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Patient Perception of Severity Versus Actual Clinical Severity in Acute Myocardial Infarction (Coronary Care, Cardiac Rehabilitation)

Denise Kay Busman

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Patient Perception of Severity

versus Actual Clinical Severity in

Acute Myocardial Infarction

A Research Study Submitted

in Partial Fulfillment of a

Master's of Science in Nursing Degree

by

Denise K. Busman, RN, BSN

ABSTRACT

Myocardial infarction affects many people each year. Patients begin to form ideas regarding their myocardial infarction and perceive elements of their environment shortly after admission to the Coronary Care Unit (Runions, 1985). One of the ideas formed concerns the severity level of their myocardial infarction. The purpose of this study was to identify factors contributing to patients' perceptions of the severity level of their myocardial infarction and in turn compare these perceptions with predicted clinical severity. Numerous studies have explored patients' psychosocial reactions and adaptation to coronary artery disease and myocardial infarction. However, few studies identify patients' perceptions of events and infarct severity with actual clinical severity. Conceptualization of this study was based on theories of crisis and cognition. Research questions asked were: 1) Is there a relationship between patients' perceptions of the level of severity and the level of clinical severity in acute myocardial infarction? and 2) Do specific events occurring during the acute phase of hospitalization relate to patients' perceptions of the severity of myocardial infarction? A descriptive-correlational design was used to analyze data collected on 50 patients admitted to the Critical Care Units of two acute care centers. Two instruments were used: a 5-level numerical scale on which patients ranked severity and responses to factors contributing to their perceptions and the Norris Coronary Prognostic Index, a tool measuring clinical severity. Demographic data were also collected to facilitate correlation of these factors with perceptions of severity. Data were analyzed using Spearman's Rho. A significant positive correlation ($r = .497$, $p < .01$) was obtained between perceived and actual clinical severity. In addition, seven of ten specific factors contributed to perception of severity above a neutral level, with physician response to one's myocardial infarction consistently ranking the highest of all factors. Several implications for nursing practice were identified.

"First of all," he said, "if you can learn a simple trick,
Scout, you'll get along a lot better with all kinds of folks.
You never really understand a person until you consider things
from his point of view--"
    "Sir?"
    "--until you climb into his skin and walk around in it."

                              Atticus to Scout
                              <u>To Kill a Mockingbird</u>

For Paul and Jesse,
  who always knew when it was time to take a walk.

Acknowledgements

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Chapter 1

Introduction

Myocardial infarction afflicts nearly one and a half million Americans each year resulting in the deaths of about 550,000 persons (Cornett, 1984). About 425,000 persons (or about 85%) of those who are admitted to hospitals with myocardial infarctions survive the attack and need to be prepared for life after the event (Monteiro, 1979). The suddenness of onset, the intense pain and the hovering of death contribute to the dramatic impact of a myocardial infarction on the individual.

Consequent entry into the coronary care unit represents a sudden shift from the familiar world of work or leisure into the unknown. This entry into an unfamiliar environment usually occurs at the same time the person is experiencing abnormal physiologic symptoms such as unrelenting chest pain, shortness of breath, diaphoresis, and perhaps nausea. Accompanying these physiologic sensations are the psychological responses initiated by this threat to self: fear, apprehension and oftentimes a premonition of death (Monteiro, 1979).

The individual rapidly finds him/herself thrust into a highly technological environment, is confined to bedrest, and is connected to one or more intravenous infusions, oxygen and a cardiac monitor, even when his/her condition is designated as "stable". Rules for activity are delivered and one is expected

to rely on persons one hardly knows for even the most personal of needs. Even the structural setting communicates dependency (Thomas & Lynch, 1979). Despite such constraints, most reports indicate that patients are generally reassured by the coronary care unit, particularly by the visible presence of equipment (Hackett, Cassem & Wishnie, 1968). However, despite feelings of reassurance, Cassem and Hackett (1968) report that a significant number of patients with myocardial infarctions experience at least some degree of distress which may be denied or suppressed. Those events perceived as most stressful by patients are those that threaten self image; including the lack of knowledge about one's illness and its seriousness (Patacky, Garvin & Schwirian, 1985).

Such a threat to one's self image has been related to anxiety provoked by problems of meaning: that is, anxiety that relates to the uncertainties of diagnosis and prognosis of one's illness. Added to this is an uncertainty about the extent of recovery one will achieve. Because none of these uncertainties can be immediately resolved, and many are outside of the patient's control in cases of suspected myocardial infarction, anxiety is heightened.

Given the nature of the imposed treatment regime, the patient is often afforded sufficient time to consider elements of the environment and their perceived meaning. Runions (1985) asserts that several hours after admission to the coronary care

unit, individuals begin to mentally review the experience of chest pain and its implications. Such behavior indicates that patients may evaluate their experiences and their environment very early in their hospitalization and establish beliefs regarding future outcomes. Estimation of the severity of one's myocardial infarction may be identified as one of the evaluations patients make.

The tremendous impact that a myocardial infarction exerts on the whole being becomes readily apparent. Yet, while most critical care nurses are familiar with the physiological aspects of acute myocardial infarction, the psychological aspects of nursing care for these patients are less widely understood. An overt juxtaposition of psychosocial care with the remainder of the critical care environment appears to exist. With measurements able to determine the titration of medications in micrograms per kilogram per minute, the assessment of and employment of interventions to facilitate perceptual responses seems hardly pragmatic.

Virtually all critical care nurses would agree that psychological factors are important in coronary care, cardiac functioning and even in long term survival (Gentry & Williams, 1979). That these factors are important seems both empirically and intuitively obvious. Yet there remains a lack of scientifically-based interventions that address the

psychological/perceptual needs of the patient with a myocardial infarction.

Problem Statement

It is the nurse who must acquaint the patient with the physical environment of the critical care unit, meet the challenge of dealing with the patient's emotional responses toward one's environment and one's illness, and facilitate coping with a life crisis. In understanding the impact these needs have on the individual, the importance of using sound and effective nursing interventions for achieving related goals is apparent. However, it is first necessary to determine just how patients with myocardial infarctions perceive their illness and the events taking place around them.

Purpose

The purpose of this study was to identify the relationship between patients' perceptions of the severity level and the actual clinical severity level of their myocardial infarction. In addition, the study sought to identify specific factors that may contribute to patients' perceptions of the severity of their myocardial infarction.

Chapter 2

Literature Review and Conceptual Framework

Literature Review

Numerous studies have been conducted exploring the patient's psychosocial reactions and adaptation to coronary artery disease and myocardial infarction (Cassem & Hackett, 1971; Razin, 1982). Several studies have also been conducted that examine factors perceived as being stressful or anxiety producing in the coronary care unit (Patacky, Garvin & Schwirian, 1985,; Rosen & Bibring 1966). However, few studies have been identified that explore patients' perceptions of events occurring during the acute phase of hospitalization and how these perceptions impact upon patients' perceptions of the severity of their myocardial infarction.

In an expansion of an earlier work, Monteiro (1979) postulates that the individual's view of the severity of the attack affects return to work, expectations of self in activities and level of threat. Perception of severity was identified as the strongest component of the regression equation used. A subcomponent of Monteiro's research identified a significant difference in patient's estimate versus clinical estimate of infarct severity at the .01 level. The correlation of the patient's perception with clinical estimate in this study was 0.44, suggesting that a moderate correlation may exist. In

general, patients tended to feel the attack was more severe than was warranted by more objective measures. It should be noted that patients were asked to rank the severity of their attack 6 months after its occurrence, allowing a number of variables to potentially affect their ranking. Conversely, ranking of clinical severity was established from inpatient records at the time of infarct, suggesting that the two rankings were taken from two different frames of reference: the immediate (clinical measurement) versus the eventual (patient perceptions).

Gentry and Haney (1975) reported that patients who are highly concerned about imminent death tend to view themselves as being sicker, report more pain/discomfort and evidence greater levels of subjective and physiologic anxiety than those less concerned over this possibility. Furthermore it was noted that as patients became more reassured and secure in their immediate survival, anxiety decreased and their perceived health status improved. These data were collected during the first 24 hours after admission to the coronary care unit. Consequently, it is assumed that the majority of patients did not have a definitive diagnosis of myocardial infarction (as conclusive data are often not available until after 24 hours). Therefore, formulation of perceptions regarding severity of infarct were likely to be incomplete, as respondents may or may not have had their diagnosis confirmed at the time of interview.

No relationship was identified between behavioral adjustment and clinical severity of myocardial infarction in a study conducted by Garrity and Klein (1975). However, each of these variables was independently predictive of six-month mortality. Their findings indicated that patients who show early adjustment to a myocardial infarction were more likely to survive six months than those patients who did not give evidence of early adjustment. Evaluation of adjustment/nonadjustment in their design was made by trained nurse-observers during the first five days of hospitalization. No input was received directly from the patient. Therefore, while overt behavioral manifestations were considered, no indication was given of patient perception of the event (potentially quite different from what their behavior was classified as by the observers).

In a study conducted by Patacky and colleagues (1985), patients' perceptions of psychological stress were examined as related to use of the intra-aortic balloon pump in the coronary care unit. The three top stressors were identified as admission to the unit, not knowing or understanding one's illness and its severity, and restricted movement in bed due to equipment. Patients in the study who were placed on the intra-aortic balloon pump were no doubt sicker than those not requiring this type of therapy. The conclusion may be drawn from the study's results that people who are more severely ill and receive

more/different therapies perceive more stressors related to those therapies.

Rozen and Bibring (1966) identified additional variables which may affect individuals' perceptions of their myocardial infarction. In their study, they describe variances in response to a myocardial infarction as being affected by age and social status. For example, their findings indicated that white collar workers were more suspicious of reassurances about their physical condition (that were inconsistent with activity limitations) than were blue collar workers. Results of this study further indicated that patients may arrive at perceptions of severity based upon their knowledge of others' treatment and activity progression.

The literature indicated that a relationship between emotional behavior/reactions toward myocardial infarction and patient outcomes exists. Various factors, both environmental and situational, have been identified that lead to perceptions of threat to self (anxiety) during the acute phase of myocardial infarction. However, there remains a gap in recent research of how patients perceive the severity of their infarct in relation to actual clinical severity. Furthermore, specific factors occurring in the critical care unit which contribute to the formation of perceptions regarding severity of infarct have yet to be identified.

Conceptual Framework

Two theories, those of crisis and cognition, provide a framework that assists in explaining man's psychosocial response to myocardial infarction and the critical care unit environment. The first theory, that of crisis, is based upon a theoretical framework that identifies man's perception of an event as a key element in the development of a crisis.

The development of crisis theory is attributed to the works of Lindeman (1944), Erickson (1959), and Caplan (1964). Stated simply, crisis can be described as an upset to a steady state. Obviously, not every event a person encounters results in crisis. Rather, it is the way in which an event is understood that in part determines if crisis actually occurs. Thus, perception of the event is one of the most critical concepts in crisis theory.

Life events may be viewed in a variety of ways. If an event is perceived as being a threat to one's integrity, it signals danger, and is usually met with anxiety. If it is perceived as loss it will most likely be met with depression. Conversely, if an event is perceived as a challenge, it is likely to be met with a mobilization of energy and problem-solving. In short, man's response to "problem" situations is based on one's perception of them.

Perception is an active process that is very subjective in nature. As indicated earlier, individuals may view a given

situation in a variety of ways. King states that perception is "each human being's representation of reality. It is an awareness of persons, objects and events" (King, 1981, pg 20.). Furthermore, King (1981) notes that high emotional states, such as anger, fear and love, may also distort one's perceptions. Emotions may restrict the cues one allows to enter the perceptual field by partially closing the field itself.

The way in which an event of illness is perceived, is influenced by individual characteristics as well. Rosen and Bibring as early as 1966, discussed several characteristics in describing the impact of a myocardial infarction on man. They identified past experience with the treatment of a myocardial infarction, socioeconomic status, and developmental stage as factors influencing perception. Developmental stage in particular, was noted to contribute to a large extent in predicting psychological reactions to myocardial infarction. The developmental issues with which man struggles were noted to be accentuated by the occurrence of a myocardial infarction.

Theories of cognition and cognitive field psychology also shed light on the problem at hand. Man may be described as a rather restricted and biased information processor. Individuals follow complicated chains of logical reasoning, relating the past to the present. However, despite a desire to face events realistically, man is limited in ability to respond to multiple inputs.

Cognitive field psychologists define experience as the interaction of a person and his/her perceived environment. John Dewey expressed this in saying, "An experience is always what it is because of a transaction taking place between an individual and what, at the time, constitutes his environment." (Dewey, 1938). Such a statement would lead to the question of how an experience (namely, the occurrence of a myocardial infarction) is affected by the physical environment (that of the critical care unit), as well as the psychological environment (e.g. life stage, educational level, past experience).

Cognitive field theory also purports that when a person perceives a thing one is not indifferent toward it. That is, the event has some meaning or else it would not be perceived at all. In addition, what it is that one perceives -- one's psychological reality -- consists of what one makes of what seems to be oneself and one's environment. Depending upon the insights/understandings a person brings to a particular occasion, one gives meaning and order to things in terms of one's own needs, abilities and purposes.

Stone, Cohen and Adler (1979), describe the process of information processing regarding illness and medical treatments. They indicate that by integrating knowledge of an illness and associated therapies with the self, individuals may realistically prepare themselves for the future. Burgess and Hartman (1986) found that perceptions of the heart attack event

influenced several key factors associated with return to work: psychological distress, social independence and re-employment barriers.

Based upon this analysis, the investigator suggests that an individual's perception of a myocardial infarction (and all the events surrounding it) leads to the formulation of conclusions regarding the severity of one's infarct. Such conclusions may further act as a means of preparing the psyche for the performance of the physical self. Further, the investigator believes that the accuracy of these perceptions is important in that it affects an individual's ultimate level of wellness and ability to interact with the world around him/her.

Research Questions

Out of recognition of the impact that perceptions often have upon eventual realities, the following research questions were examined:

1) Is there a relationship between patients' perceptions of the level of severity and the level of clinical severity in acute myocardial infarction?

2) Do specific events occurring during the acute phase of hospitalization contribute to patients' perceptions of the severity of myocardial infarction?

Definitions

Myocardial Infarction: necrosis of myocardial tissue,

   secondary to circulatory occlusion. Diagnosis of its

   occurrence was based upon the physican's interpretation

   of clinical history, changes on the electrocardiogram,

   and/or serial cardiac enzyme elevation.

Acute phase of hospitalization: the first 72 hours of

   admission to the hospital. Some or all of this period

   is usually spent in a Critial Care Unit.

Perception of severity: how an individual views the extent

   of his/her illness as rated on a scale modified from

   that used in the Brown-Harvard Infarction Study

   (Monteiro, 1979). (See Appendix A)

Clinical severity: the extent of myocardial damage and

   associated complicating factors, which arrive at a

   level of predicted risk of mortality as measured on the

   Coronary Prognostic Index (C.P.I.) (Norris, Brandt,

   Caughy, Lee & Scott, 1969). (See Appendix B)

Specific events: factors (environmental, biological,

   psychological) that often occur during the acute phase

   of hospitalization following myocardial infarction. The

   factors measured in this study included: verbal and

   physical messages conveyed to the patient by visitors,

   physicians, and nurses; the number of monitoring

   devices, medications and intravenous lines used; the

amount of chest pain experienced by the patient; and
the amount of activity the patient was allowed. (See
Appendix A)

Degree of impact: the extent to which events have
contributed to the patient's beliefs about how severe
their heart attack is, as measured using a scale
ranging from "very mild" to "very severe". (See
Appendix A)

Chapter 3

Methodology

Design

A descriptive-correlational design was used in this study. Structured interviews were conducted with a sample population consisting of 50 sequential admissions into the Medical Critical Care Units of two acute care hospitals serving a Midwestern metropolitan area of 600,000.

Sites

Two critical care units were used in the study. One unit consisted of eight beds, all of which were private rooms. The other unit consisted of fifteen beds: eleven private rooms and one four bed ward. Each unit was equipped with full monitoring capabilities and was staffed so that Registered Nurses provided the majority of patient care. Historically speaking, approximately 55% of the admissions to these units are patients with an actual or probable diagnosis of acute myocardial infarction, with occupancy averaging 70-75% of bed capacity.

Pilot Study

A pilot study consisting of 5 subjects preceded the larger study. Participation criteria were the same as required for the larger sample. This smaller scale study was used to assess the adequacy of the newly constructed measurement tools. It also served to gather reactions to and overall impressions of

the major study from its participants. Based upon the findings of the pilot study, it was found that careful explanation of the questionnaire was helpful in providing a clear understanding of the intent of the section assessing contributing factors. For example, it was identified that some contributing factors could be misinterpreted without subjects keeping in mind "level of contribution" (e.g. confusing the level of influence with the amount of a factor). For instance, with "the number of drugs I have to take" confusing "very little" for meaning "I take very few drugs" versus "it has very little influence on my perception of severity".

Subjects who agreed to participate in the pilot study offered positive feedback regarding the nature of the study. All pilot study participants verbalized the hope that conducting the formal study would lead to a better understanding of the influences of the critical care unit environment and activities on future heart attack victims.

Sample

All patients who met the following criteria were considered for participation in the study:

      1) conversant in the English language,

      2) sufficiently oriented to person, place and time to answer questions appropriately.

      3) physically stable and able to tolerate a 10-15 minute questionnaire period.

4) diagnosed by a physician as having suffered a

myocardial infarction (as determined by clinical

history, presence of changes on an electrocardiogram,

and/or serial cardiac enzyme elevation).

Procedure

Patients meeting the above criteria were approached

regarding their willingness to participate in the research

project within 36-72 hours of admission (See Appendix C). To

maintain consistency of approach, the investigator explained

the research study, obtained written consent, conducted patient

interviews and gathered patient-related data for measurement of

clinical severity.

Subjects were assured verbally and in writing of the

confidentiality of their responses (See Appendix C and Appendix

D). After consent was obtained, a code number was assigned to

each subject. Thereafter, this code number was the subject's

only means of identification. Signed consent forms were kept

separately from all other research data so as to protect the

anonymity of subjects' responses.

Once patients had agreed to participate in the study, data

were collected in the following manner:

1) Patients were asked to rank the severity of their

myocardial infarction as they understood it using a

five-level ordinal scale. They were then asked to

rank the degree to which ten factors may have

contributed to their beliefs regarding the severity of
their infarct. (See Appendix A)

2) Patients were next asked to complete a
questionnaire identifying selected demographic data
about themselves (See Appendix E)

3) The investigator then collected necessary data from
the patient's record to allow ranking of clinical
severity using the Coronary Prognostic Index (C.P.I.)
(See Appendix B).

