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HEALTH PRACTICES AND RISK-RELATED BEHAVIORS
AMONG LOW-INCOME WORKING WOMEN:
NURSING ASSISTANTS EMPLOYED IN LONG-TERM CARE AGENCIES

by

Martha A. Nelson

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF PHILOSOPHY

in

Nursing

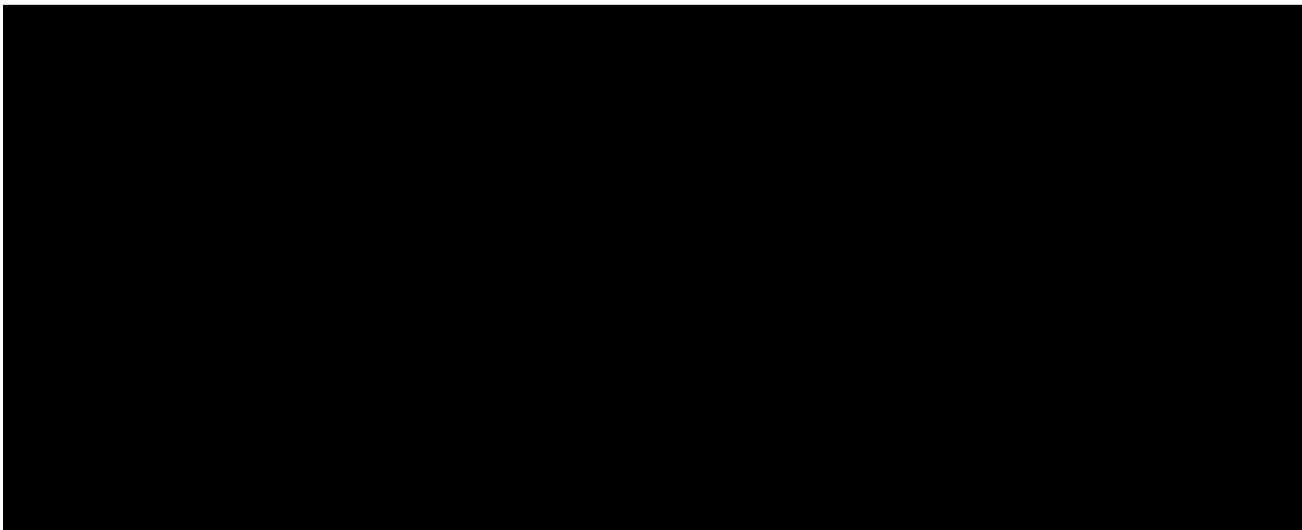
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**HEALTH PRACTICES AND RISK-RELATED BEHAVIORS
AMONG LOW-INCOME WORKING WOMEN:
NURSING ASSISTANTS EMPLOYED IN LONG-TERM CARE AGENCIES**

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Martha A. Nelson

ACKNOWLEDGEMENTS

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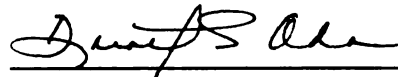
Abstract

Low-income working women are in a disadvantaged position in terms of their health. They are vulnerable to the health threats associated with poverty and do not appear to experience the health benefits of employment to the same extent as women from higher socioeconomic groups. An exploratory-descriptive design was used in an effort to discover how the health practices of low-income working women are influenced by the circumstances of their daily lives. Semi-structured interviews were conducted with thirty-four women employed as nursing assistants in long-term care agencies.

Eating a healthy diet, exercising, and getting sufficient rest and sleep were the most commonly reported health practices. The women considered themselves to be in good health and were generally satisfied with their current health practices but indicated there was more they should be doing for their health. Women who rated their health as good most frequently described exercise as something they should be doing, but women who rated their health as fair most frequently responded that they should be getting more rest. Job-related injury and illness were the most often expressed health concerns. The women reported experiencing chronic physical discomfort as well as actual injury as a result of the heavy lifting involved in their work. Although working overtime was perceived as increasing the risk of injury, most of the women did this to supplement their income.

A high level of involvement in work, family, and social roles was depicted in the women's responses, however work occupied the central position in most of the women's lives and therefore exerted the greatest influence on their health practices. Time and energy constraints related to the demands of multiple role activities, and financial lack arising from disadvantaged socioeconomic conditions, were frequently mentioned barriers to desired health practices.

Long-term care facilities present a unique opportunity for nurses to develop and test community-oriented workplace interventions to promote health and reduce the rates of work-related illness and injury. If the health disparities experienced by low-income working women are to be reduced, then an environment which supports the integration of healthy practices into their daily activities is needed.



Dorothy S. Oda, DNSc, RN,

Chair

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CHAPTER ONE

Introduction

Low-income Working Women and Their Health

Early in the twentieth century concerns about the health of impoverished women workers in the United States led to the passage of labor legislation which regulated certain working conditions for women (Stellman, 1988). As Stellman notes, these "protective" laws, which included specifications of the type of work women could perform and the hours women could work, reflected societal beliefs about the frailty and vulnerability of women and have since been found discriminatory. Assumptions about the detrimental effects of employment on women's health were still prevalent, however, in the 1960s when employment rates for women began to rise sharply (Haynes & Feinleib, 1980). Findings from the large-scale prospective Framingham Heart Study challenged these assumptions. Haynes and Feinleib reported that, during eight years of follow-up, working women did not have higher rates of coronary heart disease (CHD) than housewives. In the Alameda County study, another large-scale prospective study, all-cause mortality rates for employed women did not differ from those for housewives over an 18 year period (Kotler and Wingard, 1989). Other studies have indicated that, for certain groups of women, employment may actually have beneficial effects on health (Adelman, Antonucci, Crohan, & Coleman, 1990; Barnett, Davidson, & Marshall, 1991; Verbrugge, 1983).

Findings from the Framingham study suggested, however, that some groups of

working women, women clerical workers who have children and who are married to blue collar workers, were at greater risk for CHD than housewives and other groups of working women (Haynes & Feinleib, 1980). Subsequent investigations have also identified groups of women workers, primarily those in low status occupations with family role responsibilities, for whom health outcomes are less favorable than for women workers in general (Hibbard & Pope, 1991; Thoits, 1986; Waldron, Herold, Dunn, & Staum, 1982). Despite the recent influx of women into well-paid high-level management and professional positions, large numbers of full-time women workers live at or near the federal poverty level (Bureau of the Census, 1994). For these impoverished women workers, many of whom are raising families, any positive health effects of employment may be offset by the negative health effects of poverty, exposure to occupational hazards, and multiple role strain.

Disparities in Health Outcomes

Social class has been increasingly recognized by epidemiologists as a confounding variable and a risk factor in studies concerned with chronic diseases (Liberatos, Link, and Kelsey, 1986). Recent national survey data indicate that low income is associated with poorer self-rated health, increased restricted activity days, increased chronic limitation of activity, increased bed disability days, and increased work and school loss days (Health Resources and Services Administration, 1990). Lower socioeconomic groups in the United States are at higher risk for heart disease, cancer, and other leading chronic diseases as well as for traumatic injury and death, infant mortality, and infectious disease (Public Health Service, 1990)

Women are particularly disadvantaged by the relationship between poverty and ill health. According to the most recent Census Bureau report ("Pain of Poverty," 1992), 16% of women in comparison to 12.3% of men in the U.S. are poor. Increasing numbers of women are living below the poverty level and female-headed households are more than twice as likely to be poor in comparison with male-headed households. Single-parent families headed by women accounted for two-thirds of the increase in the number of poor families during 1991 (Pear, 1992). Women and children constitute nearly 78% of the poor in the United States and poverty rates have been particularly high among African-American, Hispanic, and Native American women (Public Health Service, 1985). The 1987 poverty rate for female-headed caucasian families was 26.7% compared to 51.8% for African-American and Hispanic families (Health Resources and Services Administration, 1990).

As mentioned previously, employment does not protect women from poverty. Working women continue to earn less than working men. In 1993, the median weekly earnings for U.S. men were \$514 in comparison to \$395 for U.S. women (U.S. Department of Commerce, 1994). This means that, despite increasing economic responsibilities resulting from rising costs of living and single parenthood, women earn an average of 77 cents in comparison to every \$1.00 earned by men. Wage inequalities between men and women, with variations in the size of the differential, are universal across all occupational groups (Unger, 1993). In some occupations employing primarily women, over 40% of the full-time workers earn wages that keep them at or below the poverty level. This is particularly the case for

women of color and for women over 45 years of age (Stellman, 1988).

More women are also employed in jobs that are less likely to offer health insurance, such as small firms, service industries, and temporary jobs (Tallon & Block, 1988). According to a Kaiser Foundation poll, (Russell, 1992), 87% of California's uninsured are working people and their families. Although women are more likely to be recipients of public health insurance, poor and near-poor working women, specifically female heads of households, are often excluded from Medicaid coverage due to income restrictions, and are thus disproportionately represented among the uninsured (Tallon & Block, 1988).

Working women, particularly poor working women, are also at risk for health hazards on the job. Stellman (1988) notes that it is in those occupations that employ large numbers of women for low wages that many women experience ill effects from occupational exposures. Stellman estimates that in 1980, 250,000 full-time workers employed in female-dominated low wage occupations were seriously enough injured or disabled on the job to file workers compensation claims. This is likely to be a very low estimate of exposure to injury since workers' compensation rates do not generally reflect chronic work-related conditions. In certain occupations, such as household work, injuries and exposures are often unreported. As Stellman concludes, "being employed full-time, yet impoverished or living in frank poverty, is not good for one's health" (Stellman, 1988, p.99).

Gaps in Information about Determinants of Health Outcomes

Lifestyle has long been implicated as an important determinant of health

outcomes. Prominent among the health outcomes linked to lifestyle is morbidity and mortality due to CHD. Because CHD accounts for more deaths than any other health problem, behaviors to reduce cardiac risk are generally considered essential components of a healthy lifestyle. The increased prevalence of risk factors such as cigarette smoking, high blood pressure, and obesity among lower socioeconomic groups (Health Resources and Services Administration, 1990), suggests that the poorer health of those with low-incomes can be, at least partially, linked to differences in behavior. It has been consistently reported in the literature that the likelihood of engaging in health promotive behaviors increases with socioeconomic status (Dean, 1989; Palank, 1991). Blue collar workers have been reported as less likely than other occupational groups to engage in either leisure or supervised exercise (Dishman, Asllis, & Orenstein, 1985). Income and education have been found to be significantly and positively associated with physical activity and nonsmoking status in a number of investigations (Duelberg, 1992; Hibbard & Pope, 1987; Krick & Sobal, 1990).

The promotion of healthy lifestyles for all Americans has been identified as a major strategy for improving health outcomes for the nation by the year 2000 (Public Health Service, 1990). There is increasing recognition, however, that lifestyle is not simply a matter of individual choice and that health behaviors need to be considered within the context of the social, economic, and political environments which influence these behaviors (Becker, 1993; Slater & Carlton, 1985; Williams, 1990). Currently, however, the interactions and processes through which individual health practices and

lifestyles are shaped by the larger environment are not well articulated or understood.

Zambrana (1988), contends that this lack of understanding of environmental influences on health is particularly the case for impoverished women and women of color. She notes that although increased concern about the needs of women in general has stimulated research on women's issues during the last decade, the needs of poor and minority women have not received as extensive attention. She argues that existing analytic frameworks developed through the study of dominant-culture middle class populations, have limited explanatory power when applied to poor and minority populations. Thus low-income women may be doubly disadvantaged by primary prevention programs that fail to give adequate attention to the risks associated with their impoverished status as well as those of particular importance to women in general.

Explorations into the influence of women's employment on health and health behavior have been greatly enhanced by consideration of what Lewin and Olesen (1985), have termed the "intrinsic" and "extrinsic" characteristics of women's working environments. Intrinsic characteristics are those typically considered work-related such as the organization of the workplace and the nature of the work, while extrinsic characteristics include non work-related factors such as the integration of work and domestic roles and the meaning of the work experience for the worker. Lewin and Olesen's approach represents a significant departure from much of the earlier work with men in which employment was viewed as the central role and other roles were ignored. Most of the recent studies addressing the relationship between

women's employment and their health do not consider women's employment roles singularly, but consider interactions among women's work and family roles. As a result, there is increasing evidence that women's role activities represent important avenues of interaction between the larger socioeconomic environment and women's health outcomes.

Contrary to what might be expected, when combinations of employment, marital, and parental roles are considered, findings indicate that women in multiple roles report fewer physical symptoms and health problems than women in fewer or single roles (Adelmann, et al., 1990; Hibbard & Pope, 1983; Verbrugge, 1983). The samples for many of these investigations, however, have been primarily white middle-class women and there is some evidence that there are race and class differences in health and health practices among women involved in work and family roles (Lutz, 1989; Waldron, et al., 1982; Waldron & Jacobs, 1988). Stevens, Hall, & Meleis (1992), describe the economic stranglehold experienced by women clerical workers, particularly those who are single mothers. Zambrana (1988), notes that impoverished and minority women often bear the heaviest burdens in not only caring for and nurturing children, but also in supporting them financially. Family income has been reported to be significantly related to well-being (Baruch & Barnett, 1986), depressive symptoms (Kandel, Davis, & Raveis, 1985), psychological distress (Meleis, Norbeck, & Laffrey, 1989; Thoits, 1983, 1986), and anxiety (Barnett & Baruch, 1985) in women involved in multiple roles. The combination of inadequate financial resources and multiple role responsibilities may inhibit healthy lifestyle behaviors and contribute

to the poorer health outcomes experienced by low-income women.

The idea that the combination of multiple roles and limited resources shapes women's health practices was supported in an earlier study of risk perception and health practices among seven low-income women with identified cardiac risk factors (Nelson, 1992). All of the women interviewed reported involvement in family roles with the extent of involvement depending on the ages of the children or grandchildren, the number of children or household members, and the particular family circumstances. Demands as well as satisfactions derived from family role involvement were reported in relation to managing cardiac risk. The women also described the effects of inadequate social and material resources on their risk managing activities. Although social support was important to the women, involvement with others was described as having both positive and negative consequences in relation to their health. Although there is a growing body of knowledge connecting women's involvement in employment, family, and other roles with health, much is still not known about the ways in which health practices are integrated into women's daily lives and how these practices are influenced by socioeconomic factors. It is important that this information comes from the women themselves as there is a need to build an understanding of women's health behavior that is based on women's lived experiences.

Summary of the Problem

Low-income working women are in a unique position in terms of their health. They are vulnerable to the health threats associated with poverty and at the same time

do not experience the health benefits of employment to the same extent as women from higher socioeconomic groups. Additionally, their employment in low-status female dominated occupations may further expose them to health risks. Involvement in domestic role activities often compounds these negative health effects as, with limited resources, the women struggle to care for themselves and their families.

Lifestyle is considered an important determinant of health, but for low-income working women, health-enhancing lifestyle choices are often limited by the circumstances of their daily lives. Currently there is a lack of knowledge about the ways in which low-income women integrate health practices into their day-to-day activities. The usefulness of explanatory models based on investigations of other populations has been questioned. The importance of women's role activities and their perceptions of and use of available resources in relation to their health practices has been suggested, but there is a need for more information about the nature of these relationships.

Purpose of the Study

The purpose of this study is twofold:

- 1) to describe the day-to-day health practices of a sample of low-income working women; and
- 2) to identify some of the personal, interpersonal, and socioeconomic factors which influence the health practices of low-income working women.

Significance of the Study

The disadvantaged position of impoverished women in relation to certain health outcomes including the prevalence of smoking, overweight, and hypertension has been acknowledged in the goals and objectives published by the Public Health Service (1990) and the Office on Women's Health (1991). Low-income, black, and Hispanic women and women with high blood pressure are among the special populations identified for increased attention in relation to the goals for reduction in the prevalence of overweight. Women of reproductive age are specified in objectives for reduction in the prevalence of cigarette smoking. Low-income adults, both women and men, are a designated group for special attention toward increasing exercise. Nursing and personal care workers, an occupational group in which the majority of workers are women, is among those groups for which there is a particular need to reduce the high rate of work-related injuries.

These targeted approaches have been undertaken as a means for identifying and reaching women at risk, but if these objectives for women's health are to be achieved, a greater comprehension of the ways in which health behaviors are patterned by the socioeconomic environment in which women lead their daily lives is needed. Interventions designed for and tested in other populations may not be appropriate for low-income women with limited resources and multiple role responsibilities. Wing (1988) notes that the public health interventions directed toward changing health behavior related to cardiovascular disease are more effective among higher socioeconomic groups with greater assets and flexibility for change.

He also points out that as higher socioeconomic groups decrease their consumption of cigarettes and high-fat foods, poor and minority groups have increasingly become the targets of marketing campaigns for these products.

Zambrana (1988) maintains that awareness of the influence of socioeconomic dimensions, including multiple role responsibilities, is critical to understanding the health needs of low-income women. This awareness can only be achieved when the voices of the women themselves are heard and cannot be gained through extrapolation or deduction based on information from other sources. When the health concerns and health needs of low-income working women are better understood, then more appropriate and more effective ways of addressing these concerns and needs may be discovered.

It is hoped that this study will draw attention to the issues surrounding the health-related lifestyle behaviors of low-income working women, a population that is relatively invisible in the current literature on health promotion and health protection. This literature is reviewed in the following chapter and those studies which have particular relevance to the study purpose are highlighted. Methods for data collection and analysis employed in the study are described in Chapter Three. Two chapters, Chapters Four and Five, are devoted to the presentation of study findings. The actual health practices reported by the women and some of the personal factors influencing these practices are described in Chapter Four. In Chapter Five, findings pertaining to the broader socioeconomic context of the women's health practices and their exposure to work-related risk are described. These findings are then critically examined and

compared to the findings of other investigators in the discussion contained in Chapter Six. Finally, in Chapter Seven, the implications of the study findings for nursing practice, health policy, and future research are proposed.

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CHAPTER TWO

Background and Review of the Literature

Conceptual Models

Health Behavior Models

Modifiable lifestyle factors are considered important determinants of morbidity and mortality due to CHD and other leading causes of death for women in the U.S. Thus changing individual behavior has become a major focus for public health policy (Avis, McKinlay, & Smith, 1990). A number of explanatory models emphasize individual responsibility for health. Models such as the Health Belief Model (Becker, Drachman, & Kirscht, 1974), Control Theory (Rotter, 1977), the Theory of Reasoned Action (Ajzen & Fishbein, 1980), Social Learning Theory (Bandura, 1977), and the Health Promotion Model (Pender, 1987), stress the importance of personal attributes such as knowledge, perceptions, self-control, and motivation in determining health-related behavior. Although some authors have pointed out that the relationship between changes in preventive health behavior and improved health has not been clearly demonstrated (Lorig & Laurin, 1985; Slater & Carlton, 1985), the assumption that lifestyle changes are important in improving health status is fundamental to the health behavior perspective. Based on this assumption, a substantial amount of nursing research in the area of preventive health and health promotion has focused on identifying the determinants of health behavior and testing effective strategies for changing individual and family lifestyles (Pender, 1984).

In general, there has been support for many of the constructs contained in the

various health behavior models. Palank (1991), reviewed the literature for support for Pender's health promotion model (Pender, 1987), and concluded that "all the proposed factors have been supported through research, at least in part, as either directly or indirectly influencing the intent to participate in different health behaviors" (p.827). Mikhail (1981) evaluated the empirical adequacy of the Health Belief Model (Becker, et al., 1974) and reported a number of findings to support the model variables as predictive of a wide range of health behaviors. Mikhail contends, however, that the Health Belief Model is only partially developed and in need of further refinement and testing. Despite the extensive efforts directed toward understanding the determinants of health behavior much unexplained variance in health practices remains suggesting that there are variables that have either not yet been incorporated in existing models or have not yet been sufficiently examined (Palank, 1991; Rakowski, 1987). Questions have also been raised about the adequacy of the Health Promotion Model in describing health-promoting behaviors in minority populations (Weitzel, & Walker, 1990).

Individualistic health behavior models have been critiqued for their narrowed scope and "downstream" perspective (Butterfield, 1990). Williams (1989), points out that more than choice is involved in the determination of health behavior, and that the structural determinants of health and behavior are ignored by individualistic health promotion approaches. Based on her review of the primary motivational models that have been used to explain and predict cardiovascular risk reduction, Fleury (1992), concludes that these models "do not allow for an investigation of the patterning of

human behavior in interaction with the environment, including the influence of factors which may prohibit the individual from initiating and sustaining behavior change" (p.237). It has been argued that inequalities in health status cannot be eliminated unless the socioeconomic conditions that result in poorer health for the disadvantaged are addressed in health promotion policies and programs (Becker, 1993; Slater & Carlton, 1985; Williams, 1990). These authors do not suggest that the influence of individual lifestyles and behaviors on health be disregarded, but rather that they be considered within the context of the political, economic, and social environment. Based on their secondary analysis of national data samples, Slater and Carlton (1985), contend that socioeconomic status and health practices have independent effects on health status and that "neglecting either planned social change or strategies to modify health behaviors would indeed be short sighted health policy" (p.32). Williams (1990), proposes that socioeconomic status also influences health indirectly through psychosocial factors including health practices and lifestyle but notes that the links between socioeconomic status and health behavior have not been systematically and empirically explored.

A Framework for Socioeconomic Status and Health

Based on his review of the literature on the relationship between socioeconomic status and health outcomes, Williams (1990) presents a conceptual framework which links socioeconomic status, psychosocial factors, and health outcomes and hypothesizes the nature of the relationships among them. Williams proposes that socioeconomic status, the term he uses to indicate social stratification or

the inequality in ranking that exists in society, is an important and direct determinant of health status. Health practices and medical care are depicted in William's framework as linked to social status and as mediators of the relationship between socioeconomic status and health status. Thus, socioeconomic position is postulated as the fundamental cause of socioeconomic disparities in health and health practices and access to medical care are viewed as pathways through which the social structure impacts on the health of individuals. In his framework Williams suggests that socioeconomic status has both direct and indirect effects on health. Williams' paradigm for research on socioeconomic status and health is presented in Figure 2.1

Williams (1990), does not specifically address the influence of multiple role responsibilities on health but includes social ties, perceptions of control, and family, occupational, and residential stress among the psychosocial factors considered to be intermediate mechanisms for the influence of socioeconomic status on health. These psychosocial factors are represented in some of the frameworks guiding investigations into the health effects of multiple role activities (Froberg, Gjerdingen, & Preston, 1986), however they are limited in scope. The larger concept of women's role involvement and the central positions women's roles occupy in their daily lives is not fully captured in William's model. Current evidence supports the idea that, for women, role involvement may also occupy a mediating position linking socioeconomic status to health outcomes.

Multiple Roles and Health Models

Research on the effects of multiple roles on women's health has been guided

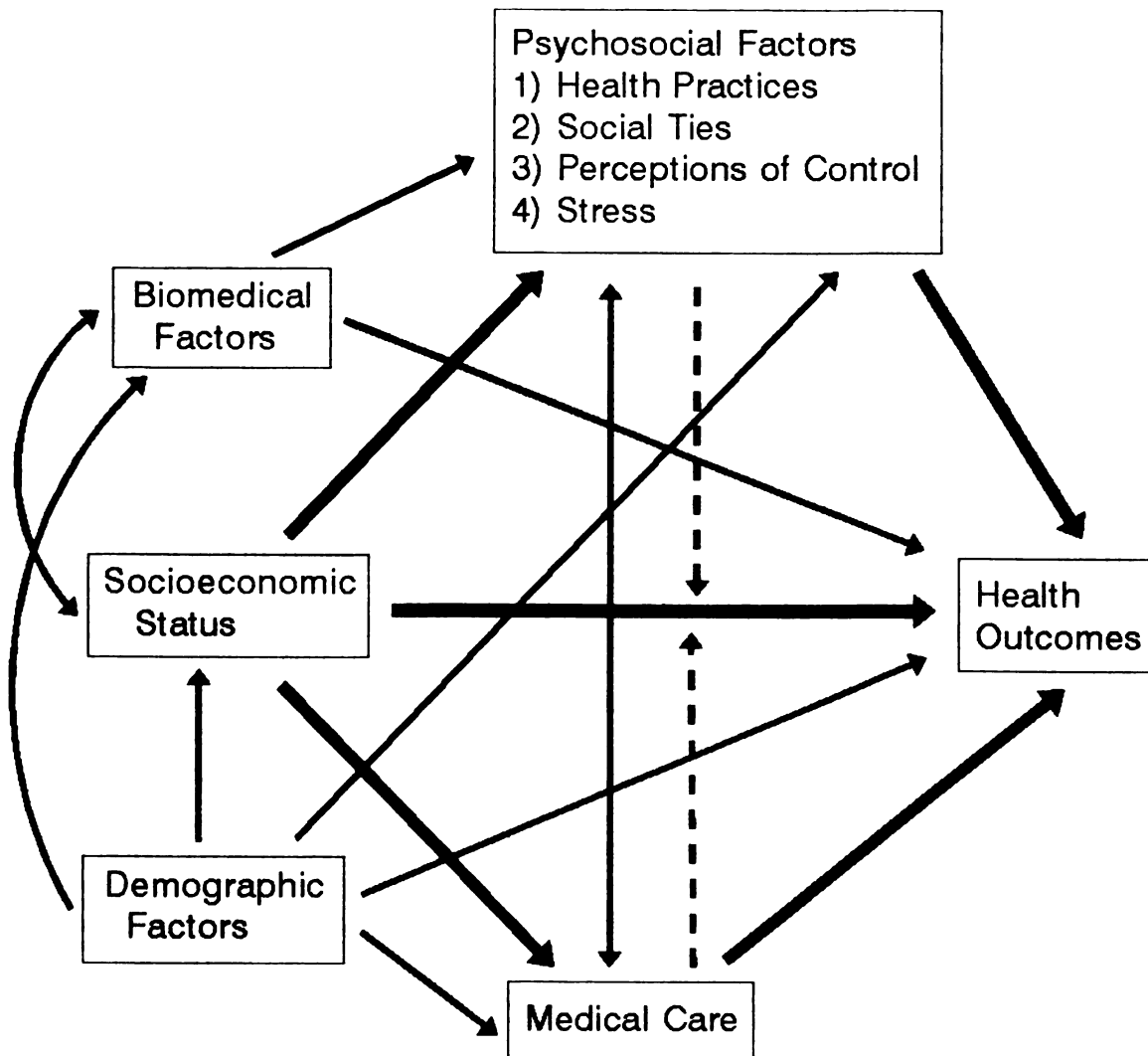


Figure 2.1. Williams' Paradigm for Research on Socioeconomic Status and Health

(Williams, 1990, p.82).

by models derived from role theory. Two predominant models of role involvement and health, the role enhancement model and the role scarcity model have been most frequently described and examined. The scarcity hypothesis, originally advanced by Goode (1960), assumes that the resources required for role involvement are limited and the additive effects of multiple roles result in overload, strain, and conflict. The role enhancement hypothesis, described by Thoits (1983), emphasizes the beneficial effects of multiple identities in terms of commitment, purpose, self-esteem, and social support. In recent investigations of multiple roles and women's health, the enhancement model has received more support than has the scarcity model (Froberg, et al., 1986).

Barnett and Baruch (1985), argue that neither model is sufficient and describe findings to support a role quality model which proposes that it is the quality of the roles and their interactive and buffering effects that is important for health. A role quality framework has been used in investigations by Barnett, et al. (1991), Baruch and Barnett (1986), Meleis, et al., (1989), and Voyadanoff and Donnelly (1989). These investigations focused on the relationship between role quality and the experience of physical or psychological symptoms.

Nathanson (1980), notes that explanatory models of women's social roles and health are similar in that they rely on a stress model to account for the effects of particular or multiple roles on health. This often implicit connection between emotions and physiological processes has been recently challenged by a number of stress researchers (Leventhal & Tomarken, 1987; Vingerhoets & Assies, 1991;

Watson & Pennebaker, 1989), yet it remains unquestioned and untested in much of the work on women's employment and domestic roles and health. Recent investigations in which measures of job strain have been linked to physiological indicators such as blood pressure and endocrine factors in women (Fox, Dwyer, & Ganster, 1993; Theorell, Ahlberg-Hulten, Jodko, Sigala, & de la Torre, 1993) have provided some empirical support for the stress model connection.

Not all studies of women's roles and health are dependent on stress theory. Examples of alternative approaches are those studies which consider multiple roles and health behavior within time use (Bird & Fremont, 1991), or resource availability (Lutz, 1989; Woods, Lentz, & Mitchell, 1993), frameworks. Health behavior has been studied less frequently in relation to women's roles than have other health outcomes such as morbidity and mortality, psychological distress, and physical symptoms. If health behavior is considered an important determinant of health outcomes, then the day-to-day management of time and other resources to enable positive health practices may be as meaningful as the women's emotional responses to their particular role circumstances.

Perspective for the Study

The preceding frameworks were described here only to establish a general ideological perspective rather than to suggest models to be tested. The notion that the health practices of the socioeconomically disadvantaged are shaped by the larger social structure and are not entirely under individual control is basic to the approach taken in this investigation. The health-related lifestyles and behaviors of

impoverished women are viewed as responses to the realities and constraints of their external environments and not solely as individual characteristics. Women's interactions with their external environments occur primarily through their performance of role activities and thus it can be postulated that the nature of women's involvement in various roles influences their health practices. This perspective allows for an open and exploratory approach to the description of health practices and a range of potential influences on these practices.

Women's Health Practices

A review of women's health literature, in conjunction with the investigator's own health-related experiences and interests, resulted in the recognition of some general areas of potential inquiry relevant to the health practices of low-income working women. The intent was not to produce an exhaustive list of variables to be explored but instead to identify those factors which seemed most salient in regards to the purpose of the study. A summary of the literature addressing these identified areas of inquiry is presented in the following sections. Throughout this review the focus has been on those studies in which specific findings for women, employed women, women from low-income groups, and women of color are reported.

Surveys of Women's Health Practices

In the Alameda County Study, a large-scale longitudinal study initiated in 1965, seven health habits were shown to be associated with physical health status and mortality. The Alameda seven health habits, often referred to as the "Alameda 7", are: 1) not smoking, 2) limiting alcohol intake, 3) sleeping 7-8 hours a night,

4) exercising, 5) maintaining desirable weight for height, 6) avoiding snacks, and 7) eating breakfast regularly (Belloc & Breslow, 1972). These "Alameda 7" practices have formed the bases for a number of surveys of health practices including the 1985 National Health Interview Survey (Schoenborn, 1986). Schoenborn presents an analysis of these data according to gender, ethnicity, and socioeconomic characteristics. The following percentages were reported for approximately 11,000 women in the \$7,000-\$14,999 income range: 1) not smoking, 69.8%; 2) limiting alcohol intake to an average of 1-2 drinks a day or less, 90.4%; 3) sleeping 7-8 hours a night, 62.3%; 4) moderately active to active levels of leisure time physical activity, 35.3%; 5) maintaining a body weight less than 10% above the desirable weight according to the 1983 Metropolitan Life Insurance table, 58%, 6) avoiding snacks, 30.6%; and 7) eating breakfast regularly, 58.5%. Only 9.1% of the women reported engaging in 6 or 7 good health habits and the total number of good habits was positively associated with both education and income. Women of color were more likely to be current smokers, more likely to limit alcohol intake, less likely to sleep 7-8 hours a night, less likely to engage in moderately active to active leisure time activities, more likely to be above desirable body weight, less likely to avoid snacks, and less likely to eat breakfast regularly than were white women of all income groups combined.

Duelberg (1985) also used data from the 1985 National Health Interview survey to compare specific primary and secondary preventive health behaviors among black and white women. Although black women were less likely than white women

to engage in the primary preventive behaviors which included exercise, maintaining a favorable weight, and not smoking, they were more likely than white women to have a pap test and breast exam, which were considered as secondary preventive behaviors. She also found geographical differences in health behaviors with urban residents more likely to receive cervical cancer screening and breast exams and rural women more likely to be non-smokers. The studies just described suggest that women's health behaviors vary with income, education, ethnicity, and location of residence.

Health practices may also vary among women's occupational groups. Turk, Rudy, and Salovey (1984) compared LPNs, teachers, and college students on their attitudes about and performance of the 30 most frequently reported health-protective activities identified by Harris and Guten (1979) in their survey of self-defined health behaviors. Harris and Guten's list of health-protective behaviors includes the "Alameda 7" but is much broader in scope and includes practices such as wearing seat belts, avoiding high crime areas, and ignoring health advice from friends. The 33 LPNs in Turk, et al.'s (1984) sample were all female with a mean age of 31.4, and they were considered of relatively low status in relation to the teachers, college students, and general population. They can also be considered most representative of low-income working women. Although the college students and teachers ranked eating sensibly and getting enough exercise among the three most important health practices, the LPNs did not. The LPNs rated keeping emergency numbers near the phone, destroying old or unused medications, and getting enough sleep and relaxation as the most important behaviors for maintaining health. The LPNs responses

indicated that the first two behaviors were performed most frequently and that getting enough sleep and relaxation were less frequently accomplished than were other health behaviors they considered less important.

Rather than rely on lists of health practices generated "a priori", some investigators have used open-ended interview questions and other inductive methods to elicit information about health practices. In Duffy's (1986), study of 59 female-headed single parent families, many of which were low-income; eating a balanced diet, getting sufficient rest, and exercising were the three most frequently mentioned primary prevention behaviors. Duffy found that primary prevention behaviors fell into two categories: 1) health care system related behaviors such as routine examinations, immunizations, and medical care, and 2) behaviors routinely learned during childhood such as eating balanced meals, personal hygiene, and obtaining sufficient rest. She noted that many of the long-standing routine behaviors were integrated into the family lifestyle and were considered "common sense" behaviors. Other relatively newer behaviors were undertaken specifically to promote health or prevent illness and were consciously performed as they had not yet become routine.

Nutrition, exercise, and behaviors related to psychological well-being were the three categories of health behaviors most frequently reported by healthy adults in Laffrey's (1990) primarily female sample of 85 healthy and chronically ill adults. Laffrey also investigated the primary reasons for the reported health behaviors and found that these could be categorized as 1) illness prevention, 2) health maintenance, and 3) health promotion. Activities related to nutrition and psychological well-being

were most frequently performed to prevent illness while exercising was more likely to be considered a health-promoting activity.

Positive versus Negative Health Practices

A common assumption in the health behavior literature is that health-promoting activities, those directed toward sustaining or increasing one's level of wellbeing, are also inherently risk-reducing. It has even been explicitly stated that "health-promoting behaviors are activities in which an individual engages to achieve well-being and self-actualization, thereby preventing risk factors from developing" (Fleetwood & Packa, 1991, p.67). The possibility that, for members of some groups, behaviors that they perceive as important to their well-being, for example smoking, also pose health risks, has scarcely been addressed. Those struggling at the bottom of the social system, with limited resources and opportunities, may be dependent on certain behaviors to maintain a sense of balance in their lives, yet these behaviors may also increase their risk of heart disease or other chronic illnesses. As noted by Gottlieb and Green (1984), both positive and negative health practices have been reported as means for coping with stressful life events. Willians (1990) observes that "risk factors for distant health outcomes may be the basic survival strategies of day-to-day existence for low socioeconomic status persons" (p. 91).

