to be considered in depth is reciprocity in support exchange. It would be interesting to examine several marital units, where the female partner has experienced a myocardial infarction or unstable angina, about perceptions of mutuality between husband and wife. The experience of women's sense of self as a mother needs more study, as well. Qualitative methodologies, like grounded theory and phenomenology, may guide the study of such questions because these methods emphasize the lived experience of the person in the situation. Similarly, these methodologies are congruent with feminist epistemology, which recognizes women's perceptions as truths.

#### Conclusion

The findings of this study provide some insight into the experience of women recovering from an acute cardiac illness. The women in this study did not ask for help rather they received what they got rather than

receiving what they needed. Although they did have needs for support, they did not express their needs to the support providers.

Husbands, children and other family members were the main sources of support to these women. These providers gave practical help with the housework and also gave affective and affirmational support. It was clear from the results of this study that the support did not always match the needs of the women.

When questioned about the importance of reciprocating support, the women replied with concrete examples of how they had returned aid in kind to friends and acquaintances. They did not speak directly about returning support to close family members. Yet, underlying their words throughout and across study respondents was an feeling of reciprocity. The women always wanted to be giving support to others and when they were unable to do so that was stressful for them. The women experienced this stress as feeling smothered by the attention of others.

The age of the women in this study sample may also influence the experience of support. These older women were socialized to mother and to be relational and intuitive. The focus of their lives had an outward orientation to others. A significant component of this orientation was giving support. The costs of receiving

support were perceived to be high.

These women lived in a predominantly rural setting. They were not assertive at expressing their needs, possibly because of the influence of the passivity of rural life.

The women's descriptions of their experience provide a beginning understanding the processes involved in giving and receiving support after an acute cardiac event. It is important to remember that not all women will experience social support in the same way described by the women in this study. The findings, however, have helped to illuminate several issues that might contribute to the depth of understanding of women's experiences after hospitalization for an acute cardiac event.

#### APPENDIX A

### Operational Definitions

The following definitions will be used for the purpose of the this study.

Social support: In this research the term social support has been defined as: "Interpersonal transactions that include one or more of the following: affect (expressions of liking, loving, admiration, respect), affirmation (expressions of agreement or acknowledgement of the appropriateness of rightness of some act, statement or point of view), and aid (direct services or material aid) "(Kahn & Antonucci, 1980, p. 267).

<u>Cardiac event</u>: Women with coronary heart disease may present clinically with angina, unstable angina or myocardial infarction.

#### Angina :

Angina pectoris is chest pain resulting from a reduction in coronary blood flow, which causes a temporary imbalance between myocardial blood supply and demand. The reduction in coronary blood flow results in myocardial ischemia that is temporary and reversible (Lemone & Burke, 1996, p.1061).

<u>Unstable angina</u> is "angina that occurs with increasing frequency, severity, and duration .... pain is

unpredictable and occurs with decreasing levels of activity or stress and may occur at rest" (Lemone & Burke, 1996, p.1062).

## Myocardial infarction :

Myocardial infarction occurs when a coronary artery becomes critically occluded, blocking blood flow to a portion of cardiac muscle for a prolonged period of time. The coronary occlusion and myocardial ischemia is usually caused by a thrombus (clot) developing at a site of arterial narrowing. (Lemone & Burke, 1996, p.1088).

#### APPENDIX B

## Introduction of the Project to Potential Study Participants

(To be used by the Critical Care Instructor)

A nursing colleague, Mae Gallant, is carrying out a research study on women who have been hospitalized with a heart attack or angina. The reason for the study is to determine the type of support needed and available for women after they have been discharged from hospital.

Ms. Gallant is a registered nurse, who has worked in coronary care in the past. She is currently enrolled in the Master of Nursing program at Dalhousie University.

Ms. Gallant would like to meet with women in their own homes, 4 to 8 weeks after discharge from hospital.

If you would like to hear more about the study, I will provide Ms. Gallant with your name and telephone number. Ms. Gallant will contact you within 2 - 3 weeks.

	Name	
		 <del></del>

Telephone Number

\* This form was on institutional letterhead.

# Introduction of the Project to Potential Study Participants

(To be used by the Liaison Nurse, Cardiac Rehabilitation Program)

A nursing colleague, Mae Gallant, is carrying out a research study on women who have been hospitalized with a heart attack or angina. The reason for the study is to determine the type of support needed and available for women after they have been discharged from hospital.

Ms. Gallant is a registered nurse, who has worked in coronary care in the past. She is currently enrolled in the Master of Nursing program at Dalhousie University.

