

Life Situations Of Elderly People With Heart Disease: The Impact Of Self-Efficacy On Self-Care

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Citation

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Abstract

A number of factors are associated with higher readmission rates, disabilities, and morbidity among elderly people with heart disease. There are few studies that have been done on self-efficacy among these individuals. The significance of this study was the identification of this phenomenon as a prognostic factor that could be related to patient outcomes. The researcher of this study analyzed data to identify areas where self-confidence lacks among this population; as a factor that might put patients at risk for readmission. The Cardiac Self-Efficacy Questionnaire was used to measure confidence levels of 20 elderly people, between the ages of 65 and 101 with heart disease. This instrument was administered to those individuals who reside at the Chai House, a senior residential living facility in Northern California. Most of the subjects also visit the nurse-managed center there. The study provided evidence that more attention needs to be focused on increasing self-efficacy around issues related to self-care measures.

INTRODUCTION

Heart failure is a condition in which the heart is unable to adequately pump the blood to meet the body's metabolic and circulatory needs. Heart failure is not a disease in and of itself; rather it is a condition associated with, or secondary to, various types of heart disease. The symptoms and complications of heart failure are not limited to the heart, however. In fact, most symptoms exhibited by the individual stem from the subsequent dysfunction of the organs involved such as the lungs, liver, and kidneys.

The incidence and prevalence of heart failure are steadily on the rise. "Heart failure affects an estimated 4.9 million Americans, and approximately 400,000 new cases are diagnosed each year" (Rich & Nease, 1999, p. 1690). "Because of its high prevalence and association with high medical resources consumption, heart failure is the single most costly cardiovascular illness in the United States, with total costs for 1998 estimated at \$20.2 billion" (Rich & Nease, 1999, p. 1690).

RESEARCH PROBLEM

Heart disease imposes a great financial burden on the health care systems and practitioners as their means of reimbursement are predetermined by diagnosis-related groupings (DRG's). Most often DRG reimbursement is not reflective of the actual costs to treat an individual with such

a condition. The provider of services is not the only one to carry the burden: Heart disease also has a tremendous impact on the life of the individual. "Elderly patients with heart failure are also at increased risk for early rehospitalization, with rates of readmission ranging from 29 to 47 percent within 3-6 months of the initial discharge" (Rich et al. 1995, p. 1190).

Multiple studies have focused on various issues concerning the successes and failures of current treatment for heart failure. Krumholz et al. (1998) and Woloshin (1997) studied the effects of emotional and social support on the health outcomes of elderly people with heart disease. Depression as an influence on the health outcomes of people with heart disease was investigated by Friedman (1993), Johnson and Roberts (1996) and Steffens et al. (1999). Another study done by Krishnan et al. (1998) investigated both depression and social support in elderly patients with cardiac disease.

Numerous factors have been associated with higher readmission rates among people with heart disease. For instance, Cardoza and Aherns (1999) evaluated inadequate regimens and discharge planning as factors associated with relapse among elderly people with heart failure. Wehby and Brenner (1999) identified unmet educational needs of patients as a reason for relapse and subsequent hospitalization. Other studies by West et al. (1997) and

Erhardt and Cline (1998) suggest there is a need for comprehensive management systems for heart failure patients in order to reduce readmission rates. Furthermore, a lack of adherence to self-care, (or noncompliance), on the part of the patient, was addressed by Ni et al. (1999) as a causative factor. Finally, Rich et al. (1995) and Hanumanthu et al. (1997), identified factors that put patients at risk for admission. Their findings indicated that careful evaluation of treatment regimens through discharge planning and close post-hospital follow up, decrease readmission rates.

Despite interventions available to patients with heart disease and heart failure, the rate of hospital re-admission remains tremendously high. In a time when adequate health care is available, and, for the most part, accessible to the general population, one may ask where the system fails these individuals. Although the flaws within the system allow patients to fall through the cracks, research has also suggested noncompliance on the part of the patients as a contributing factor. However, it is a time to move away from placing blame and move toward solving this problem. The fact of the matter is that this problem exists and will continue until solutions arise. Perhaps there are other issues that have not been fully addressed; hence the purpose of this study.

PURPOSE

The purpose of this study was to identify factors that influence behaviors related to self-care management among people with heart disease. Specifically, the objectives were to explain two things: the level of confidence in knowing what to do and the level of confidence in being able to carry out specific self-care measures. The results of this study were not intended to determine causality between self-efficacy and patient outcomes. The significance of the study, however, is the identification of this phenomenon as a possible prognostic factor that could be related to patient outcomes. The utilization of this information is crucial to promote advances in patient care and patient education.