Cigarette smoking in particular has been linked to psychological distress related to disadvantaged social and economic circumstances. Mechanic and Cleary (1980), found smoking to be significantly related to psychological distress symptoms indicating anxiety and depression in young women and men. Likelihood of smoking

was increased for African-American women and men with reported high frequency of hassles and for African-American women with weak social networks in a study by Romano, Bloom, and Syme (1991). The most frequently reported hassles were unemployment, living in an unsafe area, insufficient money for necessities, home repair problems, and serious illness or accident. Gottlieb and Green (1984) also report an association between negative life events and smoking initiation for women and men.

Graham (1987) interviewed 57 British women caring for pre-school children in low-income families and found that over half of the mothers smoked and those who smoked were more likely to feel that their lives were stressful in terms of financial and relationship worries and concerns about their children, more likely to report feeling under pressure, tired, and lonely, and less likely to report they had friends in whom they could confide. Smoking was viewed by these women as a way of coping with the experiences of motherhood as well as with the experiences of economic impoverishment, what Graham terms "caring in poverty", and as such was considered both a luxury and a necessity. Graham observes that smoking has a paradoxical place in the lives of women, "it works to promote women's sense of well-being, while threatening their physical health" (p.55).

There is evidence that coping needs influence health behaviors other than smoking. Avery (1990), in her description of the evolution of the National Black Women's Health Project, includes a quote from one of the participants that illustrates this very well. "My home life is not working. My old man is an alcoholic. My kids

got babies. Things are not well with me. And the one thing I know I can do when I come home is cook me a pot of food and sit down in front of the TV and eat it. And you can't take that away from me until you're ready to give me something in its place" (p. 7).

It is, as Rakowski (1986) has called them, the "nagging daily difficulties" rather than the life-threatening crises that divert time and energy from health-promoting and health-protecting activities. O'Brien (1982), uses the term "pragmatic survivalism to describe the health behavior patterns of Mexican-American migrant workers. She defines pragmatic survivalism as "symbolizing a pattern of health-illness attitudes and behaviors that focus on the achievement and maintenance of low-level wellness in the most practical manner possible for the continuance of productive life". The health-seeking behaviors important to the migrant farmworkers were those that enabled them to carry out their usual occupational and other primary roles with minimal disruption. Preventive and risk-reducing activities had low priority in terms of day-to-day survival needs.

Personal Factors Influencing Women's Health Practices

Perceptions of Health

Definitions of health and perceived health status are both considered among the individual cognitive-perceptual factors found to be associated with health-promoting behaviors (Palank, 1991). Smith (1981), noting the many ways health has been defined, found that ideas about health could be organized into four models: 1) eudaimonistic, 2) adaptive, 3) role-performance, and 4) clinical. Within the

eudaimonistic model, health is defined as exuberant well-being and self-actualization, while the adaptive model indicates that health is demonstrated by the ability to adjust to the environment to maximum advantage. The role performance model of health emphasizes the ability to perform social roles effectively and the absence of illness is indicative of health according to the clinical model. When a multi-ethnic sample of 528 healthy women were asked what being healthy meant to them, the clinical view of health was reflected most in the responses (Woods, Laffrey, Duffy, Lentz, Mitchell, Taylor, & Cowan, 1988). The women, however, reported nine different images of health considered within the eudaimonistic model. Higher levels of education and income were associated with a greater variety of health images and more images in the eudaimonistic category. No differences in variety or frequencies of health images were found in relation to ethnicity or employment status. A relationship between health conception and the type of health activities performed was reported by Laffrey, 1985. She found that women and men with a eudaimonistic view of health selected more health-promoting behaviors than those with did those with adaptive, role-performance, or clinical views of health.

Self-rated health or perceived health status has been reported as associated with health behavior in a number of studies (Duffy, 1988; Laffrey, 1985; Mechanic & Cleary, 1980; Pender & Pender, 1986), and is one of the cognitive-perceptive factors included in the Health Promotion Model (Pender, 1987). In Duffy's (1988), study of midlife women, those who reported their current health status as good rated high on an exercise subscale, while those who reported poor past health status had high scores

on nutrition and stress management subscales. Poorer self-rated health has been associated with decreased intentions for weight control (Pender & Pender, 1986; Zindler-Wernet & Wiess, 1987), decreased likelihood of initiating or adhering to exercise programs (Dishman, et al., 1985; Hibbard & Pope, 1987; Muhlenkamp, Brown, & Sands, 1985), cigarette smoking (Hibbard & Pope, 1987), and fewer positive health practices (Mechanic & Cleary, 1980; Muhlenkamp, et al., 1985; Rakowski, 1986).

Members of minority and low-income groups are more likely than the general population to consider their health to be fair or poor (Health Resources and Services Administration, 1990). In a comparison of the health perceptions of men and women with mild hypertension, Anson, Paran, Neumann, & Chernichovsky (1993) found that twice as many women as men rated their health as poor. Poor health ratings were associated with unhappiness, distress, and a weak sense of coherence. Bird and Fremont (1991), found that the burden of housework had a negative impact on self-rated health and that women employed more than 30 hours averaged 12.3 hours of housework while men employed more than 30 hours a week averaged only 3.1 hours of household labor. Though the women spent more than twice as many hours on child care, this was not found to have a significant impact on health. It may be that there are satisfactions inherent in the role of mother that moderate the negative health effects of the burden involved. Ross and Bird (1994), also report higher perceived health ratings for men than for women. They contend that women are disadvantaged in terms of health by gender inequality in paid and unpaid work, more distress, and

fewer subjective work rewards.

Health Concerns and Perception of Risk

Perceived susceptibility to a health problem is presented in the Health Belief Model (Becker, et al., 1974), as one of the individual perceptions influencing preventive health actions. Hibbard and Pope (1987), propose that women's health concerns are linked to their health status and to their health behaviors. In their study of 1,155 working-aged women, Hibbard and Pope found health concerns to be related to both medically-defined and self-defined health behaviors. Women with poorer self-rated health and lower levels of education were more likely to have greater health concerns.

Female employees in an oncology center had a perceived risk of developing cancer that was higher than their projected actual risk. Perceived cancer risk was associated with cigarette smoking, personal experience with cancer among family and friends, and perceived health status (Helzlsouer, Ford, Hayward, Midzenski, & Perry, 1994). Despite high perceived risk, participation in colon cancer screening was low, however most of the women had received pap smears and mammograms in the past three years. Family history was also found to be an important determinant of perceived risk of breast cancer in a survey of 36,000 women participating in a breast cancer screening program (Vernon, Vogel, Halabi, & Bondy, 1993). Black women were more likely to perceive their risk as high in comparison with white women. Perceived risk of breast cancer, however, was only associated with having had a mammogram and not with other health-related behaviors for the early detection of

breast cancer.

Walters (1993) surveyed 356 Canadian women and found that the health problems they were most likely to worry about were motor vehicle accidents, breast cancer, heart disease, being overweight, stress, and arthritis. A number of women in Walters' sample also reported fears of violence. In interviews with a subset of the sample, Walters (1993) found that the women often referred to family history in explanations of worry about particular health problems such as cancer, heart disease, or diabetes. Worry about mental health problems such as stress and depression was tied to the women's social circumstances rather than to family history. The Canadian women were less likely to worry about some of the problems they were actually experiencing, suggesting that some problems had become normalized in the women's day-to-day lives. Tiredness was reported by 68% of the women and disturbed sleep was reported by 46.1% of the women, yet concern about these problems was expressed by approximately half of the women experiencing them. On the other hand, the number of women reporting concerns about being overweight exceeded those who reported overweight as a health problem.

While the findings cited suggest that women's health concerns and perceptions of risk may not reflect public health estimates of risk, a review of some of the available data describing the major health risks for women in the areas of chronic illness and occupational injury is applicable to the current investigation. A brief summary of current risk information in relation to working women follows.

Risk of chronic illness. Cardiovascular disease is the leading cause of death

for women in the United States. The American Heart Association (1989) has called heart disease in women the "silent epidemic" thus noting both the latency and the extent of a disease that accounts for one-third of all deaths among women. In California in 1992, more women of all races died from heart disease than from malignant neoplasms, the second leading killer of women (State of California Department of Finance, 1993).

In an analysis of mortality information for 61,561 working-aged women included in the 1979-1981 California Occupational Mortality Study (Doebbert, Riedmiller, & Kizer, 1988; Kizer, 1987), breast cancer was found to be the leading cause of death for working women as a group, but ischemic heart disease was the leading cause of death for black working women and for women not in the labor force. Doebbert and colleagues found a higher mortality risk for women in certain occupations. Service occupations, which include traditional female occupations such as waitresses, licensed vocational nurses, health aides, cosmetologists, and telephone operators, were associated with the largest number of female deaths and the highest standardized mortality ratio (SMR) for all causes of death. Women in the low-income service occupations just listed experienced more than one and one-half times the expected risk of death. Black and white women working as licensed vocational nurses, health aides, and orderlies, had significantly high SMRs for suicide, hypertensive disease, cerebrovascular disease, ischemic heart disease, and accidents. White women in that occupational group also had a higher SMR for diseases of the urinary system than any other occupational group. Generally, the overall SMRs for

women employed in clerical and sales occupations were much lower than those for women in health-related service occupations.

Although the increased cardiovascular mortality rates reported for licensed vocational nurses, health aides and orderlies may be at least partially related to socioeconomic status, a survey of 5,921 Swedish women workers suggests the influence of certain job characteristics on cardiovascular risk (Hall, Johnson, & Tsou, 1993). Low work control, low work social support, and high physical job demand were associated with excessive risk of cardiovascular mortality. This job pattern was characteristic of blue collar workers which included manual workers of all skill levels. Interestingly, high psychological job demands were not associated with increased cardiovascular morbidity or mortality.

Risk of Occupational Injury. Information about occupational injury rates is commonly based on the number of injuries and illnesses reported to state workers' compensation agencies, however it is recognized that these data are indicative of the most severe cases and that many work-related health problems are not reported (Stellman, 1988). The types of occupational health risks experienced by women workers vary with the occupation. The largest number of women are employed in clerical work where hazards include video display terminals, exposure to poor air and lighting, and stress (Quinn and Woskie, 1988). Women employed in health services are exposed to infectious disease, radiation, sterilizing and anesthetic gases, lifting and falls, and stress (Quinn and Woskie, 1988). It is women employed in health care, particularly those employed as nursing assistants, that represent a high risk

population of particular interest in relation to the current study.

The increased risk of injury associated with nursing assistant work has been well documented (Jensen, 1987; Personick, 1990; Public Health Service, 1991; Stout, 1992). Nurse's aides are injured at work far more frequently than any other group of workers employed in nursing homes and personal care facilities (Personick, 1990). Annual rates of work-related injuries resulting in medical treatment, lost time from work, or restricted work activity have been reported as 12.7 per 100 full-time nursing and personal care workers, a rate less than that of construction workers but slightly higher than farm workers (Public Health Service, 1991). Even higher injury rates of 15.0 per 100 full-time workers have been reported for nursing homes where the majority of the workers are nursing assistants (Personick, 1990). In comparison, baseline injury rates for all industries was 7.7 per 100 workers in 1987 and the year 2000 objectives cite a target rate of 6 per 100 workers overall, and 9 per 100 workers for nursing and personal care workers (Public Health Service, 1991).

Current data suggest that the rates of injury for nursing assistants employed in nursing homes have been steadily increasing. Personick (1990), reports a 40% increase in work-related injuries in nursing homes from 1980 to 1988. The most common injuries reported for nursing assistants are strains and sprains most frequently involving the back or trunk area , and these injuries are sustained primarily during the lifting and transferring of nursing home residents (Personick, 1990; Stout, 1992). Jensen (1987) used workers' compensation and employment information from four states in a rank-order analysis of occupations in relation to back strains and

sprains. Nursing aides, orderlies, and attendants ranked first, placing above construction laborers and garbage collectors, with an average rank of 1.4, for incidence of back strains and sprains in comparison to other occupational groups.

It is likely that many more nursing assistants experience work-related health problems than indicated by the available data. Garg and Owen (1992) report that 75% of the 57 nursing assistants involved in their ergonomic intervention study reported having suffered from low-back pain and 51% had visited a health care provider for their pain. Only 25%, however, reported losing eight days of work or more over the past three years due to their pain and 65% reported that they had lost no work time during the past three years due to work-related back pain.

Little has been reported about nursing assistants' perceptions of work-related risk and the actions taken in response to perceived susceptibility to injury or illness. Harrell (1990), in a study of 244 full-time employed men and women, found that those with the greatest control over their work perceived the least risk of accidental injury. Also the use of equipment typical of blue collar rather than white collar work was associated with increased perceived risk of injury. The pace of work had less of an effect on perceived injury than did autonomy and freedom in the work. Investigations into the degree of control nursing assistants experience in their work have produced divergent findings. Helmer, Olson, and Heim (1993) reported that 52% of the 246 nursing assistants who completed a job satisfaction survey, indicated a high level of autonomy in their jobs. Brannon, Cohn, and Smyer (1990), compared certain job characteristics and work-context variables for nurse's aides in relation to

similar categories of female workers: high school graduates, workers in smaller organizations, and hourly workers. Ratings for autonomy were not significantly different among the comparison groups, however the investigators note that women in general experience less autonomy at work than do men. On the other hand, Tellis-Nayak and Tellis-Nayak (1989), include ceaseless supervision, little room for initiative, and "not much benefit of the doubt", among the routine indignities described by nursing assistants.

Satisfaction with Health Practices

Intuitive reasoning suggests that those who are satisfied with their current health practices are less likely to perceive a need to modify these practices or adopt new behaviors. Yet satisfaction with health practices was not identified as a variable in any of the studies of health behavior reviewed. Perceived benefits of health-protecting and health-promoting behaviors have been studied and have been found to be related to the performance of these behaviors (Pender, 1987). Palank (1991) notes that research on perceived benefits of health-promoting behavior suggests that the immediacy rather than the magnitude of a benefit may exert the most effect on behavior and that perceived benefits may impact differently on the initiation versus the maintenance of behaviors. Satisfaction implies not only that benefits have been perceived, but have also been experienced at a level consistent with expectations.

Gillett's (1988) study of exercise adherence in overweight women illustrates both satisfaction with and perceived benefits of a health practice. A 94% adherence rate was reported for moderately overweight participants of a dance exercise program.

In interview data collected at the beginning and end of the program, eight factors influencing exercise adherence were identified. Three of the factors: group homogeneity, carpooling and social networks, and pleasurable feelings associated with increased energy and fitness, could be considered as indicators of satisfaction. Two of the factors: desire to change body image, and desire to change health status and improve physical health suggest perceived benefits of the exercise program.

Social and Economic Factors Influencing Women's Health Practices

Women's involvement in social roles and the availability of health care, economic, and interpersonal resources have been proposed by this investigator as important areas for exploration of potential connections between the socioeconomic environment and health practices. Within these areas, factors which deter or present barriers to desired behaviors as well as those which facilitate and support health practices can be identified. The literature related to women's role involvement, access to resources, and common barriers to health practices will be summarized in the following sections.

Multiple Role Involvement

Studies of the relationship between multiple role involvement and health practices are not as numerous as those relating women's social roles to health outcomes. Measures of health behavior investigated include self-reported health-protective and health-promotive actions (Hibbard & Pope, 1987; Umberson, 1992, Woods, et al. 1993), medical care utilization (Hibbard & Pope, 1983; Lutz, 1989), and medically defined health behaviors (Hibbard & Pope, 1987, Umberson, 1992).

Hibbard and Pope (1987), examined the relationship of women's roles to health interest and health concerns in a random sample of 1155 women aged 18 to 64. They found that involvement in parental and marital roles, roles which include responsibilities for caring for others, was associated with greater interest in health. Interest in health was associated with more health-protective and health-promotive behaviors including physical fitness activity and decreased smoking. Woods and colleagues (1993) interviewed 659 women aged 18 to 45 in order to develop models relating women's roles, gender role norms, social demand and social resources, well-being, and distress to health-promoting and health-damaging behaviors. In terms of women's roles, Woods et al. found that women who used alcohol more frequently were more likely to be employed, while women who ate more than two meals per day and slept more hours per night were less likely to be employed. Women who ate more than two meals per day were more likely to be partnered, while women who smoked and women who exercised for longer periods of time were less likely to be partnered. The only regression model which included the parental role was the model for hours of sleep per night. Women who slept more hours per night had fewer children.

The combination of marriage and employment has been associated with more health-protective behaviors such as cervical cancer screening and breast examinations (Lutz, 1989). Lutz found that non-traditional women, women who were sole-providers for themselves and their families, received significantly less preventive health care than other women, despite having a regular source of care. Umberson

(1992) examined the effects of social control on health behavior and found that a change in status from married to unmarried was associated with an increase in negative health behaviors for both women and men.

Risk-reducing practices have been included in investigations of the relationship between employment roles and cardiac risk factors. In a large cross-sectional study of 1,041 Mexican-American and non-Hispanic white women enrolled in the San Antonio Heart Study (Hazuda, Haffner, Stern, Knapp, Eifler, & Rosenthal, 1986), employed women were found to have more favorable lipoprotein patterns than homemakers even though they did not differ significantly in obesity, total serum cholesterol, systolic and diastolic blood pressures, or cigarette smoking. They also found that employed women ate a significantly less atherogenic diet than homemakers and employed Mexican-American women spent significantly more time in daily exercise than Mexican-American homemakers. The apparent protective effects of employment found by Hazuda and colleagues were more pronounced for women in professional and managerial occupations and sales and clerical occupations than for those in blue-collar occupations.

With only a few exceptions (Hazuda, et al., 1986; Meleis, et al., 1989; Woods, et al., 1993), white middle-class women predominated in the samples for the studies on multiple role involvement reviewed. Some studies, however, did include sufficient numbers of minority women in the sample to allow for analysis of race or ethnicity as a demographic variable (Waldron, et al., 1982; Waldron & Jacobs, 1988, 1989). Racial differences in the effects of labor force participation and multiple role

involvement on health were reported in each of these investigations. Marshall and Barnett (1991), investigated the effects of race and class on the quality of women's role experiences and found both race and class differences in job role quality and in multiple role gains and strains. Class differences were also found in parenting concerns. In a qualitative analysis of descriptions of job stress by women clerical workers from five different ethnic groups, racial tensions were linked to both psychological and physical symptoms (Stevens, et al., 1992). The lack of studies involving sufficient numbers of minority women and the evidence that significant race and class differences may exist, suggest that much of the current knowledge about the effects of multiple roles on women's health and health practices is limited in scope and cannot be generalized to many groups of U.S. women.

Availability of Resources

Health care resources. Income and health insurance are considered primary determinants of access to medical care in the U.S. (Butler, 1988). The poor are more likely to lack a regular source of ambulatory care for financial reasons and thus are less likely to receive needed preventive care (Hayward, Bernard, Freeman, & Corey, 1991). Medicaid, initiated in 1965 under the Social Security Act, insures the poorest of the poor, but benefits differ from state to state and as the number of people living in poverty has increased, the number covered by Medicaid has remained fairly constant (Butler, 1988). According to a recent National Center for Health Statistics Report, 32.5% of people living below the current poverty level (an annual income of less than \$13,924 for a family of four), are uninsured (Ries, 1991).

Regardless of income, blacks, Hispanics, and other minorities are more likely to be uninsured and make up a disproportionately large segment of the uninsured population in the U.S. (General Accounting Office, 1991). In California, approximately 40% of Hispanics have no health insurance (Russell, 1992). There is also a gender gap in insurance coverage. Although an average of 64.1% of Medicaid recipients in the U.S. are female, the increased predominance of females among the poor and the greater number of women who are not covered through employment provided insurance means that women in general are more likely to be uninsured or underinsured (Muller, 1990). In 1989, fewer women than men in all age groups, except those aged 25 to 44, were covered by private insurance (Ries, 1991).

Though insurance can lessen the financial burden of health care for the poor and is clearly associated with the utilization of needed medical care services (Davis & Rowland, 1990), the poor continue to pay a disproportionate amount of their income for out-of-pocket health care expenses with even fairly small medical costs imposing a substantial financial burden (Butler, 1988). Although it is those who fall in the grey area between near poverty and Medicaid eligibility who are least likely to utilize health services (Hawkins & Higgins, 1990), both the insured and uninsured poor are more apt to delay or sacrifice preventive and routine ambulatory care for economic reasons. Uninsured middle-aged women were significantly less likely to receive blood pressure checkups, Papanicolaou smears, glaucoma screening, and breast examinations in a study by Woolhandler & Himmelstein, (1988). This means that those at greatest risk for poor health, low-income women with hypertension, obesity,

and high cholesterol, for example, are least likely to receive appropriate early care.

Preventive services, however, are not readily available for even the insured poor. Muller (1990) notes that increasing numbers of privately practicing physicians refuse to treat Medicaid patients and that many of the poor must resort to community or hospital-based clinics for their care. Faced with increasing demand for services at a time when government contributions are declining, these clinics are being forced to curtail services (Butler, 1988; Davis & Rowland, 1990), and it is non-urgent preventive care that is sacrificed first. Interest in health and fitness in the U.S. has resulted in the proliferation of health clubs and weight loss clinics which offer alternatives to medically-provided preventive care but these are unavailable to both the insured and uninsured poor due to the cost. Gottlieb and Green (1987) note the unequal distribution of health promotion and disease prevention services across population groups and suggest that health promotion has been a white middle-class phenomenon.

Although financial access barriers to preventive care are predominant, the poor also face other access barriers. The quality of care provided by ambulatory settings serving the poor has been questioned. Hawkins and Higgins (1990), note that these clinics fail to attract highly skilled health professionals and that rapid staff turnover is often a problem. In addition, language barriers and minimal attention to cultural diversity can compromise care for many low-income minority groups. Despite the presence of hospitals and clinics in many rural and inner city areas, geographical access barriers may still exist if affordable and convenient public transportation is

lacking (Hawkins & Higgins, 1990). As financial strains force the closing of public health clinics and community health centers, many of the poor are forced to travel farther for care. The tacit expectation that the poor should be willing to "pay" in time and convenience for health services is evidenced by the increased travel time, overcrowding, and long waits that are involved in seeking care. Those working in unskilled occupations often must forfeit wages in order to seek health care during the hours in which services are available. Hawkins and Higgins (1990) point out that although the quality of care available to the poor may be comparable to that available to the nonpoor, the experience of obtaining care is not. It is those with least resources, those in lower social classes with less education, who must invest the most time and effort in obtaining the care they need (Gauthier & Krassen-Maxwell, 1991).

Gender bias may present additional access problems for low-income women. Although women are reported to utilize preventive medical services more frequently than men, some question whether this results in better health outcomes for women (Muller, 1990). Duffy (1986), notes that the particular problems facing single mothers are often ignored by health professionals who base their expectations on a "normative" male-headed two-parent family. Muller (1990) describes the burdens created by characteristics of the Medicaid program as a gender issue since it is women who are most often affected by changes in benefits and eligibility.

Socioeconomic resources. Income, education, and occupation are the most frequently used measures of socioeconomic status. Although income would seem to be the most straightforward measure, a number of investigators have argued that

education is the strongest indicator of health behavior (Krick & Sobal, 1990; Winkleby, Jatulis, Frank & Fortmann, 1992). Others have raised questions about the usefulness of education as a measure of social class due to increasing homogeneity in educational levels in the U.S. and low correlation coefficients between education and income (Liberatos, et al., 1988; Winkleby, et al., 1992). The income and occupational status of women and members of minority groups continue to lag behind those of white males at all levels of education (Health Resources and Services Administration, 1990). The strengths and weaknesses of the socioeconomic indicator used as well as the possibility that income, education, and occupation are associated independently with particular health outcomes, need to be considered when evaluating the relationship between economic resources and health behavior. Education may impact health and health practices through its influence on lifestyle behaviors, problem-solving capacity, self-esteem and self-efficacy, and social values rather than by conferring economic advantages (Liberatos, et al., 1988; Winkleby, et al., 1992).

Level of education has been found to be positively related to regular exercise and negatively related to smoking in a number of studies (Duelberg, 1992; Hibbard & Pope, 1987; Krick & Sobal, 1990; Muhlenkamp, et al., 1985; Schoenborn, 1986). Higher levels of education have also been associated with increased positive health practices and healthier lifestyles in general (Krick & Sobal, 1990; Kulbok, 1985; Gottlieb & Green, 1984; Mechanic & Cleary, 1980; Rakowski, 1986; Walker, Volkan, Sechrist, & Pender, 1988; Woods, et al., 1993).

Although used less frequently than education as a socioeconomic variable in

studies of health behavior, income has been reported as positively influencing health promoting lifestyles (Walker, et al., 1988) and participation in breast cancer screening (Fulton, Buechner, Scott, DeBuono, Feldman, Smith, & Kovenonck, 1991). Woods, et al. (1993) assessed both income and education in relation to women's health-promoting and health-damaging behaviors and found that while education had positive effects on health-promoting behaviors and was a deterrent to health-damaging behaviors, income was not significantly correlated with either type of behavior. Weitzel and Waller (1990), found ethnic differences in the relationship between income and a health-promoting lifestyle. Income was positively related to health-promoting lifestyle scores for Hispanics but not for African Americans or whites.

Differences in health behaviors and outcomes have been reported for occupational groups (Dishman, et al., 1985; Lusk, Kerr, & Rons, 1995), however traditional occupational groupings may not clearly depict the distribution and status of women in the labor force. In one study in which occupation was considered as a socioeconomic indicator, men were fairly evenly represented across occupations while approximately 75% of the employed women in the sample held nonprofessional white collar jobs (Winkleby, et al., 1992). Classification of women's occupations into white collar and blue collar categories is also problematic. Waldron and Jacobs (1988), classified professional, technical, administrative, clerical, and sales workers as white collar women and craftsmen, operatives, laborers, service, and private household workers as blue collar women. In their analysis of longitudinal data for a five-year period, they found that employment had more beneficial effects on health

for blue collar married women than for white collar married women. It is not clear where women in some occupations, licensed vocational nurses for example, would fit in Waldron and Jacobs' classification. An alternative approach is exemplified by Marshall and Barnett (1991), who selected two female occupational groups with statistically significant differences in education and average income, licensed vocational nurses and social workers, for comparison on the quality of role experiences.

Interpersonal Resources. The quantity and strength of social ties and supportive relationships have been related to health and health behavior in a number of studies (Gottlieb & Green, 1984; Lindheim & Syme, 1983). Support from others has been found to be an important determinant of exercise adherence in women (Dishman, et al., 1985; Gillet, 1988; Zindler-Wernet & Weiss, 1987). Romano, et al. (1991), found smoking prevalence to be significantly increased for urban African-American women with poor social networks. A strong association between social support and number of positive health practices was reported by Hubbard, Muhlenkamp, and Brown, (1984). Muhlenkamp and Sayles (1986) found a significant correlations among social support, self-esteem, and positive health practices in a sample of 98 women and men aged 18 to 67. Through path analysis they determined that social support exerted its influence on lifestyle indirectly through its direct effect on self-esteem.

Increased social ties, however, may have negative as well as positive effects on health and low-income women may be particularly vulnerable to stress in

association with relationships. As noted by Pesznecker (1984), "for low-income women, family and friends and intimate relationships all seem to pose problems that may be more frequent or of greater intensity and duration than for women with more resources" (p. 241). Rook (1984), points out that the troublesome aspects of relating to others are often overlooked when a large social network or frequent interactions with friends and neighbors is interpreted as a high level of social support. Rook investigated the effects of both supportive and problematic social ties on psychological well-being in 120 elderly widows and found that negative social ties were more consistently and strongly related to well-being than were positive social ties. She also found that the number of social supports and the number of problems reported were unrelated.

Shumaker and Hill (1991), contend that women's social roles place them in the position of "network tender" and that this exposes them to more negative social outcomes related to network involvement. They suggest that the greater opportunities for support provided by large social networks are also accompanied by greater demands on resources and thus the positive effects of social support may be negated. This view is supported by Belle's (1982), observation that the social networks of low-income women provide similar amounts of stress and support, so that even when impoverished women are involved in supportive social networks, this involvement can be extremely stressful. As stated by one of the women interviewed in an earlier study (Nelson, 1992), "friends is trouble and I don't want to be bothered with trouble" (p.11). Current information implies that the relationships between social resources

and health are more complicated for women and members of minority groups but research on social support across population subgroups is lacking (Shumaker & Hill, 1991; Zambrana, 1988).

Barriers to Health Practices

A concept which has been theoretically and to some extent empirically linked to both socioeconomic status and health behavior is that of barriers to health protecting and health promoting activities. The concept of barriers is included in some form in many of the health behavior models including the Health Belief Model (Becker, et al., 1974) and the Health Promotion Model (Pender, 1987), however Fleury (1992) notes that it is frequently left unmeasured in empirical research. Barriers are defined in the Health Belief Model as the subjective beliefs or perceptions about the costs of preventive action in relation to consequences such as inconvenience, unpleasantness, or extent of life change required (Rosenstock, 1966). This definition suggests that barriers are subjective phenomena and not objectively identifiable, however Melnyk (1988) notes that any theoretical distinction between actual or perceived barriers has become blurred in the operationalization of this concept. In her review of the literature related to barriers arising in interaction between the consumer and the health care system, Melnyk found that application of the concept of barriers was often not consistent with the definition derived from a particular model. She found a variety of barrier indicators, both structural and individual, recognized in the literature as determinants of health behavior. The types of barriers identified in Melnyk's review include: system barriers, time, distance, cost, availability,

organization of services, discrimination, provider-consumer relationships, patient characteristics, demographic factors (age, education, income), attitudes, knowledge, cultural factors, and family characteristics. In her later work to empirically operationalize "cost" barriers from the Health Belief Model perspective, Melnyk (1988), classified barriers into five major factors: 1) provider-consumer relationship, 2) site-related, 3) cost, 4) fear, and 5) inconvenience. Fleury (1992) notes that in comparison with other Health Belief Model constructs, perceived barriers has been the most consistently associated with cardiovascular health behavior in the literature.

Pender (1987) defines barriers to health-promoting behavior as being either "imagined" or "real" and consisting of "perceptions concerning the unavailability, inconvenience, or difficulty of a particular health-promoting option" (p.65). The concept of barriers in Pender's model is focused primarily on self-initiated health practices rather than behaviors that involve interaction with the health care system. The perceived difficulty of adopting a health-related activity was found by Sennott-Miller and Miller (1987) to be a consistently stronger predictor of likelihood of adoption than was perceived effectiveness. This relationship held for a single behavior, weight control, as well as for a set of commonly recommended risk-reducing behaviors requiring lifestyle management. Other types of barriers identified as related to health-promoting activities include time constraints, program characteristics such as accessibility and cost, and internal perceptions such as control and motivation (Palank, 1991).

There is general agreement in the literature that further development and

clarification of the concept of barriers to health-protecting and health-promoting practices is needed (Melnyk, 1988; Mikhail, 1981; Palank, 1991; Pender, 1987). It seems intuitively obvious that many of the barriers identified as predictive of health practices can also be linked to socioeconomic status but there has been little empirical work in this area. Zambrana (1988) points out that the low-income woman encounters multiple barriers in her efforts to maintain wellness and prevent illness for herself and her family under socioeconomic conditions that contribute to poor health. Barriers identified by Zambrana include those involving interaction with the health care system such as lack of information, language differences, and lack of insurance, as well as those arising from social conditions such as the need to assume primary responsibility for the care, nurturing, and support of children.

In their review of the literature on determinants of physical activity and exercise, Dishman, et al. (1985), found perceived available time to be an important determinant of participation in both supervised and spontaneous exercise programs. They conclude that environmental barriers can outweigh personal intention to engage in regular physical activity. Duffy (1986), reports that for female-headed one-parent families, time was by far the most frequently mentioned barrier to preventive health practices. The other barriers cited by the women Duffy interviewed were "laziness", money, and needing someone's support. Additional factors which the women described as influencing their health practices included economic concerns, parenting, day care issues, inadequate support systems, and low self-esteem. Faced with these barriers, the women maintained habitual prevention practices but had insufficient

energy resources for establishing new behaviors.

Lack of time was also reported as the most significant factor limiting exercise in a study of weight control practices of black and white women by Johnson, Corrigan, Dubbert, and Gramling (1990). Other barriers to exercise mentioned were lack of money, lack of facilities, and lack of an exercise partner. Lack of willpower as well as no time for meal planning and the need to cook for her family were the most frequently reported barriers to dieting. Most of the women who were attempting to control their weight through diet and exercise were impeded by the multiple demands on their time.

Gauthier and Krassen-Maxwell (1991) suggest that women are particularly vulnerable to role-related time demands as they are expected to provide health care for themselves and their family. They contend that there is often little consideration given to the time burdens imposed on women, especially poor women, in their interactions with health care professionals. The implicit message is that the women's time is less valuable and more flexible than that of the health professional as evidenced by long waits for service, rushed examinations, and little time allowed for questions and concerns. Lack of time to meet role expectations and health care needs thus constrains the health practices of low-income women.

Research Questions

The preceding review of the literature suggested and supported the following questions which guided the present study:

- 1) What are the day-to-day health practices of low-income working women?

- 2) How do low-income working women view their health?
- 3) How satisfied are low-income working women with their day-to-day health practices?
- 4) What are the major health concerns of low-income working women and how do they respond to perceived health risks?
- 5) How are the health practices of low-income working women influenced by their involvement in work, family, and social roles?
- 6) How are the health practices of low-income working women influenced by the perceived availability of health care, interpersonal, and socioeconomic resources?
- 7) What do low-income working women consider as barriers to desired health practices?

Study Assumptions

Assumptions underlying this study include the following:

- 1) Day-to-day health practices influence health outcomes.
- 2) Health practices evolve in response to both individual and environmental factors.

Definition of Terms

The term Health Practices is used in this study as a general term which encompasses those behaviors described as health-promoting, health-protecting, health-maintaining, and illness preventing. Essentially, the use of the term health practices is intended to include all health behaviors except those that are specifically illness-

related. This investigator recognizes that efforts to differentiate health behaviors based on qualities such as the motives, intents, goals, and determinants of these behaviors are extensive and ongoing, however much overlap of categories and confusion of terms persists. The use of a broader term which makes possible the inductive discovery of potential categories of behavior is consistent with the exploratory purpose of the study. At times, terms such as health behaviors and health-related activities are used interchangeably with the term health practices. This is only intended to improve the readability of this document and not to imply differences in meaning.

Low-income is a term that is applied to those persons whose income falls well below the national or state median income. It is a relative term and, for the purposes of this study, it designates those who have poorly paid jobs in relation to the earnings of other workers.

Working women are women with a regular source of paid employment. This includes women who are working part-time as well as full-time.

Role refers to the behaviors, attitudes, and values, both expected and actual, that are associated with a particular social position. Roles are enacted in social situations and are modified through interactions with others (Hardy & Conway, 1989).

A Nursing assistant is a semi-skilled health worker who performs the most basic caregiving tasks in the health care setting. Nursing assistants are also referred

to as nurse's aides, nurse aides, and, if certified by a state agency, certified nursing assistants or CNAs.

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CHAPTER THREE

Methods

Study Design

Both qualitative and quantitative approaches to data collection and analysis were used in an exploratory-descriptive study design. An exploratory-descriptive design is consistent with an inductive approach to knowledge building which in this study, began with the women's accounts of their own experiences in the day-to-day management of their lives and health. Although a problem area for inquiry had been defined, the focus was on explicating the women's perspectives in an effort to understand the issues from the position of the women themselves. Semi-structured interviews were used to collect data on the women's present experiences (see Appendix A for the interview guide).

