Running Head: COMFORT

Factors related to the self-perceived comfort of chronically ill, institutionalized older adults

By

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FACTORS RELATED TO THE SELF-PERCEIVED COMFORT OF

CHRONICALLY ILL, INSTITUTIONALIZED OLDER ADULTS

BY

KATHLEEN HOHENSTEIN

A Thesis/Practicum submitted to the Faculty of Graduate Studies of The University of Manitoba in partial fulfillment of the requirements of the degree

of

MASTER OF NURSING

Abstract

This descriptive study examined the factors related to the comfort level of chronically ill older adults living in a 461 bed long term care facility. The relationships among depression, quality of life, pain, self-rated health, social support, and comfort were investigated. Additionally, the perceptions of comfort held by chronically ill older adults and their primary nurses were compared and contrasted. Face to face interviews were conducted with a convenience sample of 35 nurse-older adult dyads. Findings of the study revealed that older adults who were not depressed, who reported low levels of pain, who were satisfied with their care and with their life in general, who were satisfied with visits from family and friends, and who viewed their health positively were more likely to report higher levels of comfort. Furthermore, while nurse and older adult reports of comfort as measured by the General Comfort Questionnaire were moderately correlated, nurse respondents tended to underestimate the older adult's comfort level. Finally, a total of 189 qualitative definitions of comfort were also provided by the nurses and older adults in this study. Overall, comfort was most commonly defined as either a sense of wellbeing or a painfree state with nurses emphasizing physical aspects of comfort and older adults focusing on psychosocial aspects.

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Finally, I would like to thank my family and friends. I cannot express in words how much I cherish all of you. It is to you that I dedicate this thesis.

Comfort

Comfort may be a blanket or breeze,

Some ointment here to soothe my knees,

A listening ear to hear my woes,

A pair of footies to warm my toes,

A PRN medication to ease my pain,

Someone to reassure me once again,

A call from my doctor, or even a friend,

A rabbi or priest as my life nears the end.

Comfort is whatever I perceive it to be

A necessary thing defined "only" by me.

S.D. Lawrence (1993)

(Cited in Kolcaba, 1996)

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Chapter One

Statement of the Problem

Older adults living with chronic illnesses face ongoing battles in their pursuit of comfort (Jones, 1986; McIlveen & Morse, 1995; Strauss et al., 1984). Pain, fatigue, anxiety, fear, grief, and loss, name just a few of the discomforts experienced by the chronically ill older adult (Strauss et al., 1984). As a result, the provision of comfort to chronically ill elderly individuals has been cited as one of the main goals of gerontological nursing practice (Canadian Gerontological Nursing Association, 1995; Ferrell & Ferrell, 1990; Hamilton, 1989; Jacox, 1989; Kolcaba, 1992). Achieving this goal demands that gerontological nurses have both an understanding and an appreciation of the factors related to the comfort level of their elderly patients.

Unfortunately, there exists a dearth of knowledge concerning the perceptions of comfort held by older adults. Indeed, only sixteen research studies, to date, have explored the construct of comfort (see Appendix A). Surprisingly, of the studies that detailed sample characteristics, only two have specifically examined comfort as perceived by elderly individuals. Hamilton, in 1989, interviewed thirty chronically ill, institutionalized elderly in an attempt to elicit both a definition of comfort and the factors contributing to and detracting from comfort. Kennedy (1991), on the other hand, used interpretative interactionism to explore how comfort was experienced by ten, acutely ill elderly on intensive care step-down units.

This lack of research investigating comfort in the elderly prevents gerontological nurses from clearly explicating comfort as a patient outcome (Kennedy, 1991).

Consequently, although nurses may objectively assess the comfort level of older adults, the level of agreement between such assessments and the older adult's actual perception of comfort is questionable (Cameron, 1993; Hamilton, 1985; Kennedy, 1991; Kolcaba, 1995). Further research on the concept of comfort is desperately needed in order to bridge this gap in gerontological nursing knowledge and practice (Hamilton, 1985).

The purpose of this study was to explore the factors related to the comfort level of chronically ill older adults living in a 461 bed long term care facility. The relationships among depression, quality of life, pain, self-rated health, social support, and comfort were investigated. Additionally, the perceptions of comfort held by chronically ill elderly and their primary nurses were also compared and contrasted. The research questions that guided the study included:

1. What factors are related to the self-perceived comfort of chronically ill older adults living in a long term care facility?
2. Is there agreement between nurse and older adult perceptions of comfort?

Chapter Two

Literature Review

Since the days of Florence Nightingale, comfort has been widely accepted as an integral component of nursing care (Arruda, Larson, & Meleis, 1992; Bottorff, 1991; Cameron, 1993; Kennedy, 1991; McIlveen & Morse, 1995; Morse, 1983). In fact, promoting comfort has even been referred to as the "ultimate purpose of nursing" (Morse, 1992, p. 92). Not surprisingly, therefore, references to comfort and comfort measures abound in nursing textbooks and nursing literature (Arruda et al., 1992; Gropper, 1992;

Jacox, 1989; McIlveen & Morse, 1995). The purpose of this literature review is to conduct a detailed analysis of the comfort literature, research, and theory. Definitions of comfort, components of comfort, and factors influencing comfort are described in subsequent sections.

Defining Comfort

While the meaning of comfort is universally understood, there exists a lack of consensus in the nursing literature as to a definition for this concept (Arruda et al., 1992; Engelking, 1988; Funk & Tornquist, 1989; Hamilton, 1985; Jacox, 1989; Kennedy, 1991; Morse, 1993). As a result, the defining attributes of comfort remain vague and difficult to articulate (Bottorff, 1991; Hamilton, 1985; Hamilton, 1989; McIlveen & Morse, 1995). Within the following section, the numerous definitions of comfort appearing in the literature are discussed.

Dictionary definitions classify comfort as either a noun or a verb. As a noun, comfort is typically defined as relief, consolation, contentment, a state of wellbeing, peace of mind, and bodily ease (Jacox, 1989; Kennedy, 1991; Morse, 1992; Webster's Universal Dictionary and Thesaurus, 1993). As a verb, comfort is used to describe such actions as supporting, assisting, aiding, palliating, soothing, cheering, strengthening, invigorating, helping, and encouraging (Ferrell & Ferrell, 1990; Jacox, 1989; Webster's Universal Dictionary and Thesaurus, 1993). Related terms include comforting, comforted, comfortable, and comfort measures (Kolcaba, 1991).

In reviewing the common language uses of comfort, Kolcaba and Kolcaba (1991) isolated the following four definitions of comfort: 1) a cause of relief from discomfort

and/or a cause of the state of comfort; 2) a state of ease and peaceful contentment; 3) relief from discomfort; and 4) whatever makes life easy and pleasurable. According to these authors, all but the fourth definition of comfort are applicable to nursing.

Finally, it is important to note that definitions of comfort have evolved and changed over time. For example, comfort was originally derived from the Latin word "conforture" meaning "to strengthen" (Ferrell & Ferrell, 1990; Gropper, 1992). However, defining comfort in terms of the act of strengthening became obsolete by the middle of this century. It has only been in the last five years and primarily in the nursing literature that such a definition of comfort has regained acceptance (Cameron, 1993; Kolcaba, 1991; Kolcaba & Kolcaba, 1991; Kolcaba, 1995; McIlveen & Morse, 1995).

A Historical Overview of Comfort

Similar to the historical variations in the definitions of comfort, the meaning and role of comfort in nursing care has also changed with the passage of time (Kolcaba, 1991; McIlveen & Morse, 1995). A unique study conducted by McIlveen and Morse in 1995 illustrated the diversity of meanings attributed to the concept of comfort throughout nursing history. In this study, 621 articles from American, British, and Canadian nursing journals and 17 nursing textbooks were coded and analysed for the concept of comfort. All articles and textbooks were written by nurses between the years of 1900 and 1980.

Findings from this study suggested the existence of three time periods of research and literature examining the concept of comfort. In the first time period, dating from 1900 to 1929, comfort was viewed as the principle goal and focus of nursing practice. Ensuring the physical comfort of patients held moral and personal significance to each individual

nurse. In contrast, between 1930 and 1959, comfort was no longer seen as the central goal of nursing. Rather, comfort was viewed as a strategy or nursing intervention useful in achieving other, more important, treatment goals. Finally, according to these researchers, between the years of 1960 and 1980, the significance of comfort to nursing was forgotten and buried beneath an avalanche of health care technology. Focusing on comfort became reserved solely for terminally ill patients and their families.

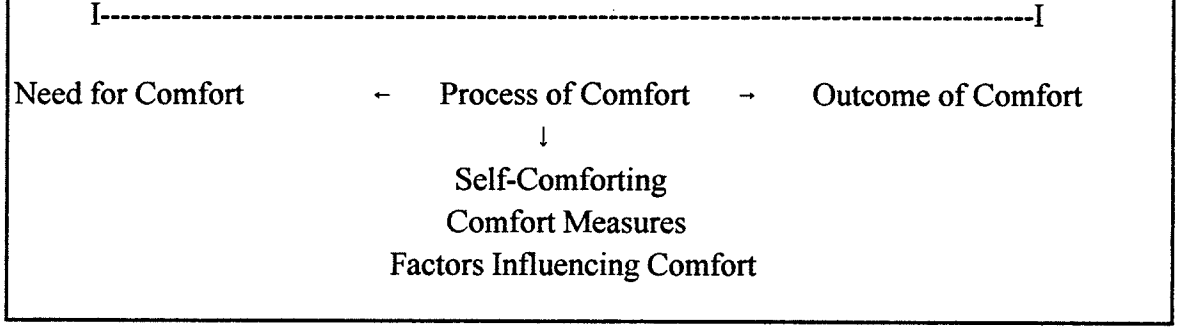
While this study did not extend beyond 1980, a review of the nursing literature in the last fifteen years strongly suggests that the role and meaning of comfort has undergone yet another metamorphism. For the first time in nursing history, research studies have been conducted specifically to investigate the concept of comfort. As well, innumerable articles on comfort measures have also appeared in the nursing literature. Possible explanations for this renewed interest in comfort include an aging society, the ever-increasing prevalence of chronic illnesses, and a shift away from the medical, cure-oriented paradigm (Morse, 1992; McIlveen & Morse, 1995; Strauss et al., 1984).

The Continuum of Comfort

The lack of a clear definition of comfort coupled with the changing role and meaning of comfort over time has created confusion in the comfort literature. Comfort has been referred to as a noun, a verb, a process, an outcome, an intervention, and a goal (Hamilton, 1985; Kennedy, 1991; Kolcaba & Kolcaba, 1991). One mechanism useful in sorting out these various definitions and meanings of comfort is to conceptualize comfort as a continuum (Hamilton, 1985; Kennedy, 1991). On one end of the continuum is the need for comfort while on the other end of the continuum is the outcome of comfort. The

process of comfort, or the act of comforting, allows the individual to travel back and forth along this continuum (see Figure 1).

Figure 1. Continuum of comfort



While the individual components of the comfort continuum overlap to some degree, this framework does permit a systematic and concise exploration of the comfort literature and research. For example, each of the sixteen research studies on comfort can be easily located on the continuum (see Appendix B). Therefore, for the purposes of this literature review, the comfort continuum serves as the guiding framework. More specifically, the need for comfort, the process of comfort, and the outcome of comfort are examined individually.

The Need for Comfort

Within the literature, the need for comfort is commonly referred to as discomfort, the absence of comfort, or distress (Ferrell & Ferrell, 1990; Kennedy, 1991; Kolcaba & Kolcaba, 1991). Comfort needs have been typically described as personal, subjective, basic, and universal (Cameron, 1993; Fleming, Scanlon, & D'Agostino, 1987; Kennedy, 1991; Kolcaba, 1992a; Kolcaba & Kolcaba, 1991). According to Kennedy (1991), the

need for comfort is dependent on the physical, psychological, social, and spiritual resources unique to each individual.

Numerous comfort needs or discomforts experienced by patients are described in the nursing literature (Cameron, 1993; Funk & Tornquist, 1989; Jacox, 1989; Kennedy, 1991; Morse, Bottorff, & Hutchinson, 1995). Examples of commonly cited discomforts include all of the following: pain, fatigue, nausea, grief, suffering, anxiety, loneliness, spiritual distress, itchiness, coldness, hotness, hunger, thirst, constipation, and noisiness (Jacox, 1989; Kolcaba, 1992b; Kolcaba & Kolcaba, 1991; Strauss & Strauss, 1984).

Two empirical research studies and one archival study have attempted to generate exhaustive lists of comfort needs or discomforts. For example, a study conducted by Arruda, Larson, and Meleis in 1992 explored the meaning of comfort to Hispanic cancer patients. Results from this study suggested the presence of six, universal comfort needs, namely, 1) the need for love, support, and consolation; 2) the need for a familiar environment; 3) the need for safety; 4) the need for a meaningful life; 5) the need for a normal life; and 6) the need to have a positive mental outlook on life.

Similarly, Morse, Bottorff, and Hutchinson (1995) conducted a phenomenological study in order to describe the discomforts commonly experienced by ill and injured adults. Interviews with 36 patients who suffered from a chronic illness or who had recently experienced a traumatic injury, a surgical intervention, or an organ transplant revealed the following eight categories of discomforts: 1) physical symptoms of the illness and disruption in activities of daily living; 2) the inability to trust one's body; 3) feelings of devastation and deception following the diagnosis of an asymptomatic disease; 4) feelings

of anticipation, fear, and vulnerability associated with certain treatments and illness experiences; 5) the loss of rights and personal dignity; 6) relentless pain; 7) unresolved stress; and 8) altered body image and self-esteem.

Finally, in conducting an archival review of the comfort literature and research, Kolcaba and Kolcaba (1991) also generated a comprehensive list of comfort needs. According to these authors, the three basic needs for comfort are, 1) the need to be in a comfortable state, 2) the need to have relief from discomfort, and 3) the need for education, motivation, and inspiration. Kolcaba and Kolcaba (1991) have suggested that these three comfort needs are universally experienced by everyone regardless of health status.

The Process of Comfort

In essence, the process of comfort is the mechanism through which an individual's needs for comfort are met (Fleming et al., 1987; Kennedy, 1991). This process, often referred to as "comforting", is the most researched component of the comfort continuum. In fact, with the noted exception of Pineau (1982), all studies on the concept of comfort have either directly or indirectly described the act of comforting (see Appendix B). According to the findings from these studies, the process of comfort includes the comfort measures employed by the individual, the comfort measures used by others, and the factors contributing to and detracting from comfort. Within the following section, each of these three elements of comforting are explored.

Self-comforting

Individuals play an active role in promoting their own comfort by learning to recognize and meet their own comfort needs (Arruda et al., 1992; Cameron, 1993; Kennedy, 1991; Morse, 1983; Morse, 1992; Morse, 1995). This process, labelled as self-comforting, is purported to have the greatest impact on the overall level of comfort experienced by ythe individual (Cameron, 1993; Kennedy, 1991; Morse, 1992). Interestingly, the use of self-comforting behaviors is suggested to occur across the entire lifespan, from infancy to old age (Hester, 1989; Kennedy, 1991).

Examples of self-comforting behaviors described in the literature include all of the following: praying, crying, talking to oneself, holding a favorite object, eating a favorite food, believing in God, accepting the situation, talking to friends and family, seeking reassurance from health care professionals, relaxing, finding a comfortable position, and getting mad (Hester, 1989; Kennedy, 1991; Morse, 1992; Morse et al., 1994). As well, retaining or regaining control over one's life situation is also frequently described as an important self-comforting behavior (McIlveen & Morse, 1995; Kennedy, 1991).