Ms. Gallant would like to meet with women in their own homes, 4 to 8 weeks after discharge from hospital.

If you would like to hear more about the study, I will provide Ms. Gallant with your name and telephone number. Ms. Gallant will contact you within 1 week.

Name
Telephone Number

#### APPENDIX C

# Information about the Project for Participants Why is the project being done?

The purpose of this study is to determine the type of support needed and available to women after discharge from hospital for a heart attack or angina. This study is being carried out by Mae Gallant, R.N., as a partial requirement for the Master of Nursing degree at Dalhousie University.

## Why was I asked to participate in this study?

You have been asked to participate in this study because you have been hospitalized at the Queen Elizabeth Hospital in Charlottetown, Prince Edward Island, and discharged with a diagnosis of heart attack or angina. As well, you have been invited to participate because you are 55 years of age or greater and can speak and understand English.

#### If I agree to participate, what then?

If you agree to participate, the researcher will come to your home at a mutually agreeable time to interview you about your experience since your discharge from hospital. You will be asked questions about your need for support and the support available to you after discharge. The interview will take approximately one and a half hours. The interview will be audio taped. As well, you will be asked some

demographic questions, such as age, income, and educational level. The researcher will also contact you after the interview by a telephone call or a return visit to your home to clarify her interpretation of your answers in the main interview and also to get your response to ideas that have come from other women interviewed for the study. Also, the researcher may ask you to read the transcript of the interview to verify your answers.

### What rights do I have if I agree to participate?

Your participation in this study is voluntary. There is no penalty for not participating. The interview can be stopped at any time if you do not wish to answer, if you become tired or feel unwell or for any other reason. You have the right to refuse to be audio taped. Before beginning the interview the researcher will review the procedures of the study with you and you will be given an opportunity to clarify any questions that you may have. You will be asked to sign an informed consent.

#### Confidentiality of your responses

Your name and answers to the interview questions and demographic survey will be kept strictly confidential. All identifying information will be replaced with a code number chosen by the researcher and your name will not appear on the audiotape label

or in any publications that describe the findings of this study. Only the researcher and participant being interviewed will be present during the interview. If the interview is taped, then the audiotape will be erased when the study is complete.

### Results of the study

When the study is completed, the results will be summarized in the final thesis report. The thesis will be placed in the library collection. As well, a summary of the study results will be made available to you if you wish to have them. The researcher may also publish the study in a nursing research journal.

If you have any questions you can contact Ms. Gallant at 566-0758 (work).

## APPENDIX D

## Demographic Information - Study Participants

	Code No		
Age	-		
Marital status :	Widowed		
	Divorced		
	Separated		
	Married		
	Single		
Education level:	Elementary (Grade 1 - 8)		
	Some high school		
	High school graduate		
	Some college or technical		
	training		
	College		
	Some university education		
	University degree		
Occupation :			
	Full time; Part-time		
If retired, when w	as the retirement date?		
Family income :	Under \$10,000		

	\$10,000 - \$20,000
	\$20,000 - \$30,000
	\$30,000 - \$40,000
	\$40,000 - \$50,000
	\$50,000 or greater
Ethnic Group :	Caucasian
	Black
	First Nation
	Other
Religious Affiliation	on:
	Roman Catholic
	Presbyterian
	United
	Anglican
	Other
Living Arrangement	:
	Family Home
	Apartment
	Senior unit
	Other (specify)
Do you live alone ?	Yes No
If no. with who	om do vou live?

Do	you	have	any o	ther	types o	of illr	esses	or	conditi	ons?
<del>.</del>		Yes			No	•				
Ιf	yes,	plea	ase li	st th	e illne	esses :	: 			
<del></del>										

#### APPENDIX E

#### Interview Guide

#### Introduction

Thank you for agreeing to be involved in this study. As you know, I am interested in learning more about the support that might be needed and available for women recovering from a heart attack and angina. I want to ask you some questions about your experience. There are no right or wrong answers. I hope that you will answer these questions freely.

#### Ouestions

- 1. To help me better understand how your illness has influenced your life, I would like you to describe a typical day in your life before your hospitalization.
- 2. I am interested in learning if your (heart attack or angina) has affected your daily life. Could you tell me about that?

Possible probes :

Changes in self-care or caring for others

Changes in management of the home

Changes in activity level

Changes in health behaviours (e.g's diet, smoking, adherence to medication)

Changes in social life

3. You mentioned several changes. How are you managing

these changes to your daily life?

Possible probe: Have you experienced any feelings of (stress or worry) as a result of these changes?