Sample and Setting

Population of Interest

The population of interest for this study was low-income working women. Since this is essentially a well population, it was decided that access through place of occupation rather than through the medical care system would be most likely to produce an adequate sample. It was also felt that the day-to-day health practices of the women that were of interest in this study might be altered in women experiencing illness episodes or health concerns resulting in contact with a health care provider. Particular female-dominated occupational groups have been targeted in previous investigations related to women's health. Occupational groups that have been studied

include clerical workers (Meleis, et al. 1989; Verbrugge, 1984), registered nurses (Dixon, Dixon, & Spinner, 1991), licensed practical nurses (Barnett, et al., 1991), social workers (Barnett, et al., 1991), nutrition aides (Reames & Burnett, 1991), university faculty and employees (Amatea, & Fong, 1991; Duffy, 1988; Reifman, Biernat, & Lang, 1991), and mid-level business managers (Reifman, et al., 1991).

Nursing assistants constitute a primarily female occupational group that has not received much attention in relation to women's health issues and since it is also a low-wage occupation, it was decided that nursing assistants would be an appropriate group from which to draw a sample for this investigation. According to recent Bureau of the Census data (1994), home health aides and personal and home care aides are among the top three fastest growing occupations in the United States. Thus, it is also an occupation that can be expected to involve increasing numbers of women workers.

Most nursing assistants are employed in long-term care facilities or nursing homes where pay and status are low and demands are high. Tellis-Nayak and Tellis-Nayak (1989) describe socioeconomic status as the common denominator shared by nursing assistants who are paid minimum wage or barely above and who live at the poverty threshold. Malveaux and Englander (1986) include nurse's aides in the bottom tier of health care workers and note that women of color are especially overrepresented in this lowest level. Nurse's aides comprise the majority of the nursing staff at long-term care facilities and have been described as performing 90% of the personal care provided to nursing home residents (Waxman, Carner, & Berkenstock, 1984). The amount of personal care provided for clients by nursing assistants in long-term care

white compared to 57.2% for the state of California (Bureau of the Census, 1990). The 1988 annual report of long term care facilities in California (Office of Statewide Health Planning and Development, 1989), lists 16 long term care facilities in Marin County. The number of licensed long term care beds in these facilities range from 13 to 187 with only three facilities having more than 100 beds. Ten of the nursing homes in Marin County are listed as for profit institutions while the remainder are designated nonprofit. There are no government supported long term care facilities in the county. The average hourly salary for nursing assistants working in long term care facilities in Marin County was \$6.50 in 1988. From the annual report data it can be determined that in 1988, nursing assistants provided 68% of the nursing care hours and their salaries accounted for 71% of nursing service costs in the Marin County facilities.

In order to optimize recruitment, a centrally located long term care facility with 168 licensed beds was targeted for initial data collection. This is a for profit facility licensed to accept patients covered by Medi-Cal, California's version of Medicaid, as well as Medicare. It also offers hospice care and, in 1988, was the only long term care facility in the county with a special program for Alzheimer's disease. The 1988 annual report (Office of Statewide Health Planning and Development, 1989) indicates that the average hourly wage for nursing assistants at this facility was \$6.06 which was below the county average. After data collection began, the need for additional recruitment sites was recognized and two more long-term care facilities were added. As skilled nursing facilities may vary in a number of characteristics

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including size, location, client health problems, socioeconomic background of clients, administration and staffing policies, and the physical and social milieu, effort was made to select sites reflecting some of these variations. A comparison of the three agencies using data from the 1992 Annual Report of Long Term Care Facilities (Office of Statewide Health Planning and Development, 1993) and from agency administrators is presented in Table 3.1.

Table 3.1

Comparison of Data Collection Sites

Characteristic	Agency A	Agency B	Agency C
Licensed Beds	168	72	187
Ownership Type	For Profit	Nonprofit	For profit
Medi-Cal certification	Yes	No	Yes
Reimbursement Source*			
Medicare	3%	10%	8%
Medi-Cal	43%	N/A	70%
Private Pay	54%	90%	21%
Number of female CNAs**	46	24	35
Current starting salary**	\$7.00/hr	\$7.00/hr	\$6.00/hr

* Percentage of total census on 12/31/92

** Information provided by agency administrator

Sampling Procedure

A convenience sample of 34 CNAs was recruited from the three long-term

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care facilities. Criteria for selection included female gender, current employment either full-time or part-time as a CNA, and the ability to speak and read English. The sample consisted of approximately one-third of the female CNAs employed in each of the three agencies.

Arrangements were made with agency administrators for the investigator to introduce herself and present the study to prospective participants at a regularly scheduled inservice meeting. A flyer describing the study and inviting female nursing assistants to participate was distributed and later posted in the employee lounge or other central area at the skilled nursing facility (Appendix B). A space for name and phone number was included on the bottom of the flier and those interested in participating were asked to fill this out and leave the form in a collection envelope posted on a bulletin board at the agency. The investigator checked the envelope regularly and contacted the women interested in participating to arrange an interview.

The success of this system varied among the agencies. In two agencies a number of participants were recruited in this manner, while in the third agency, two weeks after the initial presentation of the project at an inservice no completed forms had been returned. The investigator then made inquiries of the assistant administrator and the staff development director and was told that women were too busy because many of them were working double shifts. The suggestion was made that the investigator approach the women individually and invite them to participate. This was tried several times without success in the employee lounge during break time and at the end of shift by the time clock. On one occasion, a male CNA said in a joking

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manner, that it was because the investigator only wanted women that she didn't get any volunteers. It wasn't until a nurse employed at the agency offered to assist by also approaching the CNAs individually that participant recruitment finally began at that agency.

In all three agencies additional participants came forward after the interviewing had begun. This and some of the comments made by the women suggested that, quite understandably, there had been some initial reticence to participate possibly due to shyness, fears about jeopardizing their jobs, and concern about the type of questions that would be asked. As the investigator became more visible at the agency and those who had been interviewed shared their experiences with others, this reticence seemed to decrease.

Interviews were arranged at a site chosen by the participant. The investigator offered to meet with the women at their home or workplace or at another site convenient for them. In many cases it took several phone calls or contacts with the women at work in order to find a time to meet. Twenty women were interviewed in their homes, ten were interviewed at their workplace, and four were interviewed in coffee shops. All of the women interviewed at their workplace were interviewed either before or after their shift began, with the exception of one woman who was interviewed during her lunch break. The length of the interviews ranged from 35 to 90 minutes with the majority lasting approximately one hour. All of the women were asked if the interview could be audiotaped and 23 of them agreed to this. Some who refused indicated embarrassment or fears about saying the wrong thing as reasons for

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their refusal.

Participants were paid \$15.00 in cash at the conclusion of the interview. The money was sealed in a plain white envelope and handed to the women as the investigator thanked them for their time. All of the women seemed pleased to receive the money although some indicated they would have been willing to be interviewed without any compensation as they enjoyed the interchange.

Human Subjects Concerns

Approval to conduct the study was obtained from the Committee on Human Research (CHR) at the University of California, San Francisco. Written approval was also obtained from administrators at the three agencies through which study participants were recruited.

All study participants were asked to sign a written consent form prior to the interview and were given a copy of the form to keep (Appendix C). The women were assured that their participation in the study would in no way affect their job and that no individual responses with which they could be identified would be available to their employer or anyone else other than the investigator. All notes, audiotapes, transcripts, and questionnaires were assigned a subject code number and were kept separately from the respondents names in a file in the investigator's home office. Fictitious names have been used in this manuscript and will be used in any other written reports of this investigation.

Participation in the study was entirely voluntary and the women were informed that the interview could be ended at any time at their request. Due to the recruitment

methods used and the conduction of some of the interviews at the workplace, the women were often aware of the identity of other participants but any references to information shared in other interviews was carefully avoided. On two occasions related women asked to be interviewed together and this was done.

Sample Demographic Characteristics

A total of 34 participants were recruited. Fourteen participants were recruited from one of the agencies and ten participants were recruited from each of the other two agencies. The percent of female CNAs employed at each agency that were included in the study ranged from 29% to 42%. The women ranged in age from 19 to 63 years with a mean age of 36 years. The majority, 59% of the women were married or partnered, 18% were single, 15% were divorced or separated, and 9% were widowed. A demographic profile of the sample is presented in Table 3.2.

The sample was multi-ethnic in composition with only 4 women (12%) listing the U.S. as their birthplace. There were 18 Asian/Pacific Island women (53%), 7 Hispanic women (21%), 6 African-American women (18%) and 3 Caucasian women (9%). The women had immigrated from 10 different countries including the Philippines, El Salvador, Nicaragua, Guatemala, Peru, India, Haiti, Ethiopia, Bulgaria, and Germany. The most frequent country of origin was the Philippines where 50% of the women were born. Only 14 of the women (41%) lived in Marin County and the rest traveled to work from adjoining counties including 14 from Solano County (41%), 5 from Contra Costa County (15%), and 1 from Sonoma County (3%).

Table 3.2

Demographic Profile of Sample

Variable	Mean	Range
Age	36	19-63
	Frequency	Percent
Marital/Partner Status		
Married/Partnered	20	59
Single	6	18
Divorced/Separated	5	15
Widowed	3	9
Ethnicity		
Asian/Pacific Islander	18	53
Hispanic	7	21
African American	6	18
Caucasian	3	9
Birthplace		
Philippines	17	50
Central/South America	7	21
United States	4	12
Europe	2	6
Haiti	2	6
India	1	3
Africa	1	3
County of Residence		
Marin	14	41
Solano	14	41
Contra Costa	5	15
Sonoma	1	3

The ethnic diversity of the sample could be considered both a limitation and a strength. There were too few women from most of the ethnic groups included in the sample to allow exploration of cultural influences on the women's roles and health

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practices. Some suggestion of cultural influences did emerge in the analysis of the interviews with the CNAs originating from the Philippines and these are reported as they relate to the study questions. The investigator was not equally knowledgeable about the ethnic groups represented and although she sought information from those within or more familiar with these groups, the possibility of cultural bias and misconceptions in meaning must be acknowledged. Conversely, the ethnic diversity of the sample made possible an increased understanding of the health issues common to a multicultural group of low-income working women.

Socioeconomic indicators included level of education, annual family income, perceived income adequacy and size of household. Most of the women had a high school education or higher with only 4 women (12%) reporting less than a high school education. Annual family incomes were in the range of \$10,000 to \$39,999 for the majority of the women with 6 women (18%) reporting family incomes of less than \$10,000 and 3 women (9%) reporting family incomes of more than \$40,000. Slightly over half of the women (53%) rated their income as inadequate or barely adequate and only 6 women (18%) indicated that they felt their income was more than adequate or at least allowed some extras. None of the women lived alone and reported numbers of persons in the household ranged from 2 to 8. The socioeconomic profile of the sample is presented in Table 3.3.

Data Collection Methods

Health Practices

Information about health practices was obtained in a semi-structured interview.

An interview guide adapted from that used previously by the investigator (Nelson, 1992), was developed (Appendix A, Part II). Participants were asked to respond to the questions: "What kinds of things do you do to keep yourself healthy?" and "What are the things you do to improve your health?" The women were also asked specific questions about smoking and exercise as these behaviors are related to cardiovascular disease risk which was of particular interest to the investigator. Specific questions were asked after the initial discussion of health practices was completed.

Table 3.3

Socioeconomic Profile of Sample

Variable	Frequency	Percent
Education		
Less than 8th grade	2	6
Some high school	2	6
High school graduate	11	32
Some college	14	41
College graduate	5	15
Annual Family Income		
Less than \$10,000	6	18
\$10,000 - \$19,999	12	35
\$20,000 - \$39,999	13	38
\$40,000 - \$59,999	2	6
\$60,000 or more	1	3
Perceived Income Adequacy		
Not enough	14	41
Barely enough	4	12
Adequate but no extra	10	29
Adequate and some extra	4	12
More than adequate	2	6

An interview approach to assessing health practices was determined to be most

consistent with the exploratory-descriptive purpose of this study. Although instruments with established validity and reliability such as the Health-Promoting Lifestyle Profile (Walker, Sechrist, & Pender, 1987), and others are available, they do not allow for full description of these behaviors in the context of the participant's daily lives. Health diaries in which subjects are asked to record behaviors over a specified period of time, have also been used to collect information about health practices (Duffy, 1986; Tripp-Reimer, 1986; Verburgge, 1983). Diaries provide for more complete description of behavior patterns and reduce recall bias encountered in interviews and questionnaires, however this approach was not considered feasible for the study population due to the respondent burden associated with diary keeping. Open-ended questions allowed for spontaneous rather than prompted responses.

Perceived Health Status

Participants were asked to rate their health on a four-point scale indicating whether they described their current state of health as excellent, good, fair, or poor (Appendix A, Part II). The limitations in using a single-item measure of a multi-dimensional concept are recognized, however it has been argued that measures of perceived health are inclusive of the various dimensions of health (Meleis, et al., 1989). The self-rated health scale did not remain the only assessment of perceived health as, early in the interview process, two open-ended follow-up questions were added. These questions were: "What were you thinking of when you rated your health as ___?" and, if the rating was other than excellent, "What would be different if your health was excellent?" Although these questions do not appear on the original

interview guide, they were asked of all but the first few women interviewed.

Satisfaction With Health Practices

Participants were asked how satisfied they were with what they were currently doing for their health and if there were things they thought they should be doing but weren't doing currently (Appendix A, Part II).

Health Concerns and Perception of Risk

Participants were asked what worried them most about their health (Appendix A, Part II). A follow-up question, "Do you worry about injuring yourself at work?", was added early in the interviewing process when the investigator became aware of work-related health risks as an area of concern. Specific questions regarding concerns about the heart or blood pressure and cardiovascular risk factors were also asked.

Role Involvement

Information about role involvement was collected using two scales from the Women's Roles Interview Protocol (WRIP) developed by Meleis, Norbeck, and Laffrey (1989), and a third scale developed by the investigator (Appendix A, Part I). The first scale adapted from the WRIP measures the number of roles and the degree of involvement with each role. Fourteen roles are listed: partner/wife, ex-wife or partner, mother, daughter, daughter-in-law, caregiver to relative, volunteer, employee, student, housekeeping, social, religious, recreational, and other. To these was added the role of grandmother based on evidence of the importance of this role in the investigator's previous study (Nelson, 1992). Participants were asked whether

they were involved in each of the roles and to rate their involvement in the listed roles using a six-point Likert type scale with values ranging from 1 (no involvement) to 5 (a great deal of involvement). Space was also provided for respondents to add any other roles or responsibilities which are not listed. It was hoped that the use of a list of roles would elicit information about the full range of role involvement for the respondents.

The second and third scales addressed the satisfactions and demands attributed to the listed roles. Subjects were asked to rate these qualities using a six-point scale with "0" indicating not applicable, "1" indicating no satisfaction (or demands) and "5" indicating a great deal of satisfaction (or demands). The demands scale was added by the investigator in order to further explore the pattern and extent of demands on time, energy, and other resources, experienced by women involved in multiple roles. The literature suggests that role demands have a significant effect on health and health behavior yet it is often assumed that demands are cumulative in relation to the number of roles and the differential demands exerted by certain roles or role patterns are not considered. Satisfactions represent a different dimension of role involvement than that of demands, and consideration of the relationship between these two dimensions was thought to be important in understanding the overall impact of multiple roles on health behavior.

Problems in the use of Likert scales in research with some cultural groups have been reported in the literature (Flaskerud, 1988). Flaskerud notes that Central American refugees are among those for whom the ordered continuum of responses

presented by the Likert scale has been problematic. In this study the WRIP was read to the respondents by the investigator and questions were repeated, restated, or explained as needed. A number of the women, including some from Central American, had difficulty selecting a numbered response and tended to respond with verbal descriptions and explanations instead. In these situations the investigator would select the numbered response which seemed to best match the verbal response and would then ask the respondent if she agreed with that choice. It is possible that, as suggested by Flaskerud (1988), this attempt to measure degrees of variation was not meaningful to the women themselves.

Available Resources

The availability of health care, socioeconomic, and interpersonal resources was measured using a combination of structured questionnaire items and semi-structured interview questions (Appendix A, Part IV). Health care resources that were assessed included the usual source of health care, and the type of health insurance, if any. Socioeconomic resources assessed included family income, education, public assistance received, type of housing, size of household, and usual method of transportation. The findings for some of these have already been discussed in relation to sample demographics. The use of at least two indicators when measuring socioeconomic status is recommended by Liberatos, et al., (1988), based on their extensive review of the literature in relation to social class measurement. They concluded that social class is a multi-faceted concept and that the commonly used indicators of income, education, and occupation are not highly correlated and are

often associated independently with particular health outcomes. The use of multiple indicators of socioeconomic resources is also consistent with the descriptive intent of this investigation.

Interpersonal resources available to the women were assessed using three semi-structured questions derived from the Personal Resource Questionnaire (PRQ-85) Part I, developed by Weinert and Brandt (1987). The PRQ is described as a two-part measure of social support and the PRQ-85 represents the most recent refinement of the instrument (Weinert, 1987). Part I of the PRQ-85 Part I provides descriptive data about the availability of help from others in ten particular life situations. The full instrument was considered too lengthy and complicated to include in the interview. Instead three open-ended questions representing the domains of help in the event of short-term illness, problems regarding family/friend, and global concerns with life were selected. The situations addressed included: 1) inability to carry out normal activities due to illness, 2) need for help or advice regarding a problem with a family member or friend, and 3) frustration about the conditions of life. The intent of questions selected was to assist the participant to identify the persons they felt they could turn to for help with health, interpersonal, and personal problems and thus gain information about the availability of social resources.

Barriers

In order to assess the women's perceptions of the barriers inhibiting their engagement in the behaviors they felt they should be doing for their health, they were asked, "What prevents you from doing all that you think you should do for your

health" (Appendix A, Part II).

Demographic and Employment variables

Demographic and employment information including age, marital status, ethnic/racial background, country of birth, area of residence, length of present employment, usual shift worked, and average number of hours employed per week was collected in an investigator administered questionnaire (Appendix A, Part III). A summary of assessment strategies used in the study is presented in Table 3.4

Data Analysis

Textual Data

Analysis of the verbal interview data occurred concurrently with data collection. The taped interviews and notes were transcribed using WordPerfect 5.1 (Wordperfect Corporation) and then entered into Ethnograph (Qualis Research Associates, 1988) to facilitate sorting and coding. In addition to the subject's verbal responses, field notes describing the setting, context, interactions, behaviors, and other situations or events related to the interviews were transcribed and included in the data analysis. Methodological decisions and strategies as well as conceptual questions and hunches that arose during the interviews were also recorded in field notes and memos and used to guide data collection and analysis. An example of this type of memo is presented in Appendix D.

Initial coding of the transcribed data involved the labeling of experiences, events, situations, feelings, ideas, and other phenomena described in the data, and then clustering of these labeled elements into descriptive categories. This process

Table 3.4

Summary of Assessment Strategies

Variable	Methods of Assessment
Role Involvement	Role Involvement Scale (WRIP) Role Satisfaction Scale (WRIP) Role Demand Scale
Health Practices Health Perception Health Concerns Satisfaction with Health Practices Barriers to Health Practices	Semi-structured interview questions
Health Status	Self-rated health scale
Demographic/Employment Information	Questionnaire
Resources	
Socioeconomic	Questionnaire
Health Care	Questionnaire
Interpersonal	Semi-structure interview questions

is designated as "open coding" by Strauss and Corbin (1990), and as the identification of "sensitizing concepts" by Hammersley and Atkinson (1983). Effort was made to keep the labels and categories at a low level of abstraction so that they remained close to the terms used by the participants and reflected the substance of the data. A listing of the initial codes which were developed and entered into ethnograph is presented in Appendix E.

The next phase in analysis was the more focused description and exploration of the categories developed in the initial coding phase. A number of techniques were used in this phase including constant comparison, questioning, and dimensionalizing

(Strauss and Corbin, 1990); domain analysis (Spradley, 1979); and unit analysis (Lofland & Lofland, 1971). The goal in this phase was to expand and clarify the categories using the data to test and refine them. Once categories had been more fully defined, the same techniques were used to further specify the categories through the identification of subcategories and the relationships among these subcategories. Further analysis centered on the discovery of themes and patterns in the data. The construction of matrices similar to the cross-classification matrix described by Patton (1980) were helpful in examining the data for potential links between the categories and suggesting relationships that could be tested in the textual data. An example of unit analysis and the construction of matrices is presented in Appendix F.

Memos were used extensively throughout data collection and analysis to both guide and document the process. Memos included code notes, theoretical notes, operational notes, and diagrams. Glaser (1978) describes memos as a means of capturing the analysis's thinking and considers them essential to the generation of theory. Memos provided a mechanism for self-reflection and assisted the investigator to examine issues, ethical questions, and emotional reactions related to the setting, the study, and the participants. Kleinman (1991), emphasizes the importance of keeping complete notes on the on the feelings experienced by the investigator in the research process as these feelings have effects on analysis and should be taken into account. Finally, memos can be used to record a "decision trail" and thus provide evidence to support the credibility of the findings (Miles & Huberman, 1984).

Numerical Data

Numerical data obtained in responses to the structured questionnaire items were entered on a PC 386 computer using the CRUNCH interactive statistical program (Crunch Software Corporation, 1991). Measures of central tendency and dispersion were calculated for each item and for the summary score on the involvement scale of the WRIP. Due to the nature of the instruments and the interview format in which data were collected, no substitutions for missing data were necessary.

A number of cross-tabulations of categorical response frequencies were also calculated. These cross-tabulations supported the development of the matrices previously discussed and provided some direction for the ongoing textual analysis.

Adequacy and Plausibility

Issues of proof, plausibility, and adequacy of the findings from the interview data were confronted. Proof was addressed by repeatedly returning to the data for evidence at each phase of analysis. Rival explanations (Patton 1980) and negative cases (Strauss & Corbin, 1990) were considered and explored in the data. Careful description of the analytic process as already discussed in relation to memos serves as a means for establishing plausibility. As much as possible, the investigator sought ideas and suggestions from other researchers engaged in qualitative analysis in testing the plausibility of the explanations offered. Stoddart (1986) has suggested that adequacy lies in the capturing of the "natural state" of any domain. Assessment of adequacy included attention to the effects of the presence of the investigator, the

extent to which the investigator was able to take the view of the participants, the possibility that the data gathering methods created rather than collected the data, and the extent to which the participants were knowledgeable about the domain of interest. These issues were explored in memos and in discussions with faculty mentors and colleagues.

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CHAPTER FOUR

Findings: Staying Healthy

Study findings are presented in two parts, each comprising a chapter of this document. In this first part, findings related to the day-to-day health practices of the study participants and some of the personal factors influencing these practices will be discussed. Study questions 1 through 3 and parts of question 4 are addressed in this chapter.

Health Practices

In response to the question, "What kinds of things do you do to keep yourself healthy?", a variety of health practices were identified. References to diet, exercise, and rest and sleep were frequent, forming three distinct categories of practices. Frequencies of responses in these three categories are presented in Table 4.1. Other practices, not mentioned frequently enough to suggest a separate category, were considered as sub-categories in the larger category of "general health practices". Practices that were described in relation to a particular health problem or concern, form a fifth category, "problem-focused practices".

Diet

When asked to identify the kinds of things they do to keep healthy, all the women except one mentioned current practices related to diet. Many named particular types of foods such as vegetables, fish, and fruits as healthy foods or good foods that they regularly included in their diet. Of these, vegetables was the type of food most frequently mentioned with 19 (56%) of the women responding that they ate

vegetables to stay healthy. Two women who acknowledged the healthy effects of eating vegetables described their own efforts to increase their intake. Shani, who said she usually ate a lot of meat, commented, "I'm trying to eat a lot of vegetables. I'm learning...now I have to since I was pregnant. I learned how to eat them".

Following vegetables, rice was the next most frequently identified healthy food with 7 (21%) of the women stating that they regularly ate rice. The influence of culture on food patterns is suggested by the frequent mention of rice and of fish by women who immigrated from the Philippines. Two Filipino American women specified that they ate rice twice a day to stay healthy.

Table 4.1

Diet, Exercise, Rest and Sleep

Practice	Number	Percent
Healthy Diet	33	97%
Exercise	20	59%
Adequate Rest/Sleep	12	35%

Eating a balanced diet or a variety of foods was considered important for health by 12 (35%) of the women. Some specifically mentioned eating from each of the basic food groups. Eleven (32%) of the women took diet supplements to stay healthy. The most frequently mentioned supplement was multiple vitamins. One woman reported taking calcium in addition to multiple vitamins. Maintaining

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adequate fluid intake was also described as a health practice by 6 (18%) of the women. While some women reported "drinking lots of liquids", others specified the type of liquid including water, fruit juices, milk, and herbal tea as liquids they drank to stay healthy.

Fourteen women (41%), specified certain foods or types of foods that they limited or avoided in order to stay healthy or to control weight. These included red meat, oils, greasy or fatty foods, coffee, sodas, sweets, carbohydrates, snacks, junk foods, and fast foods. One woman reported reducing her rice intake from 2 cups to one-half cup at each meal in an effort to lose weight. Another stated that she did not take vitamins because she felt she was too fat. Restriction of sweet foods and sugar intake was identified by two of the women as a way to prevent diabetes.

Finally, some women cited the preparation, timing, and amount of food eaten as important to their health. Cooking their own food, eating regular meals, and eating breakfast was important to several of the women. Four women reported reducing the amount of food they ate in order to control weight, but one woman stated that she tried to "eat a lot" in order to stay healthy.

A link between diet and work was suggested but the thinness of the data in this area precluded an adequate exploration of this connection. The implication is that there is a need to regulate the diet in order to provide the energy needed for work. Supporting this idea are statements such as "when I work I eat", "I try to eat a good lunch before work" and "if I don't work then I eat, eat, eat. It's O.K. if I work, when I work 16 hours I forget the diet". Failure to eat adequately can result in an

energy deficit as summarized by one woman, "when I work double I don't eat and then I feel weak. I can't move around, I don't have enough energy".

Exercise

Information about current exercise was obtained through spontaneous responses to the general question about health practices and through responses to a direct question about regular exercise. Twenty (59%) of the women reported regular exercise as a health practice. The types of exercise mentioned were categorized as either primarily aerobic or primarily strengthening and flexing in nature. The types of exercise in each category are presented in Table 4.2.

Table 4.2

Types of Exercise

Type of Exercise	Number	% of those exercising
Aerobic/Endurance		
walking	6	30%
aerobics	4	20%
dancing	2	10%
stationary bike	2	10%
exercise machine	2	10%
running/jogging	2	10%
bike riding	1	5%
horseback riding	1	5%
Strengthening/Flexibility		
bending	7	35%
sit-ups	5	25%
stretching	3	15%
abdominal exercises	3	15%
leg/knee exercises	2	10%
neck/shoulder exercises	2	10%
back exercises	1	5%
push-ups	1	5%

Ten women (29%) reported engaging in exercise only in the aerobic category and four women, 12% of the sample, described regular exercise only in the strengthening and flexibility category. Many of the women identified more than one type of regular exercise and, for 6 (18%) of the women, the types of exercise reported fell into both categories. Walking was the most frequent type of exercise mentioned in the aerobic category. Walking was the only form of exercise mentioned by 6 of the women and, for at least 3 of these women, walking was also a means of transportation to work, bus stop, or shopping. Four women reported engaging in aerobic work-outs using tapes, televised exercise programs, and music. None of the women attended structured aerobics classes or used a fitness center or gym. Other types of aerobic exercise mentioned were dancing, jogging, bike riding, horseback riding, and the use of a stationary bike or "exercise machine". In the strengthening and flexibility category, the most frequent type of exercise reported was "bending", followed by sit-ups. Other forms of flexibility exercise mentioned were stretching, push-ups, and exercises targeting a particularly body area such as back, leg, shoulder, knee, and neck exercises.

The women reported exercising an average of twice a week for 15 minutes at a time. The number of days a week the women exercised ranged from zero to seven and the number of minutes spent in each exercise session ranged from zero to sixty. Six women responded that they exercised every day with a maximum time of 30 minutes per session reported by three of these women. One woman stated that three to four times a week she walked for an hour in the morning before work. Thus, 3

1/2 to 4 hours a week was the greatest amount of exercise reported by any of the women.

Exercise was clearly connected to work as a CNA. Of the 14 women who reported no other form of regular exercise, 10 (71%) described work as sufficient exercise in itself. For example, one woman who denied exercising regularly stated "work is enough exercise. Working there is exercise for the whole day". Nadia, who had been working as a CNA for 11 months, stated,

I get so much exercise with this job. It's the same as going to the gym twice a week. We walk so much. I've worked for a year now and I have muscles like I've worked out at the gym (Nadia).

Nadia's comment suggests that her work could be considered as fitting into both the aerobic and the strengthening categories of exercise. Others remarked on the amount of walking their job involved, for example, "I walk, walk, all day around the hospital...I never stop", and "I walk and run everyday at work, it keeps you moving".

In addition to exercise inherent in the job, four women described planned exercise at work beyond that required by the job. Two women found opportunities to do stretching and bending exercises during breaks or slow times. Elena explains,

Oh I do my exercise. Sometimes three times a week. Or just sometimes I usually do it at work. For example around 9:00 in the evening I do it for 20 minutes, a little bit of aerobics, stretching...Because, for example, if I am working, by 9:00 or 9:20 or 9:30, in the patio I go and exercise (Elena).

Carmen described taking walks around the hospital, "I walk at work. I take walks around the hospital...about two to four days a week for about 30 minutes, but sometimes I have to stop and answer lights". Participating in activities with the residents was another form of additional exercise at work described by one woman,

"sometimes when I bring the resident at 9:00 in the morning and they have activities there and I dance with them...Yeah, I dance with the residents".

Finally, two women described exercises done to prepare for or facilitate their work. Maria discussed the exercises she does to strengthen her back,

That's what I tell you. I do exercises every night and so I keep my back straight up. The muscles, you know, strained, I mean moving, because when the muscles get too tight and then you lift, that's when you get back injury or something...that's what I do that is good for my job, exercise my back, legs, shoulder, neck,... (Maria).

Anna talked about the exercises she did every morning before work to relieve pain in her knee, "Sometimes I feel some pain in here (indicating knee area). I think it is a sign of getting old. I always get my exercise everyday just to ease the pain".

Rest and Sleep

Twelve women (35%), responded that getting sufficient rest and sleep was something they did to maintain their health and to prevent or alleviate fatigue. Sleep and rest was not initially identified as a separate code but emerged in analysis of the data included in the general health practices category. A connection between sleep or rest and health was supported by comments such as, "actually I do sleep more to stay healthy because you've got to sleep a good night's sleep" and "we can't stay too late because of work the next day, I have to take care of my health".

Five women specified needing amounts of sleep ranging from six to eight hours per night, while others were less specific and spoke of getting "enough sleep" or "a good night's sleep". The timing as well as the amount of sleep and rest needed was included in some of the women's descriptions of their sleep and rest practices.

The timing of sleep or rest activities included going to bed early, taking a nap after work, and resting on days off.

Some women mentioned physiological changes that increased their own need for sleep and rest. These included menstruation, recent childbirth, and aging. Many women spoke of feeling tired but this was more frequently attributed to their level of activity rather than to their lack of sleep or rest. Fatigue, however, could interfere with sleep and rest as described by Lorena,

Sometimes when I get too tired I get asthma, like an allergy, and it bothers me at nighttime and I cannot sleep. I don't have a good sleep when it bothers me, when I'm too tired (Lorena).

Irene commented, "I need a lot of sleep in order to have a good day the next day. Sometimes when I'm really tired, I can't sleep".

Work as a CNA was the activity most often mentioned in reference to sleep and rest practices, particularly in terms of timing. Women working the day shift described arising at 4:00 a.m. in order to have time to get ready for and commute to work by 6:00 a.m. and this necessitated an early bedtime. Sleep and rest patterns were further complicated by overtime work, most specifically working a double shift or a 16 hour day. As Anita stated, "If I'm working double I only sleep three to four hours. Fifteen, sixteen hours awake and then go back to work again at 3:00 p.m. Compensating for the sleep and rest deficits resulting from altered work schedules could be difficult as one woman explained, "When I sleep only six hours I have to sleep again, two hours, just to overcome that". Family role demands were also discussed as a factor in the timing and amount of sleep and rest. Iris, the mother of a

severely handicapped child, described her daily schedule,

My daughter takes a lot of time. When I get home after work at 11:00 p.m. I usually do housework sometimes until about 2:00 a.m. Then I get up at 6:00 a.m. to get my daughter off to school. Sometimes in the mornings I take my mother to work and help her. She has a day cleaning job (Iris).

General Health Practices

Health practices, other than diet, exercise, and sleep/rest, that were mentioned spontaneously by the women were categorized as other health practices. A further coding of these practices produced five sub-categories of health promoting and/or health maintaining activities: 1) receiving regular checkups, 2) avoiding harmful substances or practices, 3) engaging in relaxing activities, 4) managing emotional responses, and 5) taking a daily shower. These sub-categories and the frequency of their mention are presented in Table 4.3.

In their discussion of regular check-ups some of the women mentioned the annual physical that is required for their employment as a CNA. Their descriptions of what the check-ups entailed indicated that these could include: measurement of blood pressure, temperature, pulse, and respirations; auscultation of heart and lungs; TB screening (including a chest x-ray if indicated); and an interview. Responses from nursing administrators at each of the three agencies supported these descriptions, however, one administrator mentioned that the annual check-up included weight measurement and this was not identified by any of the CNAs. All check-ups were conducted at the agencies, however, in one agency the nursing staff performed the examination, while in the other two, the medical director was responsible.

Table 4.3

General Health Practices

Practice Category	Frequency
1. Receiving regular checkups	
a. physical exam	3
b. mammogram	3
c. pap smear	3
d. blood pressure check	1
e. cholesterol check	1
2. Avoiding harmful substances/practices	
a. avoiding cigarettes	6
b. limiting or avoiding alcohol	4
c. avoiding drugs	1
d. avoiding unsafe sex	1
3. Engaging in relaxing activities	
a. go somewhere (shopping, movies, etc.)	6
b. play with baby	2
c. take time for self	1
d. engage in sex	1
4. Managing emotional responses	
a. maintain a positive attitude	3
b. avoid worrying thoughts	1
c. avoid anger	1
d. don't take everything to heart	1
5. Taking a shower every day/morning	4

Varying degrees of confidence in this annual check-up were expressed. For some women this was enough to confirm their health status, for example, "Actually we have annual check-ups, x-ray and everything, TB test, everything. And they have to ask you some questions like that, what you feel. A general check-up". Other women expressed a need to have a more complete physical, for example, "I should have check-ups more often. I mean, I have check-ups here once a year, but I should

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have the full physical check-up thing." The three women who reported annual physical examinations as something they did for their health indicated that these examinations were in addition to that provided by the agency.

Attention to the promotion and maintenance of mental and emotional health was indicated by descriptions of activities directed toward relaxation and the control of emotional responses. Some of the women's comments suggest a philosophical perspective which enables them cope with day-to-day difficulties. Nan put it this way,

I try to stay happy. I don't let things bother me. I don't get involved to a point where it's really...I'm 51 years old, I've raised my kids and for now it's like I'm being reborn. Everything that comes to me I get involved, but I just don't take everything to heart. So, somehow it doesn't bother me (Nan).