Despite the numerous references to self-comforting present in the literature, only one research study was designed specifically to explore how individuals define and engage in self-comforting processes. Using both participant observation and unstructured interviewing techniques, Cameron (1993) explored comfort as perceived by ten medical surgical patients. Results from this exploratory study suggested that comfort was a dynamic, interpersonal, and intrapersonal process. This process, called integrative balancing, was initiated by the patient in response to a perceived disequilibrium created by

illness and hospitalization. According to Cameron (1993), integrative balancing incorporated three stages: 1) monitoring or identifying comfort needs; 2) networking with other patients; and 3) enduring the suffering associated with hospitalization. Unfortunately, the lack of any information on sample characteristics and sampling techniques combined with the small sample size severely limits the generalizability of this study to other patient populations.

Comfort Measures

Second, the process of comfort is also seen to include a host of comfort measures initiated by persons other than the individual patient. Comfort, in this sense, refers to the comforting behaviors of the nurse, physician, clergy, family, friends, and other health care professionals (Arruda et al., 1992; Engelking, 1988; Gropper, 1992; Hamilton, 1989; Kennedy, 1991; McIlveen & Morse, 1995).

Numerous research studies have been conducted to explore the comforting behaviors engaged in by nurses in a variety of clinical settings (Bottorff, Gogag, & Engelberg-Lotzkar, 1995; Morse, 1983; Morse, 1992; Solberg & Morse, 1991; Triplett & Arneson, 1979; Walters, 1994). Providing information, giving reassurance, offering choices, using humor, massaging, administering medications, and performing mouth care name just a few of the interventions described as comforting (See Appendix C for a complete list of comfort measures). The diversity of comfort measures makes a detailed analysis unwieldy. Therefore, this analysis is limited to those interventions consistently appearing in the comfort research and literature. Four comfort measures, namely, caring, touching, talking, and listening, fall within this category (Arruda et al., 1992; Hamilton,

1985; Morse, 1983; Morse, 1992).

Caring is frequently portrayed as an integral component of the process of comfort. In fact, a caring attitude of nursing staff is described as one of the most important determinants of patient comfort (Arruda et al., 1992; Collins, McCoy, Sale, & Weber, 1994; Hamilton, 1985; Hamilton, 1989; Kennedy, 1991). According to the acutely ill elderly patients interviewed by Kennedy (1991), a caring attitude is defined as a person who "shows interest and concern; provides for patients' needs and wants with compassion, tenderness, and respect; and knows what the patient needs" (p. 65). Similarly, a caring attitude was defined as a person who is "friendly, caring, and kind" by the chronically ill older adults in Hamilton's 1989 study on comfort (p. 30).

The importance of touching, talking, and listening in the process of comfort was detailed by Morse (1983) in an ethnoscientific study on the concept of comfort. In this study, four, healthy, Anglo-American women, aged 23 to 29 years, were interviewed in order to explore the components and context of comfort. Results of this study suggested that the act of comforting consists of two major components, touching and talking, and one minor component, listening. By combining the components of touching and talking, the following four types of comfort were isolated: 1) touching/hugging; 2) touching/little talking; 3) talking/little touching; and 4) talking only. According to Morse, the type of comforting deemed appropriate in a given situation was dependent on perceived comfort needs, age, and role relationships.

Additional support for the role of touching and talking in the provision of comfort was found in studies exploring the responses of infants and children to tactile and verbal

comforting behaviors. In a study conducted by Solberg and Morse (1991), caregivers were found to comfort postoperative neonates using a variety of types of touching and talking including kissing, holding, rocking, stroking, cooing, and squeezing. Furthermore, Triplett and Arneson (1979) discovered that talking, humming, singing, patting, stroking, and holding were effective in comforting distressed infants and children in the hospital. Interestingly, in both studies, tactile comforting behaviors were more effective than verbal comforting behaviors.

Factors contributing to and detracting from comfort

Finally, the process of comfort is also suggested to entail those factors contributing to and detracting from the overall comfort level of an individual. Unlike the aforementioned comfort measures which require the actions of either the individual person or others, some factors, simply by their presence, are believed to influence perceptions of comfort (Hamilton, 1985; Kennedy, 1991). Specifically, factors thought to enhance comfort include satisfaction with nursing care, a high quality of life, being healthy, and the existence of strong informal and formal support systems (Ferrell & Ferrell, 1990; Gropper, 1992; Hamilton, 1985; Kennedy, 1991; Kolcaba, 1992a; Morse et al., 1994). In contrast, the presence of chronic illness, depression, pain, and a poor quality of life are believed to decrease the comfort level of an individual (Engelking, 1988; Ferrell & Ferrell, 1990; Hamilton, 1989; Kennedy, 1991; Strauss et al., 1984).

It is important to note that the relationships between comfort and the above factors are not well established in the empirical research. Although numerous studies have been conducted to examine depression, quality of life, pain, self-rated health, and social support,

no formal research could be isolated which explored the strength and nature of the relationship between comfort and these factors. In fact, the existence of such relationships is supported only by subjective reports from patients and nursing staff.

The Outcome of Comfort

Having examined both the need for comfort and the process of comfort, it is now possible to explore the third component of the comfort continuum, namely, the outcome of comfort. Articulating comfort as a outcome requires a detailed understanding of what feeling comfortable means to an individual (Kennedy, 1991; Kolcaba & Kolcaba, 1991). Unfortunately, describing and defining the state or feeling of comfort is no easy task. In fact, according to some researchers, the state of comfort is beyond human awareness (Morse et al., 1994; Morse et al., 1995).

Nevertheless, through the use of unstructured interviewing, a few researchers have been able to elicit subjective descriptions of comfort. For example, Kennedy (1991) was able to gain an heightened understanding of the meaning of comfort to acutely ill elderly patients on intensive care step-down units. According to these older adults, the state of comfort can be described by the following phrases: feeling relieved; feeling calm and at ease; feeling happy and cared for; feeling warm and cozy; feeling accepted, loved, and respected; having peace of mind; and being able to visualize the future.

In contrast, the chronically ill, institutionalized older adults interviewed by Hamilton in 1989 provided less abstract definitions of comfort. Comfort, in this study, was defined as a state in which the older adult was free from pain, had regular bowel movements, was independent, felt relaxed, was positioned properly, felt at home in their hospital room, and

felt cared for by nurses, family, and friends.

Numerous other definitions and descriptions of the state of comfort can be found scattered throughout the comfort literature. Comfort has been described as feeling assured and confident, being in touch with oneself, being content, feeling safe and secure, having choices, having privacy and space, feeling clean and refreshed, feeling normal, and feeling integrated (Arruda et al., 1992; Bottorff, 1991; Morse, 1983; Morse, 1992; Pineau, 1982). As well, comfort has been expressed both as a state of wellbeing and as a state in which all needs for comfort have been met (Engelking, 1988; Kennedy, 1991; Morse, 1992).

However, the most detailed and comprehensive conceptual definition of comfort was developed by Katharine Kolcaba following a review of the comfort literature and research. According to this author, comfort can be defined as "the state of having met basic human needs for ease, relief, and transcendence" (Kolcaba, 1991, p. 239). The state of comfort, by this definition, occurs when the individual senses an enduring state of ease or contentment, senses partial or complete relief from discomfort, and/or senses feeling strengthened, invigorated, and motivated. All three senses of comfort can occur individually or in combination with one another (Kolcaba, 1991; Kolcaba, 1992b; Kolcaba, 1994; Kolcaba & Kolcaba, 1991).

The Defining Attributes of Comfort

In reviewing all of the components of the comfort continuum, certain characteristics of comfort seemed to continually recur in the literature. Specifically, comfort is consistently defined both as a multidimensional concept and as a concept which holds personal meaning for each individual. Within the following section, these two

defining attributes of comfort are examined.

The majority of nursing literature primarily focuses on the physical and psychological dimensions of the concept of comfort (Collins et al., 1994; Fleming et al., 1987; Jacox, 1989; Kennedy, 1991; McIlveen & Morse, 1995). Comfort is typically equated with the provision of pain control, symptom relief, and emotional support (Ferrell & Ferrell, 1990). However, the empirical research on comfort strongly suggests that comfort is, in actuality, a multidimensional concept. According to this body of research, comfort is comprised of physical, psychological, social, spiritual, environmental, and cultural dimensions (Arruda et al., 1992; Ferrell & Ferrell, 1990; Hamilton, 1985; Hamilton, 1989; Jones, 1986; Kennedy, 1991; Kolcaba, 1991; Kolcaba, 1992b; Pineau, 1982).

Furthermore, the relative importance of each of these dimensions of comfort is believed to be dependent on the individual person and his/her health care situation (Arruda et al., 1992; Cameron, 1993; Hamilton, 1985; Kolcaba, 1992b). In other words, comfort is seen as a personal experience unique to every individual (Funk & Tornquist, 1989; Gropper, 1992; Kennedy, 1991). Research attempting to measure and evaluate patient comfort must take into account the individualized meanings attributed to this concept (Ferrell & Ferrell, 1990; Kennedy, 1991).

Comparing nurse and patient perceptions of comfort

The subjective nature of comfort raises doubts as to the ability of nurses to accurately assess the comfort level of their patients. Some of the comfort literature suggests that nurses use intuition, direct questioning, and various behavioral criteria when

monitoring patient comfort (Cameron, 1993; Ferrell & Ferrell, 1990; Kolcaba, 1992a). Unfortunately, no research studies have been designed to evaluate the effectiveness of such comfort assessments.

However, insights into the level of agreement between nurse and patient perceptions of comfort may be gleaned from research exploring other highly subjective phenomenon. A few studies have been conducted to compare nurse and patient perceptions of pain. In a study conducted by Krokosky and Reardon (1989), the perceptions of pain held by both nurses and physicians differed significantly from patient perceptions. Nurses and physicians not only were unable to accurately determine the location and intensity of pain but typically overestimated the effectiveness of pain management regimes. Similarly, the findings from at least three other research studies also discovered that nurses frequently underestimated the intensity of pain in their patients (Rankin & Snider, 1984; Seers, 1987; Stephenson, 1994). Therefore, as the experience of pain is somewhat similar to comfort in that both are subjective in nature, it would seem plausible that nurse and patient perceptions of comfort may also significantly differ.

The State of the Comfort Literature

In summary, the literature and research on the concept of comfort is still in its infancy. Only sixteen research studies have been conducted to explore comfort. The vast majority of these studies have been qualitative, have had small sample sizes, and have focused exclusively on the process or act of comforting. Furthermore, only two research studies, to date, have examined the perceptions of comfort held by older adults (Hamilton, 1989; Kennedy, 1991). No research studies could be isolated that explored the nature of

relationships between quality of life, depression, pain, self-rated health, social support, and comfort. Similarly, no studies were discovered that compared nurse and patient perceptions of comfort. Additional empirical research involving quantitative methodology and focusing on other components of the comfort continuum is desperately needed in order to further understand comfort as a positive patient outcome (Kolcaba, 1992b).

A Theoretical Review of Comfort

Unfortunately, the existing body of empirical research on comfort has been largely atheoretical (Kolcaba, 1994). Furthermore, only a few sporadic references to nursing theories appear in the review literature (Cameron, 1993; Kolcaba, 1992b; Kolcaba & Kolcaba, 1991; McIlveen & Morse, 1995). However, in order to fully understand the state of the present knowledge concerning comfort, exploring this concept from a theoretical perspective is necessary. Several nursing theorists, including Orlando, Wiedenbach, Roy, and Peplau, have described comfort as the unifying purpose and goal of nursing practice. According to these theorists, all patients have an universal need for comfort and meeting this need is the responsibility of the professional nurse (Orlando, 1961; Peplau, 1952; Roy, 1981; Wiedenbach, 1964). However, despite the importance of comfort within these theories, no descriptions or definitions of this concept are provided. This failure to specifically address comfort further attests to the historical evolution of comfort in the nursing profession (McIlveen & Morse, 1995). During the time in which the above theories were written, comfort was simply accepted as a positive outcome of nursing care. Nursing theorists did not try to describe comfort but rather attempted to describe how nurses assisted patients in achieving comfort.

Separate and apart from theories that delineate comfort as a goal, another group of nursing theories describe comfort as a concept which is subsumed under the larger constructs of caring and helping (McIlveen & Morse, 1995). For example, both Leininger and Watson deem comfort to be a component of caring. While Leininger, in her transcultural care theory, does not specifically define comfort (Leininger, 1981), Watson suggests that comfort is a multidimensional concept influencing the relationship between the environment and the individual patient (Watson, 1979). In her theory of caring, Watson provides a list of comfort measures which are believed to support, correct, or protect the internal and external environment of the individual (Watson, 1979).

In contrast, Benner regards comfort as a component of the construct of helping. According to Benner, providing physical and psychological comfort measures establishes the nurse in a helping relationship with the patient. Examples of comfort measures detailed by Benner include bathing, washing hair, performing range of motion exercises, dressing patients in their own clothes, and touching (Benner, 1984).

Regretably, none of the above nursing theories presents a comprehensive theoretical overview of the concept of comfort. Rather, these theories focus on specific dimensions or purposes of comfort. Only one nursing theory could be isolated that specifically addressed the role of comfort in nursing. *The theory of holistic comfort* was developed by Katharine Kolcaba in 1994. Based on the model of human press proposed by Murray (1938), this theory presents an intra-actional view of the concept of comfort (see Appendix D).

According to Kolcaba, stressors associated with decreased health status create a need for comfort or "stimulus situation". This stimulus situation is comprised of both alpha press and beta press. Alpha press is defined as the interaction among the negative environmental, social, and emotional responses to the health care situation (obstructing forces), the interventions used by the nurse (facilitating forces), and the past history and personal resources of the individual (interacting forces). Beta press, on the other hand, represents the individual's "perception of the how well nursing interventions meet the needs arising from the health care situation" (Kolcaba, 1994, p. 1180). If the individual perceives that nursing interventions have been successful in minimizing or eliminating comfort needs, then the individual perceives an increase in his or her level of total comfort. Additionally, within this theory, Kolcaba further contends that enhanced levels of comfort encourage the individual either to engage in health-seeking behaviors or to prepare for a peaceful death (Kolcaba, 1994; Kolcaba, 1995).

While *the theory of holistic comfort* does provide a mechanism to theoretically conceptualize comfort as a positive patient outcome, numerous limitations of this theory are evident. First, the complexity of this theory creates difficulty in application to everyday situations. Second, this theory fails to address the role of individual patient, his or her family and friends, clergy, and other health care professionals in the promotion of comfort. Finally, no supporting literature or research is provided to substantiate the existence of a relationship among comfort, health-seeking behaviors, and preparation for death.

The limitations plaguing the *theory of holistic comfort*, combined with the lack of alternative nursing theoretical explanations for comfort, necessitated a review of theories

developed by other related disciplines. In examining psychological, anthropological, and sociological theories, one theory was discovered that helped to shed light on the intricacies of the concept of comfort.

The *theory of human motivation* was first proposed by Abraham Maslow in 1954. According to this holistic-dynamic theory, human beings are motivated by the presence or absence of unsatisfied universal human needs. These basic or motivating needs can be arranged in the following ascending hierarchy: 1) physiological needs (oxygen, food, water, sleep, and sex); 2) safety needs (security, stability, dependency, protection, and freedom from fear and anxiety); 3) belonginess and love needs (affectionate relationships with a group or family); 4) esteem needs (self-respect, self-confidence, self-esteem, and recognition and respect from others); and 5) the need for self-actualization (being true to the inner self).