4) All data were then entered on a data collection
sheet to facilitate computer data entry and analysis.

Instruments

The primary area of interest, patients' perceptions of the
severity of their myocardial infarction, was measured using a
five-level ordinal scale modified from the Brown-Harvard
Infarction Study (Monteiro, 1979). (See Appendix A). The
Brown-Harvard Infarction Study measured patient perception of
infarct severity and compared it with his/her physician's
estimate of severity as well as with an objective rating
derived from clinical data. In the Brown-Harvard study,
patients were asked to rate the severity of their myocardial
infarction in an interview conducted six months after
experiencing their infarct. In the present study, a Likert
design was used for assisting patients in estimating their
perceived severity soon after experiencing their infarct.

Wording of the scale was changed from that used in the Brown-Harvard study. The tool used in the Brown-Harvard study phrased severity in terms of "risk of death". The investigator believed that using such phraseology might divert the patient's attention away from one's present environment and experience, and instead focus it on one's own mortality. In addition, a suggestion of this nature might increase the participant's anxiety level, placing subjects for this study at greater risk.

The second portion of the questionnaire asked patients to consider the contribution of various factors in their environment toward their overall estimate of infarct severity (See Appendix A). This portion of the tool was developed specifically for the present study. A Likert design was again used for identifying the degree to which each factor may have contributed to the patient's perception of his/her myocardial infarction. The tool consisted of 10 factors which are usually present in the critical care unit environment, and may impact upon the patient's perceptions of his/her well-being. (See Appendix A). Items were identified based upon literature describing patients' responses to stress in the critical care unit (Gentry & Haney, 1975; Patacky, Garvin & Schwirian, 1985; and Runions, 1985) and the investigator's clinical experience in critical care nursing.

Reliabilitiy and validity values for the tools classifying actual and perceived severity were not identified in the

literature. Face validity for the portion of the newly-constructed tool measuring factors contributing to patients' perceptions of the severity of their myocardial infarction, was established through review of its content by 20 nurses experienced in care of the critically ill.

Demographic data were also collected, based upon the impact that such variables are known to have upon patient response to myocardial infarction (Garrity & Klein, 1975; and Rosen & Bibring, 1966). (See Appendix E). This information was gathered for analysis to assist further understanding of the context from which individual patient responses were made.

Clinical severity of the patient's myocardial infarction was determined using a tool developed by Norris, et al.(1969). Unlike an earlier prognostic index (Peel, et. al., 1962), this index uses more objective criteria in predicting severity. The Coronary Prognostic Index (C.P.I.) was developed following a study of mortality of 757 patients admitted with myocardial infarction. It applies numerical weightings to six easily measured factors found to be associated with hospital mortality from acute myocardial infarction. The factors include age, electrocardiogram determination of position and extent of infarction, systolic blood pressure on admission, heart size, degree of lung congestion, and history of previous ischemia (See Appendix B). Each factor was given a numerical weighting between 0 and 1, the weighting being proportional to

the effect on mortality. This number was then multiplied by a
second value, which increased according to the importance of
the prognostic factor. The total score placed patients in one
of six groups. Each group had a gradually increasing mortality
rate from 3% (where the index score is less than 4) to 78%
(where it is 12 or greater). For the present study, the six
groups were numbered from 1 through 6 for easier comparison
with the scale measuring patient perception of severity. (See
Table 1). Reliability and validity values were not reported
for this index. However, a similar index using less objective
criteria reported a 91.7% accuracy (Hughes, Kalbfleisch, Brandt
& Costiloe, 1963). A more recent application of this index
(Norris, Barnaby, Brandt, Geary, Whitlock, Wild, &
Barratt-Boyes, 1984) confirmed its efficacy in evaluating
infarct severity by comparing severity as determined by heart
catheterization with severity as determined by the C.P.I.
score. Results of the study demonstrated similar evaluations
of infarct severity between the two methods.

Table 1
C.P.I. Score and Assigned Severity Level for Study Comparison

C.P.I. score	Assigned Severity Level
<4	1
4-5	2
6-7	3
8-9	4
10-11	5
12+	6

Chapter Four

Results

Data were collected during a 90 day period from January 27, 1986 to April 27, 1986. During this period, 81 persons that were admitted to the Medical Intensive Care Units of the two selected hospitals had a confirmed diagnosis of acute myocardial infarction. Twenty three of these patients were not approached regarding study participation for the following reasons: unstable physical status (N=7), disorientation (N=2), an inability to read, write, or speak the English language (N=2) and/or transfer out of the unit before data could be collected in the first 36-72 hours of hospitalization (N=12). A total of 58 patients met study criteria and were approached regarding study participation. Fifty patients (86%) gave consent to participate and completed study questionnaires.

Characteristics of Subjects

Gender

Eighty percent of the sample population obtained was male (N=40) with only 20% of the population being female (N=10). This type of gender distribution is commonly seen in patient populations with heart disease, it was not surprising that such a distribution was obtained in the study.

Age

Ages of participants ranged from 29 years to 83 years, with the majority of subjects (32%) falling in the 60-69 year old category. Mean age for this population was 60.12 years. (See Table 2).

Table 2
Distribution of Sample Population by Age

Age	N	Percentage
30-39 years*	4	8%
40-49 years	5	10%
50-59 years	13	26%
60-69 years	16	32%
70-79 years	10	20%
80-89 years	2	4%

*One 29 year old subject was included in this age group.

Ethnic Group

Ninety four percent of all participants were Caucasian (N=47). Only 2% of participants were Black (N=1), while 4% were Native Americans (N=2). No Spanish Americans or other ethnic groups were represented. The identification of Native Americans was surprising to the investigator, as there were no subjects that outwardly appeared to be of this heritage. This in turn raised the possibility that some participants may have misunderstood the term "Native American" to mean "born and raised in America," and indicated their ethnic group incorrectly.

Income

Income level was not reported by five of the study participants. Despite the assurance that all information would be held confidential and could be identified by code number only, it appears that these five subjects may have felt uncomfortable revealing their income level for the study. One's income level is generally considered to be quite personal. Considering the threat that is imposed on the individual in the event of a myocardial infarction, revealing one's income level may have increased a sense of threat for some participants. The mean reported income level fell between $15,000-$24,000/year. Considering the mean age of study participants, this finding was not totally unexpected. (See Table 3).

Table 3
Distribution of Sample Population by Income Level

Income	N	Percentage
<$5,000/yr.	4	9%
$5,000-$14,999/yr.	15	33%
$15,000-$24,999/yr.	9	20%
$25,000-$34,999/yr.	8	18%
$35,000-$50,000/yr.	6	13%
$50,000/yr.	3	7%

Education

All participants in the study had at least a 7th grade education, with the majority of participants (72%) having completed at least a high school education (N=36). Given the mean age of study participants, subjects were surprisingly

well-educated. One might expect that fewer of the older

subjects would have had the opportunity to attend high school,

let alone complete a high school education. (See Table 4).

Table 4
Distribution of Sample Population by Educational Level

Education	N	Percentage
Grades 1-6	0	0%
Grades 7-9	3	6%
Grades 10-11	11	22%
Grade 12	15	30%
3 yrs. or less college	9	18%
4yrs. college	6	12%
Beyond 4 yrs. college	6	12%

Infarction History

The experience of having a heart attack was new to most

study participants. That is, for 37 of the subjects (74%), this

was their first myocardial infarction. The remaining 13

subjects (26%) had suffered at least one previous heart attack

in the past. However, it is not known how many previous

infarcts they had suffered.

Previous Hospitalizations

Seventy eight percent of the study participants had been

admitted to the hospital in the past (N=39). For the remaining

22% (N=11), the event of hospitalization was a new experience.

While it is known that the majority of the participants had been

exposed to a hospital setting in the past, it is not known how

many had been exposed to a Critical Care Unit environment in their past admission(s).

Exposure to Myocardial Infarction

Many of the participants indicated that they had known others close to them who had experienced a heart attack in the past (N=38 or 76%). It could then be anticipated that for all but the remaining 24% (N=12), there was some degree of expectation as to what the nature of their experience or treatment would be like.

Research Question I

Spearman's Rho was used to analyze the first research question: Is there a relationship between patients' perceptions of the level of severity and the level of clinical severity in acute myocardial infarction?

A significant positive correlation ($r =.497$, $p < .01$) was obtained. The patients were able to perceive a level of severity that correlated with the measurement of the level of actual clinical severity.

Research Question II

Descriptive techniques were utilized to analyze the second research question: Do specific events occurring during the acute phase of hospitalization contribute to patients' perceptions of the severity of myocardial infarction?

Patient responses for the ten specific factors utilized in the questionnaire were examined by comparing the mean rank value

for each factor. Investigation of the contribution that these factors may make toward patients' perceptions of infarct severity revealed that certain factors do indeed influence perceptions. Overall mean values describing the degree of contribution toward perception of severity showed that seven of the ten factors displayed a mean greater than a neutral level of contribution (or a value greater than 3.0 on a scale of 1 to 5, wherein 1 = no contribution, 2 = very little contribution, 3 = neutral, 4 = very much contribution, and 5 = the most contribution). (See Table 5).

Table 5
Factors Contributing to Patient Perception of Severity in Order of Mean Value

Factor	Mean
What the doctors say and do	4.26
Amount of chest pain prior to admission	3.88
Frequency of B/P and pulse measurement	3.84
What the nurses say and do	3.66
Number of monitoring devices used	3.45
Number of drugs taken	3.32
Number of IV lines used	3.08
What family and friends say and do	2.82
Amount of chest pain since admission	2.66
Amount of activity allowed	2.60

Other Results of Interest

Analysis of the two research questions according to demographic subgroups revealed some additional findings of interest. The relationship between perceived severity and clinical severity suggested correlations in several of these subgroups. (See Table 6). However, it is necessary to point out that the significance of these correlations cannot be generalized given the small size of some of the demographic subgroups.

The mean values of factors contributing to perception of severity fell in a similar pattern for most demographic subgroups in the study population. Physician response to the patient's infarction consistently ranked highest (X=4.26) of the factors measured in all but three of the twenty six demographic subgroups identified: subjects with 3 years or less of college, subjects with incomes exceeding $50,000 per year, and subjects with no prior hospitalizations. In addition, female subjects and subjects between the ages of 80-89 years scored physician

Table 6
Spearman Rho Rank Coefficient Correlations Perceived Severity vs
Clinical Severity

Class	RHO	N
Males	.5558**	40
Females	.2266*	10
Ages 30 - 39	.7500**	4
Ages 40 - 49	.4000**	5
Ages 50 - 59	.4556**	13
Ages 60 - 69	.2781*	16
Ages 70 - 79	.7866**	10
Ages 80 - 89	0.0000	2
Caucasian	.4470**	47
Spanish American	0.0000	-
Black	0.0000	1
Native American	0.0000	2
Other	0.0000	-
Less than $5,000	.2500*	4
$5,000-14,999	.7561**	15
$15,000-24,999	-.3333*	9
$25,000-34,999	.0357	8
$35,000-50,000	-.0666	6
Over $50,000	-.1000	3
Less than 7 yrs Sch	--	--
7 - 9 yrs Sch	1.0000**	3
10 - 11 yrs Sch	.9206**	11
12th Grade	.4819**	15
Part College	.0925	9
4 yrs College	.4000**	6
4 yrs College Plus	.3333**	6
Yes - 1st Attack	.4246**	37
No - 1st Attack	.5266**	13
Yes - Hosp Admission	.4786**	39
No - Hosp Admission	.5140**	11
Very Mild Illness	1.0000**	4
Mild Illness	.3333**	6
Moderate Illness	.4347**	11
Severe Illness	.3600**	10
Very Severe Illness	.3469**	7
People near have had heart attack	.4735**	38
People near have not had heart attack	.3863**	12

 * significant at the .05 level
** significant at the .01 level

response relatively low. However, in these two groups physician response still ranked above all the other factors. (See Table 7).

Table 7
Lowest Mean Scores for Physician Response to a Patient's Myocardial Infarction

Subgroup	N	Mean
Women	10	3.7
80-89 year olds	3	3.5
3 yrs. or less college	9	3.3
Income $50,000/yr.	3	3.5
First admission	11	3.5

Subjects who rated physician response the highest were: subjects with incomes between $25,000-$34,999 per year and between $35,000-$50,000 per year, and subjects who had completed 4 years of college. (See Table 8).

Table 8
Highest Mean Scores for Physician Response to a Patient's Myocardial Infarction

Subgroup	N	Mean
4 yrs. of college	6	4.8
Income $25,000-$34,999/yr.	8	4.8
Income $35,000-$50,000/yr.	6	5.0

The amount of chest pain experienced prior to admission to the hospital was the second highest factor (X=3.9). Subjects with 3 years or less of college, those with 4 years of college or more, and those aged 80-89 years, rated chest pain prior to admission as having a notably lower level of contribution. (See Table 9).

Table 9
Lowest Mean Scores for Chest Pain Prior to Admission

Subgroup	N	Mean
3 yrs or less college	9	3.3
4 yrs college or more	6	3.5
Aged 80-89 yrs.	2	3.0

Subjects with incomes of less than $5,000 per year and with educations between the 7th-9th grades rated this factor as having a notably higher level of contribution. (See Table 10).

Table 10
Highest Mean Scores for Chest Pain Prior to Admission

Subgroup	N	Mean
Income <$5,000	4	4.5
7th-9th grade	3	4.7

The frequency with which blood pressure and pulse were taken
was rated third highest (X=3.8) and demonstrated more than a
neutral influence on perception of severity in all but one
demographic subgroup. Those subjects with a first time
infarction rated this factor eighth in respect to all other mean
scores for this group (X=2.5). Conversely, in the patient
subgroup with incomes between $5,000-$14,999 per year, this
factor received a mean score that was higher than in any other
subgroup (X=4.3).

The contribution of what the nurses say and do also indicated
more than a neutral degree of influence on perception of severity
(X= 3.7). Compared with other total group means, this factor
placed fourth among the factors given to participants. In the
youngest and oldest subgroups, along with the subgroups of
participants with 3 years or less of college, or with 4 years of
college, this factor showed a notably lower level of contribution.
(See Table 11).

Table 11
Lowest Mean Scores for Contribution of Nurse's Response

Subgroup	N	Mean
Age 30-39 yrs.	4	3.3
Age 80-89 yrs.	2	2.5
3 yrs or less college	9	3.0
4 yrs of college	6	3.3

Three groups -- those with incomes less than $5,000/year,
with 7th-9th grade or with 12th grade educations -- rated what
nurses say and do notably higher in contribution to perception
of severity. (See Table 12).

Table 12
Highest Mean Scores for Contribution of Nurse's Response

Subgroup	N	Mean
Income <$5,000/yr.	4	4.3
7th-9th grade	3	4.3
12th grade	15	4.1

Of additional interest, is that for the subgroup of 30-39
year olds, what the nurses say and do scored below the overall
mean (X=3.3), and what the doctors say and do scored above the
overall mean (X=4.8).

In addition, it is of interest to point out that in only one
subgroup -- those with incomes greater than $50,000 per year --
did the mean value of what the nurses say and do (X=3.7) exceed
that of what the doctors say and do (X=3.3). However, it must
also be noted that this group was very small (N=3 or 7%).

The remaining six factors identified for the study had
overall mean scores of less than 3.5. For the purpose of this
discussion, they are described as having very little or neutral

contribution to perception of severity. However, some interesting variances from the overall means for these factors were identified in some demographic subgroups, and are worth brief discussion here.

The number of monitoring devices used contributed above a neutral level to perception of severity (X=3.4). For participants age 40-49, and for those with a 12th grade education, this factor contributed more to perception of severity (X=4.0). This same factor contributed less to perception of severity for those with incomes greater than $50,000 per year (X=2.7), and for those with 4 years of college (X= 2.5).

The contribution of the number of drugs taken was also above a neutral level (X=3.3). A remarkably lower level of contribution was found for those between the ages of 80-89 years (X=1.0), and for those with a 7th-9th grade education (X=2.3). A notably higher level of contribution was found with those between the ages of 40-49 years (X=4.2) and those with incomes between $25,000-$34,999 per year (X=3.8).

Contribution of what family and/or friends say and do was below a neutral level (X=2.8) for the overall sample. Interestingly, those participants whose annual incomes were less

than $5,000 per year, or whose educational level was at the 12th grade level or less indicated that this factor had more than a neutral level of contribution (X=3.3 or greater). Subjects with 7th-9th grade educations and subjects with incomes less than $5,000 per year rated this factor the highest (X=4.0 and X=3.8 respectively). For these subgroups, the contribution of what family and friends say and do placed fourth and fifth among the ten study factors.

The mean value for the amount of activity allowed fell last among the ten contributing factors used in the study (X=2.6). However, subjects in five subgroups rated this factor as having greater than a neutral level of contribution. They were: subjects aged 30-39 years (X=3.5), and 80-89 years (X=3.0), those with incomes between $15,000-$24,999 per year (X=3.2), or $35,000-$49,999 per year (X=3.8), and those with 7th-9th grade educations (X=3.7). An appreciably lower level of contribution was noted among female participants (X=1.8) and among those making less than $5,000 per year (X=1.3).

Chapter 5

Discussion/Conclusions/Implications

Discussion

The major finding of this study that patient perception of severity level is closely related to the actual clinical severity level is in agreement with the findings cited in the literature. Weisman and Hackett (1969) found that individuals recovering from myocardial infarction demonstrated an awareness of their prognosis in spite of an essential lack of symptoms and the positive, optimistic environment provided by caregivers. In a more recent study (Germino and McCorkle, 1985), subjects with first time myocardial infarction acknowledged an awareness of their diagnosis, treatment and prognosis that fell just below the mid-point of an awareness scale from 0-16, where 16 indicated a high level of awareness.

Results of the present study point to a stronger correlation between perceived and clinical severity than that identified by Monteiro (1979). Rationale for this difference may be related to the fact that perceived estimate was obtained sooner after infarction than was obtained in Monteiro's study. Also, clinical estimate was obtained using an objective scale. The use of patients' physicians for estimating clinical severity in Monteiro's study may have resulted in a more subjective evaluation of severity.

Present findings are of interest in light of the time frame from point of diagnosis. Participants were asked to rank the severity of their myocardial infarction within the first 72 hours of hospitalization. Consequently, the basis for their decision regarding severity was primarily their critical care unit experience, as opposed to their functional level several months afterwards.

