

Perceptions of Health, Functional Status, and Nursing Roles in
Noninstitutionalized Elders with Cardiac Disease

A Senior Honors Thesis Presented in Partial Fulfillment of the Requirements for the Degree of
Bachelor of Science in Nursing with Distinction
College of Nursing of The Ohio State University

By

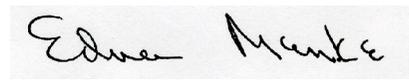
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Chapter I

Introduction

In a society that highlights youth and promotes “staying young,” the influence of elderly individuals is often overlooked. Many Americans see older adults “as nonproductive members of society” (Sherrell, 2004). However, as early as the current decade, the rapidly growing number of older adults will have a large impact on our nation. Current estimates show that a population explosion is coming, but this is not another generation of “baby boomers.” Rather, starting in the year 2010, the number of elderly adults in the United States will escalate at unprecedented rates. Approximately 70 million Americans will be 65 years old or older, and about 8.5 million will be 85 years old or older by 2030 (Federal Interagency Forum on Aging Related Statistics, 2004).

The many advances that have been made in science, medicine, and society combined have led to longer, better quality of life for aging adults in general (Baltes & Smith, 2003). Even though there have been periods of slower improvements, overall life expectancy and physical functioning have increased while mortality and disability rates have decreased for this age group over the past 30 years (Crimmins, 2004).

While most trends in elderly health are positive, one fact that requires attention is the increasing prevalence of disease in older adults. As longevity increases, people must manage chronic illness for longer periods of time. By the year 2040, there will be approximately 160 million individuals in the United States will have a chronic illness, with most of the affected being individuals 65 years and older (National Academy on an Aging Society, 1999).

Cardiac illnesses are among the chronic diseases that are increasing in prevalence among older adults (Crimmins, 2004). The population of adults 65 years and older have the highest rate of cardiac disease of any age group in America; 43 percent of adults 65 years and older have some form of cardiac disease (National Academy on an Aging Society, 2000). Furthermore, chronic heart disease is the leading cause of death in American adults 65 years

old and older (Merck Institute of Aging and Health, 2004). Mortality from these conditions has decreased as new, more successful pharmacological and conservative interventions have been developed to manage cardiac disease. However, older individuals with cardiac disease, especially those 70 years old and older, are more likely to experience limitations in performing activities of daily living (ADLs) due to heart problems (National Academy on an Aging Society, 2000).

Data collected in the year 2000 showed that 95.5 percent of individuals in the United States aged 65 years old or older were noninstitutionalized; in other words, only 4.5% of this population was living in some type of extended care facility (Administration on Aging, 2002). This information suggests that most older adults are living in the community and may or may not be seeking health care.

Despite the increasing prevalence of chronic disease, the number of aging adults rating their health as fair or poor has been steadily decreasing since the early 1980's (Crimmins, 2004). In 2002, the percentage of Americans 65 years old or older rating their health as very good or excellent has increased to 37 percent (National Center for Health Statistics, 2002). Research dealing with the elderly and their health self-assessments indicates that there are many factors involved in the process of assessing one's own health (Zauszniewski, Chung, & Karfcik, 2001; Benyamini, Leventhal, & Leventhal, 2003; Krause & Shaw, 2003; Beaumont & Kenealy, 2004; Windle & Woods, 2004). However, these studies focused on elderly individuals in general, without focusing on the unique needs of those affected with cardiac disease and other specific illnesses.

Research that has been done on factors influencing elders' self-assessments of health and functional status provides findings for the older American population in general. These studies do not specifically provide knowledge about health assessment of individuals with cardiac disease, nor do they discuss how cardiac conditions can limit elders in their activities of daily living. Chronic illnesses that affect the heart may exert much different influences on

individuals' daily lives than other illnesses alone that are common to the elderly, such as arthritis and diabetes.

Knowledge regarding older adults' unique health perceptions, physical limitations, and health care needs is essential for nurses today. The need for this knowledge becomes even more apparent as the majority of registered nurses have little educational preparation in gerontological nursing and less than 25 percent of baccalaureate nursing programs include a course in gerontological nursing (Bennett & Flaherty-Robb, 2003). With elders living longer and having more chronic health issues than ever before, nurses have even more potential to promote health and to work toward meeting care needs in this population than in previous years. Practically every nursing professional will interact with elderly individuals at some point in one's career. Therefore, an understanding of what older adults think about and expect from nurses is necessary in order to best meet the needs of this population. In addition, knowledge of how to best promote health and meet needs for care in these individuals is indispensable for all nurses, not just ones who choose to specialize in geriatrics (Young, 2003).

The current situation regarding individuals 65 years and older in the United States is an important issue requiring further investigation. It affects not only health care professionals but members of the general public. Financial issues regarding Medicare, Medicaid, insurance, and social security are only going to become more intense in the coming years. The general populace, used to focusing on the younger generations, will have a much larger percentage of elders as active participants in society. Family members will be facing even more decisions regarding caretaker roles and end-of-life decisions. Now is the time to begin learning about how to best meet the needs of this unique segment of the population.