RESEARCH QUESTIONS

The main research question of this study was “How does self-efficacy affect the ability for self-care management among people with heart disease who are 65 years and older?” However, in order to answer this question, there are more specific questions that needed to be addressed. The sensitizing questions, which were answered indirectly in this study, were as follows (a) are the subjects able to communicate their needs and concerns? (b) Are they able to

control their signs and symptoms using the self-care regimen techniques prescribed to them by their physician(s)? (c) Are they able to function in a social environment on a day-to-day basis?

Bandura, in his theory of self-efficacy, considers self-efficacy as a factor in people's behaviors, rather than an individual causal element. What is suggested here is that self-efficacy may be a potential determinant of one's outcomes. The implication is that confidence is necessary for a positive effect on health behaviors. For instance, an individual with heart disease who has little or no self-efficacy may not believe he/she can make a difference in his/her life situation and, therefore, may not adhere to the prescribed treatment and/or self-care measures. Whereas, an individual with a higher level of self-efficacy may adhere more closely, or completely to the suggested treatment measures they are given by their health care provider(s).

OPERATIONAL DEFINITION SELF-EFFICACY

Bandura's definition of self-efficacy will be used for the purpose of this study. He defines it as, “a belief in ones capability to exercise control over actions and environmental demands” (Carroll, 1995, p. 51). According to Bandura's definition, individuals' expectations for success or failure in the performance of tasks will determine their outcome. That is, people who believe they are able to successfully perform a task will be more likely to attempt to accomplish it and to overcome their fears associated with failure. Conversely, people who do not believe in themselves will tend to avoid activity.

LITERATURE REVIEW

Self-efficacy is a concept that has been studied in relation to people with heart failure and the effects on them. Gortner and Jenkins (1990) and Carroll (1995) utilized models of different theoretical perspectives. Orem's theory of self-care and Bandura's theory of self-efficacy were the theoretical frameworks used in these studies. These studies discuss patients with some form of heart disease that produce similar symptoms and experiences.

Bandura's theory of self-efficacy demonstrates a link between the way individuals perceive themselves and their resulting behaviors. The link between perception and behavior is determined by analyzing the magnitude of symmetry between these items and applying them to specific tasks. According to this theory, then, the perception of

people, that they are unable to change or improve their life situations has a negative effect on their lives as this impacts their self-care behaviors.

Carroll's (1995) study applies Bandura's theory of self-efficacy to demonstrate a connection between self-efficacy expectations and self-care behaviors. She states, "specific self-efficacy expectation ratings are a powerful mediator of specific behaviors in cardiac and pulmonary patients" (Carroll, 1995, p. 51.). This study consisted of 122 men and women ranging in age from 65 to 74 years old, recovering from coronary artery bypass graft surgery. Interviews were conducted at four measurement points: on admission, after a discharge class, and at 6 and 12 weeks after surgery. All subjects completed the Exercise of Self-Care Agency Scale (ESCA), a scale used to measure self-concept, initiative and responsibility, knowledge and information seeking, and passivity. The Jenkins Self-Efficacy Expectation Scales, which focused on walking, climbing stairs, general activities, and roles and relationships, were used with confidence rating scales. These scales indicated respondents' self-confidence in performing each activity they were rated on. Finally, an Activity Checklist was used to assess the subject's performance on these activities, within 24 hours of the time of the interviews.

The result of Carroll's (1995) study was supportive of Bandura's theory. "Self-efficacy expectations were predictive of subsequent behavior performance" (p. 57). According to the scales used in this study, self-efficacy expectations were found to be lower among elderly patients, as compared to younger patients, at 6 and 12 weeks post-operatively. The author recommends helping individuals strengthen their self-efficacy in order to decrease potential negativity.

The findings of Carroll's study were consistent with those of an earlier study by Gortner and Jenkins (1990), also based on Bandura's theory of self-efficacy. In this study subjects were undergoing heart surgery, some for the first time and others for the second time. In addition to the routine information on recovery, the experimental groups in this study viewed videotape programs on family coping and conflict resolution. Participants were also followed by telephone for weekly monitoring. It was demonstrated that combined inpatient and outpatient teaching, and monitoring programs provided to cardiac patients after surgery, strengthened efficacy expectations for recovery. The authors concluded that, "a low intensity psycho-educational intervention enhanced expectations for activity and self

reported activity" (Gortner & Jenkins, 1990, p. 1138).