Although comfort is not specifically addressed in the *theory of human motivation*, the distinctive similarities between the five basic human needs and the descriptions of comfort detailed in the review literature is remarkable. In fact, all of the comfort needs described in the literature can be easily arranged according to the hierarchy of basic human needs (see Appendix E). For example, physical comfort needs are seen to include the need for symptom control, the need for positioning, and the need for food and water (Collins et al., 1994; Hamilton, 1985; Hamilton, 1989; Kennedy, 1991). Such comfort needs closely coincide with the physiological or biological needs described by Maslow. Additionally, the universal human need for self-actualization resembles the comfort needs for motivation, strengthening, and invigoration (Kolcaba & Kolcaba, 1991).

The strong relationship between the *theory of human motivation* and the concept of comfort is further supported by the existence of a hierarchical relationship among comfort needs. According to Maslow (1954), the satisfaction of lower level needs is required prior to the fulfilment of higher level needs. In other words, the need for food must be satisfied before the need for safety and protection can be addressed. Similarly, in several research studies on comfort, the need for physical comfort was cited as a prerequisite for all other "levels" of comfort (Cameron, 1993; Collins et al., 1994; Fleming et al., 1987; Hamilton, 1985; Kennedy, 1991). For example, individuals who were in pain or nauseated were simply unable to focus on their needs for emotional or psychological comfort.

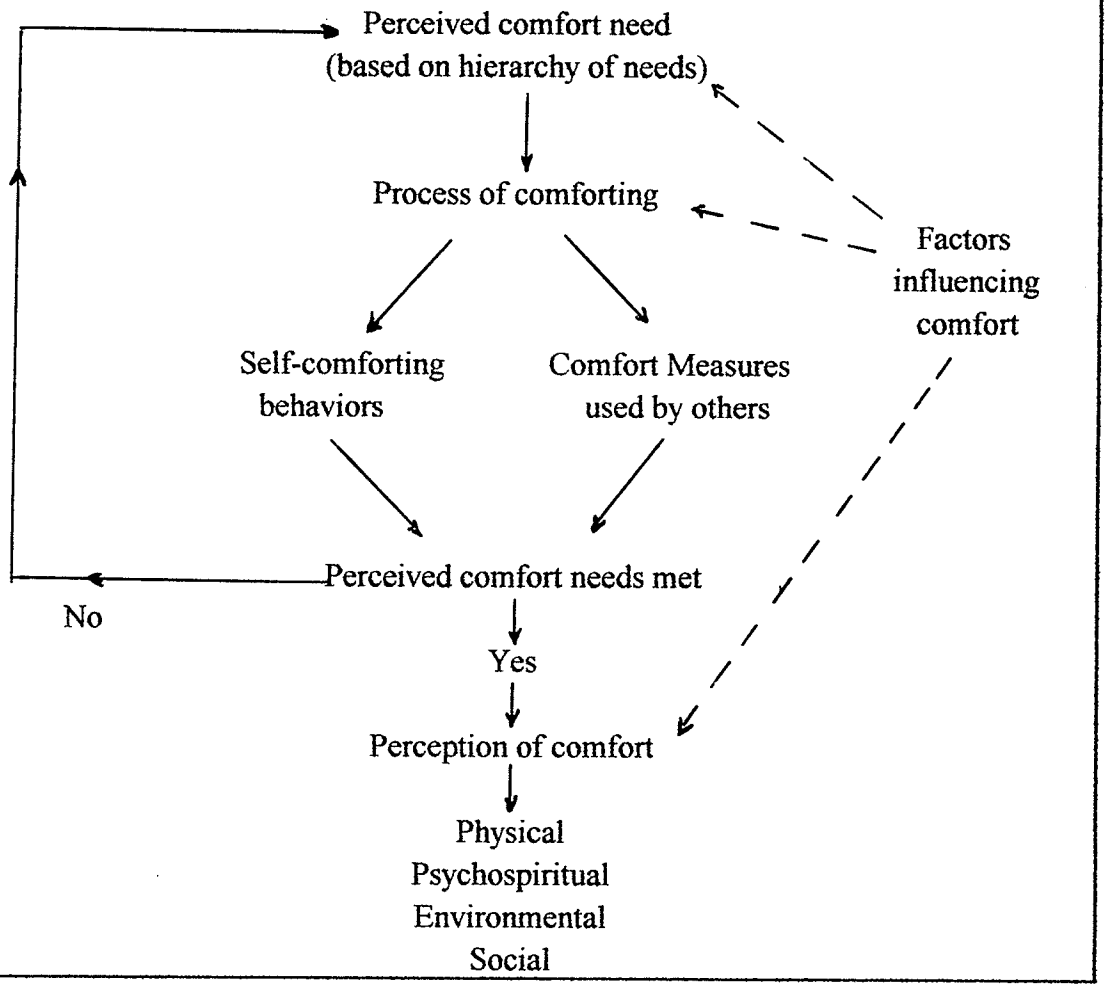
Conceptual Framework

Following from the above theoretical review on comfort, it became apparent that no existing theory adequately described all of the dimensions and components of the concept of comfort. The *theory of holistic comfort* proposed by Kolcaba (1994) fails to address the role of the individual patient and significant others in the process of comfort. Further, Maslow's *theory of human motivation* addresses only the need for comfort and fails to provide explanations for the process and outcome of comfort. Consequently, neither of these theories, in and of themselves, were utilized as the guiding framework for the present study.

Instead, the current literature and research on comfort was combined with the theoretical work of Maslow (1954) and Kolcaba (1994) in order to produce a comprehensive and clinically relevant conceptual framework (see Figure 2). This framework, developed by the researcher for the purposes of this study, provided the

mechanism through which the concept of comfort was explored and examined.

Figure 2. Conceptual framework



The continuum of comfort, originally described by Kennedy (1991), provided the foundation upon which the conceptual framework was built. In other words, comfort was conceptualized as a need, a process, and an outcome. The need for comfort was envisioned as a hierarchy of basic comfort needs incorporating the needs for biological integrity, safety, belonging, self-esteem, and self-actualization (Maslow, 1954). The process of comfort was depicted as including both the self-comforting behaviors engaged

in by the individual and the comfort measures used by significant others. The outcome of comfort was seen to be comprised of the individual's perception of physical, psychospiritual, environmental, and social comfort (Kolcaba, 1994). The need for comfort, the process of comfort, and the perceptions of comfort can be either positively or negatively influenced by a myriad of external and internal factors.

Examining all of the components of comfort detailed in this conceptual framework was not possible within the scope of the present study. Therefore, for the purposes of this research study, the perception of comfort was measured and described. More specifically, the relationship between self-perceived comfort and the factors of depression, quality of life, pain, self-rated health, and social support were explored. As well, nurse and older adult perceptions of comfort were compared and contrasted.

Chapter Three

Research Methodology

Research Questions and Hypotheses

Based on the knowledge and insights gained both from reviewing the literature, research, and theories on the concept of comfort and from developing a conceptual framework for understanding comfort, the research questions and related research hypotheses that guided this study included the following:

Research Questions:

1. What factors are related to the self-perceived comfort of chronically ill older adults living in a long term care facility?
2. Is there agreement between nurse and older adult perceptions of comfort?

Research Hypotheses:

1. Depression is inversely related to the self-perceived comfort of older adults residing in a long term care facility;
2. Pain is inversely related to the self-perceived comfort of older adults residing in a long term care facility;
3. Quality of life is directly related to the self-perceived comfort of older adults residing in a long term care facility;
4. Social support is directly related to the self-perceived comfort of older adults residing in a long term care facility;
5. Self-rated health is directly related to the self-perceived comfort of older adults residing in a long term care facility; and
6. Nurses report higher levels of comfort compared with older adults' self-perceived comfort.

In order to test the above research hypotheses, a quantitative, cross-sectional, descriptive study was conducted. More specifically, within this research study, five key variables, namely, depression, pain, self-rated health, social support, and quality of life were examined with regards to their relationship to the self-perceived comfort of older adults residing in a long term care facility. As well, the level of agreement between nurse and older adult perceptions of comfort was explored.

Operational Definitions of the Research Variables

In order to further clarify and define each of the research variables, the operational definitions for these variables is described below.

Comfort:	1) The state of having met basic human needs for ease, relief, and transcendence as measured by the General Comfort Questionnaire (Kolcaba, 1991);
	2) The level of comfort experienced by the older adult in the past week measured by a visual or tactile analogue scale.
Depression:	1) Score of 11 or greater on the Geriatric Depression Scale (Yesavage et al., 1983).
	2) A positive response to the single item question "Do you often feel sad or depressed?" (Mahoney et al., 1994).
Pain:	The level of pain experienced by the older adult in the past week measured by a visual or tactile analogue scale.
Self-rated health:	Subjective, global appraisal of overall health status made by the older adult.
Social support:	1) Size of support network measured by marital status, number of children, number of peer residents named as friends, and existence of a confidante;
	2) Level of social contact measured by the frequency of visits, telephone calls, and letters received or made by the older adult;
	3) Quality of social support received by the older adult as measured by overall level of satisfaction with visits.
Quality of life:	1) Satisfaction with care in the long term care facility reported by the older adult as measured by the Nursing Home Resident Satisfaction Scale (Zinn, Lavizzo-Mourey, & Taylor, 1993); and
	2) Satisfaction with life reported by the older adult as measured by the Life Satisfaction Index-Z (Corcoran & Fischer, 1987).

Instrumentation

Having operationalized all of the research variables, the specific instruments that were used to measure each variable can now be described.

Comfort

Perceptions of comfort held by the older adult were measured using the General Comfort Questionnaire (GCQ) developed by Katharine Kolcaba. The GCQ is a 48 item instrument designed specifically to measure the degree to which individuals perceive that their comfort needs for ease, relief, and transcendence have been met. By measuring perceptions of comfort across physical, psychospiritual, environmental, and social dimensions, this instrument measures a total of twelve facets of comfort (Kolcaba, 1991; Kolcaba, 1992b; Kolcaba, 1994). Each item of the GCQ originates from one of these twelve facets (see Table 1).

Table 1
Origin of Items of the GCQ (+ denotes positively worded items; - denotes negatively worded items).

	Ease	Relief	Transcendence
Physical	1 +	19 -	5 -
	20 -	14 -	6 -
	28 -	48 -	15 +
	36 +	25 -	29 +
Psychospiritual	2 +	22 -	9 +
	7 +	40 -	17 +
	31 +	44 +	45 -
	38 +	46 +	41 -
	24 -		
Environmental	11 +	3 +	21 -
	47 -	27 +	35 -
	32 -	12 -	18 -
	42 -	34 -	33 +
			30 +
Social	4 +	8 -	10 +
	23 +	13 -	16 -
	43 +	26 -	
	39 -	37 +	

All of the 48 items in the GCQ are scored along a four point Likert-type scale ranging from strongly agree to strongly disagree. Total scores range from 48 to 192 with higher scores indicating higher levels of comfort. Scores can also be determined for each of the four comfort dimensions (physical, psychospiritual, environmental, social) and each of the three senses of comfort (relief, ease, transcendence).

Prior to this research study, the GCQ had not been used in older adult populations (personal communication, Katharine Kolcaba, November 8, 1995). However, the instrument was pilot-tested with 256 adults who either lived in the community or were patients in an acute care facility. Analysis of the results of this pilot study revealed a Cronbach's alpha of .88. The three factors of relief, ease, and transcendence accounted for 63.4% of the variance in the 48 items of the instrument. Deletion of 13 items from the GCQ increased the Cronbach's alpha to .90 (Kolcaba, 1992b). The reliability of the subscales within the 35 item Revised GCQ fell between .66 and .80 (Kolcaba, 1992b). Despite the increased reliability of the Revised GCQ, the original 48 item instrument was selected for use in this study to allow a comparison between the psychometric properties found in the pilot population with the psychometric properties found in an older adult population.

For the purposes of this research study, two minor modifications of the GCQ were necessary. First, the GCQ was originally developed to measure the level of comfort perceived by the individual at the exact moment that he or she completed the instrument. However, in order to ensure consistency in the time frames of all instruments, in this study respondents were asked to report their comfort level over the past week. Second, the wording of five items was also modified due to the fact that not all interviews occurred in the older adults' room (see Table 2).

Table 2

Modifications to Items in the GCQ

Item	Original Wording	Modified Wording
21	This room makes me feel scared	My room makes me feel scared
27	The temperature in this room is fine	The temperature in my room is fine
32	This chair (bed) makes me hurt	My wheelchair (bed) makes me hurt
33	This view inspires me	The view from my room inspires me
42	This room smells terrible	My room smells terrible

In order to measure nurse perceptions of the comfort level of older adults, the GCQ was modified by the researcher. All items in this new instrument directly corresponded with the items in the original GCQ. In fact, the only difference in the two tools is that the nurse responded to items about the older adult rather than about him or herself. For example, the item "My body is relaxed" which is found in the original GCQ was modified to read "Mr./Mrs. X's body is relaxed" in the nurse version of the GCQ. The time frames of the original GCQ and the nurse version of the GCQ are identical in that nurses were asked to report the older adult's level of comfort over the past week.

In addition to using both forms of the GCQ, comfort was also measured using a visual analogue scale. The comfort visual analogue scale consisted of a ten centimetre, horizontal line labelled as "very uncomfortable" on one end and as "very comfortable" on the other end. Both the older adult and the nurse were asked to rate the older adult's overall comfort level in the past week by placing a mark somewhere along the horizontal line. The comfort visual analogue scale was scored by measuring the distance from the

"very uncomfortable" end of the scale to the respondent's selected point (Miller & Ferris, 1993; Wewers & Lowe, 1990).

Due to fact that two older adults in this study were legally blind, the visual comfort analogue scale was modifed into a tactile analogue scale for these select cases. Two pieces of tape were placed on a ruler, exactly ten centimeters apart. The respondents were instructed to imagine one piece of tape meaning they were "very uncomfortable" and to imagine the other piece of tape meaning they were "very comfortable". The respondents were then asked to place their index finger on the point between the two pieces of tape that reflected their overall comfort level in the past week. The value on the ruler to which the respondent pointed was recorded as the score. The same ruler, used to measure the scores for the visual analogue scale, was used as the tactile analogue scale. With both types of analogue scales, measurements were made to the nearest millimeter.

Finally, all respondents were also asked the single open-ended question "what does the word 'comfort' mean to you?". Unlike the other measures of comfort, this last question required the nurse to answer according to how he or she personally described or defined comfort.

Depression

In this study, depression was measured using both the Geriatric Depression Scale and a single item question. First, the Geriatric Depression Scale (GDS) was administered to all older adult respondents. This instrument, developed specifically to screen for depression in the elderly, consists of 30 items and has a yes or no response format. All of the items on the GDS required the respondent to answer according to his/her feelings over the past

week. A score of 11 or greater on the GDS is suggestive of depression (Yesavage et al., 1983).

The GDS has been demonstrated to be a valid and reliable tool in community, psychiatric, and nursing home populations (Lesher, 1986; Sheikh & Yesavage, 1986; Yesavage et al., 1983). In fact, a Cronbach's alpha of .99, a split-half reliability of .94, and a one month test-retest reliability of .94 have all been reported for this instrument (Lesher, 1988; Yesavage et al., 1983). Further, the GDS strongly correlates with other depression rating instruments including the Zung Self-Rating Depression Scale and the Hamilton Rating Scale for Depression (Yesavage et al., 1983). Using a score of 11 as a cut-off point for depression, the GDS has a sensitivity rate of 84% and a specificity rate of 95% (Lesher, 1986).

The second measure of depression used in this study was the question "Do you often feel sad or depressed?". This single item question has been shown to be comparable to the GDS in screening for depression in community older adult populations as demonstrated by a sensitivity rate of 69%, a specificity rate of 90%, a positive predictive value of 85.4%, and a negative predictive value of 90% (Mahoney et al., 1994). Respondents are required to simply answer the question as yes or no.