Outside activities with family members or friends were the most frequently mentioned ways of relaxing. These included going to the park, the mall, or the movies, taking short trips, and "visiting". Only a few of the women reported engaging in planned recreational activities. One woman enjoyed regularly attending dances with her aunt and another woman owned a horse which she rode several times a week.

Problem-focused Practices

In describing what they did to stay healthy, the women sometimes connected their activities to a particular health problem. Diet practices to control weight and rest/sleep practices to alleviate fatigue have been discussed earlier in this chapter. Other problem-focused practices included drinking warm milk before bed to prevent insomnia, using herbalist remedies to relieve back pain, and covering the back and shoulders when perspiring to prevent cough. Five women reported taking prescribed

medications for treatment of health problems. One woman was taking verapamil to control hypertension, one was taking insulin, two had been taking ferrous sulfate for anemia, and one had been taking antibiotics for a urinary tract infection. One of the women taking ferrous sulfate had recently discontinued it because of gastrointestinal side effects and the woman taking the antibiotic had stopped taking it when her symptoms improved. She offered the following explanation,

They gave me some antibiotics for my urine and it is O.K. now...yeah, and when I feel good, I immediately stopped the medicine. I don't want to drink medicine...and when I already, my bladder is already...call back the germ. I already feel good with my bladder after the medicine and I'm supposed to finish all the medicine, but I stopped it (Anna).

Four women discussed the need to take certain actions to relieve stress.

Although the activities they identified could have been considered as relaxing activities in the general health category, their description in relation to stress suggested that these were problem-focused rather than general in nature. Two women identified cigarette smoking as a stress-relieving activity, for example, "I just smoke at the job. It's very stressful over there" and "The stress level is hard...days are more stressful than evenings...it's more work. In the evenings I can take a break, watch TV, and have a cigarette". Nadia, also noting stress on the job, talked about her strategies for relieving stress,

I put things off my mind, relax mentally trying to get rid of all the things that worry me. I get myself involved in other activities. I go out with the kids and with friends and don't think too much. The stress is too much. This is a very stressful job both mentally and physically. Sometimes I think I will go crazy (Nadia).

Evelyn, who attributed her occasional headaches to stress, stated,

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I don't go to the doctor when I'm sick because I know best what works. I take care of it myself. If I have a headache, I don't take Tylenol because I know I need sleep and if I get sleep the headache will be gone. I think the headaches are from stress (Evelyn).

Some of the women described changes in their health practices and connected these changes to certain events or circumstances. Iris, who has diagnosed hypertension, spoke of her responses to the warnings about her weight she received at the clinic. She stated, "I limit cokes to one per day. I used to drink a lot more cokes but now I'm cutting down. It's hard", and "I'm reading labels now and trying to limit fats". Elena, also concerned about her weight, had become ill during a visit to the Philippines and had lost weight. She felt she was now at her optimum weight and was working to maintain this. Anna began drinking more fluids after experiencing a urinary tract infection.

It was having her first baby that caused Shani to view her own health differently. She commented,

I was thinking about my health. I'm going to do something about this. when you have a baby you have to take care of yourself good. Cause your body is already sensitive, it gets sick easily. So I take care of myself and work slowly...I'll find out more because that is what I'm interested in about myself now. Every time I go to the doctor, I'm going to make sure that they give me this and that. (Shani)

Rachel also had a new baby, but in her case this meant less opportunity for exercise and recreation. She stated, "My family is in the Philippines and I don't want to take the baby to the babysitter on my day off so that I can go exercise" and "I haven't gone (to the park) since I had my baby".

Health Appraisal

Most of the women described their health as good or excellent, with 21 (62%) rating their health as good, and 8 (24%) reporting their health as excellent. Only 5 women (15%) rated their health as fair and none of the women reported their health as poor. The women's comments on their health rating as well as their responses to follow-up questions provided textual data which suggest certain shared definitions or perceptions of health.

A number of women based their appraisal of their health on the degree to which they experienced illness or health problems and they considered themselves to be in good or excellent health if they were not sick. As summarized by one woman, "Good health means that there is nothing wrong with me, that I'm not sick". Two women related their health status to their weight, one rating her health as good because "I'm at a good weight" and the other responding that "because of my weight I can't say it's excellent". One woman identified her cigarette smoking as the reason she rated her health as good rather than excellent.

Almost as frequently as health problems, the women mentioned feelings they associated with their health status. These included "feeling strong", "feeling like going more", "not feeling anything like headaches or not tired", not feeling any aches or pain, and not feeling any symptoms of illness. Not feeling good, or feeling tired, despite absence of illness, indicated decreased health for some, for example, "I don't feel very good. I'm tired from working two jobs. I've never been sick though, just colds", and, "Sometimes you don't feel good, especially in the morning when you are

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going to wake up".

Another frequent measure of health was the ability to sustain a certain activity level both at home and at work. Jessica talked about the number of residents she could care for as a measure of her health, "I can do a lot of things, I can still carry 11 residents...maybe if you are excellent you are a super woman...you can do the 15 residents every day". Another woman who was the mother of a young child and also attended community college, stated, "I think it's excellent... because I can still do everything".

Some women expressed some uncertainty about their actual health status suggesting that this could only be determined by a check-up. They seemed particularly hesitant to rate their health as excellent without this external validation, for example, "I can't say excellent because I don't go so much to the hospital", "I really haven't had a check-up in the last couple of years. So I've got to have that done and then I could say excellent, but until then...", and "you don't know if you are excellent in your health".

Three women related their health to their age, one stating, "I feel healthy to be 63 years old", and another commenting, "I'm getting older so I think more about my health". One young woman suggested that it was her age that enabled her to carry out all her activities and expressed concern that as she got older the same level of activity might have detrimental effects on her health. She stated, "for now it seems that I still can do it because I'm young, but if I really think of it, it really isn't good for me in the long run".

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Satisfaction With Health Practices

Responses to the question, "How satisfied are you with what you are currently doing for your health?", could be sorted into three categories: satisfied, somewhat satisfied, and not satisfied. Twenty-four women, 71% of the sample, expressed satisfaction with their current health practices. The responses of seven women, 21% of the sample, indicated they were only somewhat satisfied with their self-care efforts. Equivocal responses such as "somewhat", "fairly", "a little", and "so-so" were placed in this category. Three women, 9% of the sample, responded that they were not satisfied with what they were doing for their health. Their comments provided some information about the reasons for their dissatisfaction. Carmen stated, "Well, not too much (satisfied) because I'm working and I sometimes don't take care of myself. Because I work too much, I really feel so tired". Louisa responded, "I'm not very satisfied. I think I'm putting too much stress on myself. I actually almost only sleep 5 to 6 hours a night because I have to study and the next day I have to go to work". Theresa commented, "Not very. I need to take better care of myself. It's too expensive to go to the doctor so I never go to the doctor".

Factors Influencing Satisfaction

Matrices were developed to facilitate examination of the data for possible links among health rating, current health practices, and satisfaction with current health practices. A cross-tabulation of health rating and satisfaction with current health practices is presented in Table 4.4. Neither the cross-tabulation nor the textual data support a connection between these two categories. The women were more likely to

report satisfaction with their current health

practices regardless of the health rating. Eighty percent of the women who rated their

Table 4.4

Health Rating and Satisfaction with Current Health Practices

Health Rating	Satisfaction					
	Satisfied		Somewhat		Not	
	freq	row %	freq	row %	freq	row %
Excellent	5	62.5	1	12.5	2	25
Good	15	71.4	6	28.6	0	0
Fair	4	80	0	0	1	20

health as fair also indicated they were satisfied with what they were doing for their health. Of the three women who were not satisfied with their current health practices, two rated their health as excellent and one rated her health as fair.

An examination of textual data and a cross-tabulation of reported diet, exercise, and sleep/rest practices with satisfaction, as presented in Table 4.5, failed to reveal any clear links among these categories. There is a suggestion of a connection between current rest and sleep practices and satisfaction in the finding that none of the three women who were dissatisfied with their current health practices reported rest or sleep activities as a means of maintaining their health. This possible link is further supported by the women's statements. Carmen commented on her fatigue and Louisa mentioned lack of sleep in responding to the question about satisfaction with health

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practices. This was not supported by comments made by the seven women who were somewhat satisfied with their health practices as only one of the women mentioned sleep in relation to satisfaction.

Table 4.5

Current Health Practices and Satisfaction With Current Health Practices

Health Practice	Number	Satisfaction (%)		
		Satisfied	Somewhat	Not
Healthy Diet	33	72.7	18.2	9.1
Exercise	20	80	10	10
Adequate Rest	12	83.3	16.7	0

As discussed earlier, some of the women mentioned feelings of fatigue or the ability to sustain a certain activity level in relation to their rating of their own health status. This suggested a possible connection between particular health practices and health rating. This potential connection was explored and is presented in Table 4.6. No differences in health rating in relation to diet, exercise, or rest were demonstrated in the cross-tabulation. Although there was some suggestion of a possible link between rest and sleep and health rating in the textual data, the sparsity of the data precluded any further development of this connection.

"Should Do" Practices

When the women were asked if there were things they thought they should be

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doing for their health but weren't doing currently, nine women (26%) indicated that they felt they were doing everything they should and the remainder mentioned

Table 4.6

Current Health Practices and Health Rating

Health Practice	Number	Percent Health Rating		
		Excellent	Good	Fair
Healthy Diet	33	21.2	63.6	15.2
Exercise	20	35	50	15
Adequate Rest	12	16.7	66.7	16.7

additional health practices they thought they should be doing. Eleven women thought they should get more exercise, six women stated they felt they needed to get more rest or sleep, and six women thought they needed more frequent check-ups. Four, of the 25 women who thought they should be doing something more, mentioned needing to regulate their diet in order to lose weight. Other health promoting or maintaining activities women felt they should be doing included engaging in more social and recreational activities and stopping smoking.

Textual data and category frequencies were examined for possible links among diet, exercise, and rest/sleep "should dos" and health rating and satisfaction with current practices. The majority of the women whose responses indicated they felt they should be regulating their diet or exercising more also rated their health as good

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or excellent and reported satisfaction with their current health practices. Half of the women who responded that they felt they needed more rest or sleep, however, rated their health as fair and indicated that they were somewhat or not satisfied with their current health practices. Most of the women who thought they should be having more frequent checkups rated their health as good or excellent but half indicated they were only somewhat or not satisfied with their current health practices. Category frequencies for these data are presented in Tables 4.7 and 4.8

Table 4.7

"Should Do" Health Practices and Health Rating

	Number	Health Rating (%)		
		Excellent	Good	Fair
"Should Do"				
Exercise	11	18.2	72.7	9.1
Rest	6	33.3	16.7	50.0
Checkup	6	33.3	50.0	16.7
Diet	4	25.0	50.0	25.0

Again there is a suggestion that, in this sample, both self-rated health and satisfaction with current health practices are more closely connected to obtaining adequate rest and sleep than to any other health practice. Unfortunately the small sample size did not allow further quantitative testing of this link. Further substantiation of adequate sleep and rest as an

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important health-related issue for these women was found in the textual data in which there were repeated references to rest, sleep, and fatigue in relation to the women's work and family activities. These references will be considered further in the following chapter.

Table 4.8

"Should Do" Health Practices and Satisfaction with Current Practices

"Should Do"	Number	Satisfaction (%)		
		Satisfied	Somewhat	Not
Exercise	11	72.7	27.3	0
Rest	6	50	16.7	33.3
Checkup	6	50	33.3	16.7
Diet	4	75	25	0

Health Concerns and Attention to Risk

Information about the women's perception of risks to their own health was found in their responses to the general question, "What worries you most about your health?" and to more specific follow-up questions about worries concerning their heart or blood pressure and injury at work. Perception of cardiovascular risk was further explored in relation to actual risk as determined through questions and the measurement of blood pressure and weight. General and cardiovascular health worries will be described in the remaining sections of this chapter. A separate

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discussion on work-related health worries and the women's responses to these worries will be included in Chapter five.

General Health Worries

Eight women, 24% of the sample, denied any current health worries. Most said they didn't worry because they felt well and weren't sick, however two women who described experiencing health problems also said that they did not worry. Nan, who had been diagnosed with cervical cancer nearly twenty years earlier stated,

You know, I don't worry about my health at all. I don't ever worry about my health. I didn't worry about my health when I was living in Japan and I had my child...at the time I was carrying her was when they discovered that I had the cancer...when she was six months old I was medical evacuated out of Japan to the States because they couldn't treat me at the facilities there in Japan. I never really worried about my health then. I'm just not, I just don't think about it, I just don't worry about it (Nan).

The women who did worry about general health conditions, other than job related injuries or illness, worried most about their weight and about getting sick. One woman worried about being underweight, and five women worried about being overweight. Only two of the women who worried about being overweight mentioned increased risk of hypertension, stroke, and heart disease as concerns associated with their weight. The types of illnesses about which women reported worrying included colds and respiratory infections, asthma, kidney disease, diabetes, strokes, and heart attacks. One woman worried about her smoking and the increased risks of lung disease. Three women described concerns about getting older and becoming incapacitated like the residents for whom they cared. Jessica described her worries about this,

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I think about getting old when I see the residents, I think I don't like to be like that. I'm always saying to myself, I don't like to be like that. It's hard for me too. When I get that kind of sick, I'm always thinking that. When I see the resident, it's hard for me (Jessica).

Cardiovascular Worries and Cardiovascular Risk

When asked directly if they ever worried about their heart or blood pressure, seven women responded that they worried about their heart and ten women described worries about their blood pressure. The women worried about heart attack and heart problems related to hypertension, diabetes, and smoking. One woman, who reported a history of congenital heart problems, worried about future problems with the "hole in her heart". Only one other woman told of experiencing actual heart problems, a murmur identified on one occasion, and she denied any worry about her heart.

Blood pressure worries were closely tied to a history of pregnancy-induced hypertension (PIH) and a family history of hypertension. Only one woman was currently receiving treatment, including drug therapy, for hypertension. Five women, however, reported experiencing hypertension during pregnancy and, for two women, this had progressed to preeclampsia and had resulted in infant loss. All except one of the women who had experienced PIH also reported a strong family history of hypertension. Maria described her fears,

Well, my mom died from high blood pressure so I'm kind of afraid one day I will have high blood pressure. When I go to the doctor I will always find out, I'm asking him how my blood pressure is. Sometimes the nurse just takes your blood pressure and they don't say. I just keep on asking (Maria).

Louisa, who had lost her first baby due to preeclampsia, talked about her concerns,

I don't know why, I'm not a high blood pressure person, but I know my family is and I know once in awhile I just get blowed up right away. So it

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does kind of worry me that when I get a little bit older that I do get it...It is my mother and my grandmother who have high blood pressure and they are both taking something for it (Louisa).

Whenever possible, a blood pressure reading was taken at the time of the interview. Two women had systolic pressures above 140 mmHg and/or diastolic pressures above 90 mmHg. Louisa was one of these women, however on the day of her interview the investigator had forgotten her blood pressure cuff, so Louisa used her own electronic measurement device and, when it read 159/106 mmHg, she expressed much doubt about its accuracy. She planned to have her blood pressure checked again at work the next day. Irene, whose blood pressure measured 182/70 mmHg, denied any history of hypertension but said she worried "a little bit about blood pressure when I'm working very hard". Irene was also encouraged to have her blood pressure rechecked by one of the nurses at her workplace.

Iris had been taking antihypertensive medication for four years and was the only woman who reported her usual blood pressure as elevated. As her interview took place in a coffee shop, she was uncomfortable about having her blood pressure checked at that time, however she stated that she did have it checked monthly and it was usually 160/90 mmHg.

In their responses to the question about blood pressure worries and in comments made at the time their blood pressure was measured, some of the women indicated that they also worried about low blood pressure. "Low blood" was a term used, most frequently by Filipino-American women, to describe a condition in which anemia is associated with low blood pressure and often symptoms of lightheadedness

and dizziness. Evelyn commented, "One time I felt dizzy and I thought I might have low blood, but my blood pressure was 110/60". When asked if she was worried about anemia, she responded "yes". Jessica also indicated that she worried about low blood pressure, stating "you know my blood pressure is only 90". In response to a question about blood pressure medication she indicated she was taking ferrous sulfate, "for my blood, because it is low. I'm anemic".

When questioned about a history of diabetes, seven women responded that they had been told, on at least one occasion, that they had diabetes. Only one of these women, however, was currently undergoing medical treatment for diabetes. Four of the women reporting diabetes had experienced gestational diabetes, and two had been told they were borderline diabetic and should watch their diet. Rachel expressed her worries about diabetes and increased risk of heart disease as follows,

When I was pregnant I had diabetes and high blood pressure. After I had my baby they checked for glucose and I'm O.K. My blood pressure is O.K. too. My aunt has diabetes. I'm really scared that I'll get it - that's what I'm really scared of. My mother is a diabetic and has heart problems. She is overweight. My grandfather had diabetes and a heart attack. I cut down on my salt and sugar intake, that's what causes diabetes, right? (Rachel).

Four women were currently smoking. Two reported that they smoked ten or more cigarettes a day and two indicated that they smoked five or less a day. Two of the women talked about their health concerns in relation to smoking and expressed a desire to cut down or quit. Dana, an insulin-dependent diabetic who said she smoked ten cigarettes a day, described her understanding of the effects of smoking on her health, "For the most part, I'm doing pretty well considering that I smoke. I already have diabetes and it constricts the vessels and stuff and smoking makes it worse".

Twelve women exceeded the desirable weight for their height by at least 10% according to the 1983 Metropolitan Life Insurance Scale for medium frame size. Medium frame midpoint was used as desirable weight in the Alameda County Study (Schoenborn, 1986). Two of the women included in this group refused to be weighed but reported an estimated weight that would clearly categorize them as overweight. Six of the women weighed more than 20% above the desired weight and two of these women were over 40% above their desired weight. Seven of the twelve expressed concern about their weight and described diet or exercise practices directed toward weight loss. Iris, whose stated weight was 185 lbs, acknowledged her weight as a health risk, stating, "They say if you don't get your weight down you'll have high blood pressure or a stroke. I want to lose 50 lbs. I don't understand why I don't lose. Maybe I need more exercise". Lupe, who was moderately overweight at 154 lbs, commented, "I think when you get weight, that is the problem that I have. When some people gain weight, that is a problem for the heart". Some who expressed concern about their weight mentioned appearance and energy level rather than health as reasons for their concern.

With one exception, the women who did not express concern about their weight could be classified as moderately overweight. Rowena, however, weighed 192 lbs and at a height of 5'4" would be classified as obese. Although she laughed about eating "a lot of things, even junk food" and stated that she didn't exercise because "now that I've put on this weight it's hard for me to bend", she did comment about her other worries, stating, "Sometimes I worry about high blood pressure and diabetes

because they run in the family. My mother has high blood pressure and she had diabetes. My father has high blood pressure and heart disease".

Although there was frequent mention of family members with hypertension, diabetes, and heart disease, only three women met the family history risk criteria of having a biological parent who died of heart disease before age 60 (Mathews, Kelsey, Meilahn, Kuller, & Wing, 1989). One other woman stated that both parents had died of heart attacks but was not specific about their ages and a fifth woman reported that her father had a fatal heart attack at age 68. Of the three women who met the family risk criteria, two had lost fathers and one had lost her mother to heart disease.

Exercise patterns have been previously discussed. Based on the amount of exercise inherent in their work, none of the women could be classified as leading a sedentary lifestyle. An exploration of exercise in relation to cardiovascular health concerns and overweight indicates that, although this connection is recognized by some of the women, it is not reflected in their reported exercise practices. Cross-tabulations of expressed weight, heart, and blood pressure concerns with reported exercise indicated little difference in exercise patterns between those who worried and those who did not (Table 4.9). Mention of exercise as something they should do, however, was more frequent among women who worried about their heart, their blood pressure or their weight than among women who did not acknowledge these worries. Seven (58%) of the twelve women classified as overweight indicated that they currently exercised regularly and three of these women stated that they should exercise more. Five (42%) of the overweight women did not currently exercise

regularly and two of the women in this group indicated that they felt they should be exercising.

Table 4.9

Exercise, Overweight, and Risk Concerns

	Number	% Current Exercise	% Should Exercise
Overweight			
Yes	12	58	41
No	22	59	27
Weight Concerns			
Yes	9	56	56
No	25	60	24
B/P Concerns			
Yes	12	58	50
No	22	59	24
Heart Concerns			
Yes	7	57	57
No	27	59	26

A summary of cardiac risk factors identified in the sample is presented in Table 4.10. Findings from the Framingham Study have demonstrated significant increases in cardiac risk associated with increases in the number of risk factors present (Levy, Wilson, Anderson, & Castelli, 1990). When elevated blood pressure, smoking, overweight, diabetes, and family history were considered, 18 women had at least one risk factor present and five of these women had two risk factors. If history of hypertension, including pregnancy induced hypertension, and history of diabetes, including gestational diabetes, are included in this cluster, then 21 women had at least one risk factor present. Of these women, six had two risk factors and two had three

risk factors. Women with three risk factors present would be considered to have a risk of heart disease more than three times greater than that of a woman with no risk factors.

Table 4.10

Cardiac Risk Factors

Risk	Number	% of Sample
History of Diabetes	7	21
Overweight (> 20%)	6	18
History of Hypertension	6	18
Current Smoker	4	12
Elevated B/P	3	9
Family History	3	9
Current Diabetes	1	3

CHAPTER FIVE

Findings: Health Practices and Day-to-Day Living

In this chapter, findings related to the influences of role involvement and the perceived availability of resources on health practices are discussed. This discussion includes information in response to study questions 5 through 7, and in partial response to study question 4.

Role Involvement

Identification of Roles

Recognition of involvement in multiple family and social roles, in addition to employment, is critical to any understanding of women's health practices. It was not an aim of this study to explore these various roles in depth, but instead to obtain a general overview of the roles in which the women were involved in order to provide a framework for a fuller description of the interplay of work characteristics and health and health practices. Descriptions of health-related role activities are interwoven throughout the discussion of the study findings.

Responses to the scaled items on the role involvement portion of the questionnaire were tabulated and are summarized in Table 5.1. All of the women reported involvement in at least 6 of the 17 listed roles and the majority (65%), of the women reported involvement in 9 to 11 roles. The maximum number of roles identified was 13, the number identified by three of the women. Only one role, the role of aunt, was indicated in the "other" category. This role was recognized by eight of the women who reported regular activities with nieces or nephews. In two of the

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interviews involvement in the role of aunt was reported after the completion of the scaled items, thus level of involvement was not determined.

In this sample, the reported level of involvement in the employee role clearly surpasses the level of involvement in the roles of mother and partner. Involvement in the role of mother or grandmother is second to that of employee and greater than reported involvement in activities as a spouse or partner. Interestingly, three of the women had dependent children less than 21 years old who had not immigrated to the U.S. with them and were being physically cared for by relatives. A fourth woman, following her divorce, had placed her two young children in the care of her ex-husband's mother in Mexico so that she could work as much as possible. Despite the geographical separation, two of these women reported a great deal of involvement with their children and the other two reported some and moderate involvement. High levels of involvement were also reported by mothers of older children who were living in their country of origin.

Many of the women indicated moderate to high levels of involvement in their relationships with their parents. For the older immigrant women, caring for parents often involved some level of financial support. When asked about her involvement as a daughter, Loni indicated a great deal of involvement and replied, "How do you rate it when you're not with them yet you're always thinking of them and you're sending them a lot of help?" Theresa also rated her involvement with her mother in El Salvador as a great deal and commented, "My father has died but I take care of my mother. I write to her and I call her and I send her money. I'm the one that's

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responsible for taking care of her."

A score representing degree of role involvement was calculated by adding the involvement ratings for all the roles (possible range from 1 to 85). Role involvement scores in the study sample ranged from 26 to 58 with a mean of 37 and a standard deviation of 6.3. These scores can be compared to the findings of Meleis, Norbeck,

Table 5.1

Role Involvement

Role Activity	Number	Level of Involvement (%)				
		None	A Little	Some	Moderate	Great
Employee	34	0	0	3	6	91
Housekeeping	34	0	9	9	44	38
Friend	33	0	33	24	30	12
Sister	32	3	22	31	22	22
Mother	29	0	0	10	24	66
Daughter	29	3	14	21	17	45
Social	29	3	31	45	17	3
Religious	26	0	19	27	31	23
Partner/Wife	23	0	9	9	17	65
Daughter-in-law	22	5	36	27	23	9
Recreational	16	0	38	38	12	12
Caregiver	8	0	25	50	0	25
Volunteer	8	0	38	50	0	12
Aunt	6	0	0	50	17	33
Student	6	0	50	17	33	0
Grandmother	5	0	0	20	0	80
Ex-Wife/Partner	3	0	100	0	0	0

and Laffrey (1989), who reported a role involvement range of 19 to 52, a mean of 35.7, and a standard deviation of 6.8 in their sample of 87 female clerical workers.

Rationing Time and Energy

Much evidence of time and energy rationing was found in the women's comments about their health practices and their role involvement. The women's remarks about the time needed for sleep and rest, for example, suggest that their work and family demands on their time are such that conscious planning of time for adequate rest and sleep is necessary. Lorena, who shared a one-bedroom apartment with four other family members, talked about how she had to negotiate for this,

Sometimes, like my nephew, he wants to talk to me and relate some stories to me but I refuse because I have to rest and I say "I'm sorry, I want to listen to your story but I have to get up early tomorrow. So we can talk later, during my day off" (Lorena)

Anita, who worked a great deal of overtime and felt she needed more rest, stated, "If I know I don't have enough energy for work I have to talk to my boss about time off.

In responding to the questions about the level of their involvement in various role activities, the women often indicated that they had to make choices and to limit their involvement in activities they valued. Louisa expressed dissatisfaction with her current level of involvement with friends, stating, "They always invite me or always want to spend time with me but I'm always like no, I don't have time. And it feels like I'm driving them away". When discussing her involvement in church activities, Shani remarked, "It's good to go to church but I don't go a lot because of my job and other things". Taking on a new role, such as becoming the mother of a new baby or becoming a student, introduced corresponding changes in role involvement and,

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frequently, changes in health practices. Rachel noted, " I used to go with a friend to volunteer on Sundays to visit for the church. After the baby and working on week-ends, the time is too small" and "when you have a baby you don't have time for socializing or for exercising". Louisa, the mother of an 11 month-old baby and a part-time college student, commented, "I used to (exercise) but not any more now that I'm going to school. We used to do like step aerobics once a week. When school starts, forget it".

Time and energy are linked in some of the women's descriptions of their activities suggesting that the amount of time devoted to certain activities can affect the amount of energy available to them. Time dedicated to rest and sleep would seem the most obvious illustration of this and this is supported by the women's comments about needing a certain amount of sleep in order to have strength for their work and to prevent or alleviate fatigue. The women described other activities, however, that "kept them going" or increased their level of energy. Maria described how she often took her children out for recreational activities on her days off,

On my days off I'll never be at home. I take them out...I enjoy it. It doesn't take any of my energy just watching her (her three year-old daughter). I don't think so because I get a lot of energy out of our activities. It just keeps me away from my job and when I come back I feel all relaxed (Maria)

Although participation in social, recreational, and religious activities was limited for most of the women, some indicated that they experienced satisfaction and an increased sense of well-being when they were able to take part in these activities and thus budgeted time to do so. Loni commented, "I go out sometimes after work with some of my CNA friends and we eat and we talk and it's really good". She indicated she

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was able to do this because her kids were not living with her. Louisa attended senior dances with her aunt two to three times a month and described this as very satisfying. Attending church was important to Anna and she explained how she adjusted her work schedule so that this was possible, "Every Sunday, even if I have my overtime here I have to cancel. When they ask me, do you want to work double? I say no, I don't want to miss church".

Risking Health at Work

A major and unexpected finding in this investigation was the extent to which the women experienced concerns about work-related health risks. For many, these concerns overshadowed their general health concerns and their concerns about cardiovascular disease or chronic illness. Thus actions taken to reduce work-related risks were included in the women's day-to-day health practices.

Types of Work-Related Health Risks

Many of the women expressed concern about work-related health risks and some described injuries or health problems they had experienced as a result of their nursing assistant work. The types of risk described could be clustered into five categories: physical injury, other work-related health problems, physical discomfort, communicable disease, and emotional and psychological distress. Each of these will be further described. In describing nursing assistant work, the terms resident and patient are used interchangeably in the same way in which they were used in the women's conversations.

Five women discussed actual injuries they had experienced at work. Two

women reported injuring their backs at work. One of the women had been on disability for two months following her injury. The other, Anna, had injured her back ten days prior to the interview and had not yet fully returned to her work although she was helping out with some of the activities that did not require lifting. She described how she had fallen while transferring her patient from a shower chair,

Yeah, I fell down, but I grabbed her just to protect her. Yeah, I'm holding her in the gait belt. Cause I didn't know that she handled the shower chair and the shower chair fell down too. So we were out of balance and I tried to grab her, and I avoided her injury and got mine (Anna).

Other women reported developing back problems or back pain as a result of their work but did not describe a specific injury. Several described their concerns about developing chronic back problems. Nadia talked about this, "The lifting worries me and having back problems after awhile. Sometimes my back really feels tired. I worry that I'm going to have back problems if I do this work a long time". Two women had injured their wrists on the job and one woman reported a minor head injury she attributed to "mechanical problems", stating "some handling techniques sometimes miss". She had been injured using a mechanical lift to transfer a patient. Other work-related health problems reported by the women included urinary tract infections attributed to infrequent bathroom breaks, and skin lesions due to glove allergy.

Backache or "tired back" was the most frequently reported physical discomfort associated with nursing assistant work. Other reported work-related discomforts included headache, wrist pain, leg pain, and neck pain. General fatigue as a result of the intensity of their work was identified by a number of women who commented

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about being tired from their jobs. Some women expressed concerns about their exposure to communicable disease and mentioned AIDs, hepatitis, flu, coughs, colds, and cancer as illnesses they worried about catching from their patients.

Descriptions of the emotional and psychological distress experienced in nursing assistant work indicated that distress is associated with individual relationships with the residents as well as with interactions with supervisors and peers. The sadness and grief felt when a resident's condition deteriorated or when a resident died was described by several of the women. Iris talked about this,

I recently lost two of my oldest patients and that was hard. You adopt them, you get to know their families and you take care of them every day. I didn't have a grandmother so I adopt them. It hurts when you lose a patient, you're doing their daily care and it's hard to watch them deteriorate. I talk with my co-workers about this and we have inservices that help (Iris).

Other women spoke about how they had cried when a resident died or when they had felt that a resident was suffering. Fely stated, "Oh, I get teary-eyed when I see them suffering. I keep on praying, oh Lord, take her. I can't take it". The women's descriptions of their relationships with their patients suggest that these relationships are generally mutually satisfying, however the occasions when a patient is displeased or indifferent to the care they are given can be distressing to the nursing assistant.

Sherie commented,

Some patients, some residents, uh, what I can say...know when you're taking your time they thank you a lot for what you're doing, but some don't. Anything you do, it's nothing for them (Sherie).

Problems with supervisors and other staff, such as the housekeeping staff, were cited as sources of distress by some of the women. One woman, after working

almost eight years on one unit, had transferred because of difficulties with the charge nurse on that unit. She was distressed about the effects her transfer had on her long-term patients and their families commenting that one family member had called her a traitor. Several women described concerns related to recent changes in administration in their agency, mentioning changing rules, increased workload, and lack of open communication as particular causes of anxiety and tension.

The women also described emotional and psychological distress in association with more general characteristics of the job. Theresa commented, "You get depressed working with old people. Around the holidays is a bad time, a lot of them don't want to lay in bed over the holidays. They don't want to be here". A couple of the women reported high levels of anxiety in relation to patient death. Maria related her fears,

Let me tell you one thing, I never take care of people when they already die. I can't, I can't touch them. I'm crying and I can't touch them. I can touch the body when it still moves...but I just can't, most of the time I cry, and I'm shaking and I'm crying. Especially when they start to going. Oh no, I can't do that (Maria).

Three women described their jobs as very stressful. They did not identify specific stressors but instead referred to the job as a whole, suggesting that the stress they experienced resulted from the interactive and cumulative effects of multiple factors.

An additional risk, which was suggested in conversations with one of the nursing assistants and an administrator, was the risk of commuting to and from the agency. Fourteen of the women lived in Solano County and the most direct route to all three agencies involved traveling over a stretch of two-lane highway known as

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"blood alley" because of the number of fatal accidents on the road, seven in a recent two year period (Flimrite, 1995). While making arrangements to interview one of the women in her Solano home, the investigator was asked if she was afraid to drive on that road. An administrator at one of the agencies mentioned that a long-term CNA employee, who was close to retirement, had recently been killed in an accident on that highway while commuting to work.

Circumstances of Work-Related Health Risks

Further analysis of the nature of the risks at work produced three categories of risk circumstances based on the source of the risk and the degree of control over the risk situation. Some risk conditions could be considered inherent in the job, while others were categorized as imposed by the agency or as self-assumed. Imposed and self-assumed risk circumstances included those situations in which actions taken or not taken intensifies an inherent risk, as well as those situations in which additional risk is imposed or assumed. A summary of these risk categories is presented in Table 5.2.

Inherent risks. Categorized as inherent risks were the physical demand of the work, the lifting and transferring of heavy and paralyzed patients, exposure to communicable disease, and the stressors intrinsic in work that requires a high level of cooperative effort. Comments such as "We cannot avoid lifting because that's our job" , "You work very hard. It is a demanding job", and "This is very heavy work here", illustrate the CNAs' recognition of the potential physical strain inherent in their work. Supporting the inherent nature of communicable disease exposure were remarks such as "You can catch things...you just don't know when there's something

there", and "I'm still kind of worried that I might get something, any disease or something...I try to be really careful about everything, but there is always the thing that you will never know". Remarks about stress on the job included, "The stress is too much. This is a very stressful job both mentally and physically. Sometimes I think I will go crazy", and "My job is very demanding, the stress level is hard".

Table 5.2

Categories of Work-related Risk

Inherent	Agency-imposed	Self-assumed
physically demanding work	inadequate staffing	lifting without assistance
heavy lifting necessary	increased workload	neglecting personal needs
exposure to illnesses	sick time restrictions	working when sick
exposure to stressors		forming attachments
		working extra days or hours

Agency-imposed risks. Descriptions of some agency policies regarding staffing and sick days suggested that these have a risk-increasing effect. Comments were made about "short staffing", those situations when the work has to be accomplished by fewer than the usual number of CNAs, thus increasing the amount and often the pace of the work for the individual. This can occur when a scheduled CNA calls in sick and is not replaced as Theresa describes, "If someone is sick and

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doesn't come in, they don't try to find a replacement, they just work short. Everyone has to take more patients". This can also occur when the agency has not hired sufficient staff to cover days off. Jessica discussed the situation in her agency,

Sometimes we are short of CNAs. In (her assigned unit) there needs to be four but sometimes we are only three because the other CNA is off. So you need to be doing the assignment, they are going to add the other residents to your assignment (Jessica).