The primary purpose of this study was to investigate noninstitutionalized elders living with cardiac conditions' self-assessments of health and functional status. In addition, the secondary purpose was to investigate these elders' perceptions of nurses and their

expectations of nurses. The research questions were:

1. What are the perceptions of health and functional status among noninstitutionalized elders living with cardiac disease?
2. What perceptions do noninstitutionalized elders living with cardiac disease have of nurses?
3. What do noninstitutionalized elders living with cardiac disease expect from nurses?

Chapter II

Literature Review

The literature review focuses on factors considered important in older adults' self-assessments of health and functional status and specific challenges nurses currently face in caring for the elderly.

Health Self-Assessment

In this study and the literature reviewed, the phrase "health self-assessment" is used to refer to an individual's perception of one's health status, which is the individual's overall physical, mental, and social condition. It is a subjective measurement that has been found to accurately predict a person's health care behaviors and daily living pattern, and therefore, it is an important component when considering the well-being of an elderly individual (Benyamini et al. 2003).

Previous studies reveal that there are numerous factors that elderly people take into consideration when rating their health status. Benyamini and colleagues (2003) investigated the influence of physical, health-related factors on older adults' sense of overall health. Their study used a convenience sample of 487 retirement community residents with an average age of 78 years. The findings demonstrated that the importance of different factors to an individual depends on their overall self-reported health status (i.e. excellent, very good, good, fair, or poor). For example, people who believed their health was fair or poor generally felt that the signs and symptoms of their particular illness were strong determinants of their overall self-assessment. Individuals in this category generally had a more negative view of life; they seemed to be caught in their present struggle with illness, leaving little room for optimism for the future.

Others who rated their health as good or better generally considered signs of good health as important, as well as any risk factors they may have for disease in the future. In those

cases where individuals contributed their good health to preexisting signs of good health and absence of risk factors, self-assessments of health could fulfill the role of a type of self-fulfilling prophecy. If the person contributed their current health status to evidence of good health and lack of risk factors, they would be more likely to maintain their current lifestyle so that they could continue to enjoy good health in the future (Benyamini et al. 2003).

The results of Benyamini and colleagues' (2003) study suggested that there are some physical factors which all elders in general take into consideration when assessing their health status. These factors include physical ability, autonomy, and energy level. However, the results also show that self-assessment of health does not represent a linear model; there is discontinuity between those rating their health as good or better and fair or poor. Generally, those who are healthy judge their level of health, whereas those who are in lower levels of health judge their level of illness.

Psychological factors are also important in understanding one's health status because individuals experience many different life changes as they age (National Academy on an Aging Society, 1999). In Windle and Woods' (2004) study of noninstitutionalized elders, they examined the effects of psychological supports on older adults' level of life satisfaction. These factors are essential to understanding a person's health status because individuals experience many different life changes as they age. A random sample of 423 community-dwelling individuals 70 years old or older was interviewed in the participants' homes. The results of the study indicated that psychological factors help older adults navigate the inevitable changes they experience in later life more successfully than those who do not have these resources. Interpersonal relationships (social supports), autonomy (environmental mastery), and satisfaction with housing arrangements were influential on the perceived health status of elderly individuals living in the community. Significant associations were found between individuals who perceived they had adequate social supports, were able to exert control over their environment, were satisfied with their living arrangements and increased life satisfaction scores. A lack of

components from these categories was significantly linked to lower levels of life satisfaction scores and a lower perception of health.

Krause and Shaw (2003) also conducted a study exploring psychological factors that influence the overall perceived well-being of elderly individuals. The sample was 442 randomly selected individuals who were interviewed. The participants were 65 years old or older and living in the community. The researchers focused on three variables: role-specific control, personal meaning, and the effect of the first two variables on older adults' health. As people age, they begin to gradually lose more abilities than they gain. Therefore, older adults compensate by investing more of their time and efforts into the roles and responsibilities that are most valuable to them. Adults who are able to exert this form of control, called role-specific control, over their lives generally report greater feelings of identity and personal meaning. Individuals in this study were asked to choose the top three roles they valued in life, and to rank them according to how important the roles were to the individual. Results of this study showed that the participants who perceived they had control over their highest-ranking role also reported the greatest meaning and highest level of health of any of the study participants.

Another study to evaluate the relationship of psychological factors on the physical health perceptions of elderly individuals was conducted by Zauszniewski, Chung, and Krafcik (2001). Researchers evaluated the relationships between learned resourcefulness, internal motivation for health, coping skills, and physical and psychosocial health among participants. A convenience sample of 137 participants ranging from 62-102 years old was recruited, and each reported an average of 3 chronic illnesses. One interesting finding was that the more chronic conditions an individual has, the less resourceful he is when compared to those who have fewer chronic illnesses. Other results showed that participants who had higher resourcefulness scores were more likely to seek out their own help for problems through interactions with family members and friends. They also were more likely to purchase over-the-counter medications to treat physical problems than those with lower resourcefulness scores. However, participants

with higher resourcefulness scores usually utilized formal health care resources less frequently than those with less resourcefulness. Resourcefulness scores and ability to cope with life changes were the most accurate indicators of physical and psychological health conditions; scores indicating internal motivation for health did not accurately predict physical and psychological health states.