Carlson, Riegel, and Moser, (2001) studied self-care abilities among people with heart failure and looked at difficulties in managing self-care. A comparison was done between newly diagnosed patients with heart failure and those who have experience with the diagnosis. The authors defined self-care as "an active cognitive process undertaken by a patient to maintain health or manage illness and disease" (Carlson et al. 2001, p. 351). This study was intended as a needs assessment for health care professionals in order to help them determine the best course of action in intervening with this population.

This study consisted of 139 elderly male patients, who were mostly single, retired and low income. The average level of education was high school. Most of the subjects recruited (82%) were hospitalized and the remaining were from a heart failure clinic. Participants completed the Self-Management of Heart Failure Questionnaire, a 65 item scale which addressed, "4 stages of the self-care management process: 1) recognizing a change in sign or symptom, 2) evaluating the change, 3) implementing a self-care treatment strategy (taking action), and 4) evaluating the effectiveness of the treatment implemented" (Carlson, Riegel, and Moser, 2001, p. 352).

The results of this study revealed three significant factors. First, for most subjects, experience with heart failure made a significant difference in the ability to recognize symptoms. Second, when signs and symptoms were recognized they were often not interpreted correctly, again this was less common with those experienced with heart failure. Finally, overall "confidence in the ability to effectively treat their symptoms was low in this group of patients." (Carlson, Reigel, & Moser, 2001, p. 358). The authors recommend that health care professionals provide more patient education pertaining to the recognition of signs and symptoms.

CONCEPTUAL FRAMEWORK

Bandura's theory of self-efficacy (1980) provided the conceptual framework for this study. The relevance of the concept of self-efficacy was discussed in the literature review and was explored in this study. It was hypothesized that self-efficacy plays a significant role in the self-care and health-related behaviors of people with heart disease. Applying this theory, this study proposed that self-efficacy influences peoples' judgment of themselves and may predict their behaviors.

“Bandura formulated a self-efficacy theory derived from social learning theory to explain the link between self-perception and behavior” (Carroll, 1995, p. 51.). The framework for his learning theory implies that one's source of information is the result of the interaction that occurs between behavioral, internal, and environmental elements. He proposed that “egoistic thought processes” are used to evaluate the resulting information. “The perception of self-efficacy thus produced is concerned with judgments of the likelihood that one can organize and execute courses of action required to deal with prospective situations” (Bandura, 1980, p. 263.).

Self-efficacy is the confidence that one has the ability to carry out specific behaviors. This confidence, according to Bandura, is dependent on one's level of knowledge. That is, performance expectations will determine individuals' actions, despite their belief regarding a particular action producing a desired outcome. Efficacy expectations also determine the length of time and amount of effort that people are willing to put forth in for a given task. Thus, the greater the level of confidence, the greater the likelihood of the pursuit of goals. Conversely, those with negative self-perceptions underestimate their abilities and give up before ever trying.

METHODOLOGY

RESEARCH DESIGN

This research project was quantitative and non-experimental. An exploratory, descriptive design was used to measure self-efficacy as it pertained to the research question and is operationally defined. The results of the study were analyzed and reported using descriptive statistics. “Descriptive statistics are statistical procedures that are used to summarize, organize and simplify data. a common technique is to compute an average” (Gravetter & Wallnau, 1999, p. 5).

SAMPLE

A convenience sample of 30 subjects, ages 65 and above with a diagnosis of heart disease, was randomly selected and proposed for the study. A total of 23 subjects agreed to participate in the study. Three of the 23 subjects, who met the study criteria and had originally agreed to participate, withdrew from the study. A total of 20 subjects completed the Cardiac Self-Efficacy Scale and the demographic data sheet. The demographic data are shown in Table I.

The subjects recruited for this study were from a residential house for older individuals in Northern California. Residents

with chronic and symptomatic heart disease meeting the inclusion criteria were recruited to participate in this study. Inclusion criteria permitted participation only of those subjects who were able to read, write, speak and understand English, and to be living independently. In order to control for homogeneity of the group, exclusion criteria included the following: history of substance abuse, and the presence of any medical or mental illness that impairs cognition. All subjects who met the study criteria were recruited by advertisements posted in the main lobby and the nurse managed clinic of the residential home.