The presence of a significant positive correlation may in fact be influenced by the critical care unit environment itself. Patients who might otherwise believe that their myocardial infarction was mild (when in fact it wasn't) may be led to acknowledge its severity when faced with the intensity of the environment. Conversely, patients who may otherwise believe that their myocardial infarction was severe (when in fact it wasn't) may find reassurance in the close monitoring of their physical condition and encouragement to perform low level activity.

Given such a possibility, it would be of interest to have each patient identify their perceived level of severity a second time once outside the critical care unit and involved in a formalized rehabilitation program. In light of the the common clinical assumption that providing information influences awareness, a patient's estimate of severity may be expected to show a more positive correlation with clinical severity following involvement in a cardiac rehabilitation program. In

the two institutions utilized for the study, official contact with rehabilitation personnel did not occur until after subjects were transferred from the critical care unit.

Examination of factors contributing to perception of severity indicates that response of both physicians and nurses to a patient's myocardial infarction contributes to perception of severity at more than a neutral level. Indeed, physician response ranked as the factor with the highest score in level of contribution. It is apparent in this sample population that what physicians say and do was a chief factor influencing perception of severity. This is not surprising when one considers the serious nature of the study setting. In a life-threatening illness, the physician is particularly sought out for an evaluation of the patient's condition by both the patient and family. The physician is seen as the one in control of the treatment of the heart attack, with relatively little participation in the decision-making process by the patient during the acute phase of hospitalization.

The lower scores given to physician response by subjects with no previous hospitalizations may be attributed to patients expecting more of their physician (once hospitalized) than they actually received. Such expectations (the continuous presence of a physician, and thorough explanations of the physician's impressions) may be attributed to influence by the mass media.

It is not uncommon for patients in Critical Care Units to express such sentiments.

Not to be overlooked is the possibility that those subjects ranking physician response lower than the overall mean had physicians who tended to explain less of their condition and prognosis. If a physician's response is less than expected, the amount that their words and actions contribute to the patient's perception of severity will likely decrease. This too is a patient perception and may vary greatly from person to person.

The amount of chest pain experienced prior to hospitalization was rated as the factor with the second highest overall mean score in terms of contributing to the patient's perception of severity. Ancedotal information recorded while collecting study data suggested that patients often related the initial onset of chest pain and other classic symptoms as the actual moment of the heart attack. Consequently, if the initial set of symptoms were severe, one had had a severe heart attack at that time. One statement made by a subject who had received cardiopulmonary resuscitation was indicative of this belief: "Well, they had to revive me, so I guess my heart attack was pretty severe at the time, but it's not too bad now." Such statements are indicative of the possibility that patient perception of the heart attack as an isolated event instead of permanent myocardial damage may impact on their perception of severity. Not to be overlooked is the possibility that for

some, the experience of chest pain may be very mild or of brief duration, and therefore not contribute as much to the perception of severity. Pain experience on the whole, being the subjective experience that it is may also be minimized by those with a higher pain threshold or more stoic disposition. Such may be the case for those who scored this factor considerably below the overall mean value.

Frequency with which blood pressure and pulse were taken also fell consistently among the top four factors identified. This finding suggests that the act of monitoring a patient's vital signs sends a message regarding the nature of their illness. For example, if the patient's blood pressure and pulse are taken frequently, the patient in turn receives the message that they are seriously ill. On the other hand, if blood pressure and pulse are taken less often, the patient receives the message that they are less seriously ill and are doing better. However, it may be that frequent checks of one's blood pressure and pulse are expected in this environment and affect the patient's perception of severity neither one way or the other. Such may be the explanation behind the wide difference in scores for this factor in patients experiencing their first myocardial infarction.

The mean value of the contribution of nurses' responses to a patient's perception of severity was also one of the top four identified in the study. Variance below this mean value may

point toward the credibility that nurses may have among some groups in identifying severity of infarct. Variance below the overall mean may be related to the tendency of nurses in the critical care unit to defer direct questions regarding the severity of infarct to the patient's physician. In many cases, a formal evaluation of severity may not be made within the first 72 hours of admission, so that if an evaluative statement of severity is not made in the patient record, the nurse may not feel qualified to make such evaluative statements. This is further supported by the that physician response (what the doctors say and do) was always more influential than the nurse's response (what the nurses say and do).

One must also consider to whom the patient looks for a prognostic statement at this point of hospitalization. Once past this acute phase and into the rehabilitation phase (with subsequent exposure to a formal cardiac rehabilitation plan) where patients are in contact with nurses at a different level, what the nurses say and do may influence patient perceptions to a greater extent.

Additional findings of interest were noted in the factor exploring contribution to perception by the number of drugs taken. A mean value that was notably higher than the overall mean was identified in those aged 40-49. This may be attributed to the likelihood that younger subjects would be taking fewer medications prior to the myocardial infarction than would older

subjects. Hence, the institution of medical treatment requiring a patient who previously took no medications to take several pills each day is likely to affect his/her perception of the severity of the infarction.

The influence of family and friends on perception of severity fell surprisingly below many factors, ranking eighth out of ten. Possible explanation of this phenomenon may again relate to the tendency of both the family and patient to look to the physician for determination of severity during this most acute phase of illness. Socioeconomic status seemed to be a dividing line here however. Subjects falling within a lower socioeconomic class indicated a higher level of contribution by family and friends to perception of severity. Conversely, those subjects of higher socioeconomic status indicated a lower level of contribution to perception of severity by what family and friends say and do. Ethnic class could not be evaluated in regard to this due to the small number in each group.

Finally, the amount of activity that patients were allowed had the lowest overall mean score of the ten factors used in the study. This may point to patients' expectations that they would have restricted activity (at least during this phase of hospitalization). It is believed however that if this level of activity continued beyond the early acute phase, the comparison of one's own progress to that of others known to have suffered a

myocardial infarction as Rosen & Bibring describe (1969) would have a greater amount of influence.

Examination of correlation coefficients for various demographic subgroups suggest some additional areas of interest. Correlation of perceived severity with clinical severity was stronger for male patients than for female patients. While the number of female subjects was small, the variance in level of correlation is wide enough to suggest that females may perceive the severity of their infarct as being different from the defined level of clinical severity. Rationale for this difference is unclear, although it is unlikely that any one factor could be implicated.

Incidental findings in sample subgroups with a minimum of 10 subjects are also deserving of mention here. In patients between the ages of 50-79, those between the ages of 70-79 were most able to judge their level of severity of illness as measured by clinical severity. Patients between the ages of 60-69 years however, had the lowest correlation between perceived and clinical severity. Again, while no single factor may be identified in relation to this difference, surely the developmental changes associated with retirement should be considered in further investigation of a lower level of correlation with this age group.

The strong correlation between perceived and clinical severity present in study participants with annual incomes

between $5,000-$14,999 per year is also of interest. For reasons that are unclear, persons within this socioeconomic class perceived the severity of their myocardial infarction to be very close to that of clinical severity. Unfortunately,the small number of study participants in each income group prohibits meaningful comparison between groups. Future investigation may be of benefit here, considering the high level of correlation seen in this one income class.

A similar pattern of findings is evident when examining the correlation between perceived and clinical severity according to educational level. The results from this study suggests an inverse relationship between correlation of perceived and actual severity with respect to educational level. That is, as educational level decreases, correlation of perceived and actual severity increases. One possible explanation is that this group of patients may more readily accept the evaluation of infarct severity given to them by health care personnel. They may accept it as their own, whereas other groups may tend to continue to formulate their own opinions separate from health care personnel. Again, further research is needed to understand the nature of this relationship more clearly.

The relationship between perceived and actual severity also appears stronger in those patients with previous exposure to myocardial infarction. Exposure related to one's own experience or knowing someone close to oneself who has suffered a

myocardial infarction showed a higher level of correlation than did the lack of exposure in this manner. Previous experience with the events surrounding the treatment of a myocardial infarction (be it their own or someone else's) may in turn help patients to come to more realistic conclusions regarding their illness. In addition, previous experience may also lead them to take greater stock in the estimate of severity conveyed to them by direct sources (e.g. nurses and physicians); at least initially.

Effect on Subjects

Few potential risks existed for participants in this study. However, it was recognized that presentation of a scale ranking infarction severity could have caused subjects to muse over the question of severity. In a previously cited study (Monteiro, 1979), no adverse effects in the use of a similar questionnaire with post infarction patients was identified. Likewise, no subjects in the present study verbalized or displayed heightened anxiety during or after completion of the questionnaires. Rather, unsolicited comments regarding the nature of the study were positive, with interest expressed on the part of many to receive a copy of the research findings. Following completion of the questionnaires, all patients were given the opportunity to express any new or existing concerns that were raised in relationship to questions asked in the study.

Sources of Measurement Error

Several potential sources of measurement error existed in this study. It is possible that some study participants had medical backgrounds that altered the way in which they approached the event of having a myocardial infarction. It is known that one registered nurse and one retired physician participated in the study. In addition, the Critical Care Unit environment, with its vast array of sensory stimuli may have functioned as a situational contaminant. While most subjects were in private rooms, those who were in a four-bed ward may have been influenced to a greater extent by the other patients around them. Transitory personal factors such as fatigue or anxiety secondary to the onset of acute illness and consequent hospitalization may have also indirectly affected subjects' responses.

Response set bias may have also been encountered in the form of subjects repeatedly choosing extreme or mid-range responses to questions measuring contribution to perceived severity. Also, subjects may have felt obligated to indicate a higher level of contribution by what the nurses say and do knowing that the investigator was a nurse conducting a nursing oriented study.

It is also possible that the act of having subjects respond to statements measuring contributing factors may have altered their perceptions of certain events. However, concern regarding the implications of the occurrence of specific events was not

verbalized. Finally, it is possible that questions regarding the contribution of specific events may have been misinterpreted. Caution was taken to promote instrument clarity when giving subjects directions on the intent of the questionnaires. However, it is still possible that some questions may have been misunderstood.

Limitations

There are several considerations for others to take into account before applying the findings of this study. The sample population may be atypical because:

-The sample was of moderate size (50 subjects).
Demographic subgroups were small, with generalization of study findings applicable only to the patients admitted to the Medical Critical Care Units of two metropolitan hospitals in the Midwest.

-There was an unequal representation of patient genders (80% male) and ethnic background (94% Caucasian) in the sample.

-Study criteria prevented some of the sickest patients from participating (as evidenced by the low mean clinical severity score of 2.8); with the majority of subjects experiencing their first myocardial infarction. Consequently, the perceptions of patients

who were sickest were not included, and the perceptions
of patients with previous infarcts were less well
represented.

Also to be considered is that the tool used for collection
of data measuring the impact of specific factors on patient
perception of infarct severity was new and had been used only
once before in the pilot study for this research. Finally,
design of the study required early measurement of clinical
severity. Consequently, the tool most suitable for determining
infarct severity was older (developed in 1969) and did not
include data that is often utilized in measuring infarct
severity further after the infarct.

Conclusions

Findings from this research study suggest that patients do
indeed understand the severity of their myocardial infarction as
clinical measurement scales would identify it. How they arrive
at such similar conclusions seems to be influenced to a large
extent by the contact they have had with their physician. They
may have actually discussed how severe their myocardial
infarction was in his or her eyes. The contact patients have
with nurses also appears to influence perception of severity,
although not to the same extent that physician contact does. As
discussed earlier, while patients look to both physicians and
nurses for an appraisal of their status in the first few days of

hospitalization, information concerning prognosis (i.e. infarct
severity) is more readily sought from physicians.

Also contributing to one's perception of severity was the
amount of chest pain experienced prior to hospitalization.
Subjects may have associated the amount of chest pain
experienced with the occurrence of heart damage. Chains of
reasoning might then proceed that if one has experienced a great
deal of chest pain prior to hospitalization, one's heart attack
is likely to fall at the severe end of a severity scale.
Conversely, those who experienced little chest pain may tend to
believe that their heart attack is likely to fall at the mild
end of the scale.

The frequency with which blood pressure and pulse were
measured also appears to influence patients' beliefs regarding
the severity of their myocardial infarction. Here too it could
be asserted that as the frequency of checking blood pressure and
pulse is increased, the perceived severity increases. That is,
the patient may believe that these factors are being assessed
more frequently because a problem is likely to arise.
Conversely, as the frequency of checking blood pressure and
pulse decreases, so does the patient's perception of severity.

The number of monitoring devices used, drugs taken and
intravenous infusions received all exhibited a level of
influence just above the neutral point. It appears that more
invasive factors exert less influence than do some less invasive

factors. Perhaps it is as highly technical environments have become the routine, these items of scientific advances are anticipated and have less influence on patients' perceptions.

The response of family and friends, amount of chest pain since admission and the amount of activity allowed, all demonstrated less than a neutral level of influence on patient perception. Several potential reasons may be credited for this result. Of note in particular is the observation that all of these factors are under the control of health professionals -- most often the nurse. It may be that if these factors were less well controlled, they may exhibit a greater level of influence than was seen in this study.

Implications for Nursing Practice

Several implications for nursing practice become evident. First is consideration of the level of influence that family and/or friends has on the patient's perception of severity. Study findings would indicate that nurses' concerns that reactions of the patient's family will convey inaccurate messages to the patient regarding the severity of the myocardial infarction are perhaps unnecessary for many groups of patients. Results suggest that the influence of family and friends may be greater among lower socioeconomic groups -- those with 7th-9th grade educations and those with incomes less than $5,000 per year. However, in both instances the influence of what nurses and physicians say and do is greater. Reasons for this finding

may indeed be related to the patient recognizing the nurses and physicians as trusted resources for information -- at least in the acute phase of illness.

In light of study findings, it is apparent that when individualizing nursing interventions for patients with acute myocardial infarction nurses should consider those factors that appear to be most influential to patients' perceptions of severity. Understanding that physician response is highly influential to perception of severity suggests that nurses should maintain an awareness of the physician's prognosis/severity estimate for the patient, and if possible be present at the time it is discussed with the patient, to better support his/her understanding of the myocardial infarction. Nursing literature widely accepts that perceptual clarity is fundamental to quality nursing care (Perreault, 1985). Facilitating the patient's understanding of what is discussed by the physician, may be one way to promote perceptual clarity.

In addition, nurses should be reminded of the influential role they play in patients' formulations of perception of severity in the critical care unit. Generalized behaviors, in addition to more specific behaviors such as assessing vital signs and history of chest pain appear to convey a message to patients regarding the severity of the myocardial infarction. Keeping this in mind, nurses can augment their actions with explanations as to what they mean for the patient. Patients who

accept their illness and are intellectually aware of their recent critical status are excellent candidates for the initial phase of cardiac rehabilitation: an exploration of the meaning of the event in their lives.

Finally then, one is led to consider how "denial", a term often used to describe patient behavior following a myocardial infarction, fits with the findings of this study (wherein patient perception of severity correlated positively with actual clinical severity). If indeed patients responded honestly when asked how severe they believed their heart attack was, it appears as though they actually were aware of how severe it was. If then, patients are aware of how severe their illness is, denial is perhaps more of an external, behavioral response than an internal response: the patient may really know how severe his/her heart attack is, but choose to behave differently than severity warrants. This premise would apply to both patients who deny a high level of severity and fail to follow activity limitations, as well as to those who deny a low level of severity and persist in limiting their activity unnecessarily. Consequently, interventions for denial should not be aimed at attempting to convince the patient of the known severity level. Rather, assessment and interventions should address why it is that particular behavioral responses are used.

Recommendations for Future Investigation

The findings of this research study raise several questions that suggest a need for further investigation in this area. The author suggests the following as areas meriting further research.

It would be of interest to collect data later in the patient's hospitalization, after he/she has been involved in an inpatient, nurse-run cardiac rehabilitation program. This type of follow-up study would allow analysis of how the level of contribution for various factors may change. It may be that as the patient and family move further into the rehabilitative phase and learn more about myocardial infarctions, the influence on perception of severity by family and friends, activity level and by nursing staff will increase. It may even be possible to differentiate between factors that are highly influential early in hospitalization versus those that become more influential later on in the hospital stay and at the time of discharge. Identifying this type of pattern would have implications for patient teaching; directing the focus of explanation and instruction according to what factor is most influential at any given time.

It would also be of interest to repeat the study asking patients to rank order the ten factors from most influential to least influential in contributing to perception of severity. This type of tool would allow for comparison between factors of level of influence. Overall rankings could then be compared

with the present study's results. A variation of this approach would be to include spouses' rankings of contributing factors. Patient and spouse rankings could then be compared to assess how factors may have variable levels of influence according to the position from which they are experienced.

It would also be interesting to measure patient behavioral responses in light of the correlation between their perceived and their actual severity. For instance, do those who perceive a level of severity similar to that of clinical severity demonstrate earlier behavioral adjustment to their myocardial infarction

An answer to this research question would be of interest in light of findings by Garrity and Klein (1975) that patients who show early adjustment to myocardial infarction are more likely to survive six months than those who do not give evidence of early adjustment.

Whereas the number of patients in some demographic subgroups was too small to allow meaningful conclusions to be drawn, it would be of value to repeat the present study selecting out specific demographic characteristics (i.e. age groups, level of education, past experience with myocardial infarction, etc...). In so doing, response patterns that may only be suggested by the present study could be more thoroughly examined. In addition, the study could be repeated to include equal numbers of male and

female subjects to better identify any difference in responses according to patient gender.

It would also be of interest to conduct a similar study but utilize a more modern and/or detailed prognostic index. While the Norris Coronary Prognostic Index fit the needs of this study, and is still used in cardiovascular research (Norris, Barnaby, Brandt, Geary, Whitlock, Wild & Barratt-Boyes, 1984), additional criteria contributing to clinical severity estimates is not included. It is believed that a stronger study would result if a more modern severity index were identified.

Lastly, the study should be repeated in its present format. Whereas the tool measuring patient perception is new, additional research would facilitate the establishment of a reliability quotient. In turn then, potential nursing interventions facilitating perceptual clarity concerning the severity of one's myocardial infarction could be identified and investigated.

Summary

This research, while of an introductory nature, identifies several findings of significance. Primary among these findings is the suggestion that a significant, positive relationship may indeed exist between perceived and actual clinical severity in acute myocardial infarction. In addition, while it appears that nurses do influence patients' perceptions of severity, other factors demonstrate a higher level of influence. Certainly, many questions remain unanswered regarding the nature of the

relationship between perceived severity and actual severity, as well as the perceived influence of specific factors occurring during the acute phase of hospitalization. Nevertheless, one thing may be ascertained: the treatment of cardiovascular dysfunction involves more than simply treating the cardiovascular system.