A typical daily assignment was described as ten to eleven patients but during short staffing conditions this might be increased to as many as fifteen patients. The risk implications are noted by Rachel in her comment about her experience with back problems, "At that time they were very short of help and we were taking care of 15 patients on the day shift. A lot of girls were hurting their backs". Jessica also talked about the difficulty of caring for 15 patients stating, "We can not do that every day. It is hard for us to do that", and further explaining, "Everyday when I did nine to ten residents it is hard for me. When I went home my back hurts". In addition to the increased physical demand, the decreased availability of help when lifting and transferring patients was seen as contributing to the risks in short staffing conditions. Anna noted, "Everyone is so busy with their own patients, sometimes it is hard to get assistance when you need it". Despite increased effort by the CNAs, short staffing may also have negative consequences for the patients and this can be distressing. Jessica explained that when she had 15 patients she was unable to get them all out of bed and into wheelchairs as is expected. Nadia commented, "We often work short staffed and then the patient doesn't get the care they need. I feel sorry for them sometimes and that's not satisfying".

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Agency policies to discourage the CNAs from taking unjustified sick days could reduce the short staffing problem, however these were viewed by some of the women as punitive, forcing them to work when sick and thus increasing job-related health risk. Rachel commented,

You've got to be there every day. Now you can't call in sick. If you are sick more than one day you have to bring in a doctor's slip. I think the regulations say after three days but now we have to get a doctor's slip for two days (Rachel).

Theresa, who had not worked long enough in her current job to qualify for health insurance, expressed the following, "When I get sick I think I stay sick longer because I don't go to the doctor. You can't collect sick pay unless the doctor signs, but if I go to the doctor I have to pay". Others also talked about the loss of pay and the need for physician verification when sick, suggesting that these were important deterrents to calling in sick. One woman, who also had no health insurance, talked about working with a cough and fever for two weeks before she became so ill she had to go to the hospital emergency room. Working when sick increases risk not only to the CNAs, but also to the patients who are particularly vulnerable to communicable illnesses brought in from the outside.

Administrators from each of the three agencies were questioned about their current sick leave policies. Their responses indicate variation in the policies among the agencies and some differences between the nursing assistants and the administrators in particular agencies in their descriptions of these policies. Based on the information provided by the administrators, one agency required medical verification starting with the second sick day, another required medical verification

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after three days or if the illness occurred on a holiday, and the third did not routinely require medical verification but considered it an option if needed. Dissatisfaction with sick leave policies, however, was expressed by nursing assistants from all three agencies.

Self-assumed risks. Finally, some work-related risks could be considered self-assumed as they involved some level of choice on the part of the nursing assistant. These included not waiting for help when lifting and transferring patients, not taking care of personal needs when working, becoming emotionally attached to patients, working when sick, and working extra hours and days. Time pressures were frequently cited reasons for not getting assistance when needed and not attending to their own personal needs such as food, water, and elimination while on the job. Evelyn described her recent bladder problems,

Last month when I had my (problem) because I control my urine, because I'm busy working and I remember that it is hard for me to urinate...because I forgot to drink water too because I am busy with my work (Evelyn).

Although close attachments to patients increased the risk of work-related emotional distress, these attachments were also described as an important source of job satisfaction and none of the respondents mentioned avoiding emotional connections with their patients. A number of the women likened their relationships with their patients to other relationships such as those with friends or relatives, usually a grandmother. These relationships seemed to develop over time in the course of the work and thus there may be less conscious choice involved than with other self-assumed risks. It could be argued that the risk of experiencing grief when a patient

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dies is as much inherent in the nursing assistant's work as it is self-assumed. Annette commented, "when you get used to do them like everyday, it's not a patient anymore, it's like your friend", and she went on to say, "that's why you get close to them and then they die, that is a very hard thing".

Agency pressures to work when sick have already been discussed, but there are also personal pressures, primarily financial, to work as much as possible.

Manuela described her situation,

Sometimes, if you wake up sometimes you feel your back hurts, but we are trying to wake up because we have to work. I don't want to call in sick because I have to work. I need extra money to send my kids. That is why I'm trying my best to work (Manuela).

Financial pressure was also the most frequently mentioned reason for working extra hours or overtime. Overtime, defined as working more than 40 hours a week, included working more than an 8 hour shift or "doubles", and working more than five days a week or ten days in a two week pay period. Many of the respondents reported other employment in addition to their work at the agency. Some worked extra at other long-term care agencies or board and care homes, some worked extra in non-CNA jobs such as housecleaning, and some were self-employed in such areas as catering, ironing, beautician work, and selling clothes, jewelry, and make-up.

The greatest self-assumed risk, however, was described in relation to overtime work as a CNA and 21 of the women (62%) were involved in this type of overtime work. The majority of the women working overtime worked both "doubles" and on days off, but seven of the women stated that they did not work "doubles" and worked only extra days. Although some of the women only worked overtime occasionally,

most reported working overtime routinely. One woman was working two full-time nursing assistant jobs, but most worked overtime one to two days a week. More than 40 hours a week on the job meant not only greater exposure to inherent risks, but also the super-imposed risk of fatigue. The women talked about feeling tired, dizzy, and weak when working overtime, particularly when working "doubles". Four of the five women who rated their health as fair (80%), worked overtime. Most of the women who indicated they felt they needed more rest and sleep also worked overtime. The women who were most explicit about the health risks associated with overtime, however, were those who chose not to work more than 40 hours a week. Emelia put it this way, "lately I've refrained from doing it, I don't want to abuse myself". Evelyn, who stated she had developed back pain, commented, "I'm afraid I'll get a back injury. That's why I don't work too much overtime".

Financial pressure to work overtime seemed to be greatest among those women who reported sending money out of the country to support children or relatives. Only one, of nine women who indicated that they routinely sent money to support others, did not work overtime. There were also comments made suggesting agency pressure to work overtime. The women talked about being called by their supervisor and asked to work extra hours or days. Some stated they never refused while others were willing to work when staffing was short or for the sake of the residents. Emelia, who was no longer willing to work overtime, was asked why she thought others were willing to do it and she responded,

Especially if they are new here and they want to make money right away. But if you work too much you'll be cranky. Sometimes they don't want to work

but they are forced to because they want favors from you. And so you do them a favor because you don't want to refuse and you might want a favor sometime. The Director of Nursing called me in her office and asked if she could call me sometimes on my day off and I said, "No, please don't call" (Emelia).

Modifying Risk at Work

Some differences emerged in the extent to which the women believed they could control work-related risk. This could be viewed as a continuum, with little or no control at one end and full control at the other. The following comment by Manuela suggests that she perceives little control over the risk of back injury,

Yeah (I worry about my back), especially if I have a resident who is too heavy and she has a stroke. You have to pull up and you have to give a big help, that is why sometimes my back hurts. But what can I do? That is my job (Manuela).

Sherie, on the other hand, stated "I don't worry about back injury. I take precautions. I use the lift, the Hoyer lift whenever I have a patient I worry about lifting", suggesting that she felt much greater control over her risk of injury. Others reported trying to be careful but still worried about the unexpected, "the thing that you will never know".

A number of strategies for modifying or reducing risk at work were revealed in the women's responses. While many of these were individually focused and controlled, some required cooperative effort and assistance from others.

Individual strategies. The importance of working carefully, knowing how to properly lift and transfer patients and using good body mechanics, was mentioned by many of the women. Several referred to the instructions they had received in their initial nursing assistant training indicating they felt they had the necessary knowledge

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to do this correctly. Some of the women mentioned the routine use of a gait belt or a mechanical lifting device as a safety precaution. Discussion of good technique also included references to the proper use of gloves to reduce the spread of infectious diseases.

Some women reported wearing back supports to protect their backs when lifting. Most of the women were questioned about this as it became apparent after the first few interviews that this was an important risk-related issue. Although the wearing of back supports has become increasingly popular among health care workers, their use is not currently mandated and policies, as described by the nursing assistants and administrators, differed among the three agencies. One agency required the wearing of back supports and had been issuing them to all employees for the past two years. Another agency had instituted a back support policy six months earlier but required the CNAs to purchase their own. The agency bought them in bulk and offered them to the CNAs at a low cost. The third agency discouraged the use of back supports until more information was available and an occupational health nurse employed by the parent corporation could provide the staff with an inservice regarding their proper use. A couple of the women told of wearing back supports at the urging of family members prior to any agency policies on their use. In one case, the woman's brother had purchased the support for her.

The women were divided in their opinions about the risk reducing potential of the back supports. When asked if she felt wearing a back support helped, Maria responded, "Not really. It's not very safe, at least 100% safe, no it's not". Others

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indicated they felt the back supports helped but their comments suggested that it was level of comfort rather than injury prevention that determined their evaluation. An example is Manuela's comment that sometimes the back support doesn't help because her back still hurts sometimes. One of the women who had experienced a back injury began wearing a support after her injury. Anna, who had recently injured her back, was working in the agency that provided the back supports but her injury occurred as a result of a fall rather than while lifting. Two nursing assistants in the agency that discouraged the use of back supports expressed some dissatisfaction about this. One reported that some of the CNAs had talked to the director of education at the agency and commented, "We tell her about that because we think it's going to help us with our backs and she doesn't see it". When asked whether using the gait belt was helpful, she responded, "But the gait belt's for the patients only". Whether or not back supports are effective in reducing injury rates, it seems that provision of these to the CNAs is viewed as indicative of the agency's concern for their safety and comfort.

The importance of caring for themselves as a way of reducing risk was discussed by some of the women. Self-care strategies such as maintaining a positive attitude, taking time for oneself, and not "taking everything to heart" were mentioned as strategies for modifying psychological and emotional risks. Getting sufficient sleep, reducing overtime work, and performing back strengthening exercises were strategies for moderating the risks of physical discomfort and injury. Shani, who was concerned about the risk of communicable disease not only to herself but also to her

family and new baby, described her risk-reducing strategies as follows,

I always be careful, not only because I have a baby, even when I live with my family, like when there is a flu or something. When I come home straight I go to the shower, you know. Straight with my clothes and I wash my own clothes separate, I don't wash them with my other clothes and anything. Because if anything happens you are the only one that brings things (Shani).

Modifying risk might also involve reducing exposure to risk or avoiding risky situations. Some women talked of refusing to care for patients with certain illnesses such as AIDs, avoiding dying patients, transferring to another unit with fewer combative patients, getting a job at another agency, and even leaving nursing assistant work. There is some hint in the data of an ongoing evaluative process in terms of risk exposure with the final option being to find another type of job or to retire. One woman talked about returning to clerical work, stating "I worry about hurting my back" and "My mother was against my doing this work because she hurt her back doing it". Maria, who was 38, expressed a desire to change jobs before she turned 50, stating, "After 50 years I really don't like to have to be a heavy lifter". Rachel's story is an interesting example of risk evaluation. She described how she had left nursing assistant work because of back problems and became a bank teller. She worked as a bank teller for three years and then took maternity leave for the birth of her daughter. She gave the following account of the events that led to her return to her old CNA position,

My first week back from maternity leave at the bank I was robbed and the next week I was robbed again. People were asking me in an interview how I felt about it and I told them I'm afraid. I decided I wanted to go back to my old career where I can feel safe and secure and not worry about being robbed. It's hard work but secure (Rachel).

Rachel went on to say that she still worked at the bank occasionally, but "I feel like if I'm not there every day I'm O.K.". She acknowledged the risk of injury in her nursing assistant work, stating "If I hurt my back I'll have to go to clerical work".

Cooperative Strategies. Some of the more frequently mentioned risk modifying strategies required the involvement of others in cooperative effort. The women talked about the importance of getting help from co-workers when lifting or transferring heavy or difficult patients. As one stated, "If I can't do the transfer by myself I go and get help. I'm never going to do it by myself". According to some of the women, information about the need for assistance from others in order to safely lift or transfer certain types of patients, is presented in their initial training for the job. However, as Nadia notes, "Although they teach us, sometimes you just can't do it that way, there's a lot involved".

As previously mentioned, one of problems in getting assistance is the availability of others to help when help is needed. In order to perform morning care for their assigned residents before lunchtime as expected by the agencies, the CNAs must work quickly, and waiting for assistance from others or stopping to assist others can mean delays in completing their assignments. Evelyn commented, "Sometimes when I'm working I don't wait for help with the lifting and I think this hurts my back", and Sherie said, "Sometimes I do a lot of things by myself. Yeah, and then you feel it later on, especially when you work all the time". How well the women get along with their co-workers can also be a determinant of availability. Lorena talked about her difficulties in getting assistance,

It's very embarrassing to tell you that I don't get any help from my co-workers. They are very selfish, they don't want to help. But, it's much better now to get help from the Latinas, the Mexicans, than some of the others. But not all Filipinos are like that, but in our job they just let you do it. You need, but if you need you cannot rely on them. They are all so busy, that's what they tell you (Lorena).

Although others spoke of how busy everyone was with their own patients and the problems getting help, Lorena was the only one to suggest a lack of cooperation and some expressed satisfaction in their relationships with co-workers.

Another important area of collaborative effort is the cooperation needed from the residents themselves in order to accomplish their care safely and efficiently. The women described how they got to know their patients and their moods and how they sometimes had to coax them into complying with their plan of care for the day. Emelia commented, "you have to talk to them to get their cooperation if you want them to be not so hard. Every patient is an individual and you have to work with them differently". Anna talked about understanding the mood of the residents and her strategies for changing "the bad moods to new moods and nicer moods". She went on to say, "It gets easier because you get to know the patients. I have one patient, I know when she needs to go to the bathroom, I can tell and I don't have any problem". Because getting to know their patients is critical in performing their care, switching assignments unexpectedly or adding new unfamiliar patients was viewed by some as a stressor and potential risk. Jessica explains,

I know how to do the routine and I know how to do the patients. I know what is the mood of the residents. But when sometimes the other station is short they are going to pull you out to the other station. It is hard for me (Jessica).

Not all of the nursing assistants interviewed valued the familiarity of daily work with

the same residents, a few preferred more variation. Rachel was assigned to a particular unit but not to a particular group of residents. As she explained, "I pick up whatever assignment is open that day. I like it because I get to know more residents and I don't get tired of the same assignment". Rachel's comment suggests that getting to know her patients was still important even though she was not the one routinely responsible for their care.

Perceived Availability of Resources to Support Health Practices

Responses to questions about the health care, socioeconomic, and interpersonal resources available to the women provided information about environmental conditions or circumstances which facilitate and or constrain healthy practices. Many of these conditions have already been identified in this discussion and will be further discussed in the following sections.

Health Care Resources

Five of the women reported they currently had no medical insurance. One of the five had not worked the required six months at her agency in order to become eligible for health insurance and another had recently met the length of employment criterion, but indicated she was not yet insured. Three women who were eligible for health insurance had declined it specifying the expense of the employee contribution to the premiums as their reasons. Several of the women who were insured also mentioned hardships imposed by the cost of the insurance. One stated, "I have Kaiser through my job but I have to pay. It costs \$200.00 a month to cover myself and my baby, but I have to have insurance for my baby. I'm taking him to the doctor today

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for a check-up". Twenty-four (71%) of the women were insured through a Kaiser plan which was the type of health insurance offered at all three agencies. Four (12%) of the women had private or other types of insurance available to them through their husband's job, or, in the case of one 20 year old single woman, through their parent's insurance. One woman, who lived in a converted garage apartment and supported her parents and three children, qualified for Medi-Cal.

As would be expected, the 24 women who were insured through a Kaiser plan indicated that they usually went to a Kaiser clinic when they needed medical care. One woman who had insurance for herself but not for her children stated that, although she went to the Kaiser clinic for her care, she took her children to the emergency room when they were sick. The four women with private insurance, including the woman covered by Medi-Cal, indicated that they usually went to a private physician's office for medical care. Of the five women with no insurance, three responded that they usually went to a community clinic when they needed medical care and two stated that they went to a private physician and paid out-of-pocket.

The women who lacked insurance for themselves or their children faced the decision to either forego care or to pay for these services. Theresa described what having no health insurance meant to her as follows,

I think I should go to the doctor more often. Sometimes I think I could be sick and don't know it. I don't go to the doctor when I'm sick because I would have to pay to see the doctor. You know poor people, we don't make any money because we have to pay all the bills, the car, the electricity, the phone...I don't have any insurance because I haven't worked long enough at (the agency)...Even though I don't have insurance I have to take my daughter

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to the doctor when she is sick (Theresa).

Lorena talked about the problems she experienced when she sprained her wrist at work prior to the time she had become eligible for health insurance, commenting,

I really suffered from pain and I couldn't even move it for a couple of weeks. It was swollen, and because at that time I didn't have insurance yet because I was new at that job...I wasn't covered so I just depended on the medication that was given to me, some aspirin, some ointment. Sometimes it still hurts when I am lifting too much.

She did not mention Workers' Compensation coverage, however her comments suggest that she felt she needed medical care beyond what was provided her.

Administrators from each of the three agencies were questioned about the health benefits offered CNAs. One agency offered health insurance to employees after six months of employment and paid the full premium for the worker. They also offered dental and vision plans but required the employee to pay 15% of the premiums for the dental plan and a \$10.00 to \$15.00 co-payment for the vision plan. Another agency offered health insurance after three months of employment but required the employee to pay 50% of the premium at a cost of approximately \$70.00 per month. A dental plan was offered for employees at \$25.00 per month, a cost representing 50% of the premium. According to an administrator at the third agency, the agency offered health insurance to the CNAs at the time of employment and paid full premiums but did not offer dental insurance. This information conflicted with descriptions of benefits provided by some of the CNAs employed in that agency. Anna, who had worked at the agency for almost a year, stated that the costs of the Kaiser plan for her was \$26.59 every paycheck or \$53.00 a month. Jessica, who had

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also worked at the agency for about a year, reported that she paid \$100.00 each pay day for Kaiser insurance for herself and her son. She commented,

Yeah, before when I used to work for Woolworth, for my family I used to pay only \$50.00 every pay day...that is why I was wondering here, it is in a hospital, how come I have to pay more for insurance? (Jessica)

Socioeconomic Resources

Information about the socioeconomic profiles of the women has already been presented in Chapter three and summarized in Table 3.3. Of note is that 53% of the women reported annual family incomes of less than \$20,000 and for those with families, this would place them near the federal poverty threshold which, in 1992, was \$13,925 for a family of four (Pear, 1992). Based on the reported household size, it could be estimated that 7 to 8 of the women were living at a poverty or near poverty level. A more precise calculation is not possible as income was reported categorically and in some cases it was not clear whether the reported family incomes included the earnings of all working adults sharing the living space. In terms of income adequacy, 41% of the women rated their family income as inadequate. Despite this evidence of economic disadvantage, the women did not discuss many direct financial constraints on their health practices other than the expense of obtaining medical care. Indirect economic influences on health practices, however, were evident in the previously described accounts of their work patterns.

In contrast to their income, the study participants were relatively well educated with the majority (56%) reporting some college education. Five of the women (15%) were college graduates. The women's status as immigrants may partially explain this

discrepancy between income and education. All but four of the women had immigrated to the U.S. and the average length of time in the country was 6.7 years with a range of 1 to 17 years. Not included in this calculation was one 26 year-old woman who had immigrated as an infant with her parents.

Information on type of residence and living arrangements was collected in order to further assess socioeconomic resources. The majority of the women (68%), indicated that they lived in rented living space, with 16 (47%) living in rented apartments, 11 (32%) living in rented homes, and 1 (3%) living in a rented room. Eleven women (32%) either owned their own home or lived in a home owned by a family member. Although living conditions were crowded for some, the average household size was 4 to 5.

Reported living arrangements were quite varied. Only eight (23.5%) of the women described a nuclear family arrangement with two adults and their dependent children living together. The sharing of living space with extended family members or non-related adults was a much more common arrangement. Only two unpartnered women lived alone with dependent children and one of these women was caring for her grandchildren. Only one woman expressed some dissatisfaction with her living arrangement, commenting on a lack of privacy. She was sharing a one-bedroom apartment with her daughter, son-in-law, nephew, and grandchild.

Interpersonal Resources

The women talked of receiving help from others in caring for their children. Partners, older children, relatives, and babysitters were mentioned as assisting them

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with their activities as mothers. Assistance with housekeeping was also reported and some had worked out domestic job sharing agreements with partners and older children. None of the women indicated they received any help from others in support of particular health practices although one woman described taking walks with her husband. Rachel, who shared the care of her five month-old baby with her partner and hired a babysitter when they were both working, was unwilling to use this assistance to enable her to exercise. She stated, "My family is in the Philippines and I don't want to take the baby to the babysitter on my day off so that I can go exercise". Almost all of the women, however, could list several people they could turn to in the event that they experienced health problems or emotional concerns. Through exploration of their responses to the questions about who they could turn to, some understanding of the availability of social resources for health is possible.

When asked whom they would turn to if they were sick and couldn't carry out their usual activities, most of the women indicated that family members were their first resource. Fourteen (41%), of the women identified their husband or partner as the person, or one of the persons, to whom they would turn. After partners, female family members, mothers, sisters, and daughters, were the most frequently mentioned sources of help when ill. Four women stated they would turn to friends, one mentioned a co-worker, and one woman, a 19 year-old young mother whose family was all in El Salvador, said she didn't know who she would ask for help. Carmen, also from El Salvador, commented that her partner was the only one she could turn to because her family wasn't here.

In contrast, when experiencing problems with family members or friends, the women were more likely to turn to friends for help or advice. Sixteen (47%) of the women said they would depend on friends or co-workers and eleven (32%) would turn to husbands or partners. Although she was married, Rachel indicated she would turn to her good friend whenever she needed help or advice. She talked about their relationship, "She would be there for me any time. She's like one of my older sisters...She understands. I'm not embarrassed to tell her what's wrong. She'll give me advice". Again there was mention of family members who were not available to them because they were out of the country. Three women said they would not turn to anyone else with their problems and would try to handle it themselves, one stating, "I don't want to involve my family in my problems. I talk to myself and pray". The resources available to the women when they experience problems are primarily viewed as contributing to their mental and emotional health, however for Irene, problem solving was also related to energy level. She explains, "When I can work through a problem I have more energy. Problems can be good in some ways because it is satisfying to make it through them".

When experiencing feelings of frustration or emotional distress, twelve women (35%) would still turn to friends but fewer would rely on partners or family members for help. Instead, they would try to work it out themselves or turn to God. Ten (29%) of the women said they would turn to themselves rather than to others and six (18%), would pray to God for help. Some mentioned the desire to avoid worrying family members. For example, Lorena commented, "My daughter, if I tell her some

heavy problems, I think that she cannot yet handle it". Others were concerned that friends or co-workers might not keep their problems confidential if they turned to them. Theresa stated, "I don't turn to people I work with because they don't really help, they just spread your problems around", and Anita commented, "I don't want people to know about my problems, I keep them secret". In addition to talking to others, talking to themselves, and praying, the women mentioned crying, walking, and taking their mind off their troubles as strategies for dealing with emotional upset.

The women's responses to the questions about interpersonal resources indicate that social and family connections are important to their health. This presents somewhat of a paradox in that establishing and maintaining social ties also requires time, energy, and sometimes money. Fely described her efforts to improve her relationship with her husband's family stating, "Right now it is kind of a little demanding till they accept me as I am. Because right now I'm the one who's trying to get together with them". This was particularly important to Fely because of her own family history of parental abandonment and divorce. She expressed sadness and embarrassment over this separation from her family and reflected the strong cultural emphasis on family connections expressed by a number of the Filipino American women interviewed. Loni talked about the significance of the Filipino family as a health resource,

Filipinos are like that, in times of need they don't turn to their friends, they turn to their families. The families won't turn you down, even if you are so bad they will always be your family....We don't have convalescent hospitals or nursing homes, we keep our old people at home until they die. We take care of them, we have close family ties. (Loni)

Many of the women were geographically separated from their extended family members and primarily relied on regular letters and phone calls to maintain their connections. A few of the women talked about trips they had made or were planning to make back to their country of origin in order to visit their relatives and friends there. The women generally initiated the phone calls and trips and were responsible for the costs. A trip back to their country of origin might even necessitate quitting their job if more than the allotted vacation time was needed. Theresa, who had recently returned from a trip back to El Salvador, was working full-time at two long-term care agencies in order to pay for her trip and save for another in the future. She had to quit her job before she left and was rehired when she returned. Consequently she had lost her health insurance benefits and had to work for six months before she could regain them. It had been over three years since Manuela had visited her mother and three children in the Philippines and had begun her present job as a CNA. She cried as she talked about her inability to afford a plane ticket to return for her oldest son's college graduation in a few months. As mentioned previously, for some of the women maintaining family ties also meant contributing to the financial support of family members in their country of origin.

While the women might be separated from some of their family members they might also be living and working with other relatives. Twenty-four of the women, including those who were married, shared their living space with extended family members or other non-related adults. These living arrangements varied from simple space and rent sharing agreements to more complex levels of cooperation in

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household management and child care. Often the relatives who shared living arrangements did not immigrate to the U.S. at the same time and those who arrived first sponsored or assisted the others to immigrate. The women's comments suggested that these shared living arrangements were often not temporary. Mercedes had arrived in the U.S. several years ago with her husband and four children and had become co-owners of a house they shared with her brother and sister-in-law.

Dolores, twenty-eight years old and single, had immigrated from Nicaragua eight years ago to live with her sister and to help with the care of her nieces and nephews.

Lorena, who discussed the cramped conditions in the one bedroom apartment she shared with her daughter, son-in-law, granddaughter, and adult nephew, indicated that they planned to move into a bigger apartment and did not suggest that they might look for separate living space. Family connections also extended into the workplace.

Among those interviewed were two pairs of sisters and one pair of sisters-in-law who worked at the same agencies. Two women reported that their male partners worked at their agency and another woman lived and worked with her cousin who was also a CNA but who was not interviewed.

Although a few women said they had no time for friends, others said they had many friends and most mentioned friends among their interpersonal resources. Many of the women indicated they had friends in their co-workers, however, for a few, relationships with co-workers were problematic. As one woman stated, "I really don't want to get that close. There are too many Filipinos working there and they talk...the others when they get to work they see each other and they start talking.

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I'm different, I just go straight to work". Carmen, on the other hand, commented, "I have friends just at my work, maybe about three or four friends". The friendly talking with co-workers that some of the women found supportive may also be associated with an increased ability to get help from others at work and thus have a risk modifying effect. There was, however, an insufficient depth of data to demonstrate this potential relationship.

The resources available through their work helped to compensate when outside social and family resources were lacking for some of the women. Irene, a widow with a grown son in the Philippines, commented, "My involvement now is just work. I have no one to go out with, I have no partner, and it's hard. I'm happy at work, I think it is my second home". Iris, a divorced mother of a handicapped child, expressed regrets over her limited social activities and remarked, "A hug and kiss at night from my patients means a lot, it might be the only hug and kiss I get that day". When asked about her involvement in her work Fely, who was married and had two children but no other relatives in the U.S., responded, "That is my second family". She talked about becoming attached to her patients and missing them on her days off and went on to say,

Maybe you can't believe it, even in my dreams sometimes, (I see) the call-light and I just jump out of bed, my gosh, the call-light. Stuff like that, that's when my husband says, "Oh my gosh, you're too much attached to your work". Especially my first year over there, I just jump out of bed...my husband said, "hey, what's going on?" "Oh, I'm sorry. I thought I am still at work", that's what I'm saying. (Fely)

The overlapping of family, social, and work roles may ease time and energy constraints to some extent but fuzzy boundaries mean that it is more difficult for the

women to compartmentalize their lives. Work concerns can easily become family concerns and family concerns can carry over into the workplace. The women may not be able to take a true break from their work, particularly when they can be called on at any time to work extra days or extra hours. Clearly defined boundaries appear to be inconsistent with the level of interdependence necessitated by the socioeconomic situations in which many of the women find themselves.

Perceived Barriers to Desired Health Practices

Types of Perceived Barriers

Time, energy, and money were the constraints most frequently described by the women in response to the question "What prevents you from doing all that you think you should do for your health?" Lack of time was mentioned particularly in relation to exercise, sleep and rest, medical or dental care, and relaxation. Lack of energy was a reason for not exercising and not engaging in recreational activities. Expense and no medical insurance were cited as reasons for not getting regular check-ups or going to the doctor more often.

For some of the women it was the time and energy demands of their work role alone, particularly when overtime work was involved, that prevented them from resting, exercising, relaxing, or seeing a doctor when they felt they should. In response to the question about whether she currently exercised, Emelia stated, "When I'm working and I go home, I'm really tired. In the morning there is no time". When Dolores, a single woman in her late twenties was asked what kept her from seeing the doctor regularly, she answered "Time, I have to work". Anita, who felt

she needed more rest and relaxation, stated "my job and lack of time", when asked what prevented her from doing all that she thought she should for her health.

For other women it was the combination of work and family role demands that left them with insufficient time and energy to attend to their perceived health needs. Annette, the mother of two preschoolers, summarized this in her comment about why she didn't get the exercise she thought she needed. She explained, "Work, house, the whole thing. Go to work, then take care of the kids, after I gets time for myself, I mean I'm pooped". Carmen talked about the demands on her time and energy stating,

"I feel tired sometimes because I cook and do everything, do the shopping, do dinner, buy clothes and shoes, do laundry, and have to work, have to do everything...I think it's really hard, because I feel so tired and I have to work because I have two children and everything is expensive (Carmen).

Carmen worried about getting sick and indicated she felt she needed more rest explaining, "I think I need, but I cannot. I really need, but I cannot because I have things to do all the time". Mercedes, who cited lack of time as the reason she didn't get the regular medical check-ups she felt she needed, commented, "Four kids and a husband, that's too much after work".

Because knowledge about health and health practices has been particularly emphasized in nursing approaches to health promotion and because inadequate knowledge has been identified as a barrier in the literature (Melnik, 1990), the data were examined for evidence that lack of knowledge constrained the health activities of the women in the sample. Two cases were found in which a health problem was, at least partially, attributed to a lack of knowledge about how to prevent or manage that

problem. Maria talked about the need for knowledge about back strengthening exercises in order to prevent backache. She felt she had to learn this on her own to protect herself after she began to experience back pain. Shani had developed anemia during her recent pregnancy but had not been given information about the need to take supplemental iron until her eighth month when she changed doctors. She talked about the need to ask more questions of health care providers in the future. There were other points in the data in which the women's comments suggested to the investigator that there were some misconceptions about the effectiveness of certain health practices. For example one woman, when asked about exercise, stated "I wanna do sit-ups and stuff but my back hurts a lot" and this raised questions about whether she was aware of techniques for minimizing back strain while doing sit-ups or of other more beneficial exercises that would not cause back discomfort. Carmen, who described feelings of fatigue and worry about getting sick, stated that she did not take supplemental vitamins because she was so fat implying that she did not clearly understand the difference between essential nutrients and calories in her diet.

However, only those situations in which the women themselves identified a lack of knowledge as a problem were considered as barriers in this investigation and, as these were few, knowledge barriers were less important than time, energy, and money barriers.

Responses to Perceived Barriers

The women's responses imply that when barriers to certain desired health practices are encountered, these practices are either decreased or abandoned, or

attempts are made to adjust or overcome the barrier. Time, energy, and money barriers are not conceptualized as barriers that can be eliminated, instead they are always operative at some level. Paradoxically, time, energy, and money are also resources to be managed and because they are generally viewed as finite, there is a requirement to allocate them according to the greatest perceived need. Work often takes precedence, even over family demands when it comes to time and energy, because it is the women's source of livelihood, providing the economic resources they need to care for their families and themselves. When time and energy remain after work and critical family responsibilities have been met, then a sort of rationing occurs in terms of meeting their own health needs. Rationing of economic resources must also occur, however information about this in the data is limited to discussions about those circumstances in which money is spent to obtain medical care.

Summary of Findings

The study participants reported engaging in a number of health practices with the three most frequently described being: 1) eating a healthy diet, 2) exercising, and 3) getting sufficient rest and sleep. They considered themselves to be in good health and based this appraisal on the absence of signs or symptoms of illness. The majority of the women were satisfied with their current health practices but also indicated they felt there was more they should be doing. The most frequently mentioned activity the women felt they should be doing was exercise. Women who rated their health as fair most frequently indicated that getting sufficient rest and sleep as the activity they felt they should be doing.

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The most frequently expressed health concerns were those related to job-related injury and illness. Five women reported being injured on the job and a number reported physical discomforts associated with their work. Although overtime work increases exposure to risk the majority of the women regularly worked overtime in order to supplement their income. Whereas some indicated they could do little to reduce job-related risk, others specified strategies for modifying risk, including using good body mechanics and proper lifting techniques, wearing back supports, and getting assistance from others. Next to job-related health concerns, weight and chronic illness were the most frequently mentioned health worries. Twenty-one of the women were assessed as having at least one risk factor for cardiovascular disease, the most common risk factor being overweight.

A high level of involvement in work, family, and social roles was indicated in the women's responses to the interview questions. Despite involvement in multiple roles, the work role was central for most of the women and therefore exerted the greatest influence on their health practices. Time, energy, and money were the most frequently mentioned barriers to desired health practices. Although the majority of the women reported inadequate economic resources, most had health insurance and many were connected to supportive social networks.

These findings are consistent with the two-fold purpose of the study. Thirty-four women working in a low-income job category, that of nursing assistant, have described their day-to-day health practices and their experiences in integrating these practices into their daily role activities. They have also described how the resources

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demographics, a greater percentage of the current study participants rated their health as good or fair than did the women in the surveys reported in the literature. The occupational levels of the women in the comparison studies is not known, however it is likely that they included women in professional and managerial positions. Women in semi-skilled and unskilled manual or "blue collar" occupations, which would include CNAs, have been reported as having poorer health than women in professional and managerial positions (Arber, Gilbert, & Dale, 1985; Waldron, et al., 1982).

Table 6.1

Comparison of Self-rated Health Findings

Sample	Self-Rated Health (% of sample)		
	Excellent	Good	Fair
Bird & Fremont (1991), N = 283	40.6%	42.8%	16.6%
Hibbard & Pope (1991), N = 586	37.9%	49.2%	12.8%
Current CNA Sample, N = 34	23.5%	61.8%	14.7%

The health practices spontaneously identified by the respondents included the seven personal health habits found to be associated with physical health status and mortality in the 20-year longitudinal Alameda County study (Schoenborn, 1986). Eating a health diet, exercising, and getting adequate sleep were the health practices most frequently reported by the women in the current study. These

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practices were consistent with those reported for women by Duffy (1986), and Laffrey (1990).

Saltonstall (1993), interviewed middle-class men and women about their health and found that both men and women cited rest, exercise, and food as essentials for health. There were gender differences, however, in the order in which these activities were reported with women mentioning food or diet first (as did the women in the present study), and men mentioning exercise first. Saltonstall notes that these body maintenance activities have become "staples in the commonsense understanding of healthiness" (p.10). This echoes Duffy's (1986) description of the long-standing, unconscious, "common sense" behaviors practiced by female-headed, one-parent families. In the current study, no attempt was made to determine time-length for the health practices reported, but the nature of these practices suggests that many could be considered long-standing rather than new behaviors. Duffy's findings indicate that new practices, those that the women undertook specifically for the promotion of health and prevention of illness, were more likely to be practiced intermittently and were more susceptible to time, energy, and money barriers.

Saltonstall (1993), noted that women's discussions of food were as much focused on caloric value in terms of weight control as they were on nutrient value. In contrast, the current study participants mentioned eating a balanced diet which included certain healthy foods much more frequently than they mentioned eating to control weight. Despite this, 35% of the women interviewed were at least 10% above their desired body weight and this is comparable to the prevalence of overweight

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reported for low-income women in the National Health Interview Survey (Schoenborn, 1986). National health goals call for reduction in overweight prevalence among low-income women to 25% by the year 2000 (Public Health Service, 1990).