RESEARCH PROCEDURES

Approval from the Human Subjects-Institutional Review Board of San Jose State University and the Chai House, a senior resident facility in Northern California, were obtained before this study was implemented. All consent forms were obtained from prospective subjects prior to any data collection. The primary researcher of the study identified all subjects meeting the study criteria. Each subject identified as meeting the criteria was required to read and sign a consent form, after reading the letter of purpose, and prior to any involvement in this study. Consent forms were distributed, signed, and collected from each subject before the questionnaires were distributed.

Each subject was asked to complete the Cardiac Self-Efficacy Questionnaire, and a demographic questionnaire. Additional information was obtained from the clients' clinic charts to a) further establish eligibility, b) confirm demographic information, and c) obtain pertinent medical history data. Permission to obtain this data was included in the consent form.

The questionnaire was administered to eligible participants at a mutually agreed upon time and location. Each participant was provided with a private space to complete the questionnaire.

INSTRUMENTS

The Cardiac Self-Efficacy Questionnaire consists of 16 statements in which subjects rate the likelihood that they would or would not know or be able to perform actions specified in the question. “We, therefore, designed a questionnaire to help elucidate the role that self-efficacy plays in the translation of disease into symptoms and disability in the coronary population” (Sullivan et al. 1998, p. 473). A five point Likert Scale (0 = not at all, 1=somewhat confident, 2=moderately confident, 3=very

confident, and 4 = completely confident) is used. Items can also be labeled as nonapplicable.

RESULTS

The demographic profile of the sample is presented in Table I. The mean age of the study participants was 84.25 years old, ranging from 65 to 101 years old. Seventy percent (n=14) of the subjects were female and 30% (n=6) were male. Nineteen of the 20 subjects were Caucasian and one did not indicate ethnicity. Nine of the subjects indicated their nationalities as the following: Jewish (6), Polish (1), Irish (1), and Italian (1). Sixty percent (n=12) of the subjects were widowed, and 75% (n=15) lived alone. Level of education and previous occupation are also presented in Table I.

Table I: Sample Characteristics (N=20)

The largest percentage of subjects (85%) had hypertension. Forty percent indicated they had undergone one of the following three coronary interventions: angiogram, angioplasty and/or coronary artery bypass graft surgery. Thirty percent had high cholesterol levels and were being treated for it. Percentages of subjects with heart failure and atrial fibrillation (a cardiac dysrhythmia) are also presented in Table II.

Table II: Cardiac History

The purpose of this study was to determine the relevance of self-efficacy and its effect on self-care behaviors. The analysis of the subjects' responses on the Cardiac Self-Efficacy Questionnaire was used to determine: (a) the ability to communicate needs and concerns, (b) the ability to control sign and symptoms following prescribed self-care regimes, and (c) the ability to function socially on a day-to-day basis. The Cardiac Self-Efficacy Questionnaire consists of questions addressing the following issues: (a) confidence in knowing when to call or visit a doctor about one's heart disease and in making their doctor understand their concerns regarding their heart (b) confidence in controlling breathlessness, fatigue and/or chest pain by taking medication, and changing activity level (c) confidence in the ability to lose weight or change diet if recommended by physician and (d) confidence in maintaining usual work, social and sexual activities or relationships.

The first two questions on the Cardiac Self-Efficacy Questionnaire ask "how confident are you that you know when you should call or visit your doctor about your heart disease and how to make your doctor understand your

concerns about your heart. Seventy percent of the subjects indicated they were 'very to completely confident' in their ability to communicate their needs and concerns in the first question. In the second question, 80% of the subjects indicated they were 'very to completely confident' in their ability to make their doctor understand their concerns.

Questions three and four address the subjects' confidence in their knowledge of how to take their medication and how much physical activity they should get. Seventy percent of the respondents indicated they were 'very to completely confident' in knowing how to take their medication and 50% were 'very to completely confident' in knowing how much physical activity is good for them.

Questions five through ten of the Cardiac Self-Efficacy Questionnaire address ability to control signs and symptoms using self-care regimens that are prescribed by the subjects' physicians. Thirty percent of the subjects indicated they were "very or completely confident" in controlling breathlessness by taking their medication and/or changing their activity level. Thirty-five percent indicated they were 'very to completely confident' in their ability to control their fatigue by taking their medication and/or changing their activity level. Twenty-five percent indicated they were 'very to completely confident' in their ability to control their chest pain by taking their medication and 40% were 'very to completely confident' in their ability to control chest pain by changing their activity level.

In questions 11 and 12, subjects were asked about their confidence in their ability to lose weight and change their diet, if recommended to do so by their physician. Fifty percent indicated they were 'very to completely confident' in their ability to lose weight and 70% were 'very to completely confident' in being able to change their diet.