Pain

Pain was measured using a one item visual analogue scale. Visual analogue scales have been used extensively to measure the intensity of pain (Miller & Ferris, 1993). Such scales have been shown to have strong test-retest and interrater reliability and to correlate with verbal pain descriptor scales (Grossman et al., 1992; Miller & Ferris, 1993; Wewers

& Lowe, 1992).

In this study, the pain visual analogue scale consisted of a 10 centimetre straight, horizontal line labelled as "no pain" on one end and as "pain as bad as it could be" on the other end. Both the older adult and the nurse were asked to rate the older adult's level of pain in the past week by placing a mark somewhere along the horizontal line. The scale was scored by measuring the distance from the "no pain" end of the scale to the respondent's selected point. Measurements were made to the nearest millimeter (Miller & Ferris, 1993; Wewers & Lowe, 1990). Again, as was necessary when measuring comfort, a tactile pain analogue scale was used for the two older adults who were legally blind.

Self-rated Health

Self-rated health was measured using a single item question. All older adult respondents were asked to rate their overall health as excellent, very good, good, fair, or poor. Studies examining the validity and reliability of self-rated health have demonstrated that this global rating of health status is stable over time, correlates with physician ratings of health and utilization of health care services, and is predictive of mortality (Hooker & Siegler, 1992; Idler & Kasl, 1991; Mossey & Shapiro, 1982; Strain, 1993). Furthermore, self-rated health has been used extensively as a measure of health status in older adult populations (Idler & Kasl, 1991; Strain, 1993).

Social Support

In order to adequately measure social support, it was necessary to examine not only the size of the social support network but the level and quality of support provided by the network (Cohen & Syme, 1985; Stewart, 1989). For the purposes of this study, the size of

the support network was measured by individually examining marital status, number of children, number of peer nursing home residents viewed as friends, and the existence of a confidante with whom to talk about problems (Tesch, Nehrke, & Whitbourne, 1989).

Level of support provided by this social network was measured by the frequency of letters, visits, and telephone calls received by the older adult (Tesch et al., 1989). More specifically, older adult respondents were asked to indicate whether they receive visits, letters, and telephone calls "frequently", "sometimes", "rarely", or "not at all". Furthermore, as older adults may also actively seek out their own social support, the frequency of letters, visits, and telephone calls made by the older adult was also measured (Stewart, 1989).

Finally, the quality of support provided by the social network was measured by the overall level of satisfaction with visits as reported by the older adult. All older adult respondents were asked to rate their satisfaction with visits on a 5 point Likert-type scale ranging from "very satisfying" to "very unsatisfying".

Quality of Life

Numerous definitions and methods of measuring quality of life in long term care facilities exist (Cohn & Sugar, 1991; Moore, Newsome, Payne, & Tiansawad, 1993). However, quality of life for institutionalized older adults is typically defined either as satisfaction with care or as satisfaction with life in general (Cohn & Sugar, 1991; Sutcliffe & Holmes, 1991). Therefore, for the purposes of this study, both of these aspects of quality of life were measured.

Satisfaction with care was measured using the Nursing Home Resident Satisfaction Scale (NHRSS). Developed by Zinn, Lavizzo-Mourey, and Taylor in 1993, the NHRSS is 11 item instrument measuring satisfaction with care in three domains, namely, physician services, nursing services, and the environment. Each of the items in the instrument contains two separate questions. The first question requires a yes or no response to the item. The second question requires respondents to rate their satisfaction with the particular item on a 4 point Likert-type scale ranging from "not so good" to "very good". For example, the first question on the NHRSS requires respondents to answer the question "Do the doctors treat you well, yes or no?". The second component of this question then asks the respondents to rate how well the doctors treat them. Additionally, the NHRSS also includes one global item on overall satisfaction. Scoring of the instrument ranges from 11 to 44 with higher scores indicating higher levels of satisfaction with care.

Results from a pilot study, in which 168 nursing home residents completed the NHRSS, suggested that the instrument was reliable. The Cronbach's alpha was .69 for physician services, .80 for nursing services, and .74 for the environment. Correlations between the individual items and the total score ranged from .4 to .7. As well, both the interrater reliability and the 30 minute test-retest reliability ranged from .64 to .79 in all three domains (Zinn et al., 1993).

Satisfaction with life in general was measured using the Life Satisfaction Index-Z (LSIZ). The LSIZ is a 13 item instrument designed specifically to measure life satisfaction in elderly populations. Respondents are required to answer "agree", "disagree", or "unsure" for each item on the instrument. Total scores on the LSIZ range from 0 to 13 with higher

scores suggesting higher levels of life satisfaction (Corcoran & Fischer, 1987). The LSIZ has been shown to correlate with other measures of life satisfaction (Corcoran & Fischer, 1987). A split-half reliability of .79 and a Cronbach's alpha of .72 have been reported for this instrument (Baiyewu & Jegede, 1992; Watts, Kielhofner, Bauer, Gregory, & Valentine, 1986).

Procedure

Based on the instruments and questions detailed above, two separate questionnaires were developed for this research study (see Appendix F and Appendix G). The older adult questionnaire was comprised of the GCQ, NHRSS, GDS, LSIZ, comfort visual analogue scale, pain visual analogue scale, and questions regarding social support, self-rated health, and the meaning of comfort. As well, a set of demographic questions including medical diagnosis, reported health problems, signs and symptoms of illness, date of birth, sex, and date of admission was included in the questionnaire. In contrast, the nurse questionnaire included only the modified GCQ, pain visual analogue scale, comfort visual analogue scale, and the open-ended question on the meaning of comfort. Demographic variables measured in the nurses' questionnaire included sex, age, nursing capacity, years of nursing experience, and years of nursing experience in long term care.

A face to face interview, lasting anywhere from 25 to 60 minutes, was conducted with each older adult respondent. Interviews were conducted between March 1996 and June 1996. The vast majority of interviews were held in the older adult's room. One older adult requested that the interview be conducted in the nursing conference room on his unit while another older adult wished to be interviewed in the cafeteria. Information on the

respondent's date of birth, date of admission, and medical diagnoses was collected from the health care record immediately following the interview.

After the older adult had been interviewed, one of the nurses who had cared for the older adult in the past week, was also interviewed. Interviews with nursing staff lasted 10 to 20 minutes and were conducted in the nursing conference room on the unit. All interviews with the nurses occurred within four days of the older adult's interview; 60% percent occurred on the same day and 26% occurred on the following day.

In order to assist respondents in answering some of the questions in the interview, the response choices for the GCQ, the NHRSS, and the LSIZ were displayed on a visual card.

Following completion of the interviews with the first three nurse-older adult dyads, all data and procedures were reviewed by both the researcher and her thesis advisor. As no changes in the data collection tools or the sample recruitment procedure were made following this pilot study, the data from these interviews was included in the final data analysis.

Sampling Design

The sample for this study was drawn from a 461 bed long term care facility in Winnipeg, Manitoba. This long term care facility has 198 personal care beds, 55 interim care beds, and 208 beds for such programs as chronic care, respiratory care, and assessment and rehabilitation. Interestingly, as 155 of the 198 personal care beds in the facility are reserved for veterans, the personal care population consists of approximately 75% men.

The target population for this study encompassed 1) all older adults residing on the personal care and interim care units of the long term care facility; and 2) all nurses working on these same units. For the purposes of this study, personal care referred to those units on which the older adult was a permanent resident of the facility. Interim care referred to those units on which the older adult was only a temporary resident. Older adults on interim care units were awaiting placement for a permanent personal care bed in one of the long term care facilities in Manitoba.

It is important to note that, in order to keep the sample as homogeneous as possible, older adults residing on the chronic care units in the long term care facility were excluded from this study. According to the panelling criteria used by Manitoba Health, older adults designated as requiring chronic care have more extensive care needs than those older adults requiring only personal care.

A convenience sample of 35 nurse-older adult dyads was used in this study. Recruitment of the sample involved a series of progressive steps. First, the unit coordinators of the personal care and interim care units were requested to make a list of all older adults residing on their units that met the following inclusion criteria:

1. The individual was 60 years of age and older;
2. The individual suffered from at least one physical chronic illness;
3. The individual was able to speak and understand English;
4. The individual was cognitively intact as measured by a score of 24 or greater on the Folstein Mini-Mental Status Exam which had been conducted less than six months prior to the interview (Folstein, Folstein, & McHugh, 1975); and
5. The individual had been a resident on the unit for a minimum of two weeks.

Second, the unit coordinators were also requested to make a list of all older adults who met the inclusion criteria with the exception of 1) they had not had a Folstein Mini-Mental Status Exam, or 2) they had scored 24 or greater on the Folstein Mini-Mental Status Exam but the exam had been conducted more than six months earlier. In such cases and where the older adult consented, the researcher administered a Folstein Mini-Mental Status Exam to determine eligibility to participate in the research study. The researcher administered a total of 45 Folstein Mini-Mental Status Exams during the recruitment of the sample.

Based on the results of the above two steps, all older adults identified as meeting the sampling inclusion criteria were then approached by the researcher to explain the purpose and nature of the research study. Consent to participate in the study was the final requirement for inclusion in the research sample.

Finally, nurses also had to be recruited into the research study. Therefore, once an interview with an older adult had been completed, the unit coordinator was asked to compile a list of two or three nursing staff who had cared for the older adult in the past week. If the unit coordinator was not available (i.e. on the weekend or in the evening), the list of staff was obtained from the nursing shift supervisor. Based on this list, the researcher selected a nurse according to the following inclusion criteria:

1. The individual was actively practising as a Registered Nurse or a Licensed Practical Nurse;
2. The individual was working part-time or full-time on the unit where the older adult resided; and

3. The individual had personally cared for the older adult during the past week.

The nurse listed at the top of the list was approached first. If this nurse refused to participate or if this nurse had been previously interviewed, the researcher proceeded to the next name on the list. It should be noted that as nurses care for numerous residents, three nurses were asked to complete interviews on two older adults.

Recruitment of older adults and nursing staff into this study was also facilitated by two additional mechanisms. First, the researcher attended an unit coordinator meeting to explain both the purpose of the research study and the sampling inclusion criteria. Second, brief fact sheets outlining the basic elements of the research study were posted in the nursing conference room on all personal care and interim care units in the facility (see Appendix H).

Gaining Access to the Research Setting

In order to gain access to the long term care facility for the purposes of this research study, the administrators of the institution required that an institutional access form, a complete copy of the research proposal, and proof of ethical approval from the University of Manitoba Faculty of Nursing Ethical Review Committee (see Appendix I) were submitted to the Associate Director of Quality, Research, and Programs. Upon receipt and review of these three items, access was granted. Regular updates of research progress were provided to an assigned liaison person within the facility.

Data Analysis

After completing the interviews, both questionnaires of the nurse-older adult dyad were coded in matched pairs to permit comparative analysis. All data within each

questionnaire was then numerically coded. Analysis of the data, including both descriptive and inferential statistics, was conducted using the Statistical Package for the Social Sciences (SPSS), Version 6.1.3. The level of significance for all statistical tests was set at 0.05.

Frequency distributions and, when appropriate, descriptive statistics including mean, median, mode, and standard deviation were computed for all items and instruments. The data was then examined for outliers, skewness, and kurtosis. Due to a nonnormal distribution and the relatively small sample size, nonparametric statistical tests were used for subsequent data analysis. Specifically, the relationships between depression, self-rated health, quality of life, social support, pain, and comfort were tested using Spearman's correlations. As well, Mann-Whitney U tests were used to examine the differences on the level of comfort reported by the older adults as a function of the independent variables. Furthermore, the level of agreement or level of congruency between nurse and older adult perceptions of comfort were calculated using Kappa.

The psychometric properties of the various instruments used in the study were also analysed. Specifically, Cronbach's coefficient alphas were calculated to determine the internal consistency of the GCQ, NHRSS, LSIZ, and GDS.

Finally, content analysis was used to examine the open-ended question on the meaning of comfort. To do so, the responses provided by the older adults and their nurses were first read in their entirety to allow the researcher to develop an awareness of the underlying content. Based on this review, the responses were then grouped into eighteen general categories. These general categories were then further reduced into eight broad

themes of comfort (Burnard, 1991; Field & Morse, 1995).

Ethical Considerations

According to the Canadian Nurses Association (1983) and the Medical Research Council of Canada (1987), any study involving human subjects must ensure that the rights of the research participants are maintained. Since this research study involved both older adults and nurses as respondents, certain ethical guidelines were followed. Therefore, within the following section, the ethical considerations surrounding informed consent, confidentiality, and protection of research participants are addressed in terms of their application to this study.

Informed consent requires that research participants are informed of the nature, purpose, risks, and benefits of the study prior to commencement of the research (Canadian Nurses Association [CNA], 1983; Medical Research Council of Canada [MRC], 1987). In this study, the researcher provided each respondent with a detailed verbal description of the research. As well, each respondent was asked to read and sign a written consent form. To ensure clarity and full disclosure of the nature and intent of the research study, separate consent forms were developed for older adult respondents and nurse respondents (see Appendix J and Appendix K).

Additionally, in order for consent to be considered legally and ethically valid, potential subjects must also understand that participation in the study is strictly voluntary (CNA, 1983; MRC, 1987). As the researcher was previously employed in this long term care facility as both a staff nurse and a nursing supervisor, particular care and attention was directed at ensuring the voluntary nature of respondent participation. To do so, a two-step

consent process was used to ensure that respondents had ample time to make voluntary and informed decisions (Hamilton, 1985). First, the researcher approached the respondent to explain the purpose and nature of the study. The respondent was not asked to make a decision regarding study participation at this time. The researcher then returned later the same day or the following day to ascertain whether or not the respondent was willing to participate. If the respondent had decided to participate in the study, the researcher again reviewed the nature and purpose of the study and had the respondent sign the written consent form. However, it should be noted that a few respondents insisted that they did not require time to consider participation and requested the researcher to conduct the interview immediately following the first contact.

The confidentiality of all study respondents was also maintained throughout the entire course of this research study. None of the names of the respondents appeared on any of the interview forms. As well, since interviews were conducted with nurse-older adult dyads, neither the older adult or the nurse was given any of the information obtained from their dyad partner. Furthermore, all raw data will be kept under lock and key for a period of seven to ten years (MRC, 1987). Only the researcher and her thesis advisor have access to this data.

Finally, efforts were also directed at protecting respondents from any mental, emotional, or physical harm associated with the research study (CNA, 1983; MRC, 1987). The length of the interview schedule for both the older adult and the nurse was kept short to minimize any inconvenience surrounding time commitments and to prevent respondents from becoming fatigued (Kennedy, 1991). However, if, during the course of the interview,

a respondent became tired or distressed, the interview was immediately stopped. Only one interview had to be stopped as a result of the respondent becoming emotionally distressed. In this situation, the researcher asked the respondent if he/she needed any assistance. The respondent requested a drink of water and a tissue and then insisted that the interview continue stating " it helps to talk about it".

Chapter Four

Research Findings

Within the following section, the findings of the study are reported. More specifically, the demographic profile of the sample, the internal consistency of the instruments, and the results of univariate and bivariate data analysis are presented. Furthermore, the categories and themes stemming from the open ended question on the meaning of comfort are also described.

Description of the Sample

Response Rate

A total of 45 older adults met the inclusion criteria for this study. Ten older adults, seven women and three men, refused to participate in the study. Reasons for refusing to participate included: not feeling well enough to participate (n = 5); not wishing to be involved in this particular study (n = 4); or simply not believing in research (n = 1). Consequently, the response rate for older adult respondents was 78%.