4. Have you needed the help or support of others to manage the changes?

If yes, then the following probes may be used to elicit more depth in the answers:

Probe: Where does your help come from?

Probe: Have you asked any of these possible

sources that you mentioned for help since

your discharge from hospital?

Probe: Did you want the help of others but did not request the help? Were there specific reasons why you did not ask for the support of others?

Probe: Have others offered help that was not asked for or was beyond what was requested?

How helpful was this support?

Probe: What type(s) of help did you need from others?

Probe: Was the help that was provided by others useful to you? If so, how?

If not, why was the support not helpful?

If no, then the following probes may be used to understand the answer:

Probe: You mentioned that you have not needed the help of others to manage the changes. Could you tell me more about that?

Additional probes will be used as indicated by the responses of the respondent.

5. Could you describe any support/help that you have given others since your discharge from hospital?

Probe: How do you feel about the support that you have given others while you are recovering from your (heart attack or angina)?

6. In general, during your recovery period, when you have received the help of others, do you feel a sense of obligation to return the support?

Probe: How do you return the help?

Probe: How does this make you feel? (Probe to name the feelings so that the feelings may be categorized as positive or negative).

7. You mentioned the many changes that (heart attack, angina) has had on your lifestyle. Can you describe how your illness has affected your relationships with the important persons in your life.

Probe: How do you feel about this?

#### APPENDIX F

The substantive codes from the first 2 interviews were examined for possible themes. The following list of themes was developed from the actual words of the women:

Theme # 1 - Smothering supported by codes - Can't do that and can't do the other thing; overcrowd me; get on my nerves; smothered; crowding me; the men are driving them crazy; can't do anything; go overboard; get carried away; a lot of people came into the house; here all the time; he wouldn't let me do anything; I did nothing when my husband was around; never had to ask anyone for anything; always checking on you; never left alone; too much; had them coming out of the woodwork; cautious with me; was just in jail here; too many around me; had lots of people around me; doctors, nurses, people; sisters were here all the time; kids never let me do anything; "Mom, I'll do that for you"; he smothers ya..he's terrible that way

Theme # 2- Monitoring supported by the codes - they watch everything; watching like hawks; always somebody here.

Theme # 3 - Knowing limits supported by codes-Leave me alone; I like to do things myself; on my own; don't have patience; I know my limits; I know exactly what I can and what I can't do; used to being alone; just by myself; quiet and nobody to bother me; I like to do things myself; I will do everything when I am alone; resting drives me crazy; hate doing nothing; on holiday now that I am alone; I do it for my self

Theme # 4- Emotional turmoil supported by codes Sounds hateful; selfish; frustrated; I had to bite my
tongue; I never got mad; thinking....under my breath;
hurt their feelings; she's mean; I felt like saying,
please, go home; shouldn't say that because everyone
has been so good; I find it very difficult; its killing
me; won't give in; stubborn; maybe I overdo it; I
couldn't believe...I took a heart attack; I took into
the bawling and crying.

Theme # 5 - Sugar and spice and everything nice supported by codes - Spoiled; they were wonderful; least little thing means so much; doesn't matter what they do;

Theme # 6 - Coaxing supported by codes - Coax me;
my friends would talk about the heart attack; you are
going to get better; they all came to the hospital to
see me; you are going to be fine; you are going to go
bowling again next year; phone me, phone me a lot;
wouldn't believe how many; I had a lot o do dishes,
vacuum for me, clean the sink and tub, do my wash for
me; f company; different ones brought things, came with
things; goodness of their hearts; call your own first;

I have a neighbour....I never saw, ...but, it doesn't bother me; someone is there if you need them; drove me in [town], paying some bills; the nurse took my blood pressure and pulse; phone me.... every day to see if I am all right; Do you need anything?; Heart to Heart thing very helpful

Theme # 7 - Nurturing others supported by codesMy husband does that for me; He's...stressed out and
worried; more worried about him; he had nobody; biggest
fear...me dying; nothing to do with sex; worries
terrible; just a wreck; he would phone me up and he
would be crying; he was a wreck; he thought I was going
to die; he was in terrible shape; I thought he was
going to have a nervous breakdown; he would just there
and hold your hand, same old Mom

Theme # 8 - Rather give then take supported by codes- Rather give than take; return it some way or another; repay people; doing little things back for them; good feeling to do something for others; feels like an accomplishment; I feel like I owe these people something; pay them back; hate people doing things for me.