Social influences are also considered by elderly individuals in self-assessment of their health. This is demonstrated in Beaumont and Kenealy's (2004) study that was done in London with well elders. This study focused on factors that influence elders' views of their quality of life including social comparisons. The study included 193 participants from diverse socioeconomic status who ranged in age from 65 to 98 years. Sixty-eight percent of the participants perceived their health as good or very good. The majority (96%) reported no health problems except for some problems they attributed to aging. Findings of this study indicated that family, hobbies, friends, health, home, companionship, creativity, social interaction, and independence are the most commonly mentioned sources of quality of life among participants. In addition, elderly individuals, like everyone else in society, compared themselves to other members of society to guide their opinions and perceptions of their own life situation. The researchers used four social comparison judgment strategies for quality of life. Upward identification is the assessment of one's own quality of life by comparing it to someone else who, in the individual's opinion, has a higher quality of life. Upward contrast is emphasizing one's own differences regarding quality of life in contrast to some one with a perceived higher quality of life. Downward identification and downward contrast are the two other comparison strategies noted; they follow the same patterns as their upward counterparts, only with groups that are considered to have lower quality of life than the individual performing the comparison. The sample (78%) preferred the downward contrast judgment strategy. Overall, individuals who utilized the downward contrast strategy had higher perceived quality of life. Individuals who used the identification methods of

social comparison had lower quality of life scores. Furthermore, those who had a generally positive or optimistic outlook on life had higher quality of life as well.

The last study focusing on social influences of elderly individuals' health perceptions used a unique approach by comparing the life perceptions of elderly individuals from the United States, Congo, and India. The sample of 252 participants had a mean age of 73 years for Americans, 65 years for Indians, and 55 years for Congolese. All participants were in "good" physical condition and living independently. Westerhof, Katzko, Dittman-Kohli, & Hayslip (2001) found that American elders placed high value on their health status and were especially afraid of becoming sick and dependent on others in their later years. They had a strong desire to maintain their autonomy, cognitive function, and motivation to care for themselves. The attitudes of the American elders were a sharp contrast to the Congolese elders' feelings about health; the Congolese elders actually expected death, decreased mobility, strength, and independence. However, they were similar to the Americans in that the Congolese were afraid of dying and hoped that they would not be alone, especially without their children. The Indian elders' responses generally fell in between those of the Americans and Congolese. They feared the physical and mental declines, loss of autonomy, and death itself as those from the other two cultures did. However, they expressed more responses that are specific to the Indian culture, such as hopes for a peaceful death and the use of meditation as a method of health maintenance.

The results from these studies reflect that vast array of factors that may be involved with older adults' assessments of their own health. Physical factors, including the signs and symptoms of chronic illnesses, play into self-assessments. Psychological factors are important and take many forms in individuals' lives, from social supports to perceptions of personal meaning and autonomy. Social influences usually consist of comparisons to others or cultural factors that affect individuals' life expectations for their later years. Despite the wide variety of

factors that play a role in the formation of health perceptions among elderly individuals, all of these dynamics have the power to shape a person's actual and perceived health status.

Functional Health

The term "functional health" refers to an individual's physical ability to perform activities of daily living (ADLs), such as bathing, dressing, brushing one's teeth, and combing one's hair. Functional health is also used to describe instrumental activities of daily living (IADLs), which include talking on the telephone, shopping, cooking, cleaning, and driving (Whittle & Goldenberg, 1996). Current trends in the elderly population indicate that older adults are now experiencing fewer limitations in physical function and ability to perform ADLs and IADLs (Crimmins, 2004). Knowledge of noninstitutionalized adults' functional ability is essential for nurses so they can anticipate in which areas their elderly clients are most likely to need assistance.

Whittle & Goldenberg (1996) conducted a study to explore the relationship between functional health status and ability to perform IADLs in a convenience sample of 47 noninstitutionalized older adults 70 years old or older. Using a series of three questionnaires, the researchers assessed the participants' level of functional health and its relationship to limitations in IADL performance. The participants rated their own health as high, and most (>85%) reported being independent in all IADLs except housekeeping. Several significant trends were identified. First of all, as the participants' functional health status declined, their level of IADL dependency increased, and the older the participant, the greater the level of dependency. The individuals' self-assessments of their social functioning, physical functioning, and overall health status were strongly related to other variables, such as pain, fatigue, mental and emotional health, energy level, and role limitations. Individuals who had high social and physical functioning and considered themselves to be in good health overall reported more favorable outcomes with other variables (e.g. less pain, better mental and emotional health, and fewer role limitations). While specific medical conditions such as arthritis, hypertension, and

angina were common among participants, the only condition that limited IADL performance was having had a stroke. Individuals who reported a history of stroke were highly dependent for transportation and housekeeping tasks. No significant relationships were found between IADL dependency and sensory impairments, such as declines in vision and hearing. However, prior studies have demonstrated that visual impairments restrict older adults' ability in the areas of transportation, finances, use of the telephone, shopping, cleaning, and cooking (Whittle & Goldenberg, 1996).