In contrast, the response rate for nurse respondents was 100%. All nurses that met the inclusion criteria for the study were willing to participate. Such a high degree of participation may have been related to the unobtrusive nature of the nurse interview.

Nurses were asked relatively few questions about themselves.

Description of Older Adults

Interviews were conducted with 35 older adults, 23 men (66%) and 12 women (34%). The high percentage of male respondents in this study reflects the veteran population within the selected facility. The mean age of older adult respondents was 77.9 years (SD = 9.2) which was slightly younger than the facility mean of 81.2 years. The length of stay in the long term care facility for the older adults in this study ranged from 3 weeks to 648 weeks (12.5 years). The median length of stay was 57 weeks or just more than one year.

Older adult respondents had an average of five medical diagnoses appearing in their health care record (SD = 2.2) with a range of 2 to 12. The most common medical diagosis found in the health care record was cerebral vascular accidents with 46% of the older adult respondents having previously experienced a stroke. Other medical diagnoses which were common to at least 20% of the older adults in the study included: osteoarthritis (31%); depression (26%); chronic obstructive pulmonary disease (20%); and hip fracture and/or hip replacement (20%) (see Appendix L for a complete list of the frequencies of medical diagnoses). Noteably, three older adults had a medical diagnosis of dementia even though screening with the MMSE indicated no cognitive impairment.

In contrast, older adults reported a mean of seven chronic illnesses (SD = 3.0) with a range of 2 to 14. The most frequently self-reported chronic illnesses included: eye trouble (60%); arthritis and/or rheumatism (51%); stroke (49%); mental and/or emotional problems (46%); ear trouble (43%); and memory problems (40%) (see Table 3). As well,

at least 40% of the older adult respondents also reported the following symptoms: rash, itch, chafing, or dry skin (66%); anxiety (60%); constipation (54%); weakness (46%); constant tiredness (46%); and muscle cramps (40%) (see Table 4).

Table 3

Frequencies of Self-Reported Chronic Illnesses (n = 35).

Chronic Illness	Frequency (%)	n
Eye Trouble	60.0	21
Arthritis/Rheumatism	51.4	18
Stroke	48.6	17
Mental/Emotional Problems	45.7	16
Ear Trouble	42.9	15
Memory Problems	40.0	14
Orthopedic Problems	37.1	13
Stomach Trouble	37.1	13
Skin Trouble	37.1	13
Foot/Limb Problems	37.1	13
Bladder Incontinence	37.1	13
Heart Trouble	34.3	12
Bowel Problems	34.3	12
High Blood Pressure	31.4	11
Neurological Problems	25.7	9
Circulation Problems	20.0	7
Breathing Problems	20.0	7
Diabetes	14.3	5
Prostate Trouble	14.3	5
Kidney Trouble	11.4	4
Thyroid Trouble	8.6	3
Cancer	8.6	3
Other bladder problems	8.6	3

Table 4

Frequencies of Self-Reported Symptoms

Symptom	Frequency (%)	n
Rash/itch/chafing/dry skin	65.7	23
Anxiety	60.0	21
Constipation	54.3	19
Weakness	45.7	16
Constant Tiredness	45.7	16
Muscle Cramps	40.0	14
Shortness of Breath	37.1	13
Difficulty Sleeping	37.1	13
Diarrhea	34.3	12
Feelings of Dizziness	31.4	11
Frequent Headaches	22.9	8
Difficulties Breathing	20.0	7
Nausea	17.1	6
Vomiting	11.4	4
Persistent Coughing	8.6	3

Description of Nurses

A total of 32 nurses participated in this study. Twenty-nine nurses were interviewed about one older adult while three nurses were interviewed about two older adults. The majority of nurse respondents were female (88%) and were between the ages of 30 and 49 years (66%). The sample was nearly equally divided between Registered Nurses (56%) and Licensed Practical Nurses (44%). Years of experience working as a nurse ranged from 1 to

32 years with a median of 11 years (M = 13.44, SD = 9.46). Furthermore, nurse respondents had worked an average of 8.95 years (SD = 6.02) in a long term care facility or nursing home. While the number of days of care provision ranged from one to seven, the nurses had provided care to the older adult for an average of 3.41 days in the week prior to their interview (SD = 1.48).

Univariate Data Analysis

Comfort

Both the older adult GCQ and the nurse version of the GCQ demonstrated high internal consistency. In fact, the Cronbach's coefficient alpha was .83 for the older adult GCQ and .92 for the nurse GCQ. Such results are consistent with the Cronbach's alpha of .88 reported by Kolcaba (1992b) during the development of this instrument. The Cronbach's alphas for the seven subscales of these tools ranged from .21 to .83 (see Table 5). Due to the number of subscales with alphas below .70, the acceptable criterion for a new scale (Brink & Wood, 1989), only the GCQ total scores were used in subsequent data analysis.

Table 5

Reliability of the GCQ

Scales	Cronbach's Alpha Older Adult GCQ	Cronbach's Alpha Nurse GCQ
GCQ Total	.83	.92
Physical Subscale	.63	.71
Social Subscale	.28	.21
Psychospiritual Subscale	.74	.80
Environmental Subscale	.66	.83
Ease Subscale	.67	.61
Relief Subscale	.56	.78
Transcendence Subscale	.65	.83

Despite high internal consistency, a concern arose when using the modified GCQ with the nurse respondents in this study. Nurses had difficulty in answering several of the items on the instrument. Specifically, five items had at least six missing cases (see Table 6) while an additional 23 items had between one and three missing cases. Difficulties in completing the modified GCQ may have been related to the subjective nature of the items. That is, most of the items tended to tap highly subjective and internalized feelings such as the older adult's feelings of serenity or spirituality. The fact that nurses in this study may have felt uncomfortable or unable to assess these feelings raises an important question for further discussion.

Table 6

Items on the Modified GCQ with Six or More Missing Cases

Items on the Modified GCQ	# of Missing Cases
17. Mr./Mrs. X's faith helps him/her not to be afraid	11
29. Mr./Mrs. X can rise above his/her pain	6
38. Mr./Mrs. X's beliefs gives him/her peace of mind	13
44. Mr./Mrs. X feels peaceful	6
46. Mr./Mrs. X has found meaning in his/her life	8

For the older adult respondents in this study, scores on the GCQ ranged from 108 to 155. The mean score on the GCQ was 129.6 (SD = 12.8). Similarly, scores on the modified GCQ reflecting nurse perceptions of the older adult's comfort ranged from 93 to 144 with a mean of 120.1 (SD = 14.9).

However, due to the large number of missing cases in the nurse version of the GCQ, comparing the means from the older adult and the nurse GCQ raised some concerns. Therefore, in consultation with the researcher's thesis committee and a statistician from the Manitoba Nursing Research Institute in the Faculty of Nursing, University of Manitoba, the total scores on the nurse version of the GCQ were also prorated. That is, the total score from each nurse respondent was divided by the number of items the nurse actually answered and then multiplied by the number of items on the instrument (48). Using these calculations, the mean prorated score on the nurse GCQ was 125.9 (SD = 12.9) with a range of 93 to 144.

The means and standard deviations for each individual item of both versions of the GCQ are provided in Appendix M. Given that the theoretical range for scores on these scales is 44 to 192, both older adult and nurse respondents tended to report a moderate level of comfort for the older adults in this study.

The second quantitative measure of comfort consisted of the tactile and visual comfort analogue scales. Possible scores on these scales ranged from 0 to 10 with higher scores reflecting higher levels of comfort. In this study, the mean score for older adult respondents was 4.8 ($SD = 3.1$) with a range of 0 to 10. The mean score for nurse respondents was 5.4 ($SD = 2.1$) with a range of 1.3 to 9.3. Again, both older adults and nurses reported moderate levels of comfort experienced by the older adult in the week preceding the interview.

A moderate positive correlation was found between the scores on the GCQ and the comfort analogue scale for older adult respondents ($r_s = .56$, $p < .001$). However, no such relationship existed between the modified GCQ and the comfort analogue scale completed by nurse respondents.

Pain

Overall, older adults and nurses in this study rated the older adult's level of pain relatively low. The mean score on the tactile and visual pain analogue scale was 3.5 ($SD = 3.3$) for older adult respondents and 3.6 ($SD = 2.1$) for nurse respondents. Interestingly, while the scores for older adults mirrored the theoretical range for this scale (i.e. 0 to 10), the range of scores for nurse respondents was only 0.7 to 8.0.

Depression

Depression was measured using both the GDS and the single item question "Do you often feel sad or depressed?". In this study, the Cronbach's alpha for the GDS was .88 reflecting an acceptable but slightly lower level of internal consistency than previously reported in the literature (Lesher, 1986; Yesavage et al., 1983). The correlation between the GDS and the single item question on depression was .73 ($p < .001$).

According to the scores on the GDS, the majority of older adults in this study were possibly suffering from depression. In fact, 60% of older adult respondents scored 11 or higher on the GDS, the cutoff score for depression (Yesavage et al., 1983). Furthermore, the mean score on the GDS for older adult respondents was 12.86 ($SD = 6.8$).

Similar results were also found with the single item question on depression. Fifty-one percent of older adult respondents stated that they had often felt sad or depressed in the week preceding the interview. While such a high number of older adult respondents with possible depressive symtoms is not uncommon in long term care populations (Lesher, 1986; Yesavage et al., 1983), implications of these findings on the results of the study is certainly worthy of further discussion.

Self-Rated Health

Responses to the single item question on self-rated health suggested that the older adults in this study rated their health positively. Specifically, 62.8% of older adults rated their health as "good", "very good", or "excellent (see Table 7). Interestingly, however, is the fact that 37.2% of older adult respondents rated their health as either "poor" or "fair". As most community samples of older adults tend to rate their health optimistically, it is

noteworthy that such optimism,while substantial, is less evident in this institutional sample (Idler & Kasl, 1991; Mossey & Shapiro, 1982).

Table 7

Frequency of Responses to Single Item on Self-Rated Health (in percentages)

Response	Frequency (%)	n
Poor	11.4	4
Fair	25.7	9
Good	40.0	14
Very Good	11.4	4
Excellent	11.4	4

Social Support

The size of the older adult's social support network was measured by individually examining marital status, number of living children, number of peer nursing home residents viewed as friends, and the existence of a confidante with whom to talk about problems. Sixteen (46%) of older adult respondents were married. A total of twenty-two of older adults (63%) had two or more living children. Twenty-three of the older adults (65.7%) reported having someone they could talk to about their problems while twelve (34.3%) stated they had no such person.

Sixteen of the older adults in this study (45.7%) stated that they had no friends in the long term care facility. It should be noted, however, that this last question may not have been representative of social contacts. Several of the older adult respondents commented that their friends were individuals they had met prior to institutionalization. Five older

adults did not feel they could even answer this question (see Table 8 for a synopsis on the size of the social support network).

Table 8

Size of the Older Adult Respondents' Social Support Network

Characteristic	N	Categories	n	%
Marital Status	35	Never Married	5	14.3
		Married	16	45.7
		Divorced	4	11.4
		Widowed/Separated	10	28.6
Number of Living Children	34	None	8	22.9
		One	4	11.4
		Two	12	34.3
		Three or more	10	28.6
Number of Friends in the Long Term Care Facility	30	None	16	45.7
		One to Six	9	25.8
		More than Six	10	14.5
Existence of a Confidante	35	Yes	23	65.7
		No	12	34.3

Social support was also measured by six questions on the frequency of letters, visits, and telephone calls received and made by the older adult. The majority of older adults in this study indicated that they "sometimes" or "frequently" received visits (91%), telephone calls (52%), and letters (43%).

In contrast, older adult respondents were rather passive in their social relationships. Ninety-one percent of older adults rarely or never wrote letters. Similarly, 77% rarely or never made visits to other people. The only area in which older adult respondents actively sought out support was with telephone calls. Twenty-two older adults (63%) reported that they "sometimes" or "frequently" made telephone calls (see Table 9).

Table 9

Frequencies in Percentages for Six Items on the Level of Support (n)

Response	Visits Made	Visits Received	Calls Made	Calls Received	Letters Sent	Letters Received
Not at all	51.4 (18)	2.9 (1)	22.9 (8)	28.6 (10)	68.6 (24)	17.1 (6)
Rarely	25.7 (9)	5.7 (2)	14.3 (5)	20.0 (7)	22.9 (8)	40.0 (14)
Sometimes	17.1 (6)	34.3 (12)	28.6 (10)	28.6 (10)	0.0 (0)	25.7 (9)
Frequently	5.7 (2)	57.1 (20)	34.3 (12)	22.9 (8)	8.6 (3)	17.1 (6)

In order to determine if the above six items on the level of social support could be analyzed as a scale, a Cronbach's coefficient alpha was calculated. The Cronbach's alpha for the social support scale was only .55 suggesting that the items may be measuring different concepts (Brink & Wood, 1989). Therefore, these items were examined individually in all subsequent data analysis.

The final measure of social support used in this study involved the quality of support provided by the social network. Overall, older adult respondents expressed satisfaction with the visits they received. Specifically, visits were reported as "very satisfying" by 54.3% of respondents, as "satisfying" by 37.1%, and as "mixed, both satisfying and unsatisfying" by 8.6%. No respondents stated that visits were either "unsatisfying" or "very unsatisfying".

Quality of Life

The NHRSS and two of its three subscales demonstrated strong internal consistency within this study. The Cronbach's alpha was .90 for the entire scale, .83 for the physician services subscale, .89 for the nursing services subscale, and .60 for the environmental subscale. With the exception of the environmental subscale, the internal

consistency of the NHRSS was higher than previously reported in the literature (Zinn et al., 1993).

Despite the reliability of this instrument, however, a number of older adult respondents had difficulty responding to the items concerning physician services. Respondents indicated that they could not rate how well the doctor treated them or how long it takes the doctor to come and see them due to limited contact with the physician.

Possible scores on the NHRSS range from 11 to 44 with higher scores reflecting higher levels of satisfaction with care. In this study, scores ranged from 14 to 42. The mean score for older adults was 27.1 (SD = 7.6) reflecting a moderate level of satisfaction. In answering the one global item of the NHRSS, 68.5% of the respondents rated their overall satisfaction with care as either "good" or "very good", 26% rated their satisfaction as "not so good", and 5.7% rated their satisfaction as "okay". See Table 10 for scores on the NHRSS subscales.

Table 10

Scores on the subscales of the NHRSS

Subscale	Theoretical Range	Actual Range	Mean	Standard Deviation
Physician Services	3-12	2-12	5.5	2.7
Nursing Services	3-12	3-12	8.6	2.8
Environment	4-16	5-16	10.6	2.9

The second aspect of quality of life, life satisfaction, was measured using the LSIZ. The Cronbach's alpha for the LSIZ was only .66 in this study. Therefore, following discussion with the researcher's thesis advisor, the following two items were deleted from

the scale: 1) I have had more chances in life than most of the people I know; and 2) In spite of what some people say, the life of the average person is getting worse, not better. The first item was deleted based on computer analysis indicating a significant increase in alpha if the item was deleted. The second item was deleted due to the fact that there was nine missing cases for this item. The Cronbach's alpha was then recalculated for the 11 item LSIZ and found to be .73. This modified version of the instrument was used for all subsequent data analysis.

Scores on the modified LSIZ can range from 0 to 11 with higher scores indicating higher levels of life satisfaction. The mean score for older adult respondents in this study was 5.1 (SD = 2.5) with a range of 0 to 9.

Bivariate Data Analysis

Within the following section, the results of bivariate data analysis are presented. Each of the six research hypotheses in this study are discussed individually.