The average of 37 minutes of exercise per week reported by the nursing assistants is far less than that found in other investigations of exercise patterns in healthy women (Johnson, et al., 1990; Woods, et al., 1993) and less than the 60 - 120 minutes per week recommended by the American Heart Association (Chandler & Hazinski, 1994). Woods, et al. (1993), reported an average of 159 minutes of exercise per week for a multi-ethnic sample of 659 middle-income women. When the time spent exercising per week is averaged only for the 20 CNAs who reported regular exercise, the mean increases to 101 minutes per week, however the reported levels of exercise for those who do exercise still fall below those reported by Johnson, et. al. (1990) for their sample of 226 black and white women in a Southeastern U.S. community. In Johnson, et al.'s sample, approximately 66% of the women who exercised reported exercising 120 minutes or more per week and only 15% exercised less than 60 minutes per week. In the current study, only 35% of the CNAs who exercised reported exercising 120 minutes or more per week and 35% of those who exercised spent less than 60 minutes a week exercising. The possibility that exercise rates might be affected by employment was considered as 75.9% of the women in the study by Woods, et al., and 71.9% of the women in the study by Johnson et al. were employed, whereas 100% of the CNAs were employed, many working more than 40

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hours a week. However, in their study of 1,041 Hispanic and non-Hispanic white women, Hazuda, et al. (1986) found that employed women actually spent more time exercising each day than unemployed women and for Mexican-American women the difference was significant.

That employment itself constitutes a form of exercise for working women has scarcely been addressed in the literature. In large-scale national surveys exercise has been defined as leisure-time physical activity excluding regular job duties (Siegal, Frazier, Mariolis, Brackbill, & Smith, 1993). In surveys using this criterion, the 14 current study participants who reported no exercise outside their job would be classified as sedentary despite numerous descriptions of the physical demands of nursing assistant work found in the literature and in the women's accounts. Wilber, Miller, Dan, and Holm (1989), note that most current methods for determining physical activity levels are based on earlier studies of the occupational and leisure patterns of men and may not accurately reflect these patterns in women. Wilbur, et al. used a combination of retrospective and prospective measures in a comparison of physical activity levels in a sample of 43 midlife women teachers, clerical workers, and nurses. They found the occupational energy expenditures of the nurses to be the greatest of the three with a mean score of 2.18 metabolic equivalents or METS per hour. The energy expenditures of nursing assistants at work would be expected to equal and most likely exceed that of nurses, particularly in long-term care settings where most of the work of lifting and transferring patients is done by CNAs. Leisure activities such as golf, tennis, social dancing, and walking are associated with MET

levels of 3-5, while lifting and carrying heavy objects can involve more than 9 METS (Fuller & Schaller-Ayers, 1990). Wilbur, et al. (1989) contend that recommendations for exercise to promote health in women should take into account all aspects of physical activity in women's lives including occupational and homemaking as well as leisure time activities.

If, work is considered a significant source of exercise for women as concluded by Wilbur, et al. (1989), then the study participants should all be considered as engaging in regular exercise. The prevalence of overweight in the sample suggests, however, that for some of the women the type and level of exercise involved in their work and their non-work activities may not be adequate for weight control.

Like the women surveyed in the investigations by Barnett, Davidson, and Marshall (1991) and by Walters (1993), the nursing assistants interviewed were tired. Although not analyzed in terms of frequency, fatigue was underlying theme in many of the women's discussions of their work and family role activities. Many of the women indicated feeling tired from their work, particularly if they were working overtime. Others attributed their fatigue to the combination of their work and family activities. Problems with fatigue were also evidenced by the frequency in which getting adequate sleep and rest were mentioned as "should do" activities. Tiredness was the most frequently mentioned physical health problem in Walter's (1993) study of 356 Canadian women and in Barnett, et al.'s (1991) study of 403 employed licensed practical nurses and social workers, and in both studies, fatigue was linked to role overload. Discussions of fatigue in relation to women's roles and health

practices are surprisingly limited in the women's health literature given the amount that has been published about the effects of role overload and role strain on the health of women. Fatigue may be imbedded in definitions and measures of stress, role burden, role strain, psychological distress, and other negative experiences that have been associated with involvement in multiple roles.

The findings of this study suggest that, in terms of day-to-day health practices, it may be helpful to examine fatigue separately. Fatigue was linked to sleep and rest behaviors which were, in turn, related to the time spent in primary work and family activities. Quite simply, a number of the women felt they needed more sleep and rest but also felt that the time needed for work and caring for their families did not allow them to take this additional time for themselves. Their comments imply that they perceive some level of fatigue as unavoidable given their current life circumstances and that some degree of normalization of the everyday experience of fatigue occurs. This has implications for health practices other than rest and sleep for lack of energy was the reason most frequently given for not exercising or engaging in recreational activities.

In answer to the first question for discussion, the health practices of the CNA study participants were similar to those reported for other women however the extent and intent of these practices may be somewhat different. The self-rated health of the nursing assistants was somewhat lower than that of the other women but it is not clear which of the many possible influences on self-rated health may account for this.

Health Practices and Health Risk

Risk of Cardiovascular Disease

Despite data demonstrating increased mortality rates for ischemic heart disease, cerebrovascular disease, and hypertension among California women working as LVNs or health aides (Doebbert, et al., 1988), the prevalence of selected cardiovascular risk factors in the current CNA sample was relatively low. Perlman, Wolf, Ray, and Lieberknecht (1988) report high blood pressure in 10-13% of premenopausal women and 23-25% of postmenopausal women in a survey of 11,651 Northern California women. In the current study sample, three women or 8.8% had elevated blood pressure. The smoking rate of 11.8% in the sample was far below the 36-38% reported by Perlman, et al. When overweight is defined as 20% above the desirable weight, the 18% of the current sample experiencing this risk factor compared favorably with reported prevalence rates for low-income women of 26.9% (Siegal, et al., 1993) and 28.6% (Schoenborn, 1986).

The finding that 64% of the CNA sample had at least one cardiac risk factor is not surprising given the prevalence of risk factors reported in the studies just cited. The high level of awareness of these risks indicated by the women's responses could be attributed to their work in health care, however Avis, et al. (1990), in their survey of a random sample of 732 men and women in the Boston area, found that knowledge about cardiovascular risk and certain risk reduction practices such as exercise, reduction of dietary fat, and smoking cessation, was fairly high, particularly among women. Avis, et al. also found that people were most specifically aware of the risk

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practices most relevant to their own risk situation but that there were inconsistencies between awareness and behavior suggesting that factors in addition to knowledge are important in health behavior.

The number of nursing assistants reporting history of gestational diabetes and/or pregnancy-induced hypertension (PIH) suggests a higher than expected prevalence of these complications of pregnancy in the sample. Although four women (12%) reported history of gestational diabetes and five women (15%) reported history of PIH, comparison with rates reported in the literature is not possible as these rates are generally reported in relation to number of pregnancies. Gestational diabetes is reported as a complication in between 1% to 5% of pregnancies with higher prevalence rates reported for women from ethnic groups other than white (Berkowitz, Lapinski, Wein, & Lee, 1992; Dornhorst, Paterson, Nicholls, Wadsworth, Chiu, Elkeles, Johnston, & Beard, 1991). Dornhorst, et al., report a high relative risk of 7.6 for Southeast Asian women in comparison to white women. Increased risk of gestational diabetes is also reported for women from lower socioeconomic groups (Berkowitz, et al, 1992). Risk of PIH has been reported ranging from 4.3% to nearly 20% (Geronimus, Anderson, & Bound, 1991; Savitz & Zhang, 1992). Geronimus, et al., found higher risk for black women in comparison to white women but this was not supported by the findings of Savitz and Zhang. A study by Solomon, Graves, Greene, and Seely (1994) suggests that glucose intolerance and hypertension in pregnancy may be associated.

History of gestational diabetes and PIH are rarely considered as cardiovascular

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risk factors yet there is increasing evidence that these conditions do increase the risk of subsequently developing non-insulin-dependent diabetes mellitus (NIDDM) (Gregory, Kjos, & Peters, 1993), and essential hypertension (Geronimus, et al., 1991; Solomon, et al., 1994). Perlman, et al. (1988) note that even isolated elevated systolic or diastolic blood pressure readings have been linked to increased risk of cardiovascular disease and mortality. Likewise, elevated fasting plasma glucose levels have been found to be predictive of cardiovascular mortality in nondiabetic women (Scheidt-Nave, Barrett-Connor, Wingard, Cohn, & Edelstein, 1991).

The rates of PIH and gestational diabetes found in the CNA sample may be indicative of early cardiovascular risk patterns for low-income women that have yet to be fully investigated. Geronimus, et al., (1991) note the lack of research focusing on rates of hypertension in young women of childbearing age. Kjos (1994), advocates annual surveillance for diabetes, maintenance of ideal body weight, adherence to a diabetic diet, and implementation of an exercise program for all women with prior gestational diabetes. Although study participants with history of gestational diabetes and PIH indicated some worry about the later development of diabetes or hypertension, they did not report having been told of any additional risk or engaging in specific screening for these problems.

Work-related risk

The nursing assistants expressed a high level of concern and awareness in relation to work-related risks. Although five women (15% of the sample) reported experiencing actual job-related injuries, many others described physical discomfort

associated with their work. The women's descriptions of their work-related health problems suggest that many of them continue to work despite their experience of back pain and that it is only when the pain reaches a certain level or can be attributed to a particular incident, that the women seek medical treatment, take time off, or restrict their activities. There was also evidence that the nursing assistants tend to normalize their back discomfort as something expected and thus accepted as part of the job. As an example, several of the women did not refer to pain when describing their back discomfort but instead talked about their back being tired from their work. This is consistent with Garg and Owen's (1992) findings that most nursing assistants who experience low-back pain do not lose work time.

In the search for explanations for the high injury rate among nursing assistants, both the actual physical effort and exertion involved in the work as well as organizational and environmental factors have been examined. When nursing assistants were asked to rank the tasks they considered most physically stressful, they indicated that transferring clients on and off the toilet, in and out of bed, and for bathing and weighing purposes were the most difficult and the most likely to produce feelings of exertion in the low back area (Owen & Garg, 1991). In their ergonomic evaluation of the lifting involved, Owen and Garg determined that the greatest compression force was experienced at the L5/S1 disc and the estimates of the extent of this force exceeded the Action Limit but fell below the Maximum Permissible Limit established by NIOSH for safe work practice. Owen and Garg point out that NIOSH limits assume two-handed symmetric lifting but that in the clinical setting

asymmetric lifting was much more common and that acceptable compression forces may be decreased when lateral bending of the lumbar column is involved.

The use of proper body mechanics is frequently emphasized as the most effective means for reducing back injury related to patient-handling activities and instruction in proper lifting and transferring techniques is included in the content mandated in nursing assistant certification programs. Garg and Owen (1992) question the widespread belief in the prophylactic value of instruction on manual lifting citing a lack of consensus on proper lifting techniques and a lack of scientific evidence that instruction alone is effective in reducing back injuries or back pain. In addition, a number of client conditions including combativeness, physical deformity, lack of cooperation, and excessive weight can impede or restrict the use of the ideal body mechanics the nursing assistants have been taught. Personick (1990) summarizes the patient handling problems nursing assistants encounter in nursing homes as follows:

Heavy lifting and other manual exertions associated with patient handling are difficult to execute safely in nursing homes, in part because the recommended lifting techniques for objects and materials (bent knees and load close to body, for example) often are impractical to apply when singlehandedly lifting unstable residents. One possible solution - getting assistance from a second employee - is encouraged in spirit and, to some extent, in practice; but, to provide two-employee lifting on a large scale would be considered too expensive by many nursing homes (p. 34).

Personick's comments are consistent with the study participants descriptions of the difficulty in getting assistance they often encounter.

The rate of staff turnover is one organizational variable that may influence injury rates. Personick (1990), notes that Bureau of Labor Statistics data show that over one-half of the women workers injured in nursing homes had worked one year

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or less in that facility at the time of their accident. The average nurse aide turnover rate in nursing home in the U.S. was reported as 103% in 1989 (Helmer, et al., 1993). Data available from the Office of Statewide Health Planning in California (1993) indicate that one of the long-term care agencies included in the current study (Agency C), had a turnover rate of 141.13%, the highest in the county and that less than half of the nursing assistants at that agency had worked there more than 12 months continuously. A second agency (Agency A), had the third highest turnover rate in the county with a rate of 122.58%, and the third agency (Agency B), had a much lower turnover rate of 73.85%. The agency with the lowest turnover rate had the highest starting salary of the three, paid full health benefits for workers after six months of employment, and did not accept residents insured by Medi-Cal, all factors that have been related to lower turnover rates in the literature (Caudell, & Patrick, 1992; Kuriansky, 1991). If less experience nursing assistants are more likely to be injured, then high turnover rates are not only costly to the agencies (Helmer, et al., 1993), but also expensive in terms of the health of the women who work there.

In response to the second discussion question, it can be said that the reported health practices may sufficiently modify cardiac risk for some but not all of the women. The interview data suggest that despite knowledge and awareness of risk, some of the women who are overweight or at increased risk for hypertension and diabetes may not be engaging in health practices effective in reducing this risk. In terms of work-related risk, limitations in the extent to which the women's individual behaviors can reduce this risk are experienced by all the study participants. No doubt

the more experienced CNAs have developed practices which serve to reduce their personal risk, but the fact remains that they work in a high-risk setting where needed resources to reduce risk are generally lacking. Overtime work increases their exposure to work-related risk, therefore working doubles and extra days could be viewed as negative health practices.

Vulnerability and Health Risk

The third question for consideration returns this discussion to the original study perspective which is that the health practices of low-income women can only be understood when they are viewed not only as individual activities, but also as responses to the larger economic and social environment. The study findings can only begin to suggest how the health practices of this sample of low-income women, nursing assistants working in long-term care agencies, fit into the daily pattern of their lives. It is clear that they have to make choices about how to care for themselves and their families using the resources they perceive as available to them.

In terms of access to health care, the choices are limited. Despite their work in the health care field, nursing assistants face the same access barriers to health care for themselves as others employed in low wage jobs. The women talked of the high costs of health insurance, the lack of health insurance for themselves or their family, and the loss of pay when they took time from work to seek health care. A CNA who earns \$6.00 an hour and pays \$50.00 to \$70.00 a month for health insurance, is paying over 5% of her income to insure herself alone. If she also insures dependent children she could be spending almost 20% of her income for health insurance.

Although most feel they have no choice but to accept these costs, a few decide to take the risk and decline health insurance.

An annual physical is required for workers in long-term care facilities primarily to insure that the residents are not exposed to communicable illnesses. This often cursory on-site physical was viewed as a beneficial health-protective activity by many of the women interviewed. Some indicated that they felt this was sufficient contact with the medical care system and that additional visits to a health care provider were not needed unless they experienced signs or symptoms of ill health. The annual physical at all three agencies did include an interview, however the depth and extent of this interview is not known. Some of the women's comments suggest that they did receive some recommendations and referrals as a result of their contact with the medical director of the facility. It seems quite possible that the women would feel some resistance to discussing with agency affiliated medical or nursing staff any health problems that might jeopardize their job. This would seem to be a particularly a concern in the agency where the nurses performed the annual physical, as these nurses could very easily be the CNAs immediate supervisors.

There was no evidence that the nursing assistants received any formal personal health information through their agency other than that related to resident health or potential workers' compensation claims. One of the agencies belonged to a corporation that employed an occupational health nurse but none of the nursing assistants at that agency mentioned any direct contact with this nurse. There were suggestions that the women at times did seek some informal health advice from CNA

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and RN co-workers.

If the women who were more recent immigrants had greater problems with access to health care, it wasn't evident in their responses to the interview questions. The most recent immigrants were Filipino women who had family or social connections with others who had lived longer in the U.S. and most likely assisted them in accessing resources. Family and social relationships play a key role in many of the women's lives.

The multiple and sometimes competing demands of work and family roles described by many of the women interviewed are similar to those identified in a number of other studies (Amatea & Fong, 1991; Barnett & Baruch, 1985; Kandel, et al., 1985; Meleis, et al., 1989; Thoits, 1986; Voydanoff & Donnelly, 1989; Waldron & Jacobs, 1989). The extent to which role satisfaction and role stress are balanced both within and among women's major roles has been defined as role integration (Meleis, et al., 1989). Hall, Stevens, and Meleis (1992), define role integration as a process involving day to day interaction with the environment and the economic, social, political, and cultural contingencies of that environment.

Two central patterns of role integration, compartmentalizing and linking were identified by Hall et al., (1992), and these, in combinations, are depicted as forming a particular arrangement for each individual. The overlapping roles and fuzzy boundaries described in the current study suggest that linking of work, family, and social roles was more common than compartmentalizing among the nursing assistants interviewed. Lewin and Olesen (1985), have pointed out the importance of

recognizing the interface between the intrinsic and extrinsic features of the work role and they note the extent to which these features tend to be intertwined. Linking patterns were reported by women from all ethnic groups represented and no cultural preferences were evident. The few women who did indicate that they were able to successfully compartmentalize their work role were older and seemed to have achieved a certain level of economic and social stability. Thus, the interdependence characteristic of linking patterns, may be at least in part, a response to limited resources.

Characteristics of the nursing assistant role itself may also promote linking patterns. There are fewer clear distinctions between work and family roles for women involved in paid caregiving than there are for women employed in other types of work, clerical jobs for example. Marks, Smyer, and Cohn (1993), note that nursing home aides use similar skills in their work and family caregiving and are "evaluated and paid for nurturing activities traditionally reserved for family life" (p. 31). Interpersonal skills, in particular, are critical to caregiving on the job and at home and Marks, et al. identify the overlapping of work/nonwork interpersonal processes as a potential source of role overload and stress. Bowers and Becker (1992) challenge the expectation that family-like (primary group) nurturing can effectively take place in an institutional (formal group) setting and maintain that in order to stay on the job, nurses' aides must develop an organizational style that involves compromises in the quality of care given. These compromises can be distressing to the nurses' aides who are affectively motivated to care for their patients

as they would care for members of their families. Many of the CNAs in the current study originated from countries where institutional care of the elderly is rare and some of their comments suggest that the formal caregiving arrangement itself is in conflict with their cultural values. It seems likely that these women would have even more difficulty compartmentalizing what they view as a traditional family activity.

Although, as noted by Marks, et al. (1993), there is the potential for role enhancement and increased satisfaction as the result of role overlap, the socioeconomic conditions in which many nursing assistants live and work increase the likelihood of negative rather than positive spillover effects. Negative spillover effects may take their toll on health as role burdens, dissatisfactions, time pressures, and overload and have been found to be associated with poorer physical health (Barnett, et al., 1991; Verbrugge, 1986). Tellis-Nayak and Tellis-Nayak (1989) poignantly describe the affective and psychological burden experienced by nurses' aides who struggle to care for their families in a world of economic hardship and social deprivation and then provide paid caregiving in a world in which work conditions are difficult and demanding and their efforts are undervalued and unappreciated. Studies of women workers in other occupations suggest that it is role strains in the work and parent roles and role conflicts in the overlap of these roles that are the greatest sources of psychological distress and depressive symptoms (Kandel, et al., 1985; Reifman, et al., 1992). The negative effects of work stressors were identified as burden, burnout, and perceived job pressure in Chappell and Novak's (1992) study of 245 Canadian nursing assistants in care homes. Workload was the work stressor most

predictive of burden and job pressure and lack of rewards was the work stressor most predictive of burnout. Job pressure was the greatest for women with fewer family members supportive of their work and more people in their household.

There is currently insufficient data to adequately describe the health implications of the type of overlapping round-the-clock caregiving activities performed by full-time nursing assistants who are also involved in mothering and other nonpaid caring roles. In the current study, three of the five nursing assistants who rated their health as fair and all three of the women who expressed dissatisfaction with their current health practices were responsible for the care of young children. The women's identification of lack of time as an important health practice barrier is consistent with their reports of heavy role demands and echoes descriptions in the literature of the health-related time constraints experienced by low-income women involved in multiple roles (Duffy, 1986; Gauthier & Krassen-Maxwell, 1991; Zambrana, 1988).

On the other hand, the women interviewed expressed a surprising amount of satisfaction with both their paid and unpaid caregiver roles. As noted by Lewin and Olesen (1988), it is important to recognize the meanings and beliefs the workers themselves hold about their work. In a recent national newspaper article on the top growth jobs, work as a nursing home aide was listed as one of the six worst, and described as a dull, dead-end, sometimes dangerous job (Horwitz, 1994). The comments of the study participants contradict this harsh characterization of their work and suggest that they value what they do despite the lack of external recognition and

reward. Other investigators have also reported that nursing assistants do not view their jobs as negatively as do outsiders and find strengths as well as deficits in their jobs (Brannon, Cohn, & Smyer, 1990).

The economic struggles and heavy work and family role demands described by the study participants suggest that these circumstances do increase their vulnerability to the increased risks they encounter in relation to their work and socioeconomic status. They experience decreased choices in responding to these risks and may even choose to compromise their health in an effort to improve their financial situation. Social connections may serve to mitigate vulnerability, however when these connections increase time and energy demands, any health advantage may be lost.

Congruency of Findings With Existing Models

In Chapter 2 of this dissertation, several conceptual models were described as providing a general perspective for the investigation. Although it was not a study aim to test any of these models or their components, some observations can be made regarding the general fit of the study findings within these frameworks.

The study findings do seem to provide some support for Williams' (1990) Paradigm for Research on Socioeconomic Status and Health, particularly in describing some of the psychosocial factors which act as mediators of the relationship between socioeconomic status and health status. The findings, however, raise questions about the adequacy of William's model in depicting the mediators that are most relevant to the experiences of low-income working women. What emerged in the current study as a most powerful mediator for low-income women, role involvement, is strikingly

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absent from William's framework. Although Williams considers occupation as an element of socioeconomic status and thus a direct influence on health, the interplay of work and family roles as a determinant of health is not addressed.

In turning to the models which do depict the influence of multiple roles on health there is also evidence of fit with various aspects of these models but none seem to fully capture the relationships described. Goode's (1960) scarcity hypothesis is supported in the women's comments about the need to limit their role activities due to time and energy constraints. Some of the women, particularly the mothers of young children, did describe feelings of overload and strain related to the additive effects of their highly demanding roles. Conversely, the importance of the women's interpersonal resources in their daily lives and the indications that these resources become available through role activities, implies congruence with the role enhancement model (Thoits, 1983). Involvement in multiple roles increases the opportunities for establishing supportive interpersonal connections, connections which may be of special significance to immigrant women.

There is some evidence that the scarcity and enhancement models are not mutually exclusive. Thoits (1986), observed a curvilinear pattern in the relationship between multiple identities and symptoms of distress, a finding which suggests that there is a point at which increases in the number of roles produce increases in symptoms of distress. Thus the scarcity model becomes primary once a certain number of role identities are acquired. In Thoits' investigations, five role identities appeared to be optimal for psychological well-being. The nursing assistants in the

current study reported a range of 6 to 13 roles with most involved in 9 to 11 roles. Thus the women studied could be considered to be in role situations in which they would be likely to experience some psychological distress related to role burden. It should be noted, however, that the potential number of roles in Thoits' studies was limited to eight, while in the current study more than 17 roles could be identified. Nevertheless, the current study findings support the idea that many of the women were at a sort of threshold in the level of their role involvement, with any additional role responsibilities likely to have a negative impact on their psychological well-being. Some women spoke of consciously limiting their involvements while others, in their descriptions of fatigue and stress, indicated that they have perhaps exceeded their optimal level of role involvement.

The relationship between role quality and health as proposed by Barnett and Baruch (1985), was not addressed in the current study. Role integration (Meleis, et al., 1989), a concept derived from a role quality perspective, was examined in relation to the study findings and has been discussed in an earlier section of this chapter. The extent of role linking described by the women is consistent with Thoits' (1983) descriptions of network-embeddedness in which there is interdependence among role identities. She notes that this interdependence can serve to optimize the expenditures of scarce time and energy resources and thus reduce the possibility of role strain. This potential connection between patterns of role integration and the resources available is suggested in the study findings as described in a previous section of this chapter.

What is lacking in the multiple role and health models just described is an explanation of how the socioeconomic environment influences the characteristics and patterns of women's role involvement. Do low-income women experience role burden and its effects on health in the same way as women from higher socioeconomic groups? If there is a threshold at which the number of roles becomes stressful rather than enhancing, how is this threshold affected by the socioeconomic environment in which these roles are enacted? Do socioeconomic as well as time and energy resources influence patterns of role integration? The study findings have highlighted some of the explanatory gaps in the current conceptual models and have suggested important directions for future investigation and theory development.

In an effort to create a visual representation of the relationships suggested by the study findings, a rough model was developed and is presented in Figure 6.1. These relationships seem best represented in the form of a Venn diagram which depicts the interconnected and imbedded nature of the links among the model components. Work, family, and other social roles are portrayed within the context of the socioeconomic environment. Health practices are pictured at the point where roles converge in order to illustrate the influences of multiple roles and the environment on these practices.

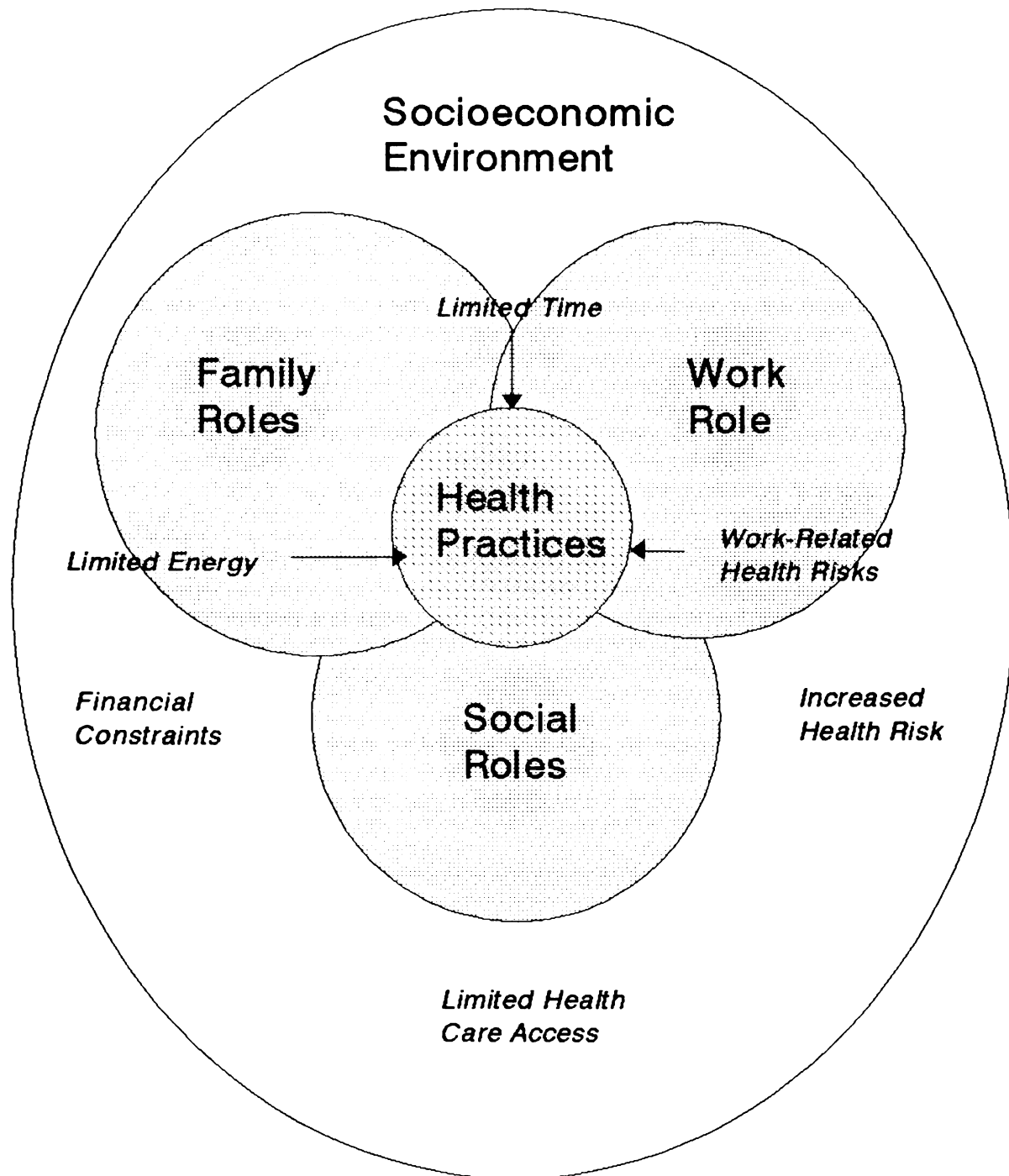


Figure 6.1. Influences on the Health Practices of Low-Income Working Women

Study Limitations

Alternative explanations for the reported findings are possible and must be considered. There are limitations in the extent to which the perspectives and views of the women interviewed can be faithfully captured in the textual data and expressed in the analysis and reporting of that data. The data collection process is a social transaction involving both the participant and the investigator in the construction of an account of experienced reality. As noted by Stoddart (1986), attention must be given to the possibility that the investigator's presence altered the domain under scrutiny and that the data gathered may have been created by the data gathering techniques themselves. Likewise, despite efforts to maintain reflexivity and to stay close to the data in its interpretation and reporting, there is the possibility that the women's realities were subjected to those of the investigator.

Nursing assistants were selected to represent low-income working women yet nursing assistant work differs from other female-dominated low-wage occupations such as clerical work, food service, and domestic work in its caregiving focus, institutional setting, and relationship to the healthcare industry. Nursing assistants do have more direct access to registered nurses and other health professionals than working women in other occupations and it is likely that they have knowledge about certain health promotion and risk reduction practices that they have gained through their training and experience. As knowledge is considered to be a determinant of health behavior, it is possible that the nursing assistants engaged in a greater number and different types of health practices than other low-income working women.

Although concepts and terms were defined as clearly as possible whenever the women indicated a lack of understanding of these, it is not feasible to know if actual congruence in meanings was achieved. Abstract terms such as involvement, satisfaction, and demand were those most frequently requiring definition. When asked how demanding certain activities were, some of the women seemed confused by the various meanings of the word, particularly when used in reference to role activities with another person such as a child, husband, or parent. A tendency to rate satisfying and valued role activities as not demanding regardless of the amount of time and energy expenditure involved was noted. For example, one woman, who was employed full-time at two long-term care agencies, rated her activities as an employee as only a little demanding. It seems likely that some of the women did not view satisfactions and demands as separate co-existing qualities. The investigator's awareness of the discrepancies in the meaning of the term demanding resulted in a decision to omit that scale from the data analysis, however there may have been other more subtle inconsistencies in the use and interpretation of terms and these may have influenced the study findings.

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CHAPTER SEVEN

Conclusions and Recommendations

Significance to Nursing

This study has provided additional support for the idea that the health practices of low-income working women are shaped by their day-to-day lives. Although the women were fairly knowledgeable about general health practices, they encountered time, energy, and financial constraints in their efforts to maintain them. It was those practices that kept the women going, that enabled them to continue their work at home and on the job that were given priority. This type of prioritizing is not unlike that O'Brien (1982) observed among migrant farmworkers. She notes "the migrant farmworker was found likely to adopt health attitudes and health-seeking behaviors that facilitated the carrying out of occupational role responsibilities while causing the least disruption of normal daily routine" (p.21).

Nurses interested in designing effective health promotion interventions for low-income working women must begin with recognition of the primacy of women's work roles. Interventions that require additional expenditure of time and energy in health practices not directly relevant to the performance of daily role activities are not likely to succeed. Strategies effective in motivating higher income populations to devote more leisure time to health promotion activities will most likely be ineffective when applied to low-income working women with little or no leisure time. Educational interventions that discount existing knowledge and life experiences can be perceived as insulting. Increased understanding of the basic health practices of low-income

working women and the ways in which these practices are integrated into the women's daily activities contributes to the development of realistic health promotion approaches for this population.

Most of the functionally motivated health practices identified by the women in the current study were not in conflict with the achievement of long-term health goals. Smoking could be considered an exception; the women mentioned smoking as a means of coping with stress while at the same time acknowledging the long-term risks of this practice. Thus while there may be a few practices for which reduction and elimination would be the ultimate goal, the majority of the reported practices are those which could form the basis for a health promotion and risk-reduction programs which would meet the needs of low-income working women. Nursing interventions could build upon and expand on the healthy practices initiated and maintained by the women themselves.

Too often when those from socioeconomically disadvantaged groups fail to achieve certain health outcomes, the attempts they have made and the small successes they have experienced are overlooked or discounted. They get the message that what they are doing is not enough; that their best efforts have been judged and found lacking. Yet, the findings of this study suggest that the women themselves are generally satisfied with their health practices, considering that they are doing the best they can within their current circumstances. This suggests a need to expand the focus of health promotion interventions to include the environments in which women live and work. Environmental constraints limit the effectiveness of individually focused

health promotion and risk reduction programs. Nurses must begin to target environmental factors that have been linked to health and health practices in their interventions with low-income working women.

The on-the-job risks encountered by nursing assistants working in long-term care facilities should be of grave concern to nursing for it is often nurses who are the direct supervisors of these workers. Nursing assistants in California and many other states are predominantly impoverished women from ethnic minority or immigrant groups and as such represent population with increased vulnerability to health risks. In the long-term care facilities they are exposed to higher than average occupational risk as they care for another vulnerable population, the frail elderly. While it is the frail elderly who are the identified clients, nursing's commitment to health for all makes the health of the other vulnerable population in the setting, the nursing assistants, also a concern. There is an opportunity for nurses to advocate for more comprehensive workplace health and safety programs in the long-term care setting, programs that not only are directed toward ensuring a safe and healthful work environment but also toward the promotion of a healthy lifestyle for those who work there. Programs of this type have the potential to positively influence health in the larger community as well. Nursing assistants who are members of underserved vulnerable populations can serve as health connections to these populations.

Implications for Nursing Practice

Low-income Working Women and National Health Goals

People with low income and people in minority groups have been identified in

the U.S. Department of Health and Services' Healthy People 2000 (1990), as high risk populations requiring targeted efforts for controlling risk factors and reducing disparities in health outcomes between these groups and the total population. Women in these special population groups are mentioned specifically in objectives related to increasing physical activity and fitness, improvement in nutrition, and reduction of tobacco use. Nursing and personal care workers are identified as a special high risk population for work-related injuries. Health professionals have the responsibility to work cooperatively with high risk individuals, families, communities, and other groups to facilitate the integration of healthy practices into daily living in order to meet the Healthy People 2000 objectives (1990). The findings of this study suggest some directions for health promotion and risk reduction activities with low-income women working as nursing assistants in long-term care facilities, a population that is particularly vulnerable to the risks they experience in their jobs and as a result of their lower socioeconomic status.

The nursing assistants' comments indicated that more than good information or motivating talk was needed to assist them to integrate new healthy practices into their daily activities. Also needed is an environment that facilitates and supports these practices and makes a greater range of choice possible. An important component of the general environment for full-time workers is the workplace. The participants in this investigation spend at least 35% of their active waking hours in the long-term care facilities in which they are employed and for many there are connections between the workplace and their outside family and social lives.