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Appendix A

Most people have an idea about how severe their heart attack was. If heart attacks were put on a scale from mild to severe, how would you rank your attack?
Please place an X in the blank that best describes you.

(1) ____ Very mild; I have no heart damage.
(2) ____ Mild; I have very little heart damage.
(3) ____ Moderate; I have some heart damage.
(4) ____ Severe; I have quite a bit of heart damage.
(5) ____ Very Severe; I have very extensive heart damage.

Many different things can lead to this idea. Below is a list of some things that take place when people have had heart attacks, and which may have led you to make a judgement about how severe your heart attack was.

Please indicate below how much each of the following items may have contributed toward how severe you believe your heart attack was. Circle the number that best describes its contribution.

	Not at all	Very Little	Neutral	Very Much	− The Most
1. What my family (or friends) says and does about my heart attack.	1	2	3	4	5

	The Most	Very Much	Neutral	Very Little	Not at all
2. What the nurses say and do about my heart attack.	5	4	3	2	1

	Not at all	Very Little	Neutral	Very Much	The Most
3. What the doctor(s) says and does about my heart attack.	1	2	3	4	5

	Not at all	Very Little	Neutral	Very Much	The Most
4. The number of monitoring devices on me.	1	2	3	4	5

	The Most	Very Much	Neutral	Very Little	Not at all
5. How often the nurse takes my pulse and blood pressure.	5	4	3	2	1

	Not at all	Very Little	Neutral	Very Much	The Most
6. The number of drugs I have taken.	1	2	3	4	5

	Not at all	Very Little	Neutral	Very Much	The Most
7. How much chest pain I had before I came to the hospital.	1	2	3	4	5

	The Most	Very Much	Neutral	Very Little	Not at all
8. How much chest pain I have had since I came to the hospital.	5	4	3	2	1

	Not at all	Very Little	Neutral	Very Much	The Most
9. The number of IV (intravenous) lines I've had.	1	2	3	4	5

	Not at all	Very Little	Neutral	Very Much	The Most
10. The amount of activity I am allowed to have.	1	2	3	4	5

Appendix B

Weighting for the Six Factors Constructing the Coronary Prognostic Index (C.P.I.)

Factor	X	Y
Age (years)		
< 50	0.2	
50-59	0.4	
60-69	0.6	3.9
70-79	0.8	
80-89	1.0	
Position of Infarction		
Anterior Transmural	1.0	
Left Bundle Branch Block	1.0	
Inferior Transmural	0.7	2.8
Anterior Subendocardial	0.3	
Inferior Subendocardial	0.3	
Admission Systolic Blood Pressure		
< 55	1.0	
55-64	0.7	
65-74	0.6	
75-84	0.5	
85-94	0.4	10
95-104	0.3	
105-114	0.3	
115-124	0.1	
> 125	0	
Heart Size		
Normal	0	
Doubtfully Enlarged	0.5	1.5
Definitely Enlarged	1.0	
Lung Fields		
Normal	0	
Venous Congestion	0.3	
Interstitial Edema	0.6	3.3
Pulmonary Edema	1.0	
Previous Ischemia		
None	0	
Previous Angina		0.4
or Infarct	1.0	

Severity scores are arrived at by multiplication of
X and Y values in each category. Categories are then added
together for a total score determining infarct severity.

Appendix C

Verbal Explanation

(The following text will be given verbatim. Certain terms may
be changed at the time of delivery as needed to maximize
patients' understanding.)

Hello, my name is Denise Busman. I am a Registered Nurse at
Blodgett Hospital and am working on my Master's Degree in
Nursing at Grand Valley State College. As part of my program
requirements, I am conducting a research study with patients who
have had heart attacks. I am interested in exploring patients'
beliefs regarding how severe their heart attack was.

Your symptoms and laboratory studies have led your doctor to
determine that you have had a heart attack. Therefore, I am
interested in having you participate in my study. Your
participation, however, is completely voluntary and is in no way
expected as part of your hospitalization.

   Your decision to participate or to not participate will not
affect the care or services you receive here at Blodgett
Hospital (Butterworth Hospital). Should you agree to
participate in the project, you will be asked to complete a
brief questionnaire asking for background information about
yourself. You will then be asked to rank how severe you believe
your heart attack was on a scale of "mild" to "very severe."
Using a similar scale, you will also be asked to rank to what
degree various events have contributed to your beliefs about the
severity of your heart attack. The entire process will take you
about 10-15 minutes to complete.

As part of the study, I will be reviewing your hospital chart to
obtain the results of x-rays, electrocardiograms, and blood
pressure measurements that have been taken and are pertinent to
your diagnosis.

All of the information you complete is confidential. Your
identity will yot be revealed. You will not be asked to sign
any of the questionnaires you complete. Rather, you will be
assigned a code number, which will appear on the questionnaires
and on your consent form.

Your responses will be examined collectively with all others that are collected. Information about you specifically will not be shared. However, the inferences this study allows to be made will be shared with other nurses in order to improve the nursing care given to future patients. You may also receive a copy of the study findings if you so desire.

You are free to withdraw your consent and discontinue your participation in the project at any time without explanation or penalty. You may find some questions in the questionnaire that cause you to think about the meanings of some of the events that have taken place which you have not considered before. I will be happy to answer any questions you may have about the questionnaires or the remainder of my project, to the best of my ability.

Finally, you will be asked to read and sign a consent form agreeing to participate in the research study. You will be given a copy of this consent form that you may keep for your records.

Do you have any questions or concerns regarding any of the material I have covered?

Would you like to participate in this research project?

Appendix D

Consent Form

The research study has been explained to me, and I understand
that the purpose of the research is to examine people's beliefs
about the severity of their illness after having a heart
attack. I understand that if I agree to participate, I will be
asked to complete a brief questionnaire about myself and my
experiences in having a heart attack.

The project will take approximately 15 minutes of my time. I
further understand that:

___ The researcher will review my medical chart to obtain
the results of tests pertinent to my diagnosis that
have been performed while I have been in the hospital.

___ All information is confidential and my identity will
not be revealed.

___ My participation is voluntary.

___ My decision to participate will not affect the care or
services I receive.

___ I am free to withdraw my consent and to discontinue my
participation in the project at any time without
explanation.

___ Any questions I have about the project will be answered.

___ I will receive a copy of this signed consent form. On
the basis of the above statements, I agree to
participate in this project.

_____   _____

Participant's Signature   Date

_____   _____

Witness' Signature   Code #

___ Participant's Copy

___ Project Nurse's Copy

Code #_____

Appendix E

Below are a few questions concerning yourself and your background. Please respond to the best of your ability by filling in the blank or by circling the response that best describes you.

1. Sex:

    ____a) Male   (1)
    ____b) Female   (2)

2. Age:

    ____a) 30-39 years   (1)
    ____b) 40-49 years   (2)
    ____c) 50-59 years   (3)
    ____d) 60-69 years   (4)
    ____e) 70-79 years   (5)
    ____f) 80-89 years   (6)

3. Ethnic Background:

    ____a) Caucasian   (1)
    ____b) Spanish American   (2)
    ____c) Black   (3)
    ____d) Native American   (4)
    ____e) Other   (5)

4. Total Annual Income:

    ____a) Less than $5,000/year   (1)
    ____b) $5,000-14,999/year   (2)
    ____c) $15,000-24,999/year   (3)
    ____d) $25,000-34,999/year   (4)
    ____e) $35,000-50,000/year   (5)
    ____f) More than $50,000/year   (6)

5. Level of Schooling Completed:

    ____a) Fewer than seven years of school (grades 1-6) (1)
    ____b) Junior High School (grades 7-9) (2)
    ____c) Partial High School (grades 10-11) (3)
    ____d) High School (completed 12th grade) (4)
    ____e) Partial College education (3 years or less) (5)
    ____f) College education (4 years) (6)
    ____g) Beyond 4 years of college (7)

6. Is this your first heart attack

    ____a) Yes   (1)
    ____b) No   (2)

7. Have you been admitted to the hospital in the past

    ____a) Yes   (1)
    ____b) No   (2)

If you answered Yes, please rate how severe that illness was using the scale below:

    ____ Very mild; it was a minor illness. (1)
    ____ Mild; I was ill for a short period of time. (2)
    ____ Moderate; I was moderately ill. (3)
    ____ Severe; I was very ill. (4)
    ____ Very severe; I was extremely ill and could have
          died. (5)

8. Do you know other people close to you who have had heart attacks?

    ____a) Yes   (1)
    ____b) No   (2)

Total Sample Group

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	3- 6%	12- 24%	24- 48%	11- 22%	- -	- -	- -	50	143	2.9
Clinical Severity	7- 14%	14- 28%	18- 36%	8- 16%	1- 2%	2- 4%	- -	50	138	2.8
Family	11- 22%	11- 22%	8- 16%	16- 32%	4- 8%	- -	- -	50	141	2.8
Nurses	3- 6%	5- 10%	7- 14%	26- 52%	9- 18%	- -	- -	50	183	3.7
Physicians	1- 2%	5- 10%	1- 2%	16- 32%	27- 54%	- -	- -	50	213	4.3
Monitors	4- 8%	9- 18%	7- 14%	19- 39%	10- 20%	- -	- -	49	169	3.4
Vital Signs	1- 2%	5- 10%	7- 14%	25- 50%	12- 24%	- -	- -	50	192	3.8
Drugs	2- 4%	12- 24%	9- 18%	22- 44%	5- 10%	- -	- -	50	166	3.3
Chest Pain - Before	2- 4%	4- 8%	5- 10%	26- 52%	13- 26%	- -	- -	50	194	3.9
Chest Pain - After	6- 12%	23- 46%	8- 16%	8- 16%	5- 10%	- -	- -	50	133	2.7
I-V Lines	5- 10%	12- 24%	13- 26%	14- 28%	6- 12%	- -	- -	50	154	3.1
Activity	7- 14%	23- 46%	8- 16%	7- 14%	5- 10%	- -	- -	50	130	2.6
Sex	40- 80%	10- 20%	- -	- -	- -	- -	- -	50	60	1.2
Age	4- 8%	5- 10%	13- 26%	16- 32%	10- 20%	2- 4%	- -	50	179	3.6
Ethnic Class	47- 94%	- -	1- 2%	2- 4%	- -	- -	- -	50	58	1.2
Income Level	4- 9%	15- 33%	9- 20%	8- 18%	6- 13%	3- 7%	- -	45	141	3.1
Education	- -	3- 6%	11- 22%	15- 30%	9- 18%	6- 12%	6- 12%	50	222	4.4
1st M.I.	37- 74%	13- 26%	- -	- -	- -	- -	- -	50	63	1.3
Past Admissions	39- 78%	11- 22%	- -	- -	- -	- -	- -	50	61	1.2
Perceived Severity	4- 11%	6- 16%	11- 29%	10- 26%	7- 18%	- -	- -	38	124	3.3
Exposure	38- 76%	12- 24%	- -	- -	- -	- -	- -	50	62	1.2

The column heading numbers refer to the order of responses.

Appendix G - <u>Gender</u>

Male

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	3- 8%	9- 23%	19- 48%	9- 23%	- -	- -	- -	40	114	2.9
Clinical Severity	6- 15%	11- 28%	14- 35%	7- 18%	1- 3%	1- 3%	- -	40	109	2.7
Family	9- 23%	9- 23%	5- 13%	14- 35%	3- 8%	- -	- -	40	113	2.8
Nurses	2- 5%	3- 8%	7- 18%	20- 50%	8- 20%	- -	- -	40	149	3.7
Physicians	1- 3%	2- 5%	1- 3%	12- 30%	24- 60%	- -	- -	40	176	4.4
Monitors	3- 8%	6- 15%	5- 13%	17- 44%	8- 21%	- -	- -	39	138	3.5
Vital Signs	- -	4- 10%	7- 18%	19- 48%	10- 25%	- -	- -	40	155	3.9
Drugs	1- 3%	9- 23%	8- 20%	18- 45%	4- 10%	- -	- -	40	135	3.4
Chest Pain - Before	1- 3%	4- 10%	3- 8%	20- 50%	12- 30%	- -	- -	40	158	4.0
Chest Pain - After	4- 10%	18- 45%	6- 15%	7- 18%	5- 13%	- -	- -	40	111	2.8
I-V Lines	3- 8%	8- 20%	11- 28%	12- 30%	6- 15%	- -	- -	40	130	3.3
Activity	4- 10%	17- 43%	7- 18%	7- 18%	5- 13%	- -	- -	40	112	2.8
Sex	40-100%	- -	- -	- -	- -	- -	- -	40	40	1.0
Age	4- 10%	4- 10%	10- 25%	13- 33%	8- 20%	1- 3%	- -	40	140	3.5
Ethnic Class	37- 93%	- -	1- 3%	2- 5%	- -	- -	- -	40	48	1.2
Income Level	1- 3%	12- 32%	8- 22%	7- 19%	6- 16%	3- 8%	- -	37	125	3.4
Education	- -	3- 8%	8- 20%	12- 30%	5- 13%	6- 15%	6- 15%	40	181	4.5
1st M.I.	30- 75%	10- 25%	- -	- -	- -	- -	- -	40	50	1.3
Past Admissions	31- 78%	9- 23%	- -	- -	- -	- -	- -	40	49	1.2
Perceived Severity	3- 10%	4- 13%	7- 23%	10- 32%	7- 23%	- -	- -	31	107	3.5
Exposure	29- 73%	11- 28%	- -	- -	- -	- -	- -	40	51	1.3

The column heading numbers refer to the order of responses.

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Appendix G - <u>Gender</u> (continued)

Female

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 30%	5- 50%	2- 20%	- -	- -	- -	10	29	2.9
Clinical Severity	1- 10%	3- 30%	4- 40%	1- 10%	- -	1- 10%	- -	10	29	2.9
Family	2- 20%	2- 20%	3- 30%	2- 20%	1- 10%	- -	- -	10	28	2.8
Nurses	1- 10%	2- 20%	- -	6- 60%	1- 10%	- -	- -	10	34	3.4
Physicians	- -	3- 30%	- -	4- 40%	3- 30%	- -	- -	10	37	3.7
Monitors	1- 10%	3- 30%	2- 20%	2- 20%	2- 20%	- -	- -	10	31	3.1
Vital Signs	1- 10%	1- 10%	- -	6- 60%	2- 20%	- -	- -	10	37	3.7
Drugs	1- 10%	3- 30%	1- 10%	4- 40%	1- 10%	- -	- -	10	31	3.1
Chest Pain - Before	1- 10%	- -	2- 20%	6- 60%	1- 10%	- -	- -	10	36	3.6
Chest Pain - After	2- 20%	5- 50%	2- 20%	1- 10%	- -	- -	- -	10	22	2.2
I-V Lines	2- 20%	4- 40%	2- 20%	2- 20%	- -	- -	- -	10	24	2.4
Activity	3- 30%	6- 60%	1- 10%	- -	- -	- -	- -	10	18	1.8
Sex	- -	10-100%	- -	- -	- -	- -	- -	10	20	2.0
Age	- -	1- 10%	3- 30%	3- 30%	2- 20%	1- 10%	- -	10	39	3.9
Ethnic Class	10-100%	- -	- -	- -	- -	- -	- -	10	10	1.0
Income Level	3- 38%	3- 38%	1- 13%	1- 13%	- -	- -	- -	8	16	2.0
Education	- -	- -	3- 30%	3- 30%	4- 40%	- -	- -	10	41	4.1
1st M.I.	7- 70%	3- 30%	- -	- -	- -	- -	- -	10	13	1.3
Past Admissions	8- 80%	2- 20%	- -	- -	- -	- -	- -	10	12	1.2
Perceived Severity	1- 14%	2- 29%	4- 57%	- -	- -	- -	- -	7	17	2.4
Exposure	9- 90%	1- 10%	- -	- -	- -	- -	- -	10	11	1.1

The column heading numbers refer to the order of responses.

Age 30-39 years

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 75%	1- 25%	- -	- -	- -	- -	4	9	2.3
Clinical Severity	3- 75%	1- 25%	- -	- -	- -	- -	- -	4	5	1.3
Family	1- 25%	2- 50%	- -	1- 25%	- -	- -	- -	4	9	2.3
Nurses	1- 25%	- -	1- 25%	1- 25%	1- 25%	- -	- -	4	13	3.3
Physicians	- -	- -	- -	1- 25%	3- 75%	- -	- -	4	19	4.8
Monitors	- -	1- 25%	1- 25%	- -	2- 50%	- -	- -	4	15	3.8
Vital Signs	- -	- -	2- 50%	- -	2- 50%	- -	- -	4	16	4.0
Drugs	- -	1- 25%	1- 25%	1- 25%	1- 25%	- -	- -	4	14	3.5
Chest Pain - Before	- -	- -	1- 25%	2- 50%	1- 25%	- -	- -	4	16	4.0
Chest Pain - After	- -	1- 25%	2- 50%	- -	1- 25%	- -	- -	4	13	3.3
I-V Lines	- -	- -	2- 50%	1- 25%	1- 25%	- -	- -	4	15	3.8
Activity	- -	1- 25%	1- 25%	1- 25%	1- 25%	- -	- -	4	14	3.5
Sex	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Age	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Ethnic Class	3- 75%	- -	1- 25%	- -	- -	- -	- -	4	6	1.5
Income Level	- -	3- 75%	- -	- -	1- 25%	- -	- -	4	11	2.8
Education	- -	- -	1- 25%	1- 25%	1- 25%	1- 25%	- -	4	18	4.5
1st M.I.	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Past Admissions	2- 50%	2- 50%	- -	- -	- -	- -	- -	4	6	1.5
Perceived Severity	- -	1- 50%	- -	- -	1- 50%	- -	- -	2	7	3.5
Exposure	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0

The column heading numbers refer to the order of responses.