Hypothesis #1

Depression is inversely related to the self-perceived comfort of older adults residing in a long term care facility

A significant relationship was found between depression and self-perceived comfort. Older adults who scored 11 or greater on the GDS were more likely to report lower levels of comfort as measured by both the comfort analogue scale ($z = -3.08$, $p < .01$) and the GCQ ($z = -3.62$, $p < .001$). Similarly, older adults who indicated that they often felt sad or depressed, also scored significantly lower on the comfort analogue scale ($z = -3.20$, $p < .01$) and the GCQ ($z = -4.50$, $p < .001$). Moderate negative correlations

($p \leq .001$) were found between the measures of comfort and depression (see Table 11). Interestingly, such correlations were stronger with the GCQ than with the comfort analogue scale.

Table 11

Correlations Between Measures of Comfort and Depression

	GCQ	Comfort Analogue Scale	GDS	Single Item on Depression
GCQ	____	.56	-.72	-.77
Comfort Analogue Scale		____	-.67	-.55
GDS			____	.73
Single Item on Depression				____

Hypothesis #2

Pain is inversely related to the self-perceived comfort of older adults residing in a long term care facility

The reported overall level of pain in the week preceding the interview was significantly related to the self-perceived comfort of older adults in this study. The correlation between the pain analogue scale and the comfort analogue scale was -.39 ($p < .05$). A moderate negative correlation was also discovered between the pain analogue scale and the total score on the GCQ ($r_s = -.64$, $p < .001$).

Using a within study median split, older adults who scored greater than 2.8 on the pain analogue scale scored significantly higher on the GCQ ($z = -3.47$, $p < .001$).

However, the relationship between the comfort and pain analogue scales was not statistically significant.

Hypothesis #3

Quality of life is directly related to the self-perceived comfort of older adults residing in a long term care facility

Quality of life and self-perceived comfort were found to be directly related in this study. Using a within study median split, older adults who scored more than 28 on the NHRSS, reported significantly higher levels of comfort on both the comfort analogue scale ($z = -3.12$, $p < .01$) and the GCQ ($z = -2.06$, $p < .05$). Furthermore, older adults scoring more than 5 on the modified LSIZ were also more likely to score higher on the comfort analogue scale ($z = -3.94$, $p < .001$) and the GCQ ($z = -3.69$, $p < .001$). The correlations between both measures of comfort and scores on the NHRSS, the three subscales of the NHRSS, and the modified LSIZ ranged from .35 to .72 (see Table 12). All correlations were significant ($p < .05$).

Table 12

Correlations between Quality of Life and Self-Perceived Comfort (*p < .05, **p ≤ .001)

	Comfort Analogue Scale	GCQ
NHRSS	.57**	.56**
Physician Services Subscale	.61**	.48 *
Nursing Services Subscale	.43 *	.35 *
Environmental Subscale	.49 *	.63**
Modified LSIZ	.61**	.72**

Hypothesis #4

Social support is directly related to the self-perceived comfort of older adults residing in a long term care facility

Only one significant relationship was discovered between the measures of social support and comfort. Specifically, satisfaction with visits was moderately correlated with scores on the GCQ ($r_s = .41$, $p < .05$). In other words, older adults who were satisfied with visits were more likely to report higher levels of comfort. The size of the social support network and the level of support provided by the network were not significantly correlated with scores on either the comfort analogue scale or the GCQ.

Hypothesis #5

Self-rated health is directly related to the self-perceived comfort of older adults residing in a long term care facility

Self-rated health was positively correlated with the total score on the GCQ ($r = .45$, $p < .01$). However, no relationship was found between self-rated health and the comfort analogue scale.

Hypothesis #6

Nurses report higher levels of comfort compared with older adults' self-perceived comfort

Depending on the measure of comfort, nurse and older adult respondents had differing perceptions of the older adult's comfort level. As previously discussed, when measuring comfort with the GCQ, nurse reports of the older adult's level of comfort tended to be lower than those reported by older adults. The mean score on the GCQ for nurse respondents was 120.1 ($SD = 14.9$) while older adults averaged 129.6 ($SD = 12.8$).

Even the mean prorated score for nurse respondents on the GCQ ($\underline{M}$ = 125.9, $\underline{SD}$ = 12.9) was lower than the mean for the older adult respondents. Conversely, using the comfort analogue scale, nurses tended to report slightly higher levels of overall comfort than the older adults in this study ($\underline{M}$ = 5.4, $\underline{SD}$ = 2.1; $\underline{M}$ = 4.8, $\underline{SD}$ = 3.1 respectively).

In terms of correlations, the only significant relationship between nurse and older adult perceptions of comfort was with the GCQ. Scores on the older adult version of the GCQ were positively correlated with scores on the nurse version of the GCQ ($\underline{r}_s$ = .47, $\underline{p} < .01$). Furthermore, the correlation between the prorated scores on the nurse GCQ and the older adult GCQ were even stronger ($\underline{r}_s$ = .54, p = .001). No significant correlations were discovered between the comfort and pain analogue scales.

Kappa, a statistical test to measure agreement between two independent raters, was used to compute the level of agreement between nurse and older adult scores for the individual items of the GCQ. To do so, the four point Likert type scale ranging from "strongly agree" to "strongly disagree" was collapsed into a dichotomous scale of "agree" or "disagree". Only 12 of the 48 items demonstrated significant agreement between nurse and older adult respondents (see Table 13). Values for Kappa ranged from .30 to .64 for these twelve items.

Table 13

Items on the GCQ Demonstrating Agreement between Nurses and Older Adults ($p < .05$)

Congruent = Number of nurse-older adult dyads whose responses matched
Incongruent = Number of nurse-older adult dyads whose responses did not match

Item	Congruent (n)	Incongruent (n)	Kappa
4. There are those I can depend on when I need help	30	4	.30
9. I feel my life is worthwhile	24	9	.42
18. I do not like it here	26	8	.46
20. I do not feel healthy	26	9	.49
22. I am afraid of what is next	22	12	.35
24. I have experienced changes which make me uneasy	22	10	.37
28. I am very tired	28	7	.60
31. I am content	25	10	.39
32. My wheelchair (bed) makes me hurt	29	6	.40
35. I feel out of place here	23	11	.32
44. I feel peaceful	23	6	.47
47. It is easy to get around here	31	4	.64

Content Analysis

Content analysis was used to examine the responses to the open-ended question on the meaning of comfort. All responses were grouped into eighteen categories (see Appendix N for the actual responses within each category). The categories were then further reduced to eight broad themes of comfort (see Table 14) .

Table 14

Number of Responses Sorted by Themes and Categories of Comfort

Theme	Category	Responses by Older Adult (n = 96)	Responses by Nurse (n = 93)	Total Responses (n = 189)
Quality of Life	Simple things in life	13	1	14
	Quality of life	----	3	3
Physical Wellbeing	Physical health	9	8	17
	Bed/wheelchair	8	4	12
	Painfree	4	30	34
General Wellbeing	Sense of wellbeing	23	26	49
	Needs met	1	6	7
Personal Rights and Freedoms	Independence	6	6	12
	Being in control	2	----	2
	Dignity	2	----	2
	One day the same as the next	1	----	1
	Privacy	5	----	5
Caring Relationships	Family and friends	10	1	11
	Relationships with nursing staff	5	----	5
	Support	----	4	4
Environment	Environment	----	4	4
Spirituality	Spirituality	6	----	6
Going Back 25 Years	Going Back 25 Years	1	----	1

A total of 189 definitions or descriptions of comfort were provided by the older adults and nurses in this study. Overall, comfort was most commonly defined as either being a sense of wellbeing or a painfree state.

Separately examining nurse and older adult responses highlights the similarities and differences between the two groups. Ninety-six definitions or descriptions of comfort were provided by 34 of the older adults in this study. It should be noted that one older adult respondent was unable to define or describe the word comfort. Each older adult provided between one and seven different responses to this question. Nurse respondents, on the other hand, provided a total of 93 definitions and descriptions of comfort with individual nurses citing as many as six differing definitions.

Examining the numbers of nurse and older adult responses to each of the eighteen categories of comfort illustrates the differences between these two groups (see Table 14). The five most frequent definitions of comfort provided by older adults were: 1) Sense of wellbeing (n= 23);

2) Simple things in life (n=13); 3) Family and friends (n=10); 4) Physical health (n=9); and 5) Bed/wheelchair (n=8). No older adults defined comfort within the categories of "quality of life" or "support".

In contrast, the five most frequent definitions of comfort for nurses were:

1) Painfree (n=30); 2) Sense of wellbeing (n=26); 3) Physical health (n=8);

4) Independence (n=6) and 5) Environment (n=6). Nurse responses fell within only 11 of the 18 categories. No nurses defined comfort in terms of the following: relationships with nursing staff; spirituality; privacy; being in control; dignity; one day being the same as the

next; and going back 25 years. Interestingly, the majority of these categories fell within the theme of personal rights and freedoms.

However, the most dramatic differences between nurses and older adults can be seen by examining the percentage of respondents within each category of comfort (see Table 15). Eighty-six percent of nurse respondents defined comfort as being painfree. However, only 12% of older adult respondents described comfort in terms of pain. Additionally, 38.2% of older adults defined comfort in relation to the simple things in life whereas only 2.9% of nurses described comfort in this way.

Table 15

Percentage of Respondents Within Each Category of Comfort

Category	Older Adults	Nurses
Simple things in life	38.2	2.9
Quality of life	0.0	8.6
Physical health	26.5	22.9
Bed/wheelchair	23.5	11.4
Painfree	11.8	85.7
Sense of wellbeing	67.6	74.3
Needs met	2.9	17.1
Independence	17.6	17.1
Being in control	5.9	0.0
Dignity	5.9	0.0
One day being the same as the next	2.9	0.0
Privacy	14.7	0.0
Family and friends	29.4	2.9
Relationships with nursing staff	14.7	0.0
Support	0.0	11.4
Environment	2.9	11.4
Spirituality	17.6	0.0
Going back 25 years	2.9	0.0

Summary of the Findings

Overall, both older adult and nurse respondents indicated that the older adults in this study experienced moderate levels of comfort. The level of comfort was found to be related to depression, pain, quality of life, satisfaction with visits, and self-rated health.

More specifically, older adults who were not depressed, who reported lower levels of pain, who were satisfied with their care and with their life in general, who were satisfied with visits from family and friends, and who viewed their health status positively were more likely to report higher levels of comfort. Furthermore, while nurse and older adult reports of comfort as measured by the GCQ were moderately correlated, nurse respondents tended to underestimate the older adult's comfort level.

Chapter Five

Discussion and Implications

Within the following section, the findings of the study are examined in light of the current theory and research on comfort. Specifically, the definitions of comfort, the factors related to comfort, and nurse versus older adult perceptions of comfort are explored individually. As well, the applicability of the GCQ for use in long term care populations is discussed. Finally, the assumptions, limitations, and implications stemming from this study are reviewed.

Defining Comfort

The descriptions of comfort provided by the older adults and nurses in this study mirrored the definitions found in the nursing literature and research. For example, comfort has been previously defined as a state of wellbeing, pain relief, regular bowel movements, being independent, feeling relaxed, having peace of mind, feeling calm and at ease, being properly positioned in bed and in a wheelchair, feeling safe, and having all of one's needs met (Arruda et al., 1992; Bottorff, 1991; Engelking, 1988; Hamilton, 1989; Kennedy, 1991; Morse, 1983; Morse, 1992). Each and every one of these definitions of comfort was

also provided by the older adults and nurses in this study.

Furthermore, similar to the comfort literature and research (Arruda et al., 1992; Gropper, 1988; Hamilton, 1989; Kennedy, 1991; McIlveen & Morse, 1995), the importance of family, friends, and nursing staff in the provision of comfort was also evident within this study. Older adult respondents frequently described comfort as a function of caring relationships. Such definitions of comfort as "nurses smiling, treating you right", "nursing staff talking to me", and "having my family around" clearly illustrated the importance of family members and nurses in the level of comfort described by these chronically ill older adults.

Despite the similarities between the definitions of comfort in the literature and those provided by the respondents in this study, one distinctive difference did exist. Kolcaba and Kolcaba (1991) identified four definitions of comfort, namely: 1) a cause of relief from discomfort and/or a cause of the state of comfort; 2) a state of ease and peaceful contentment; 3) relief from discomfort; and 4) whatever makes life easy or pleasurable. According to these authors, the fourth definition of comfort is hedonistic and therefore has little significance or application to nursing practice. However, in the present study, 38.2% of older adult respondents defined comfort as related to the "simple things in life". These older adults described comfort as having money, enjoying a bottle of whiskey, reading a good book, and having a cigarette. In light of such findings, the fourth definition of comfort, previously discounted by Kolcaba and Kolcaba, should be reexamined within the context of nursing.

In reviewing the comfort literature and research, two brief references to what is typically labelled as "the comforts of home" seemed to parallel the "simple things in life" category discovered within the present study. Specifically, Pineau (1982) conducted a study to examine the psychological meaning of comfort as related to the material comforts in the home. Respondents in this study defined a comfortable home as one which was personalized, warm, spacious, and quiet. The second reference to "the comforts of home" appeared in a phenomenological study conducted by Bottorff (1991). In this study, several of the respondents identified that comfort occured in one's own home due to the familiarity of the environment, the warmth, and the ability to be one's true self. In this latter study, comfort was defined in reference to such everyday things as watching TV and wearing your own clothes.Given the fact that for the older adults in the present study "home" was the long term care facility in which they resided, the importance of the "simple things in life" or the "comforts of home" in the level of comfort experienced by older adults is not surprising.

Factors Related to Self-Perceived Comfort

Situating the findings of this study within the literature on the factors related to comfort is difficult due to the dearth of empirical studies in this area. In fact, prior to the present study, the relationship between comfort and such variables as depression, pain, quality of life, social support, and self-rated health was based solely on testimonials and common sense. After all, it seemed plausible that older adults who were depressed, who were in pain, who had a poor quality of life, who had limited social support, or who viewed themselves to be in poor health would be likely to experience low levels of comfort

(Ferrell & Ferrell, 1990; Gropper, 1992; Hamilton, 1985; Hamilton, 1989; Kennedy, 1991; Kolcaba, 1992a; Morse et al., 1994). Not surprisingly, therefore, all but one of these relationships were supported by this study.

The only relationship not fully supported by the findings of this study was the one existing between comfort and several measures of social support. Only the older adult's level of satisfaction with visits influenced the total score on the GCQ. Marital status, number of living children, number of peer nursing home residents viewed as friends, existence of a confidante, and the frequency of telephone calls, letters, and visits were not significantly related to the level of comfort reported by the older adult.

At least two possible explanations exist for this seemingly limited relationship between social support and comfort. First, the measures of social support used in this study may not have been reflective of the social support system of the older adult respondents. In particular, older adults were questioned regarding the number of nursing home residents they viewed as friends. However, as pointed out by the older adults themselves, most friendships had been established prior to institutionalization. The addition of an item inquiring simply about the number of friends that the older adult had may have better captured the size of the social support network. Furthermore, modifying the wording of the existing question to ask whether or not the older adult "spent time with" or "enjoyed the company of " fellow residents may have also been beneficial.

The second possible explanation is that quality of support may simply be a more critical indicator of comfort than either the size of the social support network or the level of support provided by the network. Several researchers have suggested that quality of

support or an individual's perception of support is ultimately more important than the quantity or frequency of social contacts (Berkman, 1983; Lindsey, 1988; Stewart, 1989). In other words, the older adult may have a large support system comprised of family, friends, and church members, but if he/she does not view such social contacts to be supportive, the benefits of social support are negated (Stewart, 1989).