Ability to function in a social environment on a daily basis and to maintain sexual relations was addressed in questions 13-16 of the Cardiac Self-Efficacy Questionnaire. The percentage of subject's responses of 'very to completely confident' in maintaining usual activities at work, at home, and maintaining usual social activities were 40%, 60% and 50% respectively. Fifteen percent of the subjects indicated they were 'very to completely confident' in maintaining sexual relations with their spouse. See Table III for further analysis of subject responses.

Figure 1

Table III: Questionnaire Results

Confidence in Knowing:	Not At All	Somewhat	Moderately	Very/Completely	N/A
When to Call /Visit MD	0	15%	10%	70%	5%
How to Make MD Understand Concerns	0	0	10%	80%	10%
How to Take Cardiac Medication	0	0	15%	70%	15%
How Much Physical Activity is Good	0	15%	25%	50%	10%
Confidence That You Can:					
Control Breathlessness with Medication	0	15%	0	30%	55%
Control Breathlessness with Activity Level	0	5%	20%	30%	45%
Control Fatigue with Medication	0	5%	20%	35%	40%
Control Fatigue with Activity Level	0	0	35%	35%	30%
Control Chest Pain with Medication	0	5%	15%	25%	55%
Control Chest Pain with Activity Level	0	5%	10%	40%	45%
Lose Weight (if overweight)	0	30%	10%	50%	10%
Change Diet (if MD Recommended)	0	5%	15%	70%	10%
Maintain Usual Activities at Work	0	0	30%	40%	30%
Maintain Usual Social Activities	5%	10%	30%	50%	5%
Maintain Usual Activities at Home with Family	0	10%	25%	60%	5%
Maintain Sexual Relationships with Spouse	0	5%	5%	15%	75%

There were a total of one divorced, two married, and, three widowed males. Comparisons showed that overall, the divorced male subject was 'very to completely confident' on 43% of the questions on the Cardiac Self-Efficacy Questionnaire. The two married males' responses indicated a 59% rating of 'very to completely confident' and the three widowed males' responses indicated a 51% rating of 'very to completely confident.'

Confidence levels according to age indicated that the oldest male (at 93 years old) was the least confident, with only 25% confidence in responses to Cardiac Self-Efficacy Questionnaire questions. The youngest male (at 73 years old) followed at 43% overall rating. The 88-year-old male had a confidence rating of 50% and the 86, 87, and 91-year-old males were between 62-68%.

There were one divorced, two single, two married, and nine widowed female subjects. The divorced woman responded 'very to completely confident' on 37.5% of the questions on the Cardiac Self-Efficacy Questionnaire. The two single women were 'very to completely confident' on 59% of the questions, and the two married females responded 'very to completely confident' on 43% of the questions. The nine widowed females responded 'very to completely confident' on 45% of the questions.

There were no significant correlations for age among the females, other than the fact that 28.5% (n=4) indicated they were overall 'very to completely confident' at 37.5%. The youngest female subject (at 65 years old) indicated an 18% average confidence level and the oldest female subject (at 101 years old) indicated a 50% overall confidence.

Female subjects indicated higher rates of confidence on questions one, two and twelve of the Cardiac Self-Efficacy Questionnaire. These questions address knowing when to call or visit their doctor, how to make their doctor understand their concerns, and their ability to change their diet if recommended by they physician. In comparison the males scored highest on questions one, two, and three, with the highest confidence on question three. Question three addresses knowing how to take cardiac medications.

While both males and females scored lowest on question 16, females scored low on questions nine and five as well. These questions address ability to control chest pain and breathlessness by taking their medication. Male subjects also scored low on question 13 and seven. These questions address ability to maintain usual activities at work and ability to control fatigue by taking their medication. As a whole, in comparing the male to the female subjects' responses, the females had higher levels of confidence than the males.

DISCUSSION

The majority of subjects indicated higher levels of confidence in communicating their needs and concerns to their physicians. These findings suggest that they are confident in knowing when to call or visit and can recognize that they are having exacerbations. This may also imply that they simply can recognize a change in the way they feel and know that they should call their physicians. It can also be said that the subjects trust the advice of their physicians, and know that if nothing else, they can get assurance, that what they are experiencing is normal.