The study findings support the idea that the workplace, as an environment itself, is a determinant of the health practices of those working within that milieu. This influence is not limited to practices related to the prevention of occupational illness and injury but extends to include general health promotion and illness prevention practices. This is not a new idea and the occupational health literature contains examples of broader workplace health promotion programs which have been developed in recognition of this connection. These broader workplace programs, however, are not available to the majority of the workforce, particularly those in low-paid service occupations where the emphasis on cost-containment discourages any investment in programs viewed as non-essential or extra.

A paradox is thus presented. The national health goals specifically target high risk populations who are currently experiencing poorer health than the total U.S. population. Previous strategies for promoting health and preventing illness have not benefitted these groups to the same extent as they have other, more privileged groups. There is evidence that health promotion and risk reducing interventions can be effectively delivered through the workplace and that workplace interventions can potentially reach members of high risk populations who have limited access to other health resources. Currently, however, there is little incentive to employers to implement non-mandated health programs. The workplace connection has not been given the attention it deserves in relation to the achievement of the Healthy People 2000 objectives.

Long-term care facilities present a unique opportunity to nursing to develop

and test environmentally focused strategies to promote health and prevent illness and injury. Nurses are already present in the workplace and are in positions where they potentially have some power to bring about positive changes. A model for transforming the long-term care setting into a workplace that is responsive to the health needs of its nursing assistant employees is presented in the next section.

A Responsive Workplace

The need for workplaces to become more responsive to the family needs of employees is outlined by Kamerman and Kahn (1987). They suggest that a responsive workplace is one that is flexible and allows its employees autonomy through flexible benefits, flexible work schedules, flexible career paths, and other choice enabling policies. Kamerman and Kahn also contend that job-protected time off, time allowed to employees to attend to personal and family needs, is an essential quality of a responsive workplace. They note, however, that issues of family responsiveness at the workplace remain primarily women's issues as women continue to bear principal responsibility for the care of children and other dependent family members. They argue that the resolution of problems in managing work and family roles simultaneously is not just the responsibility of employers or individuals, but also the responsibility of the larger society and is tied to the valuing of women workers. Kamerman and Kahn's responsive workplace therefore requires change at the level of the workplace and at the level of the socio-political environment.

Health needs are not included in Kamerman and Kahn's (1987) description of a responsive workplace. In an expanded version of a responsive workplace the

Community Resources

- health resources
- medical care
- child care
- family/social services



Accessibility

- resources to reduce occupational risk
- resources to promote health
- resources to prevent illness



**RESPONSIVE
WORKPLACE**



Flexibility

- benefits
- work schedule
- career path



Time

- family leave
- vacation
- personal time
- time for health-related activities

Figure 7.1. Model of a Responsive Workplace

elements of flexibility and time could also be applied to the promotion of health and the prevention of injury and illness. The current study findings suggest that an additional element, that of accessibility in relation to health resources, should be included. A proposed model of an expanded responsive workplace, which includes responsiveness to health needs, is presented in Figure 7.1. Accessible health resources in the long-term care setting could include ongoing health and fitness classes, on-site professional health services, smoking cessation and weight control programs, and more comprehensive annual health examinations. Also accessible should be the information, equipment, and manpower needed to perform the lifting and transferring tasks of the job safely and to reduce the incidence of physical strain and injury. Finally, there should be clear connections between the long-term care agency and the health resources available in the surrounding community so that not only employees but also their families can easily access these resources.

Kammerman and Kahn's (1987) discussion of the societal changes needed to support family responsiveness at the workplace is also applicable when considering what is needed to increase the responsiveness of the workplace to health needs. The shift from a physician dominated illness care system to a broader community-based health care approach has really just begun. The workplace is not generally viewed as a health care site for employees, even when, as in the case of long-term care facilities, the workplace is part of the health care system. To some extent the issue of health responsiveness at the workplace is also a women's issue for it is women who usually assume responsibility for the health of their families as well as for their own health.

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Kammerman and Kahn (1987) note that the workplace serves as a community environment. They comment, "If people spend much of the day at the workplace and if it is a workplace with many other people, it can and should help solve some of their family and personal needs and make life simpler" (p.303). As a community, the workplace should also help solve some of the health needs of those who work there.

Nurses can be instrumental in transforming the long-term care setting into a responsive workplace and in shaping a responsive socio-political environment that supports and sustains this transformation. There are, however, numerous constraints to be confronted including the inadequate preparation of many currently practicing nurses to conceptualize and address health issues at an environmental level and the costs of the needed programs and changes. There is evidence that a responsive workplace is cost-effective. Helmer, et al., (1993) describe the high costs of turnover in long-term care settings and note evidence that changes in the work environment to promote increased satisfaction among workers is effective in reducing turnover. Turnover rate was reduced to below 25% as a result of a program to promote CNA job satisfaction, security, and enrichment in a Philadelphia long-term care facility (Henry, 1993). Elements of a responsive workplace such as increased autonomy and opportunities for career progression were components of this successful program. Another program at a Connecticut facility included staff health issues in their inservices. The turnover rate fell to less than 20% (Acampora, 1993).

Implications for Health Policy

The crowded facilities, severely ill residents, soaring injury rates, inadequate

training, and lack of health benefits experienced by nursing assistants in long-term care agencies has begun to receive increased media attention (Horwitz, 1994). Joan Kuriansky, executive director of the Older women's League (1991) sums up the situation stating, "as a society, we pay parking lot attendants more to watch our automobiles than we pay these workers who attend to the needs of our loved ones" (p. 52). The nursing home industry places workers at risk and does not adequately provide for the meeting of their basic physiological and health needs through adequate pay and benefits. Harrington (1994), describes the wages and benefits for nursing home workers as scandalously low.

The situation facing nursing assistants employed in nursing homes is only part of the larger picture. The nursing home industry is rapidly growing in response to an aging population and shortened hospital stays. Although highly regulated, the quality of care provided in long-term care facilities is a continued concern. Harrington (1994), identifies improved wages, benefits, and staffing levels for nursing home staff as essential to improvement of the system. She notes, however, that the special interest groups involved in nursing home issues are often in conflict, with the industry focusing on profits, the government concerned with regulation, and consumers interested in quality and access. Nursing has not yet taken a strong stand for improvements in the working conditions in nursing homes, yet Harrington suggests that if nurses would form coalitions with consumer groups, the current uneven power balance favoring the nursing home industry could be shifted.

The interests of nurses and consumers are in alignment. Kruzich, Clinton, and

Kelber (1992), in a study of personal and environmental influences on nursing home satisfaction, found that organizational variables including the median hourly wage for nursing assistants, the percentage of health insurance paid for nursing assistants by the facility, the nursing assistant/resident ratio, and the length of employment for nursing assistants, were significantly correlated with resident satisfaction. In another comparison survey of nursing homes, Sheridan, White, and Fairchild (1992), found a relationship between human resource management policies, practices, and procedures and poor nursing care. In advocating for improvements in salaries, benefits, and staffing ratios in the long-term care facilities, nurses could not only positively impact the health of the women who work there, but also improve the well-being of those they care for.

Implications for Nursing Research

There is a need for further descriptive and exploratory work on low-income women's health practices and risk-related behaviors, and, concurrently, there is a need to begin to design, implement, and test interventions which can assist low-income women to improve and protect their health. It is this investigator's position that research in both areas must proceed simultaneously. It is critical to build a fuller understanding of women's health practices which can then support the development of strategies for achieving better health outcomes for all women. However, the extent of the current disparities in health for low-income women and the rapidly shifting nature of both the health care and the larger socio-political environment in the U.S. introduce a sense of urgency. Development of interventions

should begin in those areas where there is an emerging base of knowledge sufficient to suggest the form and direction those interventions could take. At the same time research to broaden and deepen this knowledge base should continue.

The reduction of back stress and injury among nursing assistants is an example of a health-related need that currently calls for both descriptive and experimental research. The descriptive investigations and ergonomic evaluations of back injury performed by Owen and Garg (1991), led to the testing of an intervention which was effective in reducing the injury and severity of back injuries (Garg & Owen, 1992). There is sufficient knowledge to support the further testing of ergonomic interventions in settings involving frequent manual lifting. On the other hand, a full understanding of the meaning of back pain for nursing assistants employed in long-term care settings is not evident in the literature and this understanding could contribute to the refinement of interventions to reduce back stress and injury.

The lack of involvement in exercise among low-income working women is an example of a health need for which there is currently insufficient information on which to build interventions. The exercise equivalency of much of the work women do is not known. The influence of occupational differences in activity levels on health outcomes for women has been barely addressed in the literature. More information about how women from different ethnic and socioeconomic groups perceive exercise is needed. Likewise, much more can be learned about women's actual experiences with exercise. Only those exercise activities which can be integrated into the day-to-day lives of low-income working women are likely to be

maintained, therefore more information about how women balance the daily demands on their time and energy is needed before successful exercise programs can be developed and tested.

The above are only two examples of potential programs of research related to the findings of the current study and to the proposed model of a responsive workplace. Due to the broad scope of the study, a number of possible areas for further investigation have been introduced. Regardless of the particular area of concern, the primacy of the experiences of the women themselves must be considered. When the workplace is viewed as a community, with the expectation that it will respond to the needs of its members, then community-oriented primary health care principles of participation, empowerment, collaboration, and equity (World Health Organization, 1978) also become applicable to the investigative process.

Conclusions

The findings of this study have suggested some directions for nursing practice, political action, and research. Nurses can be instrumental in drawing attention to the needs of a population, low-income working women, that has been largely overlooked in health care planning and research. Nursing assistants working in long-term care facilities represent a subset of this population that is readily accessible to the nurses who share the same setting, yet the models that guide nursing practice in this location are not inclusive of the needs the caregivers as well as the care recipients. Currently there is an opportunity for nurses to demonstrate the effectiveness of a community model which considers the needs of all who live or work within the boundaries of the

long-term care setting. The vision of a workplace that is responsive to the family and health needs of the women who work there springs from this community perspective.

REFERENCES

- Acampora, A. (1993). Satisfaction on the job: The value factor. The Journal of Long-term Care Administration, 20(2), 17.
- Adelmann, P., Antonucci, T., Crohan, S., & Coleman, L. (1990). A causal analysis of employment and health in midlife women. Women & Health, 16, 5-20.
- Ajzen, L. & Fishbein, M. (1980). Understanding attitudes and predicting social behavior. Englewood Cliffs, NJ: Prentice-Hall.
- Amatea, E. & Fong, M. (1991). The impact of role stressors and personal resources on the stress experience of professional women. Psychology of Women Quarterly, 15, 419-430.
- American Heart Association. (1988). 1989 Heart Facts. Dallas: Author.
- American Heart Association. (1989). Silent epidemic: The truth about women and heart disease. Dallas: Author.
- Anson, O., Paran, E., Neumann, L., & Chernichovsky, D. (1993). Gender differences in health perceptions and their predictors. Social Science and Medicine, 36(4), 419-427.
- Arber, S., Gilbert, G., & Dale, A. (1985). Paid employment and women's health: A benefit or a source of role strain? Sociology of Health and Illness, 7, 375-400.
- Avery, B. (1990). Breathing life into ourselves: The evolution of the national black women's health project. In E. White (Ed.), The Black Woman's Health Book (pp.4-10). Seattle: Seal.
- Avis, N., McKinlay, J. & Smith, K. (1990). Is cardiovascular risk factor knowledge sufficient to influence behavior? American Journal of Preventive Medicine, 6, 137-144.
- Bandura, A. (1977). Social learning theory. Englewood Cliffs, N.J.: Prentice-Hall.
- Barnett, R. & Baruch, G. (1985). Women's involvement in multiple roles and psychological distress. Journal of Personality and Social Psychology, 49, 135-145.
- Barnett, R., Davidson, H., & Marshall, N. (1991). Physical symptoms and the interplay of work and family roles. Health Psychology, 10, 94-101.

- Baruch, G. & Barnett, R. (1986). Role quality, multiple role involvement, and psychological well-being in midlife women. Journal of Personality and Social Psychology, 51, 578-585.
- Becker, M. (1993). A medical sociologist looks at health promotion. Journal of Health and Social Behavior, 34, 1-6.
- Becker, M., Drachman, R., & Kirscht, J. (1974). A new approach to explaining sick-role behavior in low-income populations. American Journal of Public Health, 64, 205-216.
- Belle, D. (1982). The impact of poverty on social networks and supports. Marriage and Family Review, 5(4), 89-103.
- Belloc, N. & Breslow, L. (1972). Relationship of physical health status and health practices. Preventive Medicine, 1, 409-421.
- Berkowitz, G., Lapinski, R., Wein, R. & Lee, D. (1992). Race/ethnicity and other risk factors for gestational diabetes. American Journal of Epidemiology, 135(9), 965-973.
- Bird, C. & Fremont, A. (1991). Gender, time use, and health. Journal of Health and Social Behavior, 39, 114-129.
- Bowers, B. & Becker, M. (1992). Nurse's aides in nursing homes: The relationship between organization and quality. The Gerontologist, 32(3), 360-366.
- Brannon, D., Cohn, M., & Smyer, M. (1990). Care giving as work: How nurse's aides rate it. Journal of Long-term Care Administration, 18(1), 10-4.
- Bureau of the Census. (1994). Statistical abstract of the United States, 1993. Washington, DC: U.S. Department of Commerce
- Butler, P. (1988). Too poor to be sick: Access to medical care for the uninsured. Washington, D.C.: American Public Health Association.
- Butterfield, P. (1990). Thinking upstream: Nurturing a conceptual understanding of the societal context of human behavior. Advances in Nursing Science, 12, 1-8.
- Caudill, M. & Patrick, M. (1991-92). Turnover among nursing assistants: Why they stay and why they leave. Journal of Long-term Care Administration, 19(4), 29-32.
- Chandra, N. & Hazinski, M. (1994). Basic life support for healthcare providers. Dallas: American Heart Association.

- Chappell, N. & Novak, M. (1992). The role of support in alleviating stress among nursing assistants. The Gerontologist, 32(3), 351-359.
- Crunch Software Corporation. (1991). Crunch statistical package, v.4, Oakland, CA.
- Davis, K. & Rowland, D. (1990). Uninsured and underserved: Inequities in health care in the United States. In P. Lee & C. Estes (Eds.). The Nation's Health (3rd ed.). Boston: Jones and Bartlett.
- Dean, K. (1989). Self-care components of lifestyles: The importance of gender, attitudes and the social situation. Social Science & Medicine, 29(2), 137-152.
- Dishman, R., Sallis, J. & Orenstein, D. (1985). The determinants of physical activity and exercise. Public Health Reports, 100(2), 158-171.
- Dixon, J., Dixon, J., & Spinner, J. (1991). Tensions between career and interpersonal commitments as a risk factor for cardiovascular disease among women. Women & Health, 17, 33-57.
- Doebbert, G., Riedmiller, K. & Kizer, K. (1988). Occupational mortality of California women, 1979-1981. Western Journal of Medicine, 149, 734-740.
- Dornhorst, A. Paterson, C., Nicholls, J., Wadsworth, J., Chiu, D., Elkeles, R., Johnston, D. & Beard, R. (1992). High prevalence of gestational diabetes in women from ethnic minority groups. Diabetic Medicine, 9(9), 820-825.
- Duelberg, S. (1992). Preventive health behavior among black and white women in urban and rural areas. Social Science & Medicine, 34(2), 191-198.
- Duffy, M. (1986). Primary prevention behaviors: The female-headed, one-parent family. Research in nursing & Health, 9, 115-122.
- Duffy, M. (1988). Determinants of health promotion in midlife women. Nursing Research, 37(6), 358-362.
- Flaskerud, J. (1988). Is the Likert scale format culturally biased? Nursing Research, 37(3), 185-186.
- Fleetwood, J. & Packa, D. (1991). Determinants of health-promoting behaviors in adults. Journal of Cardiovascular Nursing, 5(2), 67-79.
- Flimrite, P. (1995, February 9). 3 die on hwy. 37 in Solano County. San Francisco Chronicle, p. A19.

- Fleury, J. (1992). The application of motivational theory to cardiovascular risk reduction. Image, 24(3), 229-239.
- Fox, M., Dwyer, D., Ganster, D. (1993). Effects of stressful job demands and control on physiological and attitudinal outcomes in a hospital setting. Academy of Management Journal, 36(2), 289-318.
- Froberg, D., Gjerdingen, D., & Preston, M. (1986). Multiple roles and women's mental and physical health: What have we learned? Women & Health, 11(2), 79-96.
- Garg, A. & Owen, B. (1992). Reducing back stress to nursing personnel: An ergonomic intervention in a nursing home. Ergonomics, 35(11), 1353-1375.
- Gauthier, C. & Krassen-Maxwell, E. (1991). Time demands and medical ethics in women's health care. Health Care for Women International, 12, 153-165.
- Geronimus, A., Andersen, H., Bound, J. (1991). Differences in hypertension prevalence among U.S. black and white women of childbearing age. Public Health Reports. 106(4), 393-399.
- Gillett, P. (1988). Self-reported factors influencing exercise adherence in overweight women. Nursing Research, 37(1), 25-29.
- Glaser, B. (1978). Theoretical sensitivity. Mill Valley, CA: The Sociology Press.
- Goode, W. (1960). A theory of strain. American Sociological Review, 25, 483-496.
- Gottlieb, N. & Green, L. (1984). Life events, social network, life-style, and health: An analysis of the 1979 national survey of personal health practices and consequences. Health Education Quarterly, 11(1), 91-105.
- Gottlieb, N. & Green, L. (1987). Ethnicity and lifestyle health risk: Some possible mechanisms. American Journal of Health Promotion, Summer, 39-45.
- Graham, H. (1987). Women's smoking and family health. Social Science and Medicine, 25(1), 47-56.
- Gregory, K., Kjos, S., Peters, R. (1993). Cost of non-insulin dependent diabetes in women with a history of gestational diabetes: Implications for prevention. Obstetrics and Gynecology, 81(5), 782-786.

- Hall, E., Johnson, J., Tsou, T. (1993). Women, occupation, and risk of cardiovascular morbidity and mortality. Occupational Medicine, 8(4), 709-719.
- Hardy, M. & Conway, M. (1988). Role theory perspectives for health professionals. New York: Appleton-Century-Crofts.
- Hammersley, M. & Atkinson, P. (1983). Ethnography principles in practice. London: Routledge.
- Harrell, W. (1990). Perceived risk of occupational injury: Control over pace of work and blue-collar versus white-collar work. Perceptual and Motor Skills, 70(3, pt .2), 1351-1359.
- Harrington, C. (1994). The nursing home industry: A structural analysis. In C. Harrington & C. Estes (Eds.), Health policy and nursing: Crisis and reform in the U.S. health care delivery system (pp. 192-204). Boston: Jones and Bartlett.
- Harris, D. & Guten, S. (1979). Health-protective behavior: An exploratory study. Journal of Health and Social Behavior, 20, 17-29.
- Hawkins, J. & Higgins, L. (1990). Access to quality health care: Who benefits. In S. Wald (Ed.), Community health nursing: Issues and topics (pp.127-143). Norwalk, CN: Appleton & Lange.
- Haynes, S. & Feinleib, M. (1980). Women, work and coronary heart disease: Prospective findings from the Framingham heart study. American Journal of Public Health, 70, 133-141.
- Hayward, R., Bernard, A., Freeman, H. & Corey, C. (1991). Regular source of ambulatory care and access to health services. American Journal of Public Health, 81, 434-438.
- Hazuda, H., Haffner, S., Stern, M., Knapp, A., Eifler, C. & Rosenthal, M. (1986). Employment status and women's protection against coronary heart disease. American Journal of Epidemiology, 123, 623-640.
- Health Resources and Services Administration. (1990). Health status of the disadvantaged (DHHS Publication No. HRS-P-DV 90-1) Washington D.C.: U.S. Government Printing Office.
- Helmer, T., Olson, S., & Heim, R. (1993). Strategies for nurse aid job satisfaction. Journal of Long-term Care Administration, 20(2), 10-14.

- Helzlsouer, K., Ford, D., Hayward, R., Midzenski, M., & Perry, H. (1994). Perceived risk of cancer and practice of cancer prevention behaviors among employees in an oncology center. Preventive Medicine, 23(3), 302-308.
- Henry, G. (1993). Retaining CNAs in long-term care. The Journal of Long-term Care Administration, 20(2), 18.
- Hibbard, J. & Pope, C. (1983). Gender roles, illness orientation and use of medical services. Social Science and Medicine, 17, 129-137.
- Hibbard, J. & Pope, C. (1987). Women's roles, interest in health and health behavior. Women & Health, 12, 67-84.
- Hibbard, J. & Pope, C. (1991). Effect of domestic and occupational roles on morbidity and mortality. Social Science & Medicine, 32, 805-811.
- Horwitz, T. (1994, September 1). Wall Street Journal. p. 1.
- Hubbard, P., Muhlenkamp, A., & Brown, N. (1984). The relationship between social support and self-care practices. Nursing Research, 33(5), 266-269.
- Jensen, R. (1987). Back injuries among nursing personnel: Research needs and justification. Research in Nursing & Health, 10(1), 29-38.
- Johnson, C., Corrigan, S., Dubbert, P., & Gramling, S. (1990). Perceived barriers to exercise and weight control practices in community women. Women & Health, 16(3/4), 177-191.
- Kamerman, S. & Kahn, A. (1987). Toward a responsive workplace. In S. Kamerman, The responsive workplace: Employers and a changing labor force (pp. 281-305). New York: Columbia University Press.
- Kandel, D., Davies, M., & Raveis, V. (1985). The stressfulness of daily social roles for women: Marital, occupational and household roles. Journal of Health and Social Behavior, 26, 64-78.
- Kizer, K. (1987). California occupational mortality 1979-1981. Sacramento, CA: Department of Health Services.
- Kjos, S. (1994). Maternal implications of gestational diabetes. Seminars in Perinatology, 18(5), 470-474.

- Kleinman, S. (1991). Field-workers' feelings: What we feel, who we are, how we analyze. In W. Shaffir & R. Stebbins (Eds.), Experiencing fieldwork (pp. 184-195). Newbury Park, CA: Sage.
- Kotler, P. & Wingard, D. (1989). The effect of occupational, marital and parental roles on mortality: The Alameda county study. American Journal of Public Health, 79, 607-612.
- Krick, J. & Sobal, J. (1990). Relationships between health protective behaviors. Journal of Community Health, 15(1), 19-34.
- Kritz-Silverstein, D., Wingard, D., & Barrett-Connor, E. (1992). Employment status and heart disease risk factors in middle-aged women: The Rancho Bernardo study. American Journal of Public Health, 82, 215-219.
- Kruzich, J., Clinton, J., & Kelber, S. (1992). Personal and environmental influences on nursing home satisfaction. The Gerontologist, 32(3), 342-350.
- Kulbok, P. (1985). Social resources, health resources, and preventive health behavior: Patterns and predictions. Public Health Nursing, 2, 67-81.
- Kuriansky, J. (1991). Low wages, poor benefits tied to nurse assistant turnover. Provider, 17(2), 52.
- Laffrey, S. (1985). Health behavior choice as related to self-actualization and health conception. Western Journal of Nursing Research, 7(3), 279-300.
- Laffrey, S. (1990). An exploration of adult health behaviors. Western Journal of Nursing Research, 12(4), 434-446.
- Leventhal, H. & Tomarken, A. (1987). Stress and illness: Perspectives from health psychology. In S. Kasl & C. Cooper (Eds.), Stress and health: Issues in research methodology (pp. 27-55). New York: John Wiley & Sons.
- Levy, D., Wilson, P., Anderson, K., & Castelli, W. (1990). Stratifying the patient at risk from coronary disease: New insights from the Framingham heart study. American Heart Journal, 119, 712-717.
- Lewin, E. & Olesen, V. (1985). Occupational health and women: The case of clerical work. In E. Lewin & V. Olesen (Eds.), Women, health, and healing: Toward a new perspective (pp. 53-85). New York: Tavistock.
- Liberatos, P., Link, B., & Kelsey, J. (1988). The measurement of social class in epidemiology. Epidemiologic Reviews, 10, 87-121.

- Lindheim, R. & Syme, L. (1983). Environments, people, and health. Annual Review of Public Health, 4, 335-359.
- Lofland, J. & Lofland, L. (1971). Analyzing social settings. Belmont, CA: Wadsworth.
- Lorig, K. & Laurin, J. (1985). Some notions about assumptions underlying health education. Health education quarterly, 12, 231-243.
- Lusk, S., Kerr, M., & Ronis, D. (1995). Health-promoting lifestyles of blue-collar, skilled trade, and white-collar workers. Nursing Research, 44(1), 20-24.
- Lutz, M. (1989). Women, work, and preventive health care: An exploratory study of the efficacy of HMO membership. Women & Health, 15, 21-33.
- Malveaux, J. & Englander, S. (1986). Race and class in nursing occupations. Sage, III(1), 41 45.
- Marks, L., Smyer, M. & Cohn, M. (1993). Nursing home aides' work and family connections. The Journal of Long-term Care Administration, 20(2), 31-34.
- Marshall, N. & Barnett, R. (1991). Race, class and multiple role strains and gains among women employed in the service sector. Women & Health, 17, 1-19.
- Mathews, K., Kelsey, S., Meilahn, E., Kuller, L., & Wing, R. (1989). Educational attainment and behavioral and biologic risk factors for coronary heart disease in middle-aged women. American Journal of Epidemiology, 129(6), 1132-1144.
- Mechanic, D. & Cleary, P. (1980). Factors associated with the maintenance of positive health behavior. Preventive Medicine, 9, 805-814.
- Meleis, A., Norbeck, J., & Laffrey, S. (1989). Role integration and health among female clerical workers. Research in Nursing & Health, 12, 355-364.
- Melnyk, K. (1988). Barriers: A critical review of recent literature. Nursing Research, 37, 196-201.
- Mikhail, B. (1981). The health belief model: A review and critical evaluation of the model, research, and practice. Advances in Nursing Science, 4(1), 65-82.
- Miles, M. & Huberman, A. (1984). Qualitative data analysis: A sourcebook of new methods. Beverly Hills, CA: Sage.

- Muhlenkamp, A., Brown, N., & Sands, D. (1985). Determinants of health promotion activities in nursing clinic clients. Nursing Research, 34(6), 327-332.
- Muhlenkamp, A. & Sayles, J. (1986). Self-esteem, social support, and positive health practices. Nursing Research, 35(6), 334-338.
- Muller, C. (1990). Health care and gender. New York: Russell Sage Foundation.
- Nathanson, C. (1980). Social roles and health status among women: The significance of employment. Social Science and Medicine, 14A, 463-471.
- National Center for Health Statistics. (1991). Health United States 1990 (DHHS Publication No. PHS 91-1232). Hyattsville, MD: U.S. Department of Health and Human Services.
- Nelson, M. (1992, July). Women and coronary artery disease: The poor and at risk. Paper presented at the Research in women's Health & Perinatal Nursing Conference, Seattle, WA.
- O'Brien, M. (1982). Pragmatic survivalism: Behavior patterns affecting low-level wellness among minority group members. Advances in Nursing Science, 4, 13-26.
- Office of Statewide Health Planning and Development. (1993). Licensed services and utilization profiles: Annual report of long term care facilities, 1992. Sacramento, CA: Office of Statewide Health Planning and Development.
- Office on Women's Health. (1991). PHS action plan for women's health (DHHS Publication No. PHS 91-50214). Washington, DC: U.S. Government Printing Office.
- Owen, B. & Garg, A. (1991). Reducing back pain in nursing personnel. AAOHN Journal. 39(1), 24-32.
- Pain of poverty widens under Bush. (1992, September 4). Marin Independent Journal. p. A3.
- Palank, C. (1991). Determinants of health-promotive behavior. Nursing Clinics of North America, 24(4), 815-832.
- Patton, M. (1980). Qualitative evaluation methods. Beverly Hills, CA: Sage.
- Pear, R. (1992, September, 4). Number of poor in U.S. is highest since 1964. San Francisco Chronicle. pp. 1, A21.

- Pender, N. (1984). Health promotion and illness prevention. In H. Werley & J. Fitzpatrick (Eds.), Annual review of nursing research (vol. 2, pp. 83-105). New York: Springer.
- Pender, N. (1987). Health promotion in nursing practice (2nd ed.). Norwalk, CN: Appleton & Lange.
- Pender, N. & Pender, A. (1986). Attitudes, subjective norms, and intentions to engage in health behaviors. Nursing Research, 35(1), 15-18.
- Perlman, J., Wolf, P., Ray, R., & Lieberknecht, G. (1988). Endogenous and exogenous risk factors for coronary heart disease in women. American Journal of Obstetrics and Gynecology, 158, 1568-74.
- Personick, M. (1990, February). Nursing home aides experience increase in serious injuries. Monthly Labor Review, pp.30-37.
- Pesznecker, B. (1984). The poor: A population at risk. Public Health Nursing, 1, 237-249.
- Public health Service. (1985). Women's health: Report of the public health service task force on women's health issues (vol 1). Public Health Reports, 100(1), 73-106.
- Public Health Service. (1990). Healthy People 2000 (DHHS Publication No. PHS 91-50213). Washington D.C.: U.S. Government Printing Office.
- Public Health Service. (1991). Action plan for women's health. (DHHS Publication No. PHS 91-50214) Washington D.C.: U.S. Government Printing Office.
- Qualis Research Associates. (1988). The ethnograph, v.3.0. Amherst, MA.
- Quinn, M. & Woskie, S. (1988). Women and work. In B. Levy & D. Wegman (Eds.), Occupational health: Recognizing and preventing work-related disease (pp. 479-499). Boston: Little, Brown and Company.
- Rakowski, W. (1986). Personal health practices, health status, and expected control over future health. Journal of Community Health, 11(3), 189-203.
- Rakowski, W. (1987). Persistence of personal health practices over a 1-year period. Public Health Reports, 102(5), 483-493.

- Reames, B. & Burnett, M. (1991). Weight management practices of black paraprofessional women. Journal of the American Dietetic Association, 91(7), 841-843.
- Reifman, A. Biernat, M., & Lang, E. (1991). Stress, social support, and health in married professional women with small children. Psychology of Women Quarterly, 15, 431-445.
- Ries, P. (1991). Characteristics of persons with and without health care coverage: United States, 1989. Advance Data: National Center for health Statistics, 201, 1-11.
- Romano, P., Bloom, J. & syme, L. (1991). Smoking, social support, and hassles in an urban African-American community. American Journal of Public Health, 81, 1415-1422.
- Rook, K. (1984). The negative side of social interaction: Impact on psychological well-being. Journal of Personality and Social Psychology, 46(5), 1097-1108.
- Rosenstock, I. (1974). The health belief model and preventive health behavior. In M. Becker (Ed.), The health belief model and personal health behavior. Thorofare, NJ: Slack.
- Ross, C. & Bird, C. (1994). Sex stratifications and health lifestyle: Consequences for men's and women's perceived health. Journal of Health and Social Behavior, 35(2), 161-178.
- Rotter, J. (1972). Application of a social learning theory of personality. New York: Holt, Rinehart & Winston.
- Russell, S. (1992, September, 7). Number of uninsured Californians likely to rise 40%. San Francisco Chronicle. p.1.
- Saltonstall, R. (1993). Healthy bodies, social bodies: Men's and women's concepts and practices of health in every day life. Social Science in Medicine, 36(1), 7-14.
- Savitz, D. & Zhang, J. (1992). Pregnancy-induced hypertension in North Carolina, 1988 and 1989. American Journal of Public Health, 82(5), 675-679.
- Scheidt-Nave, C., Barrett-Connor, E., Wingard, D., Cohn, B. & Edelstein, S. (1991). Sex differences in fasting glycemia as a risk factor for ischemic heart disease death. American Journal of Epidemiology, 133(6), 565-576.

- Schoenborn, C. (1986). Health habits of U.S. adults, 1985: The "Alameda 7" revisited. Public Health Reports, 101(6), 571-580.
- Sennott-Miller, L. & Miller, J. (1987). Difficulty: A neglected factor in health promotion. Nursing Research, 36, 268-272.
- Sheridan, J., White, J., & Fairchild, T. (1992). Ineffective staff, ineffective supervision, or ineffective administration? Why some nursing homes fail to provide adequate care. The Gerontologist, 32(3), 334-341.
- Shumaker, S. & Hill, R. (1991). Gender differences in social support and physical health. Health Psychology, 10(2), 102-111.
- Siegel, P., Frazier, E., Mariolis, P., Brackbill, R., & Smith, C. (1993). Behavioral risk factor surveillance, 1991: Monitoring progress toward the nation's year 2000 health objectives. Morbidity and Mortality Weekly Report, 42(SS-4), 1-21.
- Slater, C. & Carlton, B. (1985). Behavior, lifestyle, and socioeconomic variables as determinants of health status: Implications for health policy development. American Journal of Preventive Medicine, 1(5), 25-33.
- Smith, J. (1981). The idea of health: A philosophical inquiry. Advances in Nursing Science, 3(3), 43-50.
- Solomon, C., Graves, S., Greene, M. & Seely, E. (1994). Glucose intolerance as a predictor of hypertension in pregnancy. Hypertension, 23(6, pt. 1), 717-721.
- Spradley, J. (1979). The ethnographic interview. New York: Holt, Rinehart and Winston.
- State of California, Department of Finance. (1993). 1992 Population Projections. Sacramento, CA.
- Stellman, J. (1988). The working environment of the working poor: An analysis based on workers' compensation claims, census data and known risk factors. In C. Perales & L. Young (Eds.), Dealing with the health needs of women in poverty: Too little, too late (pp. 83-101). New York: Harrington Park Press.
- Stevens, P., Hall, J., & Meleis, A. (1992). Examining Vulnerability: A narrative study of low-income women clerical workers from five ethnic/racial groups. Western Journal of Nursing Research, 14(6), 754-774.
- Stoddart, K. (1986). The presentation of everyday life. Urban Life, 15(1), 103-121.

- Stout, N. (1992). Occupational injuries and fatalities among health care workers in the United States. Scandinavian Journal of Work, Environment and Health, 18(Suppl. 2), 88-89.
- Strauss, A. & Corbin, J. (1990). Basics of qualitative research. Newbury Park, CA:Sage.
- Tallon, J. & Block, R. (1988). Changing patterns of health insurance coverage: Special concerns for women. In C. Perales & L. Young (Eds.), Dealing with the health needs of women in poverty: Too little, too late (pp. 119-136). New York: Harrington Park Press.
- Tellis-Nayak, V. & Tellis-Nayak, M. (1989). Quality of care and the burden of two cultures: When the world of the nurse's aide enters the world of the nursing home. The Gerontologist, 29(3), 307-313.
- Theorell, T., Ahlberg-Hulten, G., Jodko, M., Sigala, F., & de la Torre, B. (1993). Influence of job strain and emotion on blood pressure in female hospital personnel during workhours. Scandinavian Journal of Work, Environment and Health, 19(5), 313-318.
- Thoits, P. (1983). Multiple identities and psychological well-being: A reformulation and test of the social isolation hypothesis. American Sociological Review, 48, 174-187.
- Thoits, P. (1986). Multiple identities: Examining gender and marital status differences in distress. American Sociological Review, 51, 259-272.
- Turk, D., Rudy, T., & Salovey, P. (1984). Health protection: Attitudes and behaviors of LPNs, teachers, and college students. Health Psychology, 3(3), 189-210.
- Umberson, D. (1991). Gender, marital status and the social control of health behavior. Social Science and Medicine, 34, 907-917.
- United States General Accounting Office, Human Resources Division. (1991). Health insurance coverage: A profile of the uninsured in selected states (GAO/HRD 91-31FS). Washington, DC: U.S. General Accounting Office.
- Unger, K. (1993). Working women: Economic and social considerations. Occupational Medicine, 8(4), 859-868.
- Verbrugge, L. (1983). Multiple roles and physical health of women and men. Journal of Health and Social Behavior, 24, 16-30.