While the nature and the strength of the relationships between comfort and the remaining independent variables were previously reported, the relationship between comfort and quality of life merits additional comment. Upon review of the descriptions and definitions of comfort provided by the older adults and nurses in this study, the similarity between this concept and the concept of quality of life is remarkable. In the gerontological nursing literature and research, the determinants of quality of life have been cited to include physical health, individual rights and freedoms, environment, relationships with family and friends, and the approach of nursing staff (Aller & Van Ess Coeling, 1995; Cohn & Sugar, 1991; Farquhar, 1995; Oleson, Heading, Shadick, & Bistodeau, 1994). Furthermore, quality of life has been defined as satisfaction with life, sense of wellbeing, and general happiness (Farquhar, 1995). All of these descriptions and definitions of quality of life closely resemble the themes and categories of comfort derived in the present study. While additional research is necessary to solidify the link between these concepts, the findings of this study suggest that quality of life and comfort may be closely intertwined for older adults residing in long term care facilities.

Comparing Nurse and Older Adult Perceptions of Comfort

Similar to the nursing literature and research on comfort (Collins et al., 1994; Fleming et al., 1987; Jacox, 1989; Kennedy, 1991; McIlveen & Morse, 1995), the nurses in this study tended to describe comfort in terms of physical and psychological dimensions. Nurse respondents most often defined comfort as the absence of pain or as a sense of general physical and psychological wellbeing. In contrast, older adult respondents defined comfort as a multidimensional concept incorporating such components as independence, social relationships, privacy, and spirituality. Similar to the results reported by both Hamilton (1989) and Kennedy (1991), older adults in this study rarely defined comfort with reference to pain relief.

Recalling the parallel relationship between Maslow's hierarchy of human needs and the comfort needs defined in the literature, results of this study seem to indicate that nurses and older adults may be focusing on differing "levels" of comfort. According to Maslow (1954), there exists five basic human needs which can be arranged in the following ascending hierarchy: 1) physiological needs, 2) safety needs, 3) belongingness and love needs, 4) esteem needs, and 5) the need for self-actualization. As previously discussed, comfort needs can be similarly organized within such a hierarchy (see Appendix E).

In comparing the definitions of comfort provided in this study with this hierarchy of comfort needs stemming from the literature, one distinct difference is noteable. Specifically, the nurse respondents tended to focus on physiological comfort needs while the older adult respondents focused on the higher level comfort needs of belongingness and love, esteem, and self-actualization.

Given these differing definitions of comfort, the incongruency between nurse and older adult perceptions of comfort found in this study is not surprising. When measured using pain and comfort visual analogue scales, nurse and older adult perceptions of the level of comfort and pain experienced by the older adult in the past week were not related. While a significant relationship was found between nurse and older adult scores on the GCQ, nurses tended to underestimate the comfort level of older adults. This latter finding is inconsistent with the literature comparing nurse and patient perceptions of pain. Typically, nurses have been shown to underestimate the intensity of pain experienced by their patients (Krokosky & Reardon, 1989; Rankin & Snider, 1984; Seers, 1987; Stephenson, 1994). Consequently, it was expected that nurses would overestimate rather than underestimate the level of comfort experienced by the older adults in this study.

The ability of nurses to act as proxies in the determination of comfort is further drawn into question by the difficulties that the nurse respondents had in completing several of the items on the GCQ. Specifically, nurses had difficulty answering items concerning spirituality and serenity. However, examination of both the definitions of comfort provided by the older adults in this study and the definitions of comfort found in the literature revealed that spirituality plays a critical role in comfort (Arruda et al., 1992; Hamilton, 1989; Kennedy, 1991). If nurses are unable or uncomfortable in assessing this aspect of comfort, it is doubtful that nurses can have a true understanding of the level of comfort experienced by chronically ill, institutionalized older adults.

The Use of the GCQ to Assess Comfort in Long Term Care Populations

Prior to this study, the GCQ had not been used to assess the comfort of older adults residing in long term care facilities. Furthermore, the GCQ had never been modified to allow for nurse perceptions of an individual's comfort level (personal communication, Katherine Kolcaba, November 8, 1995). Findings from this study indicated that the both the older adult and nurse version of the GCQ were internally consistent, reliable measures of comfort.

Noteably, the GCQ appeared to be a more sensitive measure of comfort than the comfort visual analogue scale. The correlations between the GCQ and the independent variables in this study were stronger than the correlations between the comfort visual analogue scale and these same variables. In fact, in terms of social support, only the total score on the GCQ was significantly related to satisfaction with visits. Additionally, older adult and nurse perceptions of comfort were significantly related only when using the GCQ. No such relationship existed with the comfort visual analogue scale.

However, if the GCQ is to be used in future studies with long term care populations, a few modifications may be necessary. First, the timeframe of the instrument should be carefully reviewed. In this study, the time frame of the GCQ was modified so that respondents were asked to report the older adult's comfort level over the past week. During the course of this study, it seemed as if the older adults were responding to the items in the here and now while the nurses were responding with reference to the past week. Therefore, future use of the GCQ should ensure that the timeframes are consistent. If only interviewing older adults, the timeframe should require the individual to answer the

items based on how he or she is feeling at the exact moment of the interview.

Additionally, if the nurse version of the GCQ is to be used in future studies, the tool may need to be modified due to the large number of missing items in this study. In particular, the five items with six or more missing cases may need to be deleted from the instrument or reworded to facilitate nurse responses.

Changing the response set in both versions of the GCQ from a 4-point likert type scale to a dichomotous, "agree" or "disagree", scale may ease administration of the instrument. Older adult and nurse respondents alike seemed to be able to quickly identify whether or not they agreed or disagreed with each item on the GCQ. However, having to further distinguish between "strongly agree" and "agree" or "strongly disagree" and "disagree" created some difficulty and confusion.

Finally, as a large number of older adult respondents defined comfort in terms of the "simple things in life", the addition of one or more items to measure this aspect of comfort may be an important consideration when using the GCQ in long term care populations. For example, an item such as "I have opportunity to enjoy the simple things in life" could be quite easily added to the instrument.

Assumptions of the Study

This entire research study was based on the assumption that individuals can indeed articulate their perceptions of comfort (Kennedy, 1991). In contrast, some researchers have argued that the state of comfort is beyond human awareness (Bottorff, 1991; Morse et al., 1995). For example, according to Morse, Bottorff, and Hutchinson (1995), only the absence of comfort, that is, discomfort is recognizable to an individual.

However, although cognizant of the claims of these researchers, for the purposes of this study, comfort was assumed to be a recognizable and positive human state. Findings from this study indicated that all of the nurses and all but one of the older adults were able to define comfort. The ability of the respondents to provide personalized definitions of comfort lends support to the position that individuals can indeed articulate their perceptions of comfort.

Limitations of the Study

In addition to stating the assumptions underlying this study, the limitations of the research must also be made explicit in order to understand the validity and reliability of the research findings (Polit & Hungler, 1991). Due to the exploratory nature of this study, several limitations, including limitations related to sampling and limitations related to measurement, must be highlighted.

In terms of sampling, two limitations need to be identified. First, as the sampling design of this study was based on a convenience sample, the generalizability of the study is limited. Second, the unique characteristics of the older adult respondents in this study also limits the generalizability of the sample. Specifically, the sample was comprised of a high percentage of men suggesting the need for further research examining the impact of gender on perceptions of comfort. As well, although not unlike other nursing home populations (Lesher, 1986), a large proportion of the older adults in this study reported depressive symptoms. Finally, as the sample consisted of only cognitively intact older adults, determining whether or not comfort is perceived similarly by cognitively impaired older adults is not possible (Kennedy, 1991).

In addition to the limitations related to sampling, two measurement limitations also need to be addressed. First, due to a low internal consistency, the LSIZ had to be modified in order to allow for inclusion of this scale in data analysis. Interestingly, in a study conducted by Abraham (1992), the internal consistency of the LSIZ was also drawn into question. In this latter study, administration of the LSIZ to 76 frail nursing home residents yielded Kuder-Richardson KR-20 coefficients ranging from only .11 to .60. Results of Abraham's study combined with the results of the present study suggest that the items of this instrument may not be meaningful for institutionalized older adult populations. As a result, caution should be exercised when using the LSIZ with elderly individuals.

The second measurement limitation concerns the ability of the physician subscale of the NHRSS to accurately measure satisfaction with physician services. Despite the high internal consistency of this scale, a significant number of older adult respondents indicated that the items were not reflective of their actual relationship with the physician on the unit. Many respondents stated that they did not feel capable of measuring their satisfaction with their physician due to the fact that they had limited contact with him or her. While such comments suggest the need to reexamine the phrasing and content of this subscale of the NHRSS, examination of older adults' perceptions of the role and responsibilities of physicians in long term care facilities may also be warranted.

Implications for Future Research

Locating the present research findings within the conceptual framework guiding this study clearly identifies future directions for research on the concept of comfort. This study focused on only one aspect of the comfort continuum, namely, the outcome of comfort.

Findings of the study shed light on the perceptions of and factors influencing the level of comfort experienced by chronically ill, institutionalized older adults. However, additional research investigating both the need for comfort and the process of comfort is also needed. Given the lack of knowledge concerning self-comforting behaviors, research examining this aspect of comfort should receive particular attention.

A variety of other potential research topics also surface upon reviewing the findings of this study. For example, investigation of the ability of other individuals to accurately assess the comfort level of older adults is required. Additional research should be conducted to examine family member and nursing assistant perceptions of the comfort level of older adults residing in long term care facilities. Furthermore, examination of the relationship between the concepts of comfort and quality of life is also needed. Finally, research exploring the material aspects of comfort or, as labelled in this study, "the simple things in life", would enable health care professionals to better understand the meaning of comfort to chronically ill, institutionalized older adults.

Implications for Clinical Practice

Nurses working in long term care facilities can be continually overheard asking residents "Are you comfortable?". However, based on the findings of this study, nurse and older adult interpretations of the meaning of this question may be quite different. Nurses are likely to be inquiring about pain control while older adults are likely to be considering such facets of life as visits from family, lying in a soft,warm bed, or having a good hot bath. These differing and individualized definitions of comfort demand that nurses clarify the meaning of comfort with each of the older adults in their care.

In addition, the findings of this study also illustrate the multitude of factors influencing perceptions of comfort. Efforts to enhance comfort need to include interventions aimed at minimizing pain, treating depression, improving health status, facilitating family visiting, and improving satisfaction with care. Only by incorporating all of these aspects into nursing practice will nurses be successful in promoting the comfort of chronically ill, institutionalized older adults.

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Synopsis of research studies on comfort

Researcher(s) and Date	Purpose	Sample	Methodology	Results
Arruda, Larson, & Meleis, 1992	To explore the characteristics, needs, and sources of comfort as perceived by Hispanic cancer patients.	10 Hispanic cancer patients undergoing chemotherapy Age range: 20-52 Mean age: 39 yrs	Ethnography	Six characteristics of comfort were described: 1) integrated being and feeling; 2) function and normalcy; 3) care and nurture; 4) security and safety; 5) control; and 6) comodo (relating to accommodation, alignment of the body). Six categories of comfort needs were also isolated: 1) nurturance; 2) familiar environment; 3) safety; 4) quality life; 5) normalcy; and 6) animo (positive mental drive).
Bottorff, Gogag, & Engelbert-Lotzkar, 1995	To describe the comforting strategies used by nurses to comfort adult cancer patients.	Examined 570 hours of videotaped interactions between 8 adult cancer patients and 32 nurses on an active cancer treatment unit (No other sample characteristics provided)	Qualitative Ethology	Eight categories of comforting interactions were described: 1) gentle humor; 2) physical comforts; 3) providing information; 4) emotionally supportive statements; 5) choices regarding care; 6) social exchange; 7) increasing proximity; and 8) touch. As well, four patterns of comforting were also reported: 1) putting experiences into perspective; 2) staying in control; 3) functioning as normally as possible; and 4) providing emotional support.

Researcher(s) and Date	Purpose	Sample	Methodology	Results
Cameron, 1993	To explore the nature and process of comfort as perceived by hospitalized, medical-surgical patients.	10 medical-surgical patients (ages were not provided)	Grounded theory	Comfort emerged as an interpersonal balancing process. Focused on the ability of the individual to enhance his/her own comfort through monitoring, networking, and enduring.
Collins, McCoy, Sale, & Weber, 1994	To examine and compare the meaning of comfort held by substance-using and nonusing postpartum women.	36 postpartum women: 18 substance-using 18 nonusers	Descriptive	Comfort was described in terms of resolution of pain, resolution of fatigue, satiation of hunger, resolution of physical irritants, and relaxation. Few differences were discovered between substance-using and nonusing women.
Fleming, Scanlon, & D'Agostino, 1987	To describe the comfort needs of adult, advanced cancer patients as perceived by nurses.	30 professional nurses and 115 paraprofessional staff at an advanced treatment centre	Descriptive	Comfort needs were categorized according to the hospital philosophy. Seven dimensions of comfort measures were described: 1) physiological; 2) spiritual; 3) psychosocial; 4) patients' rights, dignity, self-worth, and patient involvement in care; 5) reducing severity of the illness; 6) family and friends; and 7) multidisciplinary team approach.
Hamilton, 1985	To examine the meaning and attributes of comfort as perceived by terminally ill cancer patients.	14 terminally ill cancer patients on a palliative care unit Age range: 38-81 Mean age: 61 yrs	Descriptive exploratory	Four themes of comfort: 1) relationships with others; 2) illness & associated symptoms; 3) feelings; and 4) immediate surroundings.

Researcher(s) and Date	Purpose	Sample	Methodology	Results
Hamilton, 1989	To explore the meaning of comfort as perceived by chronically ill elderly.	30 chronically ill institutionalized elderly (All respondents over 65 years old)	Qualitative	Five comfort themes: 1) disease process; 2) self-esteem; 3) positioning ; 4) approach and attitudes of staff; and 5) hospital life.
Kennedy, 1991	To explore how comfort is perceived by acutely ill patients.	9 patients on intensive care step down units and 1 community patient Age range: 58-78 Mean age: 69 yrs	Interpretive Interactionism	The experience of comfort consisted of a need for comfort, the process of comfort, and the outcome of comfort. The process of comfort encompassed nine comfort categories: 1) caring attitude; 2) being there; 3) consistency; 4) reassurance; 5) delegating control of a situation; 6) physical activities; 7) family and friends; 8) calm feeling; and 9) belief in God.
McIlveen & Morse, 1995	To examine the changing role of comfort in nursing literature between the years of 1900 and 1980.	621 journal articles and 17 nursing textbooks	Historical	Three time periods or eras of comfort emerged: 1) 1900 to 1929-comfort as nursing's focus; 2) 1930 to 1959-comfort in transition; and 3) 1960 to 1980 comfort and the rise of nursing science.
Morse, 1983	To explore the components and context of the act of comforting.	4 healthy, Anglo-American women (aged 23-29 years)	Ethnoscience	Three components of comfort: 1) talking; 2) touching; and 3) listening. The appropriateness of each component of comfort in a given situation is dependent on an individual's age, perceived needs, and role relationships.