Assumptions, based on the findings of the study, also indicate that compliance may not be an issue among the subjects, given that overall levels of confidence were also high in the areas of knowing how to take their medication(s) and changing their diet. The second highest confidence ratings were found to be related to issues concerning physical activity, controlling chest pain by changing activity levels, losing weight and maintaining usual social activities in different settings. Although compliance does not appear to be a major issue, confidence in knowing how much physical activity is good was only 50% among all the subjects. This may be an indication that the degree of compliance with recommended exercise regimes may not be optimal.

Another area in which confidence levels were second highest was in regards to controlling chest pain by changing activity levels. This brings up a concern about how far the subjects

might push themselves and how much pain they might allow themselves to experience before they actually stop. The concern is that if they do not stop or decrease their activity to eliminate their chest pain, they could have secondary complications.

It is difficult to address weight loss in the realm of compliance due to the manner in which the question is stated. Literally, the way it reads is, “how confident are you that you can lose weight (if you are overweight)?” It is open to discussion as to how to interpret the responses, since weight loss is not addressed as a suggestion from a physician. Also it is left to the subject to decide whether or not they are overweight.

There are numerous factors that could influence the way in which the subjects responded to this question. For example, cultural beliefs, personal ideals, or self-image could have some bearing on the responses provided. In addition, when considering personal motivation versus physician recommendation, it could be said that advice may increase motivation.

While all the subjects indicated they are retired, four responded “not applicable” and 12 indicated a 40% confidence level in ability to maintain usual activities at work. It is unknown whether they answered the question as if they were working on a monetary or voluntary basis. Also of interest is that confidence in maintaining usual social activities was at 50% and maintaining usual activities at home with family was at 60%. It is unknown whether or not they interpreted “at home” to mean in their actual apartment or in the residential facility itself. That is, the facility offers social activities such as movie night, lectures, and creative art classes, where family and friends are welcome.

In general the subjects indicated the lowest levels of confidence on the questions that pertain to their ability to manage symptoms by following prescribed regimens. It is of particular concern since the questions were specific to controlling breathlessness and fatigue by taking medication and changing activity levels, and controlling chest pain by taking medication. It is very probable that the subjects are not taking their medication correctly, or at all, and that they are over exerting themselves. Again, exacerbation of their disease and the possibility of developing secondary problems are of concern.

It must be noted that interpretation of the questions is a significant factor when analyzing the results. That is, two of

the five subjects that responded to confidence in maintaining sexual relations with a spouse, were a divorced male and a widowed female. It is to be assumed then that the two subjects interpreted “spouse” to mean a “partner” whom they are not married too. Furthermore, 12 of the subjects indicated a “not applicable” response to this question. While the setting of the residential facility, is conducive to socializing among the residents, it would be interesting to know if these 12 subjects responded as such, because the question contains the word “spouse.”

Finally, it is generally said that in terms of psychological well being, married men tend to be better off than single men. Assuming psychological well being precedes, or requires confidence, the results of this study could be said to support this idea: overall confidence levels were highest among married men. In contrast, it is interesting to note that among the female subjects, confidence was not only highest among the single women, but also significantly higher than the other groups. Since it is unknown how long they have been single, assumptions are difficult to make.

LIMITATIONS

Some of the recognized limitations of this study included the following. First, the sample size was small. Second, this study did not address hospitalized patients. Third, generalizations cannot be made since data collection was restricted to residents of a senior residential facility, living in Northern California. Fourth, the ratio of male to female subjects also makes it difficult to make assumptions. Finally, the information provided allows only assumptions to be made.

CNS IMPLICATIONS

The findings of this study imply that self-efficacy can determine self-care performance. The findings show that the subjects expressed low levels of self-efficacy in regards to self-care activities. There are a number of implications for advanced practice nurse (APN) practice as a result of this study. First, the CNS can start by identifying the individuals' level of self-efficacy. Second, the APN can develop and modify strategies to educate clients so that the content is tailored to their level of self-efficacy. Third, by personalizing the educational sessions, the APN helps to empower clients to increase their self-efficacy. Fourth, the APN can help clients identify even the smallest changes and benefits in order to prevent them from becoming discouraged in the event that expectations are not met. Finally, clients can be helped to recognize the APN as a

source of support.

CONCLUSION

This study proposed to identify the life situations of elderly people with heart disease. The conceptual framework used in this study suggests that self-efficacy may be a prognostic factor in the recovery phase and health maintenance among these people. This study intended to identify the level of confidence and ability to carry out prescribed self-care measures among elderly people with heart disease. Further intentions were to utilize this information in promoting and advancing patient care and education. The evidence was clear that more attention needs to be focused on increasing self-efficacy on issues related to direct self-care measures.

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