Appendix H - <u>Age</u> (continued)

Age 40-49 years

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	1- 20%	3- 60%	1- 20%	- -	- -	- -	5	15	3.0
Clinical Severity	- -	2- 40%	3- 60%	- -	- -	- -	- -	5	13	2.6
Family	- -	1- 20%	3- 60%	- -	1- 20%	- -	- -	5	16	3.2
Nurses	- -	- -	1- 20%	3- 60%	1- 20%	- -	- -	5	20	4.0
Physicians	- -	- -	- -	3- 60%	2- 40%	- -	- -	5	22	4.4
Monitors	- -	- -	1- 20%	3- 60%	1- 20%	- -	- -	5	20	4.0
Vital Signs	- -	1- 20%	1- 20%	2- 40%	1- 20%	- -	- -	5	18	3.6
Drugs	- -	- -	1- 20%	2- 40%	2- 40%	- -	- -	5	21	4.2
Chest Pain - Before	- -	- -	- -	5-100%	- -	- -	- -	5	20	4.0
Chest Pain - After	1- 20%	1- 20%	1- 20%	2- 40%	- -	- -	- -	5	14	2.8
I-V Lines	- -	2- 40%	1- 20%	2- 40%	- -	- -	- -	5	15	3.0
Activity	- -	3- 60%	- -	2- 40%	- -	- -	- -	5	14	2.8
Sex	4- 80%	1- 20%	- -	- -	- -	- -	- -	5	6	1.2
Age	- -	5-100%	- -	- -	- -	- -	- -	5	10	2.0
Ethnic Class	5-100%	- -	- -	- -	- -	- -	- -	5	5	1.0
Income Level	1- 20%	1- 20%	1- 20%	2- 40%	- -	- -	- -	5	14	2.8
Education	- -	- -	1- 20%	2- 40%	1- 20%	1- 20%	- -	5	22	4.4
1st M.I.	4- 80%	1- 20%	- -	- -	- -	- -	- -	5	6	1.2
Past Admissions	4- 80%	1- 20%	- -	- -	- -	- -	- -	5	6	1.2
Perceived Severity	2- 50%	- -	- -	1- 25%	1- 25%	- -	- -	4	11	2.8
Exposure	3- 60%	2- 40%	- -	- -	- -	- -	- -	5	7	1.4

The column heading numbers refer to the order of responses.

Age 50-59 years

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 8%	1- 8%	7- 54%	4- 31%	- -	- -	- -	13	40	3.1
Clinical Severity	1- 8%	5- 38%	5- 38%	2- 15%	- -	- -	- -	13	34	2.6
Family	3- 23%	3- 23%	1- 8%	4- 31%	2- 15%	- -	- -	13	38	2.9
Nurses	- -	1- 8%	2- 15%	7- 54%	3- 23%	- -	- -	13	51	3.9
Physicians	1- 8%	- -	- -	4- 31%	8- 62%	- -	- -	13	57	4.4
Monitors	- -	3- 25%	2- 17%	4- 33%	3- 25%	- -	- -	12	43	3.6
Vital Signs	- -	- -	2- 15%	7- 54%	4- 31%	- -	- -	13	54	4.2
Drugs	- -	3- 23%	4- 31%	6- 46%	- -	- -	- -	13	42	3.2
Chest Pain - Before	1- 8%	1- 8%	- -	4- 31%	7- 54%	- -	- -	13	54	4.2
Chest Pain - After	1- 8%	9- 69%	- -	1- 8%	2- 15%	- -	- -	13	33	2.5
I-V Lines	- -	4- 31%	4- 31%	4- 31%	1- 8%	- -	- -	13	41	3.2
Activity	4- 31%	5- 38%	1- 8%	2- 15%	1- 8%	- -	- -	13	30	2.3
Sex	10- 77%	3- 23%	- -	- -	- -	- -	- -	13	16	1.2
Age	- -	- -	13-100%	- -	- -	- -	- -	13	39	3.0
Ethnic Class	13-100%	- -	- -	- -	- -	- -	- -	13	13	1.0
Income Level	3- 23%	1- 8%	1- 8%	4- 31%	2- 15%	2- 15%	- -	13	46	3.5
Education	- -	1- 8%	3- 23%	2- 15%	2- 15%	1- 8%	4- 31%	13	63	4.8
1st M.I.	9- 69%	4- 31%	- -	- -	- -	- -	- -	13	17	1.3
Past Admissions	11- 85%	2- 15%	- -	- -	- -	- -	- -	13	15	1.2
Perceived Severity	- -	3- 30%	3- 30%	1- 10%	3- 30%	- -	- -	10	34	3.4
Exposure	12- 92%	1- 8%	- -	- -	- -	- -	- -	13	14	1.1

The column heading numbers refer to the order of responses.

Age 60-69 years

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 6%	4- 25%	9- 56%	2- 13%	- -	- -	- -	16	44	2.8
Clinical Severity	2- 13%	4- 25%	6- 38%	4- 25%	- -	- -	- -	16	44	2.8
Family	3- 19%	4- 25%	1- 6%	8- 50%	- -	- -	- -	16	46	2.9
Nurses	- -	2- 13%	2- 13%	11- 69%	1- 6%	- -	- -	16	59	3.7
Physicians	- -	2- 13%	1- 6%	6- 38%	7- 44%	- -	- -	16	66	4.1
Monitors	1- 6%	2- 13%	2- 13%	11- 69%	- -	- -	- -	16	55	3.4
Vital Signs	- -	3- 19%	2- 13%	10- 63%	1- 6%	- -	- -	16	57	3.6
Drugs	- -	4- 25%	3- 19%	9- 56%	- -	- -	- -	16	53	3.3
Chest Pain - Before	- -	2- 13%	4- 25%	6- 38%	4- 25%	- -	- -	16	60	3.8
Chest Pain - After	1- 6%	6- 38%	5- 31%	2- 13%	2- 13%	- -	- -	16	46	2.9
I-V Lines	2- 13%	3- 19%	5- 31%	5- 31%	1- 6%	- -	- -	16	48	3.0
Activity	2- 13%	7- 44%	3- 19%	2- 13%	2- 13%	- -	- -	16	43	2.7
Sex	13- 81%	3- 19%	- -	- -	- -	- -	- -	16	19	1.2
Age	- -	- -	- -	16-100%	- -	- -	- -	16	64	4.0
Ethnic Class	16-100%	- -	- -	- -	- -	- -	- -	16	16	1.0
Income Level	- -	4- 33%	3- 25%	2- 17%	3- 25%	- -	- -	12	40	3.3
Education	- -	1- 6%	3- 19%	6- 38%	3- 19%	2- 13%	1- 6%	16	69	4.3
1st M.I.	10- 63%	6- 38%	- -	- -	- -	- -	- -	16	22	1.4
Past Admissions	12- 75%	4- 25%	- -	- -	- -	- -	- -	16	20	1.3
Perceived Severity	2- 17%	1- 8%	4- 33%	4- 33%	1- 8%	- -	- -	12	37	3.1
Exposure	10- 63%	6- 38%	- -	- -	- -	- -	- -	16	22	1.4

The column heading numbers refer to the order of responses.

Age 70-79 years

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 10%	2- 20%	4- 40%	3- 30%	- -	- -	- -	10	29	2.9
Clinical Severity	1- 10%	2- 20%	4- 40%	1- 10%	1- 10%	1- 10%	- -	10	32	3.2
Family	3- 30%	1- 10%	2- 20%	3- 30%	1- 10%	- -	- -	10	28	2.8
Nurses	1- 10%	2- 20%	1- 10%	3- 30%	3- 30%	- -	- -	10	35	3.5
Physicians	- -	2- 20%	- -	2- 20%	6- 60%	- -	- -	10	42	4.2
Monitors	2- 20%	2- 20%	1- 10%	1- 10%	4- 40%	- -	- -	10	33	3.3
Vital Signs	- -	1- 10%	- -	5- 50%	4- 40%	- -	- -	10	42	4.2
Drugs	- -	4- 40%	- -	4- 40%	2- 20%	- -	- -	10	34	3.4
Chest Pain - Before	- -	1- 10%	- -	9- 90%	- -	- -	- -	10	38	3.8
Chest Pain - After	2- 20%	6- 60%	- -	2- 20%	- -	- -	- -	10	22	2.2
I-V Lines	1- 10%	3- 30%	1- 10%	2- 20%	3- 30%	- -	- -	10	33	3.3
Activity	- -	7- 70%	3- 30%	- -	- -	- -	- -	10	23	2.3
Sex	8- 80%	2- 20%	- -	- -	- -	- -	- -	10	12	1.2
Age	- -	- -	- -	- -	10-100%	- -	- -	10	50	5.0
Ethnic Class	8- 80%	- -	- -	2- 20%	- -	- -	- -	10	16	1.6
Income Level	- -	6- 67%	2- 22%	- -	- -	1- 11%	- -	9	24	2.7
Education	- -	- -	3- 30%	4- 40%	1- 10%	1- 10%	1- 10%	10	43	4.3
1st M.I.	8- 80%	2- 20%	- -	- -	- -	- -	- -	10	12	1.2
Past Admissions	8- 80%	2- 20%	- -	- -	- -	- -	- -	10	12	1.2
Perceived Severity	- -	1- 13%	2- 25%	4- 50%	1- 13%	- -	- -	8	29	3.6
Exposure	8- 80%	2- 20%	- -	- -	- -	- -	- -	10	12	1.2

The column heading numbers refer to the order of responses.

Appendix H - <u>Age</u> (continued)

Age 80-89 years

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	1- 50%	- -	1- 50%	- -	- -	- -	2	6	3.0
Clinical Severity	- -	- -	- -	1- 50%	- -	1- 50%	- -	2	10	5.0
Family	1- 50%	- -	1- 50%	- -	- -	- -	- -	2	4	2.0
Nurses	1- 50%	- -	- -	1- 50%	- -	- -	- -	2	5	2.5
Physicians	- -	1- 50%	- -	- -	1- 50%	- -	- -	2	7	3.5
Monitors	1- 50%	1- 50%	- -	- -	- -	- -	- -	2	3	1.5
Vital Signs	1- 50%	- -	- -	1- 50%	- -	- -	- -	2	5	2.5
Drugs	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Chest Pain - Before	1- 50%	- -	- -	- -	1- 50%	- -	- -	2	6	3.0
Chest Pain - After	1- 50%	- -	- -	1- 50%	- -	- -	- -	2	5	2.5
I-V Lines	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Activity	1- 50%	- -	- -	- -	1- 50%	- -	- -	2	6	3.0
Sex	1- 50%	1- 50%	- -	- -	- -	- -	- -	2	3	1.5
Age	- -	- -	- -	- -	- -	2-100%	- -	2	12	6.0
Ethnic Class	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Income Level	- -	- -	2-100%	- -	- -	- -	- -	2	6	3.0
Education	- -	1- 50%	- -	- -	1- 50%	- -	- -	2	7	3.5
1st M.I.	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Past Admissions	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Perceived Severity	- -	- -	2-100%	- -	- -	- -	- -	2	6	3.0
Exposure	1- 50%	1- 50%	- -	- -	- -	- -	- -	2	3	1.5

The column heading numbers refer to the order of responses.

Appendix I - Ethnic Class

Caucasian

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	3- 6%	11- 23%	23- 49%	10- 21%	- -	- -	- -	47	134	2.9
Clinical Severity	7- 15%	13- 28%	18- 38%	8- 17%	- -	1- 2%	- -	47	125	2.7
Family	10- 21%	10- 21%	8- 17%	16- 34%	3- 6%	- -	- -	47	133	2.8
Nurses	3- 6%	5- 11%	6- 13%	25- 53%	8- 17%	- -	- -	47	171	3.6
Physicians	1- 2%	5- 11%	1- 2%	15- 32%	25- 53%	- -	- -	47	199	4.2
Monitors	4- 9%	9- 20%	7- 15%	19- 41%	7- 15%	- -	- -	46	154	3.3
Vital Signs	1- 2%	5- 11%	7- 15%	25- 53%	9- 19%	- -	- -	47	177	3.8
Drugs	2- 4%	12- 26%	9- 19%	21- 45%	3- 6%	- -	- -	47	152	3.2
Chest Pain - Before	2- 4%	4- 9%	5- 11%	24- 51%	12- 26%	- -	- -	47	181	3.9
Chest Pain - After	5- 11%	22- 47%	7- 15%	8- 17%	5- 11%	- -	- -	47	127	2.7
I-V Lines	5- 11%	11- 23%	13- 28%	14- 30%	4- 9%	- -	- -	47	142	3.0
Activity	7- 15%	22- 47%	7- 15%	7- 15%	4- 9%	- -	- -	47	120	2.6
Sex	37- 79%	10- 21%	- -	- -	- -	- -	- -	47	57	1.2
Age	3- 6%	5- 11%	13- 28%	16- 34%	8- 17%	2- 4%	- -	47	168	3.6
Ethnic Class	47-100%	- -	- -	- -	- -	- -	- -	47	47	1.0
Income Level	4- 10%	13- 31%	8- 19%	8- 19%	6- 14%	3- 7%	- -	42	134	3.2
Education	- -	3- 6%	11- 23%	13- 28%	8- 17%	6- 13%	6- 13%	47	209	4.4
1st M.I.	34- 72%	13- 28%	- -	- -	- -	- -	- -	47	60	1.3
Past Admissions	38- 81%	9- 19%	- -	- -	- -	- -	- -	47	56	1.2
Perceived Severity	4- 11%	6- 16%	11- 30%	9- 24%	7- 19%	- -	- -	37	120	3.2
Exposure	36- 77%	11- 23%	- -	- -	- -	- -	- -	47	58	1.2

The column heading numbers refer to the order of responses.

Appendix I - Ethnic Class (continued)

Spanish American

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Clinical Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Family	- -	- -	- -	- -	- -	- -	- -	0	0	-
Nurses	- -	- -	- -	- -	- -	- -	- -	0	0	-
Physicians	- -	- -	- -	- -	- -	- -	- -	0	0	-
Monitors	- -	- -	- -	- -	- -	- -	- -	0	0	-
Vital Signs	- -	- -	- -	- -	- -	- -	- -	0	0	-
Drugs	- -	- -	- -	- -	- -	- -	- -	0	0	-
Chest Pain - Before	- -	- -	- -	- -	- -	- -	- -	0	0	-
Chest Pain - After	- -	- -	- -	- -	- -	- -	- -	0	0	-
I-V Lines	- -	- -	- -	- -	- -	- -	- -	0	0	-
Activity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Sex	- -	- -	- -	- -	- -	- -	- -	0	0	-
Age	- -	- -	- -	- -	- -	- -	- -	0	0	-
Ethnic Class	- -	- -	- -	- -	- -	- -	- -	0	0	-
Income Level	- -	- -	- -	- -	- -	- -	- -	0	0	-
Education	- -	- -	- -	- -	- -	- -	- -	0	0	-
1st M.I.	- -	- -	- -	- -	- -	- -	- -	0	0	-
Past Admissions	- -	- -	- -	- -	- -	- -	- -	0	0	-
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Exposure	- -	- -	- -	- -	- -	- -	- -	0	0	-

The column heading numbers refer to the order of responses.

Black

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	1-100%	- -	- -	- -	- -	- -	1	2	2.0
Clinical Severity	- -	1-100%	- -	- -	- -	- -	- -	1	2	2.0
Family	1-100%	- -	- -	- -	- -	- -	- -	1	1	1.0
Nurses	- -	- -	1-100%	- -	- -	- -	- -	1	3	3.0
Physicians	- -	- -	- -	1-100%	- -	- -	- -	1	4	4.0
Monitors	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
Vital Signs	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
Drugs	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
Chest Pain - Before	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
Chest Pain - After	- -	- -	1-100%	- -	- -	- -	- -	1	3	3.0
I-V Lines	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
Activity	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
Sex	1-100%	- -	- -	- -	- -	- -	- -	1	1	1.0
Age	1-100%	- -	- -	- -	- -	- -	- -	1	1	1.0
Ethnic Class	- -	- -	1-100%	- -	- -	- -	- -	1	3	3.0
Income Level	- -	1-100%	- -	- -	- -	- -	- -	1	2	2.0
Education	- -	- -	- -	- -	1-100%	- -	- -	1	5	5.0
1st M.I.	1-100%	- -	- -	- -	- -	- -	- -	1	1	1.0
Past Admissions	- -	1-100%	- -	- -	- -	- -	- -	1	2	2.0
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	- -
Exposure	1-100%	- -	- -	- -	- -	- -	- -	1	1	1.0

The column heading numbers refer to the order of responses.

Appendix I - <u>Ethnic Class</u> (continued)

Native American

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	1- 50%	1- 50%	- -	- -	- -	2	7	3.5
Clinical Severity	- -	- -	- -	- -	1- 50%	1- 50%	- -	2	11	5.5
Family	- -	1- 50%	- -	- -	1- 50%	- -	- -	2	7	3.5
Nurses	- -	- -	- -	1- 50%	1- 50%	- -	- -	2	9	4.5
Physicians	- -	- -	- -	- -	2-100%	- -	- -	2	10	5.0
Monitors	- -	- -	- -	- -	2-100%	- -	- -	2	10	5.0
Vital Signs	- -	- -	- -	- -	2-100%	- -	- -	2	10	5.0
Drugs	- -	- -	- -	1- 50%	1- 50%	- -	- -	2	9	4.5
Chest Pain - Before	- -	- -	- -	2-100%	- -	- -	- -	2	8	4.0
Chest Pain - After	1- 50%	1- 50%	- -	- -	- -	- -	- -	2	3	1.5
I-V Lines	- -	1- 50%	- -	- -	1- 50%	- -	- -	2	7	3.5
Activity	- -	1- 50%	1- 50%	- -	- -	- -	- -	2	5	2.5
Sex	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Age	- -	- -	- -	- -	2-100%	- -	- -	2	10	5.0
Ethnic Class	- -	- -	- -	2-100%	- -	- -	- -	2	8	4.0
Income Level	- -	1- 50%	1- 50%	- -	- -	- -	- -	2	5	2.5
Education	- -	- -	- -	2-100%	- -	- -	- -	2	8	4.0
1st M.I.	2-100%	- -	- -	- -	- -	- -	- -	2	2	1.0
Past Admissions	1- 50%	1- 50%	- -	- -	- -	- -	- -	2	3	1.5
Perceived Severity	- -	- -	- -	1-100%	- -	- -	- -	1	4	4.0
Exposure	1- 50%	1- 50%	- -	- -	- -	- -	- -	2	3	1.5

The column heading numbers refer to the order of responses.