- Verbrugge, L. (1984). Physical health of clerical workers in the U.S., Framingham, and Detroit. Women & Health, 9, 17-41.
- Verbrugge, L. (1986). Role burdens and physical health of women and men. Women & Health, 11, 47-77.
- Vernon, S., Vogel, V., Halabi, S., & Bondy, M. (1993). Factors associated with perceived risk of breast cancer among women attending a screening program. Breast Cancer Research and Treatment, 28(2), 137-44.
- Vingerhoets, A. & Assies, J. (1991). Psychoneuroendocrinology of stress and emotions: Issues for future research. Psychotherapy and Psychosomatics, 55, 69-75.
- Voydanoff, P. & Donnelly, B. (1989). Work and family roles and psychological distress. Journal of Marriage and the Family, 51, 923-932.
- Waldron, I., & Jacobs, J. (1988). Effects of labor force participation on women's health: New evidence from a longitudinal study. Journal of Occupational Medicine, 30, 977-983.
- Waldron, I. & Jacobs, J. (1989). Effects of multiple roles on women's health: Evidence from a national longitudinal study. Women & Health, 15, 3-19.
- Waldron, I., Herold, J., Dunn, D., & Staum, R. (1982). Reciprocal effects of health and labor force participation among women: Evidence from two longitudinal studies. Journal of Occupational Medicine, 24, 126-132.
- Walker, S., Sechrist, K., & Pender, N. (1987). The Health-Promoting Lifestyle Profile: Development and psychometric characteristics. Nursing Research, 36, 76-81.
- Walker, S., Volkan, K., Sechrist, K. & Pender, N. (1988). Health-promoting lifestyles of older adults: Comparisons with young and middle-aged adults, correlates and patterns. Advances in Nursing Science, 11(1), 76-90.
- Walters, V. (1993). Stress, anxiety and depression: Women's accounts of their health problems. Social Science and Medicine, 36(4), 393-402.
- Watson, D. & Pennebaker, J. (1989). Health complaints, stress, and distress: Exploring the central role of negative affectivity. Psychological Review, 96, 234-254.

- Waxman, H., Carner, E., & Berkenstock, G. (1984). Job turnover and job satisfaction among nursing home aides. The Gerontologist, 24, 503-509.
- Weinert, C. (1987). A social support measure: PRQ85. Nursing Research, 36(5), 263-267.
- Weinert, C. & Brandt, P. (1987). Measuring social support with the Personal Resource Questionnaire. Western Journal of Nursing Research, 9(4), 589-602.
- Weitzel, M. (1989). A test of the health promotion model with blue collar workers. Nursing Research, 38(2), 99-104.
- Weitzel, M. & Walker, P. (1990). Predictive factors for health promotive behaviors in white, hispanic, and black blue-collar workers. Family and Community Health, 13(1), 23-34.
- Wilber, J., Miller, A., Dan, A., & Holm, K. (1989). Measuring physical activity in midlife women. Public Health Nursing, 6(3), 120-128.
- Williams, D. (1989). Political theory and individualistic health promotion. Advances in Nursing Science, 12, 14-25.
- Williams, D. R. (1990). Socioeconomic differentials in health: A review and redirection. Social Psychology Quarterly, 53(2), 81-99.
- Winkleby, M., Jatulis, D., Frank, E. & Fortmann, S. (1992). Socioeconomic status and health: How education, income, and occupation contribute to risk factors for cardiovascular disease. American Journal of Public Health, 82(6), 816-820.
- Woods, N., Lentz, M., & Mitchell, E. (1993). The new woman: Health-promoting and health-damaging behaviors. Health Care for Women International, 14, 389-405.
- Woods, N., Laffrey, S., Duffy, M., Lentz, M., Mitchell, E., Taylor, D., & Cowan, K. (1988). Being healthy: Women's images. Advances in Nursing Science, 11(1), 36-46.
- Woolhandler, S. & Himmelstein, D. (1988). Reverse targeting of preventive care due to lack of health insurance. JAMA, 259, 2872-2874.
- WordPerfect Corporation. (1990). WordPerfect, v. 5.1.

World Health Organization. (1978). Primary health care: Report of the international conference on primary health care. Alma-Ata, USSR, 6-12 September. Geneva: World Health Organization.

Zambrana, R. (1988). A research agenda on issues affecting poor and minority women: A mode for understanding their health needs. In C. Perales & L. Young (Eds.), Too little, too late: Dealing with the health needs of women in poverty (pp. 137-160). New York: Harrington Park Press.

Zindler-Wernet, P. & Weiss, S. (1987). Health locus of control and preventive health behavior. Western Journal of Nursing Research, 9(2), 160-179.

Appendix A

WORKING WOMEN'S HEALTH STUDY
Interview Guide

Subject Code: _____

PART I: Women's Roles Interview Protocol

1. Women carry out different activities in their daily lives. Which of the following are activities or roles in which you are involved? What is the extent of your involvement in each of these activities?

- 0 = Not applicable
 1 = No involvement
 2 = A little involvement (Refer to response guide)
 3 = Some involvement
 4 = Moderate involvement
 5 = A great deal of involvement

1 Partner/wife.....	0	1	2	3	4	5
2 Ex-wife or partner.....	0	1	2	3	4	5
3 Mother/Stepmother.....	0	1	2	3	4	5
4 Grandmother.....	0	1	2	3	4	5
5 Sister	0	1	2	3	4	5
6 Daughter.....	0	1	2	3	4	5
7 Daughter-in-law.....	0	1	2	3	4	5
8 Caregiver to a relative.....	0	1	2	3	4	5
9 Friend	0	1	2	3	4	5
10 Volunteer worker.....	0	1	2	3	4	5
11 Employee.....	0	1	2	3	4	5
12 Student.....	0	1	2	3	4	5
13 Housekeeping activities.....	0	1	2	3	4	5
14 Social activities.....	0	1	2	3	4	5
15 Religious or spiritual activities	0	1	2	3	4	5
16 Recreational activities.....	0	1	2	3	4	5
17 Other _____	0	1	2	3	4	5
(please specify)						

2. How satisfying is each of the activities in which you are involved?

- 0 = Not applicable
 1 = No satisfying
 2 = A little satisfying
 3 = Somewhat satisfying (Refer to response guide)
 4 = Moderately satisfying
 5 = Very satisfying

1	Partner/wife.....	0	1	2	3	4	5
2	Ex-wife or partner.....	0	1	2	3	4	5
3	Mother/Stepmother.....	0	1	2	3	4	5
4	Grandmother.....	0	1	2	3	4	5
5	Sister	0	1	2	3	4	5
6	Daughter.....	0	1	2	3	4	5
7	Daughter-in-law.....	0	1	2	3	4	5
8	Caregiver to a relative.....	0	1	2	3	4	5
9	Friend	0	1	2	3	4	5
10	Volunteer worker.....	0	1	2	3	4	5
11	Employee.....	0	1	2	3	4	5
12	Student.....	0	1	2	3	4	5
13	Housekeeping activities.....	0	1	2	3	4	5
14	Social activities.....	0	1	2	3	4	5
15	Religious or spiritual activities	0	1	2	3	4	5
16	Recreational activities.....	0	1	2	3	4	5
17	Other _____	0	1	2	3	4	5

(please specify)

3. How demanding of your time and energy is each of the activities in which you are involved?

0 = Not applicable

1 = Not demanding

2 = A little demanding

3 = Somewhat demanding (Refer to response guide)

4 = Moderately demanding

5 = Very demanding

1	Partner/wife.....	0	1	2	3	4	5
2	Ex-wife or partner.....	0	1	2	3	4	5
3	Mother/Stepmother.....	0	1	2	3	4	5
4	Grandmother.....	0	1	2	3	4	5
5	Sister	0	1	2	3	4	5
6	Daughter.....	0	1	2	3	4	5
7	Daughter-in-law.....	0	1	2	3	4	5
8	Caregiver to a relative.....	0	1	2	3	4	5
9	Friend	0	1	2	3	4	5
10	Volunteer worker.....	0	1	2	3	4	5
11	Employee.....	0	1	2	3	4	5
12	Student.....	0	1	2	3	4	5
13	Housekeeping activities.....	0	1	2	3	4	5
14	Social activities.....	0	1	2	3	4	5
15	Religious or spiritual activities	0	1	2	3	4	5
16	Recreational activities.....	0	1	2	3	4	5
17	Other _____	0	1	2	3	4	5

(please specify)

PART II: Health Practices and Cardiac Risk

1. How would you describe your current state of health?

1 Excellent		
2 Good		
3 Fair		(Refer to response guide)
4 Poor		

2. What kinds of things do you do to keep yourself healthy? What are the things you do to improve your health?

3. How satisfied are you with what you are currently doing for your health?

4. Are there things that you think you should be doing for your health that you aren't doing currently? What are they?

5. What prevents you from doing all that you think you should do for your health?

6. What worries you most about your health?

7. Have you ever worried about your heart or your blood pressure? _____
If so, can you describe these worries?

8. Have you ever been told you had a problem with your heart or your blood pressure?

9. Are you currently taking any medications for your heart or blood pressure? _____
If so, please list the medications you are taking _____

10. What is your usual blood pressure? _____ Measured B/P _____

11. Have you ever been told you have diabetes? _____

12. Are you currently taking any medications for diabetes? _____
If so, please list the medications you are taking _____

13. Do you currently smoke? _____
If yes, how many cigarettes do you smoke each day? _____

14. What is your current height and weight? Ht _____ Wt _____

15. Have either of your biological parents died of heart disease? _____

If so, at what age? _____

15. Do you currently exercise regularly? _____
 If so, what type of exercise do you engage in? _____

How many times a week do you exercise? _____

How long do you exercise each time? _____

Part III: Demographic and Employment Information

In order to compare the results of this study with others, I would like some additional information about your background and employment.

1. Your Age: _____

2. Marital/partner status:

- 1 single, never married _____
- 2 currently married or living with a partner _____
- 3 divorced or separated _____
- 4 widowed _____

3. Husband or partner's occupation? _____

4. Ethnic/racial background

- 1 Asian _____
- 2 African American _____
- 3 Caucasian _____
- 4 Hispanic _____
- 5 Native American _____
- 6 Other _____
 (please specify)

5. Were you born in the United States? _____
 If not, in what country were you born? _____

6. In which county do you live?

- 1 Marin _____
- 2 Contra Costa _____
- 3 Alameda _____
- 4 San Francisco _____
- 5 Sonoma _____
- 6 Napa _____
- 7 Other _____

7. How many hours a week are you employed outside your home?

- 1 less than 10 _____
- 2 10 to 20 hours _____
- 3 21 to 30 hours _____
- 4 31 to 40 hours _____
- 5 more than 40 _____

8. What shift do you usually work?

- 1 day _____
- 2 evening _____
- 3 night _____
- 4 varied _____

9. How long have you had your present job?

- 1 less than 6 months _____
- 2 6 months to 1 year _____
- 3 1 to 5 years _____
- 4 5 to 10 years _____
- 5 over 10 years _____

PART IV: Resources

The following are questions about the resources that are available to you. First I would like to ask you about who you can turn to for help when you need it.

1. Can you remember a time when you were sick and couldn't carry out your usual activities? Who did you turn to for help?

2. Can you remember a time when you needed help or advice for a problem with a family member or friend? Who did you turn to for help or advice?

3. Can you remember a time when you felt frustrated, upset, or overwhelmed with the conditions of your life? Who did you turn to for help or support?

4. Can you think of other times when you have needed help? What were they? Who did you turn to?

5. What is the highest educational level you have achieved:

- 1 less than 8th grade _____
- 2 completed 8th grade _____
- 3 completed some high school _____
- 4 graduated from high school _____
- 5 completed some college _____
- 6 completed a baccalaureate degree _____
- 7 completed a graduate degree _____

6. Which best represents your total family income during the past 12 months? Include wages, salaries, public assistance, unemployment, etc.

- 1 Less than \$10,000 _____
- 2 \$10,000 - \$19,999 _____
- 3 \$20,000 - \$39,999 _____ (Refer to response guide)
- 4 \$40,000 - \$59,999 _____
- 5 \$60,000 or more _____

7. How adequate is your income?

- 1 not enough for family needs _____
- 2 barely enough income for family needs _____
- 3 adequate income but no frills _____ (Refer to response guide)
- 4 adequate income and some frills _____
- 5 more than adequate income _____

8. Which of the following types of assistance are you or your family currently receiving?

- 1 Aid to families of Dependent Children (AFDC) _____
- 2 Social Security (SSI) _____
- 3 General Assistance _____
- 4 Food Stamps _____
- 5 Women, Infants, and Children Program (WIC) _____

9. What is your usual method of transportation to places not in walking distance:

- 1 drive my own car _____
- 2 take bus or public transportation _____
- 3 ride with friends or co-workers _____
- 4 other _____

10. In which type of housing you currently live?

- 1 a rented apartment or condominium _____
- 2 a rented house or duplex _____
- 3 a rented room _____
- 4 a house or condominium owned by you or your family _____
- 5 housing project _____

6 other _____

11. How many members are there in your household? _____

Please list the people who live with you: _____

12. Do you have any medical insurance? _____

If so, please indicate the type:

1 Medi-Cal _____

2 County Medical Services Program (CMSP) _____

3 Kaiser or another Health Maintenance Organization (HMO) _____

4 Private _____

13. Where do you usually go when you need medical care?

1 Private physician's office _____

2 Hospital outpatient clinic _____

3 Community/neighborhood clinic _____

4 Hospital emergency room _____

5 Other _____

(please specify)

THIS IS THE END OF THE INTERVIEW. THANK YOU FOR YOUR TIME AND ASSISTANCE.

Appendix B

ATTENTION NURSING ASSISTANTS

I WOULD LIKE TO TALK WITH YOU ABOUT YOUR DAILY ACTIVITIES AND YOUR HEALTH. IF YOU ARE INTERESTED IN PARTICIPATING IN A STUDY OF WORKING WOMEN'S HEALTH, PLEASE FILL OUT THE ATTACHED FORM AND PLACE IT IN THE ENVELOPE MARKED "WORKING WOMEN'S HEALTH STUDY".

I WILL CALL YOU AND ARRANGE AN INTERVIEW AT A TIME AND PLACE OF YOUR CONVENIENCE. THE INTERVIEW WILL TAKE APPROXIMATELY ONE HOUR.

IN APPRECIATION FOR YOUR HELP, I WILL PAY YOU \$15.00 IN CASH AT THE END OF THE INTERVIEW.

IF YOU HAVE ANY QUESTIONS, PLEASE CALL ME AT 897-5486.

Martha Nelson, RN, MS, PhD Candidate
Department of Mental Health, Community, and Administrative Nursing
University of California, San Francisco

I AM INTERESTED IN THE WORKING WOMEN'S HEALTH STUDY

NAME _____

PHONE NUMBER _____

BEST TIME TO CALL _____

Appendix C

UNIVERSITY OF CALIFORNIA, SAN FRANCISCO Consent to be a Research Subject

PURPOSE AND BACKGROUND:

Martha Nelson, RN, MS, and Dorothy Oda, RN, DNSc, of the Department of Mental Health, Community, and Administrative Nursing are conducting a study to learn more about how working women manage their health.

PROCEDURES:

If I agree to participate in this study, Martha Nelson will meet with me for an interview which will take a maximum of 60 minutes and can be completed near my workplace or at another location convenient for me. The interview will not be scheduled during my work hours. In this interview, which will be tape-recorded with my permission, I will be asked questions about what I do for my health, about risk factors for heart disease, and about my health worries. I will also be asked questions about my daily activities and responsibilities, and about the resources available to me.

RISKS/DISCOMFORTS:

I may find the interview tiring. I may refuse to answer any questions at any time during the interview. Participation in research may involve a loss of privacy, however confidentiality of my responses to the interview questions will be protected as much as possible. My name will be kept separately from my responses in a locked file and any tapes of the interview will be destroyed at the end of the study. While my individual responses will not be identifiable to anyone other than Ms. Nelson, overall results of this study may be shared with other health care professionals and may be reported in the scientific literature. My name will never be associated with any reports.

BENEFITS:

There will be no direct benefit to me from participating in this study. However, the information I provide may help health professionals to better understand the experiences and concerns of working women in managing their health and reducing their risk of heart disease.

COSTS/REIMBURSEMENT:

There will be no costs to me other than my time. A compensation of \$15.00 will be offered to me in appreciation for my participation in this study. I will be paid in cash immediately after completion of the interview.

QUESTIONS:

I have talked to Martha Nelson about this study and have had my questions answered. If I have further questions about the study, I may call Ms. Nelson at (415)897-5486 or Dr. Oda at (415)476-4643. If I have any comments or concerns about participation in this study, I should first talk with the investigator. If for some reason I do not wish to do this, I may

contact the Committee on Human Research, which is concerned with the protection of volunteers in research projects. I may reach the committee office between 8:00 and 5:00, Monday through Friday, by calling (415)476-1814, or by writing: Committee on Human Research, Box 0962, University of California, San Francisco, San Francisco, CA 94143.

CONSENT:

I will be given a copy of this consent form to keep. Participation in research is voluntary and I am free to decline to be in this study, or to withdraw from it at any point without jeopardy to my employment. If I wish to participate I should sign below.

Date

Subject's Signature

Date

Investigator's Signature

Appendix D
Examples of Memos

9/28

MEMO: Early themes - Job satisfaction

I have been surprised by the strong feelings of satisfaction some of the women have expressed in relation to their employment. Several of the CNAs have mentioned feeling very close to their patients and described them as "like family members" with whom they share affection. One stated, "I love my patients". Another talked about the hugs and kisses she receives from her patients as often the only ones she gets that day. Some have mentioned the grief they experience when a patient dies or their condition deteriorates.

Others have mentioned the satisfaction obtained through giving care and knowing that their patients have been well cared for. Some have mentioned the appreciation expressed by their patients for what they do. One CNA who works a 2nd job at another SNF in which the clients are all private pay compared the kinds of appreciation expressed by different types of patients. She described the MediCal patients as more grateful and appreciative of what she did for them and the Private pay patients as expectant of services. She described her work with appreciative patients as more satisfying.

Not all of the CNAs interviewed have rated their jobs as extremely satisfying. One, who seemed concerned about the extent of physical effort involved and the potential for back injury, rated her job as somewhat satisfying and said that her feelings fluctuated. She also mentioned satisfaction in knowing that she was helping others and that they appreciated this but in her case this seemed to be outweighed by other factors.

I realize that I have some preconceived ideas about the work of CNAs based on my own experiences in SNFs and my previous observations of CNAs at work. I had felt that most of them were very task-oriented rather than patient-focused and I had expected that the demands of the job would far outweigh the satisfactions. Although some responses may be somewhat influenced by social desirability, the enthusiasm expressed makes me doubt that this could be the whole explanation. Also, I have not done much probing on the question about job satisfaction so the comments made have been mostly spontaneous. I think it would be interesting to further explore the aspects of the job that seem related to satisfaction by asking the CNAs what they find satisfying about their job.

I have very little information so far to support a connection between job satisfaction and health or health practices. I'm afraid if I ask about this directly I will be artificially creating a connection that may not actually exist. I hope that with more interviews I will get more variation in levels of satisfaction and that some links may emerge.

10/12

MEMO: Early themes - Job satisfaction

After consulting with my committee I have contacted two other SNFs for permission to recruit CNAs there. One, Guardian of Greenbrae, has mostly private pay patients, some

Medicare, and no Medi-Cal. The other, Novato Convalescent, has mostly Medi-Cal patients with a few private pay and Medicare. These are in contrast to Rafael Convalescent where there is a nearly equal number of private pay and Medi-Cal patients. I am hoping that this sampling will result in greater variation in descriptions of job satisfaction and thus allow a fuller exploration of this theme.

In the meantime I have begun to ask the CNAs what they find satisfying about their job and their responses do seem to indicate that appreciation and gratitude from others including patients and patient's families, as well as their supervisors, is very important. One said that she found the job satisfying because she felt the residents she cared for liked her and they didn't give her a hard time.

Some other factors have begun to emerge as well. One CNA mentioned the satisfaction derived from giving more than one is receiving. This suggests internal as well as external determinants of satisfaction.

11/14

MEMO: Early themes - Job satisfaction

Although some of the CNAs have told me about their plans for the future and how long they intend to continue working as CNAs, I have not directly asked them about this until today. In the response was information about job satisfactions, job demands, and health worries that had not been brought up when I had asked about these things directly. She talked about service to others in relation to her spiritual beliefs and the satisfaction in doing something that pleases God. She also expressed her concerns about back injury on the job and talked about the problems she would face if she injured her back and had to go on disability. She mentioned this as one of the reasons she planned eventually to look for a different kind of job, one she could continue more easily when she got older.

I think I am now beginning to get some information that relates health and health concerns to job satisfaction. I plan to add the question about future job plans to the remaining interviews.

11/24

MEMO: Early themes - Job satisfaction

I have been surprised this week to hear two different CNAs who work at two different agencies refer to the residents they work with as their friends. In the first instance I had asked what she found satisfying about her job and she mentioned her friends. I asked if she meant her co-workers and she said "oh, no, I mean the residents, they are my friends." In the second case, the CNA talked about the residents as her friends at the end of the interview when I asked how long she planned to work as a CNA. Previously during the interview she had responded several times that she didn't have many friends. I had assumed that she meant friends outside her job. I am beginning to understand that for many CNAs their jobs have some very important social aspects.

The CNA I interviewed today had worked at RCH before she started working at GGB. As this was a great opportunity to test my premise about a relationship between the residents' SES as determined by their insurance status and CNA job satisfaction, I asked her to

compare the two settings in terms of her satisfaction. She commented that the two places were very different but compared the pay, benefits, and workload rather than the way she was treated by the residents.

Appendix E

INITIAL CODES

6/30/94

<u>CODE</u>	<u>EXPLANATION</u>
PARTNR ACT	Descriptions of activities involving a spouse or partner
MOTHER ACT	Descriptions of mothering activities
DAUGHT ACT	Descriptions of activities involving parents
SISTER ACT	Descriptions of activities with sisters and/or brothers
GRANDM ACT	Descriptions of activities with grandchildren
AUNT ACT	Descriptions of activities with nieces and nephews
IN-LAW ACT	Descriptions of activities with spouse or partner's family
EX-HUSB ACT	Descriptions of activities involving an ex-husband
FRIEND ACT	Descriptions of activities with friends
JOB ACT	Descriptions of activities on the job
HOUSWK ACT	Descriptions of involvement in housekeeping activities
CAREGV ACT	Descriptions of caregiving activities beyond those typically included in work and family roles
STUDNT ACT	Descriptions of activities as a student
CHURCH ACT	Descriptions of religious activities and/or spiritual practices
REC ACT	Descriptions of activities considered as recreation
SOCIAL ACT	Descriptions of involvement in social activities
VOLUNT ACT	Descriptions of volunteer activities
OTHR ACT	Descriptions of any activities not fitting in any specified category
ROLE ASST	Descriptions of assistance with role activities and/or who is assisting

SATISFACT	Expressions of satisfaction with activities and/or those involved
DISSATISF	Expressions of dissatisfaction with activities and/or those involved
DIFFICULTY	Descriptions of activities identified as difficult or demanding
CONFLICT	Situations in which role activities conflict
ROLE MGMT	Descriptions of strategies for balancing or managing role activities and/or conflicts
CULT DIFF	Descriptions of cultural differences in role activities, comparison of country of origin with U.S. culture
OVERLOAD	Statements about too much to do, feeling overwhelmed with too many activities and expectations
STRESS	Any use of the terms "stress" or "stressful"
FATIGUE	Statements about feeling tired, lacking energy, feeling worn out
MONEY PROB	Any mention of financial problems or economic strain
SEND MONEY	Any mention of sending money to help support family members living away from them
GIVNG CARE	Descriptions of "uncompensated" care, care given for altruistic reasons, beyond what is expected and not for monetary rewards
PT RELSHIP	Descriptions of relationship with patients, how and on what level they view their interactions with patients
PT FAMILY	Discussions of interactions with and perceptions of patients' families
PT DEATH	Descriptions of events, reactions, and feelings related to the death of a patient
WK ADJUST	Descriptions of the process of adjustment to the job
WK SOCIAL	Socialization at work, social exchanges with staff and patients
WK EXTRA	Statements about working overtime, doubles, days off, and outside jobs
WK REASONS	Statements about why they are working

WK POLICY	Discussions of hospital policies related to job activities, compensations, and other employment practices
JOB QUALIF	Statements about what it takes to be able to do the work involved
PAST JOB	Descriptions of jobs held in the past
CMPARE JOB	Comparison of current job or assignment with other jobs
JOB PLANS	Future job plans
JOB CHNGE	Reasons for changing or wanting to change jobs
HLTH DEF	Explanations of self-rated health and how health is experienced
HLTH PROB	Descriptions of health problems experienced not related to their job
JOB HLTH	Descriptions of job-related health problems experienced
JOB INJURY	Descriptions of injuries experienced on the job and the consequences
WORRY	Worries or concerns about health
RISK	Perceptions of health risks not related to their job
JOB RISK	Perceptions of health risks that are job-related
FAM RISK	Identification of family illness risk
GN HLTH PX	General health practices, practices other than diet and exercise that are not risk or problem-oriented
DIET	Description of types and amounts of food and fluid intake to maintain health
INITIAL CODES	
EXERCISE es	Any discussion of exercise or descriptions of exercise practices to maintain health
EXCS AT WK	Descriptions of exercise related to their job or carried out at the workplace
PROB PX	Health practices oriented toward alleviation or control of a health problem

INJURY PX	Health practices oriented toward alleviation or control of the effects of an injury
RISK PX	Health practices oriented toward reducing risk or preventing illness or injury
EMPL PX	Health maintaining or promoting practices provided or supported by the hospital
BARRIER	Description of a condition that constrains or impedes identified health practices
MED TX	Description of a medically prescribed treatment for a health problem or injury and extent of adherence to the treatment
PX BENEFIT	Perceived benefits of identified health practices
SHOULD DO	Descriptions of what they feel they should be doing for their health
WANT TO DO	Descriptions of what they would like or desire to do for their health
ILL HLP	Perceived availability of help if ill
PROB HLP	Perceived availability of help if experiencing a problem with a family member or friend
PERS HLP	Perceived availability of help if experiencing personal concerns or frustrations
OTHR HLP	Other types of help utilized or available

Appendix F

Analysis & Coding: Unit Analysis

Working Extra

9/19/94

Definition: Working more than 40 hours a week, overtime work

I. Types of overtime work

When

- a. working "doubles": working more than an 8 hours shift, working a double shift (16 hours)
- b. working days off: working more than five days a week

Where

- a. working extra as a CNA at the same job site
- b. working extra as a CNA at a different job site
- c. working extra as a CNA at both the same and at a different job site
- d. working extra in a non-CNA paid job: ie. housecleaning, bank teller
- e. working extra in self-employed job: ie. catering; ironing; selling clothes, jewelry, Avon; beautician

II. Structure

DOUBLES

		Yes	No
EXTRA DAYS	Yes	A - 4 B - 5 C - 4	A - 4 B - 0 C - 3
	No	A - 0 B - 0 C - 1	A - 6 B - 5 C - 2

III. Frequency

- a. Often, routinely - "I always work doubles" 67(799), "I work most of the time on my day off" 42(620)
- b. Occasionally - "Sometimes I'm working double, one day, two days" 5(176), "Occasionally I work overtime" 48(232)
- c. Never - "I never work overtime" 6(86), "I don't work anymore double time or on my days off" 65(451)

IV. Conditions/circumstances

- a. opportunities for overtime work are ongoing
- b. there are pressures for and against overtime work

For

1. need/desire to earn more money - "I can stay with this job with little money because they give you more time" 68(581), "I need the part-time and extra hours" 66(327)
2. desire to help/please others - "sometimes I work straight when my supervisor...when we are short" 10(411), sometimes they don't want to work but they are forced to because they want favors from you. And so you do them a favor because you don't want to refuse and you might want a favor sometime" 65(470) "I volunteer because there is no one to work. They ask me and I never refuse" 68(520)

Against

1. time/energy needed for family role activities - "my job is hard and I have to take care of my baby. I never work overtime" 6(85), "that's the thing, I don't have the time (to work overtime) you know." 46(408)
2. concern about own health/wellbeing - "lately I've refrained from doing it (working overtime), I don't want to abuse myself" 65(460), "I only work if it's my day to work and on my days off I rest" 8(290)

V.

Processes

short staffing ----> opportunity for overtime work ----> / \ / \ ---->

pressures for

pressures against

-----> decision to work/not work

VI.

Consequences/benefits of overtime work

a. financial

1. earn money needed to survive - "we have to pay the bills here or send money to my kids" 66(505) "you know poor people, we don't make any money because we have to pay all the bills, the car, the electricity, the phone" 44(176)
2. compensation for low hourly wage - "because of the low rate, because we are students here. That's why I keep on making doubles and overtime" 67(958) "I can stay with this job with little money though because they give you more time" 68(579)
3. earn money for extras - "at the end of the year I

would try to work 6 days a week, so that gives me money for Christmas and my car registration" 60(1035) "I wanted extra money to buy things for the baby so I worked overtime and bought stuff for my baby" 69(408)

b. health

1. fatigue/sleep loss - "because I worked too much, I really feel so tired" 5(517), "I don't feel very good. I'm tired from working two jobs" 44(146) "if I'm working double I only sleep 3 to 4 hours. Fifteen, sixteen hours awake and then go back to work again at 3:00 p.m. It's killing me, really" 64(918)
2. problems/discomforts - " you know when I work like 16 hours, sometimes I feel very weak" 47 (822) "when I work double I don't eat and then I feel weak. I can't move around, I don't have enough energy." 68(355), "if you work too much you'll be cranky" 65(469)

c. health practices

1. decreased time for exercise - "supposed to be every day at least 15 minutes, but when I'm working overtime, like just three times a week" 64(844)

VII.

Strategies

Response to Overtime Opportunity

<----- pressures against ----->

Avoidance -----	Reluctance -----	Acceptance -----	Seeking -----
"I only work if it's my day to work" 8(290)	"Sometimes I work one of my days off with my husband's permission" 61(88)	"I accept overtime" 10(417)	"I always volunteer to work" 68(183)

----- pressures for ----->

Responses are influenced by the pressures "for" and "against" as described under circumstances/conditions. Increased pressures "for" can move one to the right on the continuum and increased pressures "against" toward the left.

VIII. Exploration of links with other codes

a. Send Money

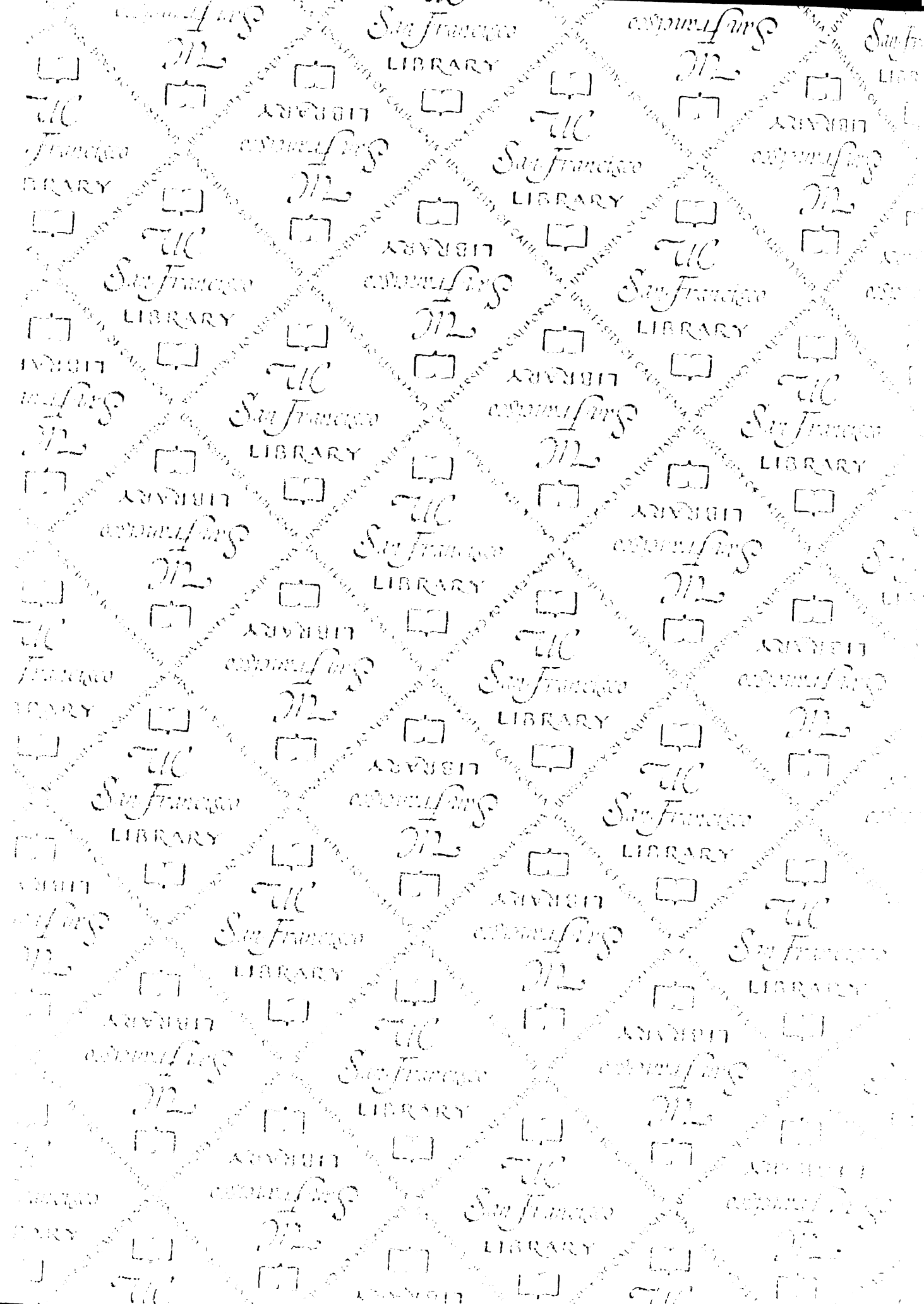
		OVERTIME	
		Yes	
SEND MONEY	No		
	Yes	8 (24%)	1 (3%)
No	13 (38%)	12 (35%)	

b. Income Adequacy

INCOME ADEQUACY					
OVERTIME	Not Enough	Barely	Adequate	Adequate +	Adequate ++
Yes (n=21)	9 (43%)	2 (10%)	7 (33%)	2 (10%)	1 (5%)
No (n=13)	5 (38%)	2 (15%)	3 (23%)	2 (15%)	1 (8%)

c. Time on Job

TIME ON JOB					
OVERTIME	< 6 months	6 mo - 1 yr	1 - 5 yrs	5 - 10 yrs	> 10 yrs
Yes (n=21)	1 (5%)	7 (33%)	8 (38%)	3 (14%)	2 (10%)
No (n=13)	1 (8%)	4 (31%)	6 (46%)	2 (15%)	0



For reference

Not to be taken
from the room.