Theme # 9 - Managing the household supported by the codes - Wash face and hands; have breakfast; do dishes; housework; vacuum; make beds; scrub; your wash; everything around the house; out cutting the grass;

working in the flower beds; wash and iron; make the beds; change the beds; whatever had to be done; never stopped; energy to burn; daily routine; cook supper.

Theme # 10 - Helping with the Housework supported by codes - bake stuff and took it in; growl, go sit down; they baked; they took food; do dishes, vacuum for me, clean the sink and tub, do my wash for me;

Theme # 11 - Needs for Support supported by codes
- every day was a drag; am I ever going to get used to
it; I tire quicker; discouraged; Oh, is this what it is
all about?; not going to feel any different; such a
change of life; awful tired feeling; always down; hate
making different kinds of meals; bothers me; find it
very stressful

#### APPENDIX G

#### Consent Form

It has been explained to me and I understand the following information.

## Purpose of the study

Mae Gallant, R.N., is doing a study on women who have been hospitalized for heart attack or angina to determine the type of support needed and available to these women upon discharge to home. This study is being carried out as a partial requirement for the Master of Nursing degree at Dalhousie University.

# Why was I asked to participate in this study?

I have been asked to participate in this study because I have been hospitalized at the Queen Elizabeth Hospital in Charlottetown, Prince Edward Island, and discharged with a diagnosis of heart attack or angina. I have been invited to participate because I am 55 years of age or greater and can speak and understand English.

### Information to be collected

I understand that I will be interviewed about my needs for support and the support available to me when I was discharged from hospital. The interview will be approximately 90 minutes in length and if I agree, the researcher will audiotape the interview. The researcher will contact me after the interview by a telephone

call or a return visit to my home to clarify her interpretation of my answers from the main interview and also to obtain my response to ideas that have come from other women interviewed for the study. Also, the researcher may ask me to read the transcript of the interview to verify my answers.

## Costs and Benefits

The cost to me will the time needed to participate in the interview. There are no anticipated risks to participating in the study. I understand that I will not benefit directly from my participation in this study but that the findings may be used by nurses and other health care professionals to improve care for women with heart disease.

## Rights of Participants

My participation in this study is voluntary. I understand that the interview can be stopped at any time if I do not wish to answer, if I become tired or feel unwell or for any other reason. If I decide not to take part, my care will not be affected.

#### Confidentiality

I understand that my name and my answers to the interview questions will be kept strictly confidential. All identifying information will be replaced with a code number chosen by the researcher and my name will not appear on the audiotape label or in any

publications that describe the findings of this study.

I also understand that only the researcher will be present during the interview. If the interview is taped, then the audiotape will be erased when the study is complete.

# Results of the study

A summary of the study results will be made available to me if I wish to have them.

# Informed consent

The purpose and process of this research has been explained to me by the researcher. My signature confirms that I have read and understood the information presented above and have been given an opportunity to clarify any information which I did not understand. If I have any further questions, I can contact Mae Gallant at (902)566-0758 (work) or her thesis supervisor, Professor Geraldine Hart, at the Dalhousie University School of Nursing at (902)494-2406.

A copy of this consent form will be left with me.

I agree to participate in this study.

Date	Signature of the Participant
	Investigator

			receive		ummary	of the	study	results
Ιf	yes,	please	provide	your	mailin	g addro	ess bel	.ow:
					<u> </u>			

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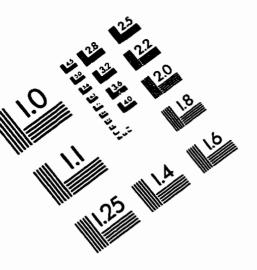
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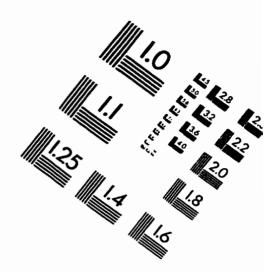
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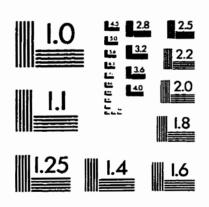
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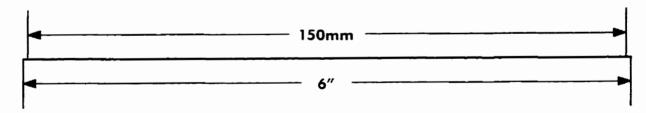
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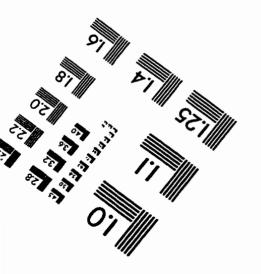
## IMAGE EVALUATION TEST TARGET (QA-3)













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