Another study focusing on the physical functioning of older adults was completed by Hellström & Hallberg (2001) in an average-sized city in Sweden. In this study, 448 adults 75 years old or older who reported that they were dependent on outside help to care for themselves participated in a questionnaire to determine their quality of life, how much help they require, and where they found help. The vast majority of the participants in the study (approximately 70%) reported being in good or very good quality of life. The remaining one-third of participants rated their health as low or very low; these individuals had a high incidence of health problems. Most of the health problems experienced by this sample were cardiovascular in nature. Older participants required significantly more help in IADLs than the younger groups, and men needed more help than women. Cleaning, errands, laundry, bathing, and dressing were the areas in which participants required the most assistance. Approximately 20 to 40% of the sample reported their ability to be alone as not at all to less than 12 hours a day. Only 14.3% of respondents received formal help, indicating that the vast majority of participants received help from spouses, family members, and friends most of the time. Interestingly, 5 to 10% of the participants reported providing help for other home-bound elders.

The results of these two studies indicate trends in physical functioning that are important for nurses to acknowledge (Whittle & Goldenberg, 1996; Hellström & Hallberg 2001). Nurses need to be aware of the activities that elders are most likely to need help performing so that they can best anticipate the needs of older adults living at home. Furthermore, the fact that cardiac

disease was among the most limiting to individuals in performing their IADLs suggests the importance of understanding the specific limitations and challenges that older adults with these types of conditions face every day. The results from these studies indicate that the older the individual, the more likely he or she is to be limited in their physical functioning. Since the number of older adults in American population is rapidly increasing, this suggests yet another area of interest for research: learning what specific needs and expectations older adults have of nurses who care for them either in their homes or in outpatient settings.

No published studies were found that addressed the topic of nurses' relationships with older adults in the community setting. Part of this study represents an initial effort to fill this gap in knowledge.

Nurses face challenges in caring for older adults for many different reasons. The studies mentioned earlier indicate elderly individuals experience a variety of physical, mental, and emotional problems, making their health care needs complex. However, managing these multiple conditions would be much easier if the number of nurses adequately prepared for geriatric nursing care was proportionate to the number of older adults in the United States.

The fact that the United States is experiencing a profound shortage of nurses is a well known fact among health care professionals. However, the problem extends beyond the current shortage in that the number of students enrolling in nursing schools across the country is also declining. Between 1995 and 2000 alone, there was a 21% decline in enrollment in America's nursing schools (Mion, 2003). However, in 2004, enrollment in baccalaureate nursing schools increased by 10.6 percent (American Association of Colleges of Nursing, 2004). Yet another challenge nursing programs currently face is a shortage of faculty members. This is problematic because without sufficient numbers of instructors, nursing students cannot be enrolled fast enough to fulfill the growing shortage, even if enough students attempted to enroll in nursing schools.

The number of baccalaureate nursing programs offering courses in geriatric nursing care

is insufficient to meet the growing demands. Only 4% of nursing schools nationwide have met the criteria for “exemplary geriatrics education,” and there is also a lack of qualified faculty members to teach the courses required for adequate preparation in this area. (Mion, 2003).

Summary

The studies discussed have identified that the majority of elderly individuals in the United States are noninstitutionalized, deal with a number of chronic conditions, especially cardiac disease, and experience varying extents of functional limitations due to these diseases. Few studies have focused on older adults living with cardiac disease, their self-assessments of health, and their functional health. Nurses need to discover ways that they can best serve this unique group, yet a lack of research exists regarding what older adults expect and need most from nurses. An understanding of these needs and expectations will be especially useful in the years ahead as a relatively small number of nurses attempt to care for the growing number of elderly adults.

Chapter III

Methods

The primary purpose of this study was to investigate noninstitutionalized elders living with cardiac conditions' self-assessments of health and functional status. The secondary purpose was to investigate these elders' perceptions and expectations of nurses.

The research questions were:

1. What are the perceptions of health and functional status among noninstitutionalized elders living with cardiac disease?
2. What perceptions do noninstitutionalized elders living with cardiac disease have of nurses?
3. What do noninstitutionalized elders living with cardiac disease expect from nurses?

Design

A cross-sectional, descriptive design was used to evaluate noninstitutionalized elders living with cardiac conditions' self-assessments of health and functional status, as well as their perceptions and expectations of nurses.

Human Subjects

The proposal for the study was submitted to The Ohio State University Social and Behavioral Sciences Human Subjects Review Committee for review for protection of human rights. The protocol was approved on September 16, 2005. Data collection began in October and was completed by November 15, 2005.