Appendix I - Ethnic Class (continued)

Other

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Clinical Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Family	- -	- -	- -	- -	- -	- -	- -	0	0	-
Nurses	- -	- -	- -	- -	- -	- -	- -	0	0	-
Physicians	- -	- -	- -	- -	- -	- -	- -	0	0	-
Monitors	- -	- -	- -	- -	- -	- -	- -	0	0	-
Vital Signs	- -	- -	- -	- -	- -	- -	- -	0	0	-
Drugs	- -	- -	- -	- -	- -	- -	- -	0	0	-
Chest Pain - Before	- -	- -	- -	- -	- -	- -	- -	0	0	-
Chest Pain - After	- -	- -	- -	- -	- -	- -	- -	0	0	-
I-V Lines	- -	- -	- -	- -	- -	- -	- -	0	0	-
Activity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Sex	- -	- -	- -	- -	- -	- -	- -	0	0	-
Age	- -	- -	- -	- -	- -	- -	- -	0	0	-
Ethnic Class	- -	- -	- -	- -	- -	- -	- -	0	0	-
Income Level	- -	- -	- -	- -	- -	- -	- -	0	0	-
Education	- -	- -	- -	- -	- -	- -	- -	0	0	-
1st M.I.	- -	- -	- -	- -	- -	- -	- -	0	0	-
Past Admissions	- -	- -	- -	- -	- -	- -	- -	0	0	-
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Exposure	- -	- -	- -	- -	- -	- -	- -	0	0	-

The column heading numbers refer to the order of responses.

Appendix J - <u>Income Level</u>

Income Less Than $5000 Per Year

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	2- 50%	2- 50%	- -	- -	- -	4	14	3.5
Clinical Severity	- -	- -	2- 50%	2- 50%	- -	- -	- -	4	14	3.5
Family	- -	1- 25%	1- 25%	- -	2- 50%	- -	- -	4	15	3.8
Nurses	- -	- -	- -	3- 75%	1- 25%	- -	- -	4	17	4.3
Physicians	- -	- -	- -	2- 50%	2- 50%	- -	- -	4	18	4.5
Monitors	- -	1- 33%	- -	1- 33%	1- 33%	- -	- -	3	11	3.7
Vital Signs	- -	- -	- -	3- 75%	1- 25%	- -	- -	4	17	4.3
Drugs	- -	2- 50%	- -	1- 25%	1- 25%	- -	- -	4	13	3.3
Chest Pain - Before	- -	- -	- -	2- 50%	2- 50%	- -	- -	4	18	4.5
Chest Pain - After	1- 25%	2- 50%	- -	1- 25%	- -	- -	- -	4	9	2.3
I-V Lines	- -	3- 75%	1- 25%	- -	- -	- -	- -	4	9	2.3
Activity	3- 75%	1- 25%	- -	- -	- -	- -	- -	4	5	1.3
Sex	1- 25%	3- 75%	- -	- -	- -	- -	- -	4	7	1.8
Age	- -	1- 25%	3- 75%	- -	- -	- -	- -	4	11	2.8
Ethnic Class	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Income Level	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Education	- -	1- 25%	1- 25%	1- 25%	1- 25%	- -	- -	4	14	3.5
1st M.I.	2- 50%	2- 50%	- -	- -	- -	- -	- -	4	6	1.5
Past Admissions	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Perceived Severity	1- 25%	2- 50%	1- 25%	- -	- -	- -	- -	4	8	2.0
Exposure	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0

The column heading numbers refer to the order of responses.

Appendix J - <u>Income Level</u> (continued)

Income $5,000 to $14,000 Per Year

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	6- 40%	5- 33%	4- 27%	- -	- -	- -	15	43	2.9
Clinical Severity	4- 27%	3- 20%	7- 47%	- -	- -	1- 7%	- -	15	37	2.5
Family	3- 20%	1- 7%	3- 20%	6- 40%	2- 13%	- -	- -	15	48	3.2
Nurses	2- 13%	1- 7%	1- 7%	6- 40%	5- 33%	- -	- -	15	56	3.7
Physicians	- -	2- 13%	- -	5- 33%	8- 53%	- -	- -	15	64	4.3
Monitors	1- 7%	3- 20%	1- 7%	5- 33%	5- 33%	- -	- -	15	55	3.7
Vital Signs	- -	1- 7%	2- 13%	6- 40%	6- 40%	- -	- -	15	62	4.1
Drugs	- -	7- 47%	1- 7%	5- 33%	2- 13%	- -	- -	15	47	3.1
Chest Pain - Before	- -	- -	1- 7%	11- 73%	3- 20%	- -	- -	15	62	4.1
Chest Pain - After	1- 7%	8- 53%	3- 20%	2- 13%	1- 7%	- -	- -	15	39	2.6
I-V Lines	2- 13%	4- 27%	2- 13%	6- 40%	1- 7%	- -	- -	15	45	3.0
Activity	2- 13%	8- 53%	2- 13%	2- 13%	1- 7%	- -	- -	15	37	2.5
Sex	12- 80%	3- 20%	- -	- -	- -	- -	- -	15	18	1.2
Age	3- 20%	1- 7%	1- 7%	4- 27%	6- 40%	- -	- -	15	54	3.6
Ethnic Class	13- 87%	- -	1- 7%	1- 7%	- -	- -	- -	15	20	1.3
Income Level	- -	15-100%	- -	- -	- -	- -	- -	15	30	2.0
Education	- -	- -	7- 47%	6- 40%	1- 7%	1- 7%	- -	15	56	3.7
1st M.I.	14- 93%	1- 7%	- -	- -	- -	- -	- -	15	16	1.1
Past Admissions	11- 73%	4- 27%	- -	- -	- -	- -	- -	15	19	1.3
Perceived Severity	1- 9%	1- 9%	4- 36%	3- 27%	2- 18%	- -	- -	11	37	3.4
Exposure	13- 87%	2- 13%	- -	- -	- -	- -	- -	15	17	1.1

The column heading numbers refer to the order of responses.

Appendix J - Income Level (continued)

Income $15,000 to $24,999 Per Year

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	2- 22%	4- 44%	3- 33%	- -	- -	- -	9	28	3.1
Clinical Severity	- -	2- 22%	1- 11%	4- 44%	1- 11%	1- 11%	- -	9	34	3.8
Family	2- 22%	2- 22%	1- 11%	4- 44%	- -	- -	- -	9	25	2.8
Nurses	1- 11%	- -	1- 11%	5- 56%	2- 22%	- -	- -	9	34	3.8
Physicians	- -	1- 11%	- -	5- 56%	3- 33%	- -	- -	9	37	4.1
Monitors	1- 11%	1- 11%	- -	5- 56%	2- 22%	- -	- -	9	33	3.7
Vital Signs	1- 11%	1- 11%	- -	5- 56%	2- 22%	- -	- -	9	33	3.7
Drugs	2- 22%	- -	1- 11%	5- 56%	1- 11%	- -	- -	9	30	3.3
Chest Pain - Before	1- 11%	- -	- -	5- 56%	3- 33%	- -	- -	9	36	4.0
Chest Pain - After	4- 44%	2- 22%	- -	2- 22%	1- 11%	- -	- -	9	21	2.3
I-V Lines	2- 22%	1- 11%	1- 11%	3- 33%	2- 22%	- -	- -	9	29	3.2
Activity	1- 11%	3- 33%	1- 11%	1- 11%	3- 33%	- -	- -	9	29	3.2
Sex	8- 89%	1- 11%	- -	- -	- -	- -	- -	9	10	1.1
Age	- -	1- 11%	1- 11%	3- 33%	2- 22%	2- 22%	- -	9	39	4.3
Ethnic Class	8- 89%	- -	- -	1- 11%	- -	- -	- -	9	12	1.3
Income Level	- -	- -	9-100%	- -	- -	- -	- -	9	27	3.0
Education	- -	2- 22%	2- 22%	3- 33%	1- 11%	- -	1- 11%	9	34	3.8
1st M.I.	7- 78%	2- 22%	- -	- -	- -	- -	- -	9	11	1.2
Past Admissions	7- 78%	2- 22%	- -	- -	- -	- -	- -	9	11	1.2
Perceived Severity	1- 14%	- -	4- 57%	1- 14%	1- 14%	- -	- -	7	22	3.1
Exposure	6- 67%	3- 33%	- -	- -	- -	- -	- -	9	12	1.3

The column heading numbers refer to the order of responses.

Appendix J - Income Level (continued)

Income $25,000 to $34,999 Per Year

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 13%	2- 25%	5- 63%	- -	- -	- -	- -	8	20	2.5
Clinical Severity	- -	4- 50%	4- 50%	- -	- -	- -	- -	8	20	2.5
Family	- -	2- 25%	3- 38%	3- 38%	- -	- -	- -	8	25	3.1
Nurses	- -	1- 13%	1- 13%	6- 75%	- -	- -	- -	8	29	3.6
Physicians	- -	- -	- -	2- 25%	6- 75%	- -	- -	8	38	4.8
Monitors	- -	1- 13%	3- 38%	2- 25%	2- 25%	- -	- -	8	29	3.6
Vital Signs	- -	1- 13%	2- 25%	3- 38%	2- 25%	- -	- -	8	30	3.8
Drugs	- -	- -	2- 25%	6- 75%	- -	- -	- -	8	30	3.8
Chest Pain - Before	1- 13%	- -	1- 13%	4- 50%	2- 25%	- -	- -	8	30	3.8
Chest Pain - After	- -	4- 50%	2- 25%	1- 13%	1- 13%	- -	- -	8	23	2.9
I-V Lines	- -	1- 13%	3- 38%	3- 38%	1- 13%	- -	- -	8	28	3.5
Activity	- -	4- 50%	1- 13%	3- 38%	- -	- -	- -	8	23	2.9
Sex	7- 88%	1- 13%	- -	- -	- -	- -	- -	8	9	1.1
Age	- -	2- 25%	4- 50%	2- 25%	- -	- -	- -	8	24	3.0
Ethnic Class	8-100%	- -	- -	- -	- -	- -	- -	8	8	1.0
Income Level	- -	- -	- -	8-100%	- -	- -	- -	8	32	4.0
Education	- -	- -	1- 13%	2- 25%	2- 25%	1- 13%	2- 25%	8	41	5.1
1st M.I.	5- 63%	3- 38%	- -	- -	- -	- -	- -	8	11	1.4
Past Admissions	8-100%	- -	- -	- -	- -	- -	- -	8	8	1.0
Perceived Severity	- -	2- 29%	- -	3- 43%	2- 29%	- -	- -	7	26	3.7
Exposure	5- 63%	3- 38%	- -	- -	- -	- -	- -	8	11	1.4

The column heading numbers refer to the order of responses.

Appendix J - Income Level (continued)

Income $35,000 to $50,000 Per Year

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	5- 83%	1- 17%	- -	- -	- -	6	19	3.2
Clinical Severity	2- 33%	- -	2- 33%	2- 33%	- -	- -	- -	6	16	2.7
Family	1- 17%	4- 67%	- -	1- 17%	- -	- -	- -	6	13	2.2
Nurses	- -	1- 17%	1- 17%	4- 67%	- -	- -	- -	6	21	3.5
Physicians	- -	- -	- -	- -	6-100%	- -	- -	6	30	5.0
Monitors	1- 17%	1- 17%	1- 17%	3- 50%	- -	- -	- -	6	18	3.0
Vital Signs	- -	1- 17%	2- 33%	2- 33%	1- 17%	- -	- -	6	21	3.5
Drugs	- -	1- 17%	3- 50%	2- 33%	- -	- -	- -	6	19	3.2
Chest Pain - Before	- -	1- 17%	1- 17%	2- 33%	2- 33%	- -	- -	6	23	3.8
Chest Pain - After	- -	1- 17%	1- 17%	2- 33%	2- 33%	- -	- -	6	23	3.8
I-V Lines	1- 17%	1- 17%	3- 50%	- -	1- 17%	- -	- -	6	17	2.8
Activity	- -	1- 17%	3- 50%	1- 17%	1- 17%	- -	- -	6	20	3.3
Sex	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Age	1- 17%	- -	2- 33%	3- 50%	- -	- -	- -	6	19	3.2
Ethnic Class	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Income Level	- -	- -	- -	- -	6-100%	- -	- -	6	30	5.0
Education	- -	- -	- -	2- 33%	1- 17%	3- 50%	- -	6	31	5.2
1st M.I.	2- 33%	4- 67%	- -	- -	- -	- -	- -	6	10	1.7
Past Admissions	4- 67%	2- 33%	- -	- -	- -	- -	- -	6	8	1.3
Perceived Severity	- -	- -	1- 25%	2- 50%	1- 25%	- -	- -	4	16	4.0
Exposure	4- 67%	2- 33%	- -	- -	- -	- -	- -	6	8	1.3

The column heading numbers refer to the order of responses.

Income More Than $50,000 Per Year

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	2- 67%	- -	1- 33%	- -	- -	- -	- -	3	5	1.7
Clinical Severity	1- 33%	2- 67%	- -	- -	- -	- -	- -	3	5	1.7
Family	2- 67%	- -	- -	1- 33%	- -	- -	- -	3	6	2.0
Nurses	- -	- -	2- 67%	- -	1- 33%	- -	- -	3	11	3.7
Physicians	1- 33%	- -	- -	1- 33%	1- 33%	- -	- -	3	10	3.3
Monitors	1- 33%	- -	1- 33%	1- 33%	- -	- -	- -	3	8	2.7
Vital Signs	- -	- -	1- 33%	2- 67%	- -	- -	- -	3	11	3.7
Drugs	- -	1- 33%	1- 33%	- -	1- 33%	- -	- -	3	10	3.3
Chest Pain - Before	- -	1- 33%	- -	1- 33%	1- 33%	- -	- -	3	11	3.7
Chest Pain - After	- -	3-100%	- -	- -	- -	- -	- -	3	6	2.0
I-V Lines	- -	- -	2- 67%	- -	1- 33%	- -	- -	3	11	3.7
Activity	- -	2- 67%	1- 33%	- -	- -	- -	- -	3	7	2.3
Sex	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0
Age	- -	- -	2- 67%	- -	1- 33%	- -	- -	3	11	3.7
Ethnic Class	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0
Income Level	- -	- -	- -	- -	- -	3-100%	- -	3	18	6.0
Education	- -	- -	- -	- -	- -	- -	3-100%	3	21	7.0
1st M.I.	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0
Past Admissions	2- 67%	1- 33%	- -	- -	- -	- -	- -	3	4	1.3
Perceived Severity	- -	- -	- -	1- 50%	1- 50%	- -	- -	2	9	4.5
Exposure	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0

The column heading numbers refer to the order of responses.

Appendix K - Educational Level

Fewer Than Seven Years of School (Grades 1-6)

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Clinical Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Family	- -	- -	- -	- -	- -	- -	- -	0	0	-
Nurses	- -	- -	- -	- -	- -	- -	- -	0	0	-
Physicians	- -	- -	- -	- -	- -	- -	- -	0	0	-
Monitors	- -	- -	- -	- -	- -	- -	- -	0	0	-
Vital Signs	- -	- -	- -	- -	- -	- -	- -	0	0	-
Drugs	- -	- -	- -	- -	- -	- -	- -	0	0	-
Chest Pain - Before	- -	- -	- -	- -	- -	- -	- -	0	0	-
Chest Pain - After	- -	- -	- -	- -	- -	- -	- -	0	0	-
I-V Lines	- -	- -	- -	- -	- -	- -	- -	0	0	-
Activity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Sex	- -	- -	- -	- -	- -	- -	- -	0	0	-
Age	- -	- -	- -	- -	- -	- -	- -	0	0	-
Ethnic Class	- -	- -	- -	- -	- -	- -	- -	0	0	-
Income Level	- -	- -	- -	- -	- -	- -	- -	0	0	-
Education	- -	- -	- -	- -	- -	- -	- -	0	0	-
1st M.I.	- -	- -	- -	- -	- -	- -	- -	0	0	-
Past Admissions	- -	- -	- -	- -	- -	- -	- -	0	0	-
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	-
Exposure	- -	- -	- -	- -	- -	- -	- -	0	0	-

The column heading numbers refer to the order of responses.

Junior High School (Grades 7-9)

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	- -	1- 33%	2- 67%	- -	- -	- -	3	11	4.0
Clinical Severity	- -	- -	- -	3-100%	- -	- -	- -	3	12	4.0
Family	- -	- -	1- 33%	1- 33%	1- 33%	- -	- -	3	12	4.0
Nurses	- -	- -	- -	2- 67%	1- 33%	- -	- -	3	13	4.3
Physicians	- -	- -	- -	1- 33%	2- 67%	- -	- -	3	14	4.7
Monitors	- -	1- 50%	- -	1- 50%	- -	- -	- -	2	6	3.0
Vital Signs	- -	- -	- -	3-100%	- -	- -	- -	3	12	4.0
Drugs	1- 33%	1- 33%	- -	1- 33%	- -	- -	- -	3	7	2.3
Chest Pain - Before	- -	- -	- -	1- 33%	2- 6	- -	- -	3	14	4.7
Chest Pain - After	- -	2- 67%	- -	1- 33%	- -	- -	- -	3	8	2.7
I-V Lines	1- 33%	1- 33%	- -	1- 33%	- -	- -	- -	3	7	2.3
Activity	1- 33%	- -	- -	- -	2- 67%	- -	- -	3	11	3.7
Sex	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0
Age	- -	- -	1- 33%	1- 33%	- -	1- 33%	- -	3	13	4.3
Ethnic Class	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0
Income Level	1- 33%	- -	2- 67%	- -	- -	- -	- -	3	7	2.3
Education	- -	3-100%	- -	- -	- -	- -	- -	3	6	2.0
1st M.I.	2- 67%	1- 33%	- -	- -	- -	- -	- -	3	4	1.3
Past Admissions	3-100%	- -	- -	- -	- -	- -	- -	3	3	1.0
Perceived Severity	- -	- -	2- 67%	- -	1- 33%	- -	- -	3	11	3.7
Exposure	2- 67%	1- 33%	- -	- -	- -	- -	- -	3	4	1.3

The column heading numbers refer to the order of responses.