Participants in this study were not exposed to any potentially harmful situations or conditions. Subjects were enrolled on a purely voluntary basis and had the opportunity to ask any question at any time prior to, during, and after participation in this study. All participants were assured prior to enrolling in the study that they could choose to terminate their participation in the study at any time. Prior to participation, the investigator obtained informed consent from each participant. The investigator ensured each participant knew his or her right to

refuse to participate, and explained the benefits of the study to each potential participant. Participants in this study were informed they would remain anonymous as no identifying information would be included on the questionnaire. To ensure confidentiality, the investigator explained that findings would be reported in a collective format. After data collection, the questionnaires were stored in a locked file in the office of the investigator's mentor. After the completion of the study, all data collected from the participants would be destroyed.

Sample

The target population for this study was noninstitutionalized elders who had been diagnosed with some form of cardiac disease. A convenience sample of no more than 40 participants from the central Ohio area was recruited. The inclusion criteria for this study was adults aged 65 years old or older who were not living in any facility where 24-hour nursing care is available. Participants must have been diagnosed with hypertension, coronary artery disease, congestive heart failure, or have had a heart attack or stroke in the past. Furthermore, participants had to be able to read and write English and comprehend questions.

The investigator recruited participants in person at a senior citizen community center where there was a community wellness clinic. Written consent to recruit participants from the wellness clinic had been obtained from the director of the wellness clinic prior to the distribution of any information regarding this study.

Potential sampling bias existed as participants self-selected to be in this study. Furthermore, older adults who go to the locations from which the sample was drawn may not be representative of the noninstitutionalized older adult population; the individuals who are able and interested in attending the services and activities at this location may have different characteristics than the target population at large.

Threats to the external validity of this study include the subjects' knowledge of their participation in a study, effects of the investigator, and the convenience sampling method that will be used.

Procedure

As previously mentioned, participants were recruited in person at a community wellness clinic in central Ohio. The investigator had a table with information about this study set up at the wellness clinic location and asked individuals attending the clinic if they wished to participate. If so, the potential participants were screened, informed about the investigator's affiliation, and educated on the purpose of this study.

After obtaining informed consent, the investigator verbally asked the participant the questions included in the questionnaire to ensure each participant understood the questions. After completing the questionnaire, each participant received a monetary incentive of five dollars.

Instruments

A combination of instruments were compiled into one questionnaire to collect the data for this study (Katz, Down, Cash & Grotz, 1970; Lawton & Brody, 1969; Whitfield, Wiggins, & Allaire, 2004). The first section of the questionnaire consisted of background information that included some questions regarding demographic variables as well as some questions regarding their cardiac disease. Each participant was asked if they had been diagnosed with hypertension, coronary artery disease, congestive heart failure, heart attack, and/or stroke, and if so, when diagnosed. The answers to these questions were used to validate that participants met the inclusion criteria. The data were used to describe the characteristics of the participants in the study.

The second section of the questionnaire related to health status. In this study, health status is defined as the participant's rating to four questions regarding health. Similar items have been used in other studies with older adults (Whitfield, et al., 2004). The participants were asked to rate their health status based on four questions. Using a scale from 1 to 5 (1 = very poor to 5 = very good), participants rated their current health status, current health compared with their health one month ago, current health compared to others the same age, and current

health compared with their status five years ago. These four items were developed specifically for this proposed study; therefore no formal reliability or validity information is available.

The third section of the questionnaire relates to functional status. Functional status is defined as the participant's score on the Katz Index of Independence in Activities of Daily Living scale and Lawton and Brody's Instrumental Activities of Daily Living Scale (Katz et al. 1970; Lawton & Brody, 1969). The Katz Index of Independence in Activities of Daily Living scale is a widely used tool to measure functional status in the older adult population. It is a short, simple test that measures the participant's ability to bathe, dress, toilet, transfer, remain continent, and feed him or herself. If an individual is independent in performing a skill, a score of "1" is assigned. No points are given for skills in which the individual is dependent on others. A score of 6 indicates an independent individual, while a score of 0 indicates a highly dependent individual. Even though the scale has been used for over 40 years, no formal reliability or validity reports for this tool were located in the literature. This instrument is widely used in a variety of settings that provide care to the older adult population to assess their ability to independently perform activities of daily living. The fact that this instrument is used extensively and recommended by the Hartford Institute for Geriatric Nursing suggests that it is a useful and appropriate measure of this variable (Shelkey & Wallace, 1998).

Lawton and Brody's (1969) Instrumental Activities of Daily Living Scale consists of 8 items that rate the participant's level of independence in performing skills such as using the telephone, shopping, preparing food, housekeeping, doing laundry, using transportation, administering medications, and handling finances. A score of "1" is assigned when a skill can be performed completely or at least mostly independently. If the participant requires a high level of assistance or is completely dependent in an area, a score of "0" is assigned. Thus, a score of 8 indicates a highly independent individual, while a score of 0 indicates someone who is highly dependent. This instrument has an interrater reliability coefficient of 0.85 and construct validity has been demonstrated by the authors of the instrument (Lawton & Brody, 1969).

The final section of the questionnaire consists of 2 open-ended questions. The first question asks the participant to state his or her perceptions and beliefs about nurses and their work. The second question asks participants to explain what they expect from nurses in regard to care and health education.

The questionnaire was piloted with a small group of older adults to ensure its feasibility and was reviewed for face validity by three faculty members at the College of Nursing.

Analysis

Demographics

The background information collected in the questionnaire was used to describe the characteristics of the sample. Frequencies and percentages were calculated for these questions.

Research Question #1: What are the perceptions of health and functional status among noninstitutionalized elders living with cardiac disease?

The first research question addresses the participants' self-assessments of health and functional status. The health status questions, Katz Index of Independence in Activities of Daily Living scale, and Lawton Instrumental Activities of Daily Living Scale were used to address this question. Frequencies, percentages, means, and standard deviations were used to report the participants' scores to the questions.

Research Question #2: What perceptions do noninstitutionalized elders living with cardiac disease have of nurses?

Research Question #3: What do noninstitutionalized elders living with cardiac disease expect from nurses?

The responses to these two open-ended questions provided qualitative data. The responses of all participants were transcribed prior to data analysis. Content analysis was performed to delineate coding categories based on the participants' responses (Krippendorff, 2004). The investigator and her mentor analyzed some of the data independently from five

participants and then met to reach consensus on the coding categories. The investigator then analyzed the data, and the analysis was reviewed by her mentor to assure consensus. Frequencies and percentages will be reported for each of the coding categories.

Chapter IV

Results

Sample

The sample consisted of 32 older adults from a community clinic in central Ohio. Ages of the participants ranged from 65 to 90 years, with a mean age of 70-74 years of age ($n=9$, 28.1%). The majority of participants were female ($n=21$, 65.6%) and Caucasian ($n=18$, 56.3%). Most of the participants lived alone ($n=27$, 84.4%), but stated they could rely on a relative to help if needed ($n=20$, 62.5%). Hypertension was the most prevalent cardiac disease among the sample ($n=30$, 93.8%), and the majority of participants were diagnosed with their cardiac illness 6-10 years ago ($n=17$, 53.1%). Tables 1 and 2 present the frequencies and percentages of the background characteristics of the participants.

Research Question #1: What are the perceptions of health and functional status among noninstitutionalized elders living with cardiac disease?

Participants were asked four questions that required them to rate their current health on a scale from one (very poor) to five (very good). They rated their current health, current health compared to 1 month ago, and current health compared to 5 years ago as good ($X=3.69$, $X=3.5$, $X=3.5$, respectively). None of the participants rated their health as "very poor" for any of the four items. The third question, "How would you rate your current health compared to the health of others the same age?" had the highest mean ($X=4.25$, $SD=0.72$), indicating that the participants felt they were in better health than other people their age. See Table 3.

The functional health of the participants was determined by their responses to two instruments. Lawton and Brody's Instrumental Activities of Daily Living Scale was one of the instruments used to measure functional health. Participants received a score of zero if they reported being unable to perform an activity independently, and they received a score of one if they were independent in performing an activity. Mean scores for the eight activities measured by the instrument ranged from 0.69 to 1.00. Use of the telephone, housekeeping, and finances

all had the highest possible mean of 1.00 indicating that all participants were able to perform these activities independently. The areas in which participants were most likely to need help were shopping (31.3%), transportation (21.9%), food preparation (12.5%), medications (9.4%), and laundry (6.3%). See Table 4.

The other instrument used to measure functional status was the Katz Index of Independence in Activities of Daily Living Scale. All 32 participants reported being independent in five of the six areas measured by the scale. Eleven (34.4%) of the sample reported being incontinent and needing help in this area. Of these, 31.2% were female and 3.1% were male. See Table 5.

Research Question #2: What perceptions do noninstitutionalized elders living with cardiac disease have of nurses?

Participants' responses to this open-ended question were transcribed during the interview and later analyzed to determine coding categories. Table 6 displays the coding categories and the number of responses in each. Participants frequently gave more than one response. The majority of responses (71.8%) were statements about nurses being helpful, such as "without nurses, we couldn't survive," and "nurses encourage good health and flu shots." Adjectives to describe nurses comprised 53.1% of the responses, including "nurses are nice," "nurses are courteous," and "nurses have excellent bedside manner." Statements that nurses are good at explaining information comprised 18.7% of the participants' answers. Three response categories each accounted for 9.3% of the responses. These categories were stories about specific nurse encounters, statements that nurses are more helpful than doctors, and other miscellaneous comments.

Research Question #3: What do noninstitutionalized elders living with cardiac disease expect from nurses?