Appendix K - <u>Educational Level</u> (continued)

Partial High School (Grades 10-11)

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 27%	5- 45%	3- 27%	- -	- -	- -	11	33	3.0
Clinical Severity	2- 18%	4- 36%	4- 36%	1- 9%	- -	- -	- -	11	26	2.4
Family	2- 18%	1- 9%	1- 9%	5- 45%	2- 18%	- -	- -	11	37	3.4
Nurses	1- 9%	2- 18%	- -	5- 45%	3- 27%	- -	- -	11	40	3.6
Physicians	- -	2- 18%	- -	5- 45%	4- 36%	- -	- -	11	44	4.0
Monitors	- -	3- 27%	1- 9%	3- 27%	4- 36%	- -	- -	11	41	3.7
Vital Signs	- -	1- 9%	2- 18%	4- 36%	4- 36%	- -	- -	11	44	4.0
Drugs	- -	5- 45%	1- 9%	4- 36%	1- 9%	- -	- -	11	34	3.1
Chest Pain - Before	- -	- -	1- 9%	6- 55%	4- 36%	- -	- -	11	47	4.3
Chest Pain - After	- -	7- 64%	2- 18%	2- 18%	- -	- -	- -	11	28	2.5
I-V Lines	1- 9%	2- 18%	3- 27%	3- 27%	2- 18%	- -	- -	11	36	3.3
Activity	1- 9%	6- 55%	2- 18%	2- 18%	- -	- -	- -	11	27	2.5
Sex	8- 73%	3- 27%	- -	- -	- -	- -	- -	11	14	1.3
Age	1- 9%	1- 9%	3- 27%	3- 27%	3- 27%	- -	- -	11	39	3.5
Ethnic Class	11-100%	- -	- -	- -	- -	- -	- -	11	11	1.0
Income Level	1- 9%	7- 64%	2- 18%	1- 9%	- -	- -	- -	11	25	2.3
Education	- -	- -	11-100%	- -	- -	- -	- -	11	33	3.0
1st M.I.	8- 73%	3- 27%	- -	- -	- -	- -	- -	11	14	1.3
Past Admissions	9- 82%	2- 18%	- -	- -	- -	- -	- -	11	13	1.2
Perceived Severity	1- 11%	2- 22%	2- 22%	3- 33%	1- 11%	- -	- -	9	28	3.1
Exposure	9- 82%	2- 18%	- -	- -	- -	- -	- -	11	13	1.2

The column heading numbers refer to the order of responses.

Appendix K - <u>Educational Level</u> (continued)

High School (Completed 12th Grade)

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 20%	8- 53%	4- 27%	- -	- -	- -	15	46	3.1
Clinical Severity	2- 13%	3- 20%	5- 33%	3- 20%	1- 7%	1- 7%	- -	15	46	3.1
Family	- -	5- 33%	2- 13%	7- 47%	1- 7%	- -	- -	15	49	3.3
Nurses	- -	1- 7%	1- 7%	9- 60%	4- 27%	- -	- -	15	61	4.1
Physicians	- -	- -	- -	4- 27%	11- 73%	- -	- -	15	71	4.7
Monitors	- -	1- 7%	2- 13%	8- 53%	4- 27%	- -	- -	15	60	4.0
Vital Signs	- -	1- 7%	1- 7%	9- 60%	4- 27%	- -	- -	15	61	4.1
Drugs	- -	3- 20%	3- 20%	8- 53%	1- 7%	- -	- -	15	52	3.5
Chest Pain - Before	- -	- -	1- 7%	11- 73%	3- 20%	- -	- -	15	62	4.1
Chest Pain - After	3- 20%	5- 33%	2- 13%	2- 13%	3- 20%	- -	- -	15	42	2.8
I-V Lines	1- 7%	4- 27%	4- 27%	5- 33%	1- 7%	- -	- -	15	46	3.1
Activity	3- 20%	7- 47%	3- 20%	1- 7%	1- 7%	- -	- -	15	35	2.3
Sex	12- 80%	3- 20%	- -	- -	- -	- -	- -	15	18	1.2
Age	1- 7%	2- 13%	2- 13%	6- 40%	4- 27%	- -	- -	15	55	3.7
Ethnic Class	13- 87%	- -	- -	2- 13%	- -	- -	- -	15	21	1.4
Income Level	1- 7%	6- 43%	3- 21%	2- 14%	2- 14%	- -	- -	14	40	2.9
Education	- -	- -	- -	15-100%	- -	- -	- -	15	60	4.0
1st M.I.	10- 67%	5- 33%	- -	- -	- -	- -	- -	15	20	1.3
Past Admissions	12- 80%	3- 20%	- -	- -	- -	- -	- -	15	18	1.2
Perceived Severity	1- 8%	1- 8%	3- 25%	5- 42%	2- 17%	- -	- -	12	42	3.5
Exposure	10- 67%	5- 33%	- -	- -	- -	- -	- -	15	20	1.3

The column heading numbers refer to the order of responses.

Appendix K - <u>Educational Level</u> (continued)

Partial College Education (3 Years or Less)

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 11%	4- 44%	2- 22%	2- 22%	- -	- -	- -	9	23	2.6
Clinical Severity	- -	4- 44%	4- 44%	- -	- -	1- 11%	- -	9	26	2.9
Family	4- 44%	2- 22%	1- 11%	2- 22%	- -	- -	- -	9	19	2.1
Nurses	1- 11%	2- 22%	2- 22%	4- 44%	- -	- -	- -	9	27	3.0
Physicians	- -	3- 33%	1- 11%	4- 44%	1- 11%	- -	- -	9	30	3.3
Monitors	1- 11%	3- 33%	1- 11%	3- 33%	1- 11%	- -	- -	9	27	3.0
Vital Signs	1- 11%	1- 11%	1- 11%	5- 56%	1- 11%	- -	- -	9	31	3.4
Drugs	1- 11%	1- 11%	2- 22%	3- 33%	2- 22%	- -	- -	9	31	3.4
Chest Pain - Before	1- 11%	1- 11%	2- 22%	4- 44%	1- 11%	- -	- -	9	30	3.3
Chest Pain - After	1- 11%	4- 44%	3- 33%	1- 11%	- -	- -	- -	9	22	2.4
I-V Lines	1- 11%	4- 44%	1- 11%	2- 22%	1- 11%	- -	- -	9	25	2.8
Activity	1- 11%	5- 56%	1- 11%	1- 11%	1- 11%	- -	- -	9	23	2.6
Sex	5- 56%	4- 44%	- -	- -	- -	- -	- -	9	13	1.4
Age	1- 11%	1- 11%	2- 22%	3- 33%	1- 11%	1- 11%	- -	9	32	3.6
Ethnic Class	8- 89%	- -	1- 11%	- -	- -	- -	- -	9	11	1.2
Income Level	1- 17%	1- 17%	1- 17%	2- 33%	1- 17%	- -	- -	6	19	3.2
Education	- -	- -	- -	- -	9-100%	- -	- -	9	45	5.0
1st M.I.	8- 89%	1- 11%	- -	- -	- -	- -	- -	9	10	1.1
Past Admissions	5- 56%	4- 44%	- -	- -	- -	- -	- -	9	13	1.4
Perceived Severity	1- 25%	2- 50%	1- 25%	- -	- -	- -	- -	4	8	2.0
Exposure	8- 89%	1- 11%	- -	- -	- -	- -	- -	9	10	1.1

The column heading numbers refer to the order of responses.

Appendix K - Educational Level (continued)

College Education (4 Years)

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	1- 17%	5- 83%	- -	- -	- -	- -	6	17	2.8
Clinical Severity	2- 33%	- -	3- 50%	1- 17%	- -	- -	- -	6	15	2.5
Family	2- 33%	2- 33%	2- 33%	- -	- -	- -	- -	6	12	2.0
Nurses	1- 17%	- -	1- 17%	4- 67%	- -	- -	- -	6	20	3.3
Physicians	- -	- -	- -	1- 17%	5- 83%	- -	- -	6	29	4.8
Monitors	2- 33%	1- 17%	1- 17%	2- 33%	- -	- -	- -	6	15	2.5
Vital Signs	- -	1- 17%	2- 33%	1- 17%	2- 33%	- -	- -	6	22	3.7
Drugs	- -	1- 17%	2- 33%	3- 50%	- -	- -	- -	6	20	3.3
Chest Pain - Before	- -	2- 33%	1- 17%	2- 33%	1- 17%	- -	- -	6	20	3.3
Chest Pain - After	1- 17%	1- 17%	1- 17%	2- 33%	1- 17%	- -	- -	6	19	3.2
I-V Lines	1- 17%	- -	2- 33%	2- 33%	1- 17%	- -	- -	6	20	3.3
Activity	1- 17%	2- 33%	1- 17%	1- 17%	1- 17%	- -	- -	6	17	2.8
Sex	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Age	1- 17%	1- 17%	1- 17%	2- 33%	1- 17%	- -	- -	6	19	3.2
Ethnic Class	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Income Level	- -	1- 20%	- -	1- 20%	3- 60%	- -	- -	5	21	4.2
Education	- -	- -	- -	- -	- -	6-100%	- -	6	36	6.0
1st M.I.	4- 67%	2- 33%	- -	- -	- -	- -	- -	6	8	1.3
Past Admissions	5- 83%	1- 17%	- -	- -	- -	- -	- -	6	7	1.2
Perceived Severity	1- 20%	- -	2- 40%	1- 20%	1- 20%	- -	- -	5	16	3.2
Exposure	3- 50%	3- 50%	- -	- -	- -	- -	- -	6	9	1.5

The column heading numbers refer to the order of responses.

Beyond 4 Years of College

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	2- 33%	1- 17%	3- 50%	- -	- -	- -	- -	6	13	2.2
Clinical Severity	1- 17%	3- 50%	2- 33%	- -	- -	- -	- -	6	13	2.2
Family	3- 50%	1- 17%	1- 17%	1- 17%	- -	- -	- -	6	12	2.0
Nurses	- -	- -	3- 50%	2- 33%	1- 17%	- -	- -	6	22	3.7
Physicians	1- 17%	- -	- -	1- 17%	4- 67%	- -	- -	6	25	4.2
Monitors	1- 17%	- -	2- 33%	2- 33%	1- 17%	- -	- -	6	20	3.3
Vital Signs	- -	1- 17%	1- 17%	3- 50%	1- 17%	- -	- -	6	22	3.7
Drugs	- -	1- 17%	1- 17%	3- 50%	1- 17%	- -	- -	6	22	3.7
Chest Pain - Before	1- 17%	1- 17%	- -	2- 33%	2- 33%	- -	- -	6	21	3.5
Chest Pain - After	1- 17%	4- 67%	- -	- -	1- 17%	- -	- -	6	14	2.3
I-V Lines	- -	1- 17%	3- 50%	1- 17%	1- 17%	- -	- -	6	20	3.3
Activity	- -	3- 50%	1- 17%	2- 33%	- -	- -	- -	6	17	2.8
Sex	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Age	- -	- -	4- 67%	1- 17%	1- 17%	- -	- -	6	21	3.5
Ethnic Class	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Income Level	- -	- -	1- 17%	2- 33%	- -	3- 50%	- -	6	29	4.8
Education	- -	- -	- -	- -	- -	- -	6-100%	6	42	7.0
1st M.I.	5- 83%	1- 17%	- -	- -	- -	- -	- -	6	7	1.2
Past Admissions	5- 83%	1- 17%	- -	- -	- -	- -	- -	6	7	1.2
Perceived Severity	- -	1- 20%	1- 20%	1- 20%	2- 40%	- -	- -	5	19	3.8
Exposure	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0

The column heading numbers refer to the order of responses.

Appendix L - Previous Hospitalization

Has Been Admitted to Hospital in the Past

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	2- 5%	9- 23%	20- 51%	8- 21%	- -	- -	- -	39	112	2.9
Clinical Severity	6- 15%	10- 26%	14- 36%	7- 18%	- -	2- 5%	- -	39	108	2.8
Family	7- 18%	7- 18%	8- 21%	14- 36%	3- 8%	- -	- -	39	116	3.0
Nurses	3- 8%	3- 8%	5- 13%	22- 56%	6- 15%	- -	- -	39	142	3.6
Physicians	- -	3- 8%	- -	12- 31%	24- 62%	- -	- -	39	174	4.5
Monitors	4- 11%	8- 21%	5- 13%	14- 37%	7- 18%	- -	- -	38	126	3.3
Vital Signs	1- 3%	4- 10%	6- 15%	19- 49%	9- 23%	- -	- -	39	148	3.8
Drugs	2- 5%	9- 23%	7- 18%	19- 49%	2- 5%	- -	- -	39	127	3.3
Chest Pain - Before	2- 5%	4- 10%	2- 5%	22- 56%	9- 23%	- -	- -	39	149	3.8
Chest Pain - After	5- 13%	18- 46%	4- 10%	8- 21%	4- 10%	- -	- -	39	105	2.7
I-V Lines	5- 13%	8- 21%	11- 28%	11- 28%	4- 10%	- -	- -	39	118	3.0
Activity	6- 15%	19- 49%	5- 13%	6- 15%	3- 8%	- -	- -	39	98	2.5
Sex	31- 79%	8- 21%	- -	- -	- -	- -	- -	39	47	1.2
Age	2- 5%	4- 10%	11- 28%	12- 31%	8- 21%	2- 5%	- -	39	143	3.7
Ethnic Class	38- 97%	- -	- -	1- 3%	- -	- -	- -	39	42	1.1
Income Level	4- 11%	11- 31%	7- 19%	8- 22%	4- 11%	2- 6%	- -	36	111	3.1
Education	- -	3- 8%	9- 23%	12- 31%	5- 13%	5- 13%	5- 13%	39	171	4.4
1st M.I.	27- 69%	12- 31%	- -	- -	- -	- -	- -	39	51	1.3
Past Admissions	39-100%	- -	- -	- -	- -	- -	- -	39	39	1.0
Perceived Severity	4- 11%	6- 16%	11- 29%	10- 26%	7- 18%	- -	- -	38	124	3.3
Exposure	29- 74%	10- 26%	- -	- -	- -	- -	- -	39	49	1.3

The column heading numbers refer to the order of responses.

Has Not Been Admitted to Hospital in the Past

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 9%	3- 27%	4- 36%	3- 27%	- -	- -	- -	11	31	2.8
Clinical Severity	1- 9%	4- 36%	4- 36%	1- 9%	1- 9%	- -	- -	11	30	2.7
Family	4- 36%	4- 36%	- -	2- 18%	1- 9%	- -	- -	11	25	2.3
Nurses	- -	2- 18%	2- 18%	4- 36%	3- 27%	- -	- -	11	41	3.7
Physicians	1- 9%	2- 18%	1- 9%	4- 36%	3- 27%	- -	- -	11	39	3.5
Monitors	- -	1- 9%	2- 18%	5- 45%	3- 27%	- -	- -	11	43	3.9
Vital Signs	- -	1- 9%	1- 9%	6- 55%	3- 27%	- -	- -	11	44	4.0
Drugs	- -	3- 27%	2- 18%	3- 27%	3- 27%	- -	- -	11	39	3.5
Chest Pain - Before	- -	- -	3- 27%	4- 36%	4- 36%	- -	- -	11	45	4.1
Chest Pain - After	1- 9%	5- 45%	4- 36%	- -	1- 9%	- -	- -	11	28	2.5
I-V Lines	- -	4- 36%	2- 18%	3- 27%	2- 18%	- -	- -	11	36	3.3
Activity	1- 9%	4- 36%	3- 27%	1- 9%	2- 18%	- -	- -	11	32	2.9
Sex	9- 82%	2- 18%	- -	- -	- -	- -	- -	11	13	1.2
Age	2- 18%	1- 9%	2- 18%	4- 36%	2- 18%	- -	- -	11	36	3.3
Ethnic Class	9- 82%	- -	1- 9%	1- 9%	- -	- -	- -	11	16	1.5
Income Level	- -	4- 44%	2- 22%	- -	2- 22%	1- 11%	- -	9	30	3.3
Education	- -	- -	2- 18%	3- 27%	4- 36%	1- 9%	1- 9%	11	51	4.6
1st M.I.	10- 91%	1- 9%	- -	- -	- -	- -	- -	11	12	1.1
Past Admissions	- -	11-100%	- -	- -	- -	- -	- -	11	22	2.0
Perceived Severity	- -	- -	- -	- -	- -	- -	- -	0	0	- -
Exposure	9- 82%	2- 18%	- -	- -	- -	- -	- -	11	13	1.2

The column heading numbers refer to the order of responses.

Appendix M - Previous Infarction

This Is First Heart Attack

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	3- 8%	9- 24%	18- 49%	7- 19%	- -	- -	- -	37	103	2.8
Clinical Severity	6- 16%	11- 30%	14- 38%	3- 8%	1- 3%	2- 5%	- -	37	99	2.7
Family	9- 24%	6- 16%	6- 16%	13- 35%	3- 8%	- -	- -	37	106	2.9
Nurses	3- 8%	3- 8%	5- 14%	17- 46%	9- 24%	- -	- -	37	137	3.7
Physicians	1- 3%	4- 11%	1- 3%	13- 35%	18- 49%	- -	- -	37	154	4.2
Monitors	3- 8%	5- 14%	5- 14%	15- 42%	8- 22%	- -	- -	36	128	3.6
Vital Signs	1- 3%	2- 5%	5- 14%	19- 51%	10- 27%	- -	- -	37	146	3.9
Drugs	2- 5%	9- 24%	5- 14%	16- 43%	5- 14%	- -	- -	37	124	3.4
Chest Pain - Before	2- 5%	3- 8%	3- 8%	20- 54%	9- 24%	- -	- -	37	142	3.8
Chest Pain - After	5- 14%	20- 54%	6- 16%	4- 11%	2- 5%	- -	- -	37	89	2.4
I-V Lines	4- 11%	10- 27%	7- 19%	12- 32%	4- 11%	- -	- -	37	113	3.1
Activity	5- 14%	19- 51%	5- 14%	5- 14%	3- 8%	- -	- -	37	93	2.5
Sex	30- 81%	7- 19%	- -	- -	- -	- -	- -	37	44	1.2
Age	4- 11%	4- 11%	9- 24%	10- 27%	8- 22%	2- 5%	- -	37	131	3.5
Ethnic Class	34- 92%	- -	1- 3%	2- 5%	- -	- -	- -	37	45	1.2
Income Level	2- 6%	14- 42%	7- 21%	5- 15%	2- 6%	3- 9%	- -	33	99	3.0
Education	- -	2- 5%	8- 22%	10- 27%	8- 22%	4- 11%	5- 14%	37	167	4.5
1st M.I.	37-100%	- -	- -	- -	- -	- -	- -	37	37	1.0
Past Admissions	27- 73%	10- 27%	- -	- -	- -	- -	- -	37	47	1.3
Perceived Severity	4- 15%	4- 15%	10- 38%	6- 23%	2- 8%	- -	- -	26	76	2.9
Exposure	28- 76%	9- 24%	- -	- -	- -	- -	- -	37	46	1.2

The column heading numbers refer to the order of responses.