Participants' responses to this question were also transcribed and analyzed after the interview sessions to establish coding categories. Table 7 presents the coding categories for

this question and the number of responses in each category. Some of the participants provided more than one response to the question and had responses that fell in more than one coding category. The majority of responses were adjectives describing the way the participants believed nurses should act (n=19, 59.3%), i.e. “nurses should be genuine and concerned,” “nurses should show empathy when in pain or suffering,” and “nurses should be helpful and attentive.” Participants also described nurses’ jobs in providing care (37.5%). Responses in this category included that nurses should “take temperatures,” “answer my call light promptly,” “relay messages to doctors,” “listen carefully,” “give medications on time,” “take vitals,” and “make sure my bed is clean.” Another category of responses (34.4%) indicated that participants wanted nurses to help them understand their diagnoses and educate them about what is happening during their hospital stay. Participants expressed through 12.5% of responses that they want nurses to simply talk with them, 15.6% of responses were in the “other” category. One participant (3.1%) had no response to this question.

Discussion

The convenience sample used for this study was representative of trends in gender, race, and outside help among the population of noninstitutionalized elderly in the United States (Administration on Aging, 2002). The only area in which the sample population differed was in the number of individuals living alone; in this study, 84.4% lived alone compared to 30.8% nationally.

The fact that 94% of participants reported having hypertension matches current national data. Hypertension is highest among elderly women and African Americans; 62% of the United States population with hypertension is over 55 years old (National Academy on an Aging Society, 2000).

The participants’ perceptions of their health status are congruent with data from studies conducted by Windle & Woods (2004) and Beaumont & Kenealy (2004). Table 3 indicates that the majority of participants rated their health as good, based on the mean of 3.5. According to

Windle & Woods' (2004) study, these ratings would be expected since the majority of participants in this study reported having adequate social supports and the ability to have control over their environment (based on responses to IADL and ADL scales).

Overall, participants in this study reported their health as being better than others their same age (mean = 4.25). This is similar to findings from Beaumont & Kenealy's (2004) study which suggests that older adults who use the downward contrast method of contrasting their health status with those of the same age who have poorer health tend to report having higher perceptions of their own health. This in turn influences better long-term health outcomes.

Regarding instrumental activities of daily living, participants have trouble mainly with shopping independently (31.3%) and transportation (21.9%). These two items are related in that they both represent activities requiring a certain level of mobility, vision, and hearing. Similar limitations in IADL performance were found by Hellström and Hallberg (2001) in their study of noninstitutionalized elders living in the community. However, in this study, men reportedly had more trouble than women in performing IADLs. This study is in contrast with the current one; of the 11 male participants in this study, only 1 had significant limitations in IADL performance. Interestingly, he was the only one of the men who had had a stroke. This information supports findings from a study conducted by Whittle & Goldenberg (1996), which found that older adults who had had strokes were more limited in their ability to perform IADLs than their peers who had not had strokes.

In regards to activities of daily living, the only activity participants reported having problems with was with incontinence (34.4%). Of the 11 participants who reported having problems with continence, 10 were female. This suggests that the problem may be due to physiological changes related to childbirth and aging that cause weakening of the pelvic floor muscles.

The perceptions of expectations of nurses varied among the participants. While many participants simply described nurses, the high number of responses regarding nurses answering questions and explaining and talking with the patient suggests that older adults have many

questions and concerns about their physical health that need to be addressed. In the category, “described nurses’ job,” many of the participants gave answers that involved the nurse paying attention to the patient, such as answering call lights promptly, being attentive to details, and just being there. These responses further support the concept that older adults want more attention and sensitivity from nurses in the healthcare setting.

This study has several strengths and weaknesses that influence the quality of the data. Strengths include the diversity of the sample, the sample being representative of national trends in the older adult population, the use of previously used instruments to collect data, and the use of open-ended questions in the data collection process. Allowing participants to answer freely instead of using closed-ended, forced choice questions enabled the co-investigator to illicit more detailed, accurate responses from participants. The fact that findings from previously completed studies in the area of geriatric nursing support and resemble the results of this study supports these findings even more.

Limitations for this study include a small sample size, a convenience sampling method, and face-to-face interviewing. While interviewing participants in person enhanced the participants’ understanding of the questions, the presence of the interviewer may have pressured participants to answer the questions in a certain way rather than stating their true thoughts about nurses. Another limitation is the lack of strict exclusion criteria for certain diseases and conditions. For example, several participants who reported having functional limitations stated they had severe arthritis or diabetes in addition to their cardiac disease. The presence of arthritis or diabetes could confound the effect of cardiac disease on these participants’ functional health.

Conclusion

This study is the first known attempt to study perceptions of health, functional status, and nursing roles in an older adult population affected by cardiac disease. While other studies have

focused on similar variables in the older adult population, no other studies are known to have focused specifically on older individuals with cardiac disease. Furthermore, studies investigating relationships between older adults and nurses outside of the institutionalized setting are scarce at best.

Implications for further research, nursing education and clinical practice can be formed based on the results of this study. To further examine self-assessments of health and functional status in older adults, further research is needed using the instruments from this study or ones similar to these. Assessing older adults with other chronic illnesses, such as arthritis and diabetes, with these tools could reveal the extent of the impact of other conditions on an individual's self-concept and functional status. Using these same assessment tools with institutionalized older adults and comparing their results to the ones of this study may indicate how much impact living independently has on an older adult's perceptions of health and functional status, and would also provide insight into whether or not perceptions and expectations of nurses differ between the two groups. Studies that ask individuals from younger age categories to state their perceptions and expectations of nurses would provide an interesting comparison of different generations' views of the nursing profession.

Results of this study support the need for more information about geriatric nursing in nursing schools' current curriculum. Nursing students need to be aware of the unique needs and expectations that older adults have of their nurses and the reasons why their needs exist. Polypharmacy, increasing numbers of comorbid chronic illnesses, and longer life expectancies are just a few reasons why older adults need more time and education from their nurses. The American Association of Colleges of Nursing (AACN) and the Hartford Foundation recommend developing faculty expertise, creating individual courses on gerontology, integrating technology into the gerontology curriculum, forming clinical and community partnerships, and cultivating student interest in gerontology in order to enhance baccalaureate nursing students' knowledge regarding older adults (Thornlow et al. 2006).

These same concepts can be applied to nursing in clinical practice. The current health care system focuses on shorter hospital stays and streamlining of care. Older adults, however, may require more time and focused attention from the nurse in order to adequately educate and care for them. Nurses who are aware of these expectations and needs can more appropriately plan their delivery of care when working with older adult clients.

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Table 1

Frequencies and Percentages for the Background Characteristics of the Sample

Characteristic	N	%
Age		
65-69	4	12.5
70-74	9	28.1
75-79	8	25.1
80-84	4	12.5
≥ 85	7	21.9
Gender		
Female	21	65.6
Male	11	34.4
Ethnicity		
African American	14	43.8
Caucasian	18	56.3
Living Arrangements		
Live alone	27	84.4
With spouse or significant other	3	9.4
With someone else	1	3.1
With ≥1 person	1	3.1
If Need Help*		
No one	3	9.4
Spouse or significant other	4	12.5
Relative	20	62.5
Other	11	34.4

* could give more than one response

Table 2

Frequencies and Percentages of Reported Cardiac Disease in Sample

Characteristic	N	%
Type of disease*		
Hypertension	30	93.8
Heart attack	8	25.0
Irregular heart beat	6	18.8
Coronary artery disease	6	18.8
Stroke	3	9.4
≥ 1 heart attack	3	9.4
Coronary artery bypass graft	3	9.4
Other	3	9.4
Other open heart surgery	2	6.3
Congestive heart failure	1	3.1
Years since diagnosis*		
1 - 5	12	37.5
6 - 10	17	53.1
11 - 15	8	25.0
16 - 20	1	3.1
21 - 25	4	12.5
26 - 30	1	3.1
31 - 35	0	0.0
36 - 40	1	3.1
41 - 45	1	3.1
≥ 46	1	3.1

*could have multiple cardiac diseases and times since diagnosis

Table 3

Participants' Health Self Assessment

Item	Very poor	Poor	Fair	Good	Very good	Mean	S.D.
How would you rate your:	N	N	N	N	N		
Current health status?	0	1	10	19	2	3.69	.64
Current health compared with health one month ago?	0	5	7	19	1	3.5	.80
Current health compared with health of others of same age?	0	0	5	14	13	4.25	.72
Current health compared with health 5 years ago?	0	7	6	15	4	3.5	.98

Table 4

Participants' Ratings for the Lawton Instrumental Activities of Daily Living Scale

Item	Able to perform independently		Unable to perform independently		Mean	S.D.
	N	%	N	%		
Use telephone	32	100.0	0	0.0	1.00	0.00
Shopping	22	68.8	10	31.3	0.69	0.48
Food preparation	28	87.5	4	12.5	0.88	0.34
Housekeeping	32	100.0	0	0.0	1.00	0.00
Laundry	30	93.8	2	6.3	0.94	0.25
Transportation	25	78.1	7	21.9	0.78	0.42
Medications	29	90.6	3	9.4	0.91	0.30
Finances	32	100.0	0	0.0	1.00	0.00
Total score						
5	2					
6	6					
7	8					
8	16					

Table 5

Participants' Scores for the Katz Independence in Activities of Daily Living Scale

Item	Independence		Dependence	
	N	%	N	%
Bathing	32	100.0	0	0.0
Dressing	32	100.0	0	0.0
Toileting	32	100.0	0	0.0
Transferring	32	100.0	0	0.0
Continence	21	65.6	11	34.4
Feeding	32	100.0	0	0.0
Total score				
5	11	34.4		
6	21	65.6		

Table 6

Participants' perceptions and beliefs regarding nurses

Response category	N	%
Are helpful	23	71.8
Adjectives about nurse	17	53.1
Good at answering questions	6	18.7
Described a specific nurse encounter	3	9.3
Nurses are more helpful than doctors	3	9.3
Other	3	9.3

Table 7

Participants' expectations of nurses for health care and education

Response category	N	%
Adjectives describing nurses	19	59.3
Described nurses' job	12	37.5
Help understand/educate	11	34.3
Answer questions	7	21.8
Other	5	15.6
Talk with patient	4	12.5
No response	1	3.1