Appendix M - Previous Infarction (continued)

This Is Not First Heart Attack

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 23%	6- 46%	4- 31%	- -	- -	- -	13	40	3.1
Clinical Severity	1- 8%	3- 23%	4- 31%	5- 38%	- -	- -	- -	13	39	3.0
Family	2- 15%	5- 38%	2- 15%	3- 23%	1- 8%	- -	- -	13	35	2.7
Nurses	- -	2- 15%	2- 15%	9- 69%	- -	- -	- -	13	46	3.5
Physicians	- -	1- 8%	- -	3- 23%	9- 69%	- -	- -	13	59	4.5
Monitors	1- 8%	4- 31%	2- 15%	4- 31%	2- 15%	- -	- -	13	41	3.2
Vital Signs	- -	3- 23%	2- 15%	6- 46%	2- 15%	- -	- -	13	46	3.5
Drugs	- -	3- 23%	4- 31%	6- 46%	- -	- -	- -	13	42	3.2
Chest Pain - Before	- -	1- 8%	2- 15%	6- 46%	4- 31%	- -	- -	13	52	4.0
Chest Pain - After	1- 8%	3- 23%	2- 15%	4- 31%	3- 23%	- -	- -	13	44	3.4
I-V Lines	1- 8%	2- 15%	6- 46%	2- 15%	2- 15%	- -	- -	13	41	3.2
Activity	2- 15%	4- 31%	3- 23%	2- 15%	2- 15%	- -	- -	13	37	2.8
Sex	10- 77%	3- 23%	- -	- -	- -	- -	- -	13	16	1.2
Age	- -	1- 8%	4- 31%	6- 46%	2- 15%	- -	- -	13	48	3.7
Ethnic Class	13-100%	- -	- -	- -	- -	- -	- -	13	13	1.0
Income Level	2- 17%	1- 8%	2- 17%	3- 25%	4- 33%	- -	- -	12	42	3.5
Education	- -	1- 8%	3- 23%	5- 38%	1- 8%	2- 15%	1- 8%	13	55	4.2
1st M.I.	- -	13-100%	- -	- -	- -	- -	- -	13	26	2.0
Past Admissions	12- 92%	1- 8%	- -	- -	- -	- -	- -	13	14	1.1
Perceived Severity	- -	2- 17%	1- 8%	4- 33%	5- 42%	- -	- -	12	48	4.0
Exposure	10- 77%	3- 23%	- -	- -	- -	- -	- -	13	16	1.2

The column heading numbers refer to the order of responses.

Appendix N - Perceived Severity

Severity: Very Mild

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	1- 25%	3- 75%	- -	- -	- -	- -	4	11	2.8
Clinical Severity	- -	1- 25%	3- 75%	- -	- -	- -	- -	4	11	2.8
Family	1- 25%	1- 25%	1- 25%	1- 25%	- -	- -	- -	4	10	2.5
Nurses	- -	- -	- -	3- 75%	1- 25%	- -	- -	4	17	4.3
Physicians	- -	- -	- -	3- 75%	1- 25%	- -	- -	4	17	4.3
Monitors	- -	- -	- -	4-100%	- -	- -	- -	4	16	4.0
Vital Signs	- -	- -	- -	4-100%	- -	- -	- -	4	16	4.0
Drugs	- -	1- 25%	- -	2- 50%	1- 25%	- -	- -	4	15	3.8
Chest Pain - Before	- -	1- 25%	- -	2- 50%	1- 25%	- -	- -	4	15	3.8
Chest Pain - After	1- 25%	2- 50%	- -	1- 25%	- -	- -	- -	4	9	2.3
I-V Lines	- -	2- 50%	- -	2- 50%	- -	- -	- -	4	12	3.0
Activity	1- 25%	3- 75%	- -	- -	- -	- -	- -	4	7	1.8
Sex	3- 75%	1- 25%	- -	- -	- -	- -	- -	4	5	1.3
Age	- -	2- 50%	- -	2- 50%	- -	- -	- -	4	12	3.0
Ethnic Class	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Income Level	1- 33%	1- 33%	1- 33%	- -	- -	- -	- -	3	6	2.0
Education	- -	- -	1- 25%	1- 25%	1- 25%	1- 25%	- -	4	18	4.5
1st M.I.	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Past Admissions	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Perceived Severity	4-100%	- -	- -	- -	- -	- -	- -	4	4	1.0
Exposure	2- 50%	2- 50%	- -	- -	- -	- -	- -	4	6	1.5

The column heading numbers refer to the order of responses.

Appendix N - Perceived Severity (continued)

Severity: Mild

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 17%	2- 33%	- -	3- 50%	- -	- -	- -	6	17	2.8
Clinical Severity	1- 17%	1- 17%	3- 50%	1- 17%	- -	- -	- -	6	16	2.7
Family	1- 17%	3- 50%	- -	1- 17%	1- 17%	- -	- -	6	16	2.7
Nurses	1- 17%	1- 17%	- -	4- 67%	- -	- -	- -	6	19	3.2
Physicians	- -	1- 17%	- -	2- 33%	3- 50%	- -	- -	6	25	4.2
Monitors	- -	3- 50%	1- 17%	- -	2- 33%	- -	- -	6	19	3.2
Vital Signs	- -	- -	2- 33%	2- 33%	2- 33%	- -	- -	6	24	4.0
Drugs	- -	3- 50%	1- 17%	2- 33%	- -	- -	- -	6	17	2.8
Chest Pain - Before	1- 17%	1- 17%	- -	3- 50%	1- 17%	- -	- -	6	20	3.3
Chest Pain - After	1- 17%	4- 67%	1- 17%	- -	- -	- -	- -	6	12	2.0
I-V Lines	- -	3- 50%	3- 50%	- -	- -	- -	- -	6	15	2.5
Activity	2- 33%	2- 33%	1- 17%	1- 17%	- -	- -	- -	6	13	2.2
Sex	4- 67%	2- 33%	- -	- -	- -	- -	- -	6	8	1.3
Age	1- 17%	- -	3- 50%	1- 17%	1- 17%	- -	- -	6	19	3.2
Ethnic Class	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Income Level	2- 40%	1- 20%	- -	2- 40%	- -	- -	- -	5	12	2.4
Education	- -	- -	2- 33%	1- 17%	2- 33%	- -	1- 17%	6	27	4.5
1st M.I.	4- 67%	2- 33%	- -	- -	- -	- -	- -	6	8	1.3
Past Admissions	6-100%	- -	- -	- -	- -	- -	- -	6	6	1.0
Perceived Severity	- -	6-100%	- -	- -	- -	- -	- -	6	12	2.0
Exposure	5- 83%	1- 17%	- -	- -	- -	- -	- -	6	7	1.2

The column heading numbers refer to the order of responses.

Severity: Moderate

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 27%	6- 55%	2- 18%	- -	- -	- -	11	32	2.9
Clinical Severity	2- 18%	2- 18%	3- 27%	3- 27%	- -	1- 9%	- -	11	33	3.0
Family	2- 18%	1- 9%	4- 36%	3- 27%	1- 9%	- -	- -	11	33	3.0
Nurses	2- 18%	- -	1- 9%	5- 45%	3- 27%	- -	- -	11	40	3.6
Physicians	- -	1- 9%	- -	3- 27%	7- 64%	- -	- -	11	49	4.5
Monitors	3- 30%	1- 10%	1- 10%	4- 40%	1- 10%	- -	- -	10	29	2.9
Vital Signs	1- 9%	1- 9%	- -	5- 45%	4- 36%	- -	- -	11	43	3.9
Drugs	2- 18%	3- 27%	2- 18%	4- 36%	- -	- -	- -	11	30	2.7
Chest Pain - Before	1- 9%	1- 9%	1- 9%	5- 45%	3- 27%	- -	- -	11	41	3.7
Chest Pain - After	3- 27%	4- 36%	1- 9%	3- 27%	- -	- -	- -	11	26	2.4
I-V Lines	4- 36%	1- 9%	2- 18%	3- 27%	1- 9%	- -	- -	11	29	2.6
Activity	3- 27%	6- 55%	- -	1- 9%	1- 9%	- -	- -	11	24	2.2
Sex	7- 64%	4- 36%	- -	- -	- -	- -	- -	11	15	1.4
Age	- -	- -	3- 27%	4- 36%	2- 18%	2- 18%	- -	11	47	4.3
Ethnic Class	11-100%	- -	- -	- -	- -	- -	- -	11	11	1.0
Income Level	1- 10%	4- 40%	4- 40%	- -	1- 10%	- -	- -	10	26	2.6
Education	- -	2- 18%	2- 18%	3- 27%	1- 9%	2- 18%	1- 9%	11	46	4.2
1st M.I.	10- 91%	1- 9%	- -	- -	- -	- -	- -	11	12	1.1
Past Admissions	11-100%	- -	- -	- -	- -	- -	- -	11	11	1.0
Perceived Severity	- -	- -	11-100%	- -	- -	- -	- -	11	33	3.0
Exposure	8- 73%	3- 27%	- -	- -	- -	- -	- -	11	14	1.3

The column heading numbers refer to the order of responses.

Appendix N - Perceived Severity (continued)

Severity: Severe

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	1- 10%	1- 10%	6- 60%	2- 20%	- -	- -	- -	10	29	2.9
Clinical Severity	1- 10%	3- 30%	3- 30%	2- 20%	- -	1- 10%	- -	10	30	3.0
Family	- -	2- 20%	1- 10%	6- 60%	1- 10%	- -	- -	10	36	3.6
Nurses	- -	2- 20%	1- 10%	6- 60%	1- 10%	- -	- -	10	36	3.6
Physicians	- -	1- 10%	- -	2- 20%	7- 70%	- -	- -	10	45	4.5
Monitors	1- 10%	1- 10%	- -	5- 50%	3- 30%	- -	- -	10	38	3.8
Vital Signs	- -	2- 20%	1- 10%	5- 50%	2- 20%	- -	- -	10	37	3.7
Drugs	- -	1- 10%	1- 10%	7- 70%	1- 10%	- -	- -	10	38	3.8
Chest Pain - Before	- -	- -	1- 10%	7- 70%	2- 20%	- -	- -	10	41	4.1
Chest Pain - After	- -	4- 40%	2- 20%	3- 30%	1- 10%	- -	- -	10	31	3.1
I-V Lines	1- 10%	2- 20%	2- 20%	2- 20%	3- 30%	- -	- -	10	34	3.4
Activity	- -	6- 60%	2- 20%	2- 20%	- -	- -	- -	10	26	2.6
Sex	10-100%	- -	- -	- -	- -	- -	- -	10	10	1.0
Age	- -	1- 10%	1- 10%	4- 40%	4- 40%	- -	- -	10	41	4.1
Ethnic Class	9- 90%	- -	- -	1- 10%	- -	- -	- -	10	13	1.3
Income Level	- -	3- 30%	1- 10%	3- 30%	2- 20%	1- 10%	- -	10	37	3.7
Education	- -	- -	3- 30%	5- 50%	- -	1- 10%	1- 10%	10	42	4.2
1st M.I.	6- 60%	4- 40%	- -	- -	- -	- -	- -	10	14	1.4
Past Admissions	10-100%	- -	- -	- -	- -	- -	- -	10	10	1.0
Perceived Severity	- -	- -	- -	10-100%	- -	- -	- -	10	40	4.0
Exposure	6- 60%	4- 40%	- -	- -	- -	- -	- -	10	14	1.4

The column heading numbers refer to the order of responses.

Severity: Very Severe

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	2- 29%	4- 57%	1- 14%	- -	- -	- -	7	20	2.9
Clinical Severity	2- 29%	2- 29%	2- 29%	1- 14%	- -	- -	- -	7	16	2.3
Family	3- 43%	- -	2- 29%	2- 29%	- -	- -	- -	7	17	2.4
Nurses	- -	- -	3- 43%	3- 43%	1- 14%	- -	- -	7	26	3.7
Physicians	- -	- -	- -	1- 14%	6- 86%	- -	- -	7	34	4.9
Monitors	- -	2- 29%	3- 43%	1- 14%	1- 14%	- -	- -	7	22	3.1
Vital Signs	- -	1- 14%	3- 43%	2- 29%	1- 14%	- -	- -	7	24	3.4
Drugs	- -	1- 14%	3- 43%	3- 43%	- -	- -	- -	7	23	3.3
Chest Pain - Before	- -	1- 14%	- -	4- 57%	2- 29%	- -	- -	7	28	4.0
Chest Pain - After	- -	3- 43%	- -	1- 14%	3- 43%	- -	- -	7	25	3.6
I-V Lines	- -	- -	4- 57%	3- 43%	- -	- -	- -	7	24	3.4
Activity	- -	1- 14%	2- 29%	2- 29%	2- 29%	- -	- -	7	26	3.7
Sex	7-100%	- -	- -	- -	- -	- -	- -	7	7	1.0
Age	1- 14%	1- 14%	3- 43%	1- 14%	1- 14%	- -	- -	7	21	3.0
Ethnic Class	7-100%	- -	- -	- -	- -	- -	- -	7	7	1.0
Income Level	- -	2- 29%	1- 14%	2- 29%	1- 14%	1- 14%	- -	7	26	3.7
Education	- -	1- 14%	1- 14%	2- 29%	- -	1- 14%	2- 29%	7	33	4.7
1st M.I.	2- 29%	5- 71%	- -	- -	- -	- -	- -	7	12	1.7
Past Admissions	7-100%	- -	- -	- -	- -	- -	- -	7	7	1.0
Perceived Severity	- -	- -	- -	- -	7-100%	- -	- -	7	35	5.0
Exposure	7-100%	- -	- -	- -	- -	- -	- -	7	7	1.0

The column heading numbers refer to the order of responses.

Appendix O - Past Experience with Infarction

Heart Attacks In Others Close To You

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	3- 8%	9- 24%	18- 47%	8- 21%	- -	- -	- -	38	107	2.8
Clinical Severity	5- 13%	12- 32%	13- 34%	6- 16%	- -	2- 5%	- -	38	104	2.7
Family	9- 24%	6- 16%	5- 13%	14- 37%	4- 11%	- -	- -	38	112	2.9
Nurses	3- 8%	2- 5%	7- 18%	18- 47%	8- 21%	- -	- -	38	140	3.7
Physicians	1- 3%	4- 11%	1- 3%	12- 32%	20- 53%	- -	- -	38	160	4.2
Monitors	3- 8%	7- 19%	7- 19%	12- 32%	8- 22%	- -	- -	37	126	3.4
Vital Signs	1- 3%	3- 8%	7- 18%	18- 47%	9- 24%	- -	- -	38	145	3.8
Drugs	1- 3%	8- 21%	8- 21%	17- 45%	4- 11%	- -	- -	38	129	3.4
Chest Pain - Before	2- 5%	1- 3%	3- 8%	22- 58%	10- 26%	- -	- -	38	151	4.0
Chest Pain - After	4- 11%	18- 47%	7- 18%	4- 11%	5- 13%	- -	- -	38	102	2.7
I-V Lines	2- 5%	9- 24%	12- 32%	12- 32%	3- 8%	- -	- -	38	119	3.1
Activity	5- 13%	17- 45%	6- 16%	6- 16%	4- 11%	- -	- -	38	101	2.7
Sex	29- 76%	9- 24%	- -	- -	- -	- -	- -	38	47	1.2
Age	4- 11%	3- 8%	12- 32%	10- 26%	8- 21%	1- 3%	- -	38	132	3.5
Ethnic Class	36- 95%	- -	1- 3%	1- 3%	- -	- -	- -	38	43	1.1
Income Level	4- 11%	13- 37%	6- 17%	5- 14%	4- 11%	3- 9%	- -	35	106	3.0
Education	- -	2- 5%	9- 24%	10- 26%	8- 21%	3- 8%	6- 16%	38	171	4.5
1st M.I.	28- 74%	10- 26%	- -	- -	- -	- -	- -	38	48	1.3
Past Admissions	29- 76%	9- 24%	- -	- -	- -	- -	- -	38	47	1.2
Perceived Severity	2- 7%	5- 18%	8- 29%	6- 21%	7- 25%	- -	- -	28	95	3.4
Exposure	38-100%	- -	- -	- -	- -	- -	- -	38	38	1.0

The column heading numbers refer to the order of responses.

Appendix O - <u>Past Experience with Infarction</u> (continued)

No Heart Attacks In Others Close To You

	1's	2's	3's	4's	5's	6's	7's	N	SUM	MEAN
Perceived Severity	- -	3- 25%	6- 50%	3- 25%	- -	- -	- -	12	36	3.0
Clinical Severity	2- 17%	2- 17%	5- 42%	2- 17%	1- 8%	- -	- -	12	34	2.8
Family	2- 17%	5- 42%	3- 25%	2- 17%	- -	- -	- -	12	29	2.4
Nurses	- -	3- 25%	- -	8- 67%	1- 8%	- -	- -	12	43	3.6
Physicians	- -	1- 8%	- -	4- 33%	7- 58%	- -	- -	12	53	4.4
Monitors	1- 8%	2- 17%	- -	7- 58%	2- 17%	- -	- -	12	43	3.6
Vital Signs	- -	2- 17%	- -	7- 58%	3- 25%	- -	- -	12	47	3.9
Drugs	1- 8%	4- 33%	1- 8%	5- 42%	1- 8%	- -	- -	12	37	3.1
Chest Pain - Before	- -	3- 25%	2- 17%	4- 33%	3- 25%	- -	- -	12	43	3.6
Chest Pain - After	2- 17%	5- 42%	1- 8%	4- 33%	- -	- -	- -	12	31	2.6
I-V Lines	3- 25%	3- 25%	1- 8%	2- 17%	3- 25%	- -	- -	12	35	2.9
Activity	2- 17%	6- 50%	2- 17%	1- 8%	1- 8%	- -	- -	12	29	2.4
Sex	11- 92%	1- 8%	- -	- -	- -	- -	- -	12	13	1.1
Age	- -	2- 17%	1- 8%	6- 50%	2- 17%	1- 8%	- -	12	47	3.9
Ethnic Class	11- 92%	- -	- -	1- 8%	- -	- -	- -	12	15	1.3
Income Level	- -	2- 20%	3- 30%	3- 30%	2- 20%	- -	- -	10	35	3.5
Education	- -	1- 8%	2- 17%	5- 42%	1- 8%	3- 25%	- -	12	51	4.3
1st M.I.	9- 75%	3- 25%	- -	- -	- -	- -	- -	12	15	1.3
Past Admissions	10- 83%	2- 17%	- -	- -	- -	- -	- -	12	14	1.2
Perceived Severity	2- 20%	1- 10%	3- 30%	4- 40%	- -	- -	- -	10	29	2.9
Exposure	- -	12-100%	- -	- -	- -	- -	- -	12	24	2.0

The column heading numbers refer to the order of responses.