Researcher(s) and Date	Purpose	Sample	Methodology	Results
Morse, 1992	To explore the use of comfort by nurses working in an emergency room.	Nurses and patients in an emergency department (no other sample characteristics provided)	Ethnography	Eight types of comforting were isolated: 1) keeping things cool; 2) clicking through the assessment; 3) monitoring and observing; 4) helping patients retain/regain control; 5) talking patients through procedures; 6) reaching the person in the body; 7) keeping the doctors on track; and 8) bringing in and supporting the family.
Morse, Bottorff, & Hutchinson, 1995	To explore the meaning of comfort as experienced by ill or injured patients.	12 family members and 36 patients who suffered from chronic illness or who had experienced a traumatic injury, a surgical intervention, or an organ transplant.	Phenomenology	Emergence of eight themes reflecting discomforts of the body resulting form illness and/or injury: 1) the diseased body; 2) the disobedient body; 3) the deceiving body; 4) the vulnerable body; 5) the violated body; 6) the enduring body; 7) the betraying body; and 8) the resigned body. Comfort measures and activities for each of these themes are described in Morse, Bottorff, & Hutchinson, 1994.
Pineau, 1982	To explore the psychological meaning of comfort as related to material comforts in the home.	400 women: 100 women aged 65 and older; 100 housewives aged 35 to 55; 100 secretaries aged 20 to 35; and 100 first and second year university students	Descriptive	Four comfort themes emerged: 1) personalization; 2) freedom of choice; 3) space; and 4) warmth.

Researcher(s) and Date	Purpose	Sample	Methodology	Results
Solberg & Morse, 1991	To explore the comforting behaviors used by caregivers when caring for distressed postoperative newborns.	Examined 40 hours of videotaped interactions between 4 male neonates and their primary caregivers	Qualitative Ethology	Both tactile and verbal comforting behaviors were used by caregivers. Tactile comforting included: 1) palmer contact; 2) kissing; 3) stroking; 4) rubbing; 5) holding; 6) patting; 7) rocking; and 8) squeezing.
Triplett & Arneson, 1979	To examine the responses of infants and children to verbal and tactile comfort.	63 hospitalized children Age range: 3 days to 44 months	Exploratory quantitative	Tactile comfort was more successful in comforting distressed children.
Walters, 1994	To describe the comforting role of critical care nurses	8 critical care nurses who worked	Phenomenology	Eight themes of comforting are described: 1) providing support to the patient; 2) relief from pain; 3) relief from anxiety; 4) communicating; 5) using touch; 6) facing death; 7) comforting family and friends; 8) supporting other nursing staff.

Appendix B

Locating the comfort research along the comfort continuum

Researcher(s) and Date	Need	Process	Outcome
Arruda, Larson, & Meleis, 1992	X	X	X
Bottorff, Gogag, & Engelberg-Lotzkar, 1995		X	
Cameron, 1993		X	
Collins, McCoy, Sale, & Weber, 1994	X	X	X
Fleming, Scanlon, & D'Agostino, 1987		X	
Hamilton, 1985		X	X
Hamilton, 1989		X	X
Kennedy, 1991	X	X	X
McIlveen & Morse, 1995		X	X
Morse, 1983		X	
Morse, 1992		X	
Morse, Bottorff, & Hutchinson, 1995	X	X	
Pineau, 1982			X
Solberg & Morse, 1991		X	
Triplett & Arneson, 1979		X	
Walters, 1994		X	

Appendix C

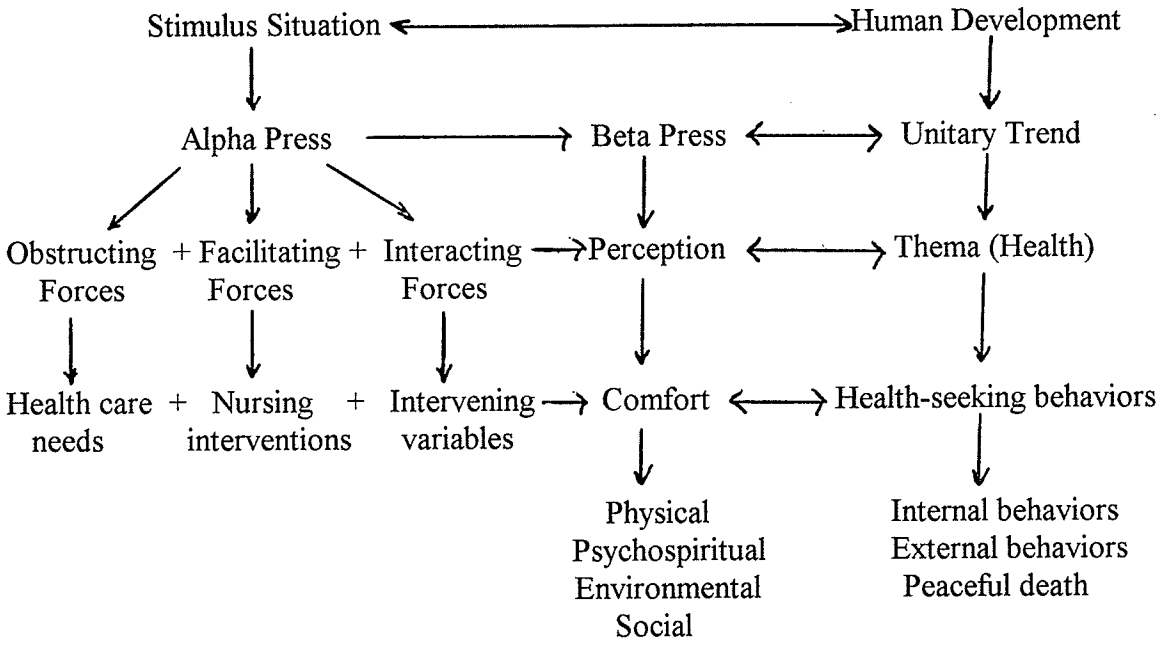
Comfort measures cited in the comfort literature and research

Presencing
Being consistent
Reassuring
Answering questions
Being kind
Alleviating physical symptoms
Allowing for privacy
Listening
Caring
Touching
Showing empathy
Showing sympathy
Accepting the patient
Monitoring the patient
Giving a back rub
Massaging
Relieving anxiety
Administering medications
Offering choices
Providing encouragement
Smiling
Positioning a fan
Praying with the patient
Giving mouth care
Providing warmth
Providing a quiet environment
Using diversion techniques
Supporting the patient/family
Being honest
Calling patients by name
Facilitating independence
Laughing with the patient
Positioning
Showing patience
Being gentle
Promoting sleep
Grooming
Bathing/feeding the patient
Skin care
Providing hot packs/cool face cloths
Engaging in social conversations
Use of gentle humor
Talking
Providing a comfortable chair

(Bottorff, 1991; Bottorff et al., 1995; Collins et al., 1994; Engelking, 1988; Fleming et al., 1987; Heslin & Bramwell, 1989; Jones, 1986; Kennedy, 1991; McIlveen & Morse, 1995; Morse, 1983; Morse, 1992; Morse, Bottorff, & Hutchinson, 1994; Walters. 1994)

Appendix D

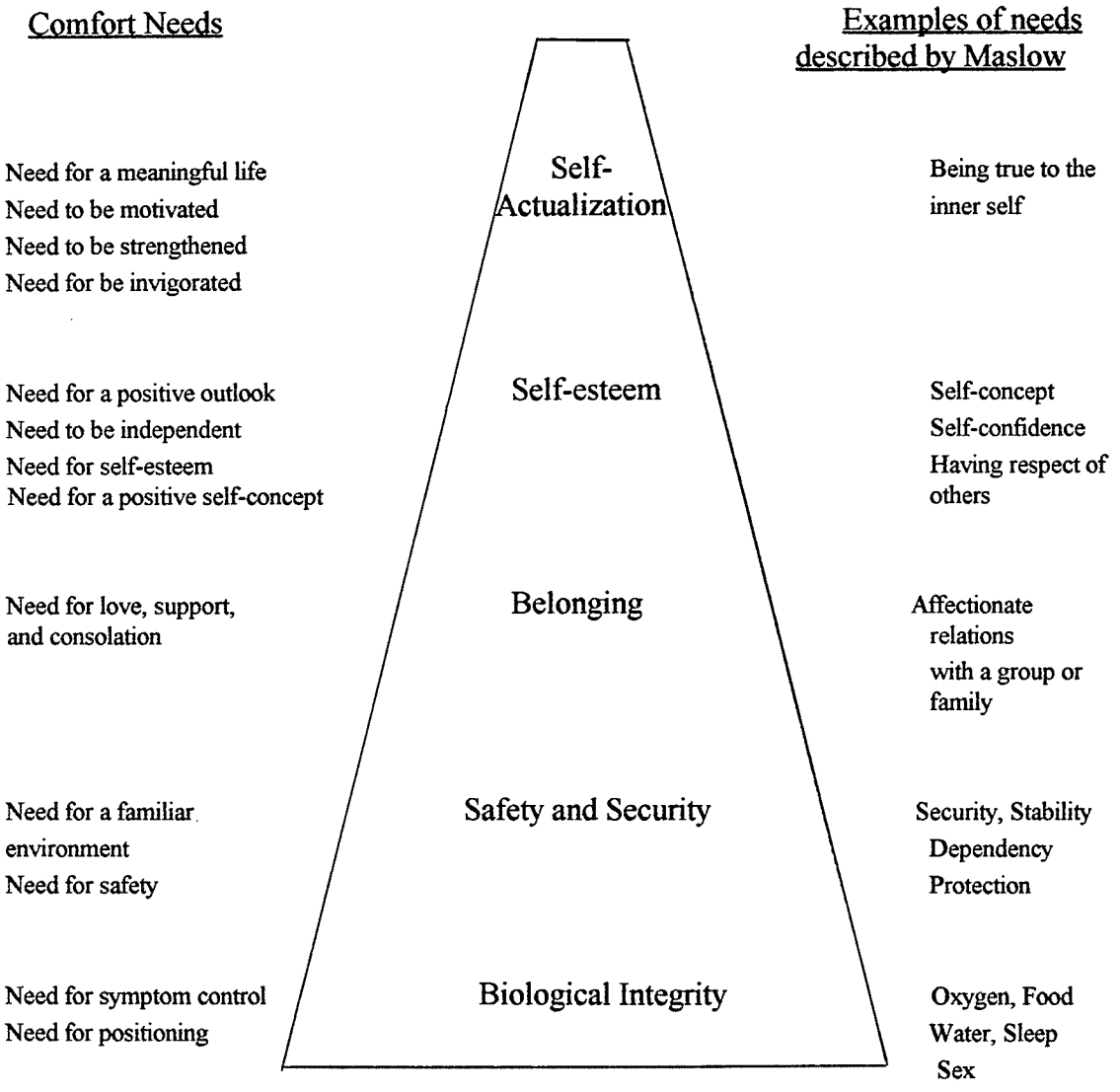
The Theory of Holistic Comfort



(Kolcaba, 1994)

Appendix E

Hierarchy of Needs



Appendix F

Code Number_____

Older Adult Questionnaire

Questions 1 to 4 to be independently completed by interviewer following the interview (not to be asked of respondent).

1. Sex of Respondent: Male ( ) Female ( )

2. Date of birth: _____

3.. Date of admission to long term care facility: _____

4. Medical diagnoses appearing in health care record:_____
_____
_____

Interview to begin at Question 5.

5. What is your current marital status?

Never Married _____
Married _____
Divorced _____
Widowed _____
Separated _____

6. How many children do you presently have? _____

7. How many of the residents in Deer Lodge Centre would you consider to be your friends? _____

8. Do you have someone that you can talk to about your problems?

Yes_____ No_____

9. How often do you receive visits? *(Read following categories)*

Frequently _____
Sometimes _____
Rarely _____
Not at all _____

10. Overall, how satisfying do you find these visits?

Very satisfying _____
Satisfying _____
Mixed, both satisfying and unsatisfying _____
Unsatisfying _____
Very unsatisfying _____

11. How often do you make visits? *(Read following categories)*

Frequently _____
Sometimes _____
Rarely _____
Not at all _____

12. How often do you receive telephone calls? *(Read following categories)*

Frequently _____
Sometimes _____
Rarely _____
Not at all _____

13. How often do you make telephone calls? *(Read following categories)*

Frequently _____
Sometimes _____
Rarely _____
Not at all _____

14. How often do you receive letters ? *(Read following categories)*

Frequently _____
Sometimes _____
Rarely _____
Not at all _____

15. How often do you send letters ? *(Read following categories)*

Frequently	_____
Sometimes	_____
Rarely	_____
Not at all	_____

16. How would you rate your overall health?

Excellent	_____
Very Good	_____
Good	_____
Fair	_____
Poor	_____

17. Do you have any of the following health problems

Heart trouble (heart attack, angina)	Yes_____ No_____
Stroke	Yes_____ No_____
High blood pressure	Yes_____ No_____
Other circulation problems (hardening of the arteries)	Yes_____ No_____
Kidney trouble	Yes_____ No_____
Prostrate trouble (males only)	Yes_____ No_____
Orthopaedic problems (fractures, joint replacements)	Yes_____ No_____
Cancer	Yes_____ No_____
Diabetes	Yes_____ No_____
Breathing problems (asthma, emphysema, TB, chronic bronchitis)	Yes_____ No_____
Neurological problems (MS, Parkinson's, ALS, Muscular Dystrophies)	Yes_____ No_____
Thyroid trouble	Yes_____ No_____

Stomach trouble	Yes_____ No_____
Emotional or mental health problems	Yes_____ No_____
Foot or limb problems (amputations, sore feet, and arches)	Yes_____ No_____
Skin trouble	Yes_____ No_____
Arthritis or rheumatism (joints, back)	Yes_____ No_____
Eye trouble not relieved by glasses (Cataracts, glaucoma)	Yes_____ No_____
Ear trouble (hearing loss)	Yes_____ No_____
Bowel problems	Yes_____ No_____
Bladder incontinence	Yes_____ No_____
Any other bladder problems	Yes_____ No_____
Problems with memory/forgetfulness	Yes_____ No_____

18. Do you have any other health problems that I did not mention?

List_____

_____

19. Do you ever experience any of the following?

Constipation	Yes_____ No_____
Diarrhea	Yes_____ No_____
Shortness of breath	Yes_____ No_____
Difficulties breathing	Yes_____ No_____
Weakness	Yes_____ No_____
Constant Tiredness	Yes_____ No_____
Persistent Coughing	Yes_____ No_____
Nausea	Yes_____ No_____
Vomiting	Yes_____ No_____
Difficulties sleeping	Yes_____ No_____
Anxiety	Yes_____ No_____

Feelings of dizziness	Yes_____ No_____
Frequent headaches	Yes_____ No_____
Rash/itch/chafing/dry skin	Yes_____ No_____
Muscle cramps	Yes_____ No_____

20. What does the word "comfort" mean to you?
Probe: How would you describe or define the word "comfort"?

_____

_____

_____

_____

_____

21. Place a mark on the line to indicate your overall comfort level in the past week.
(Display visual analogue scale)

very uncomfortable — very comfortable

22. I am going to read some statements that may describe your comfort in the last week. Please state whether you strongly agree, agree, disagree, or strongly disagree with each statement.Remember these questions relate to your comfort in the last week.
(Display response choices)

If the respondent says a question does not apply to them, circle strongly disagree.

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
1. My body is relaxed	4	3	2	1
2. I feel useful because I'm working hard	4	3	2	1

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
3. I have enough privacy	4	3	2	1
4. There are those I can depend on when I need help	4	3	2	1
5. I don't want to exercise	4	3	2	1
6. My condition gets me down	4	3	2	1
7. I feel confident	4	3	2	1
8. I feel dependent on others	4	3	2	1
9. I feel my life is worthwhile	4	3	2	1
10. I am inspired by knowing that I loved	4	3	2	1
11. These surroundings are pleasant	4	3	2	1
12. The sounds keep me from resting	4	3	2	1
13. No one understands me now	4	3	2	1
14. My pain is difficult to endure	4	3	2	1
15. I am inspired to do my best	4	3	2	1
16. I am unhappy when I am alone	4	3	2	1
17. My faith helps me to not be afraid	4	3	2	1
18. I do not like it here	4	3	2	1
19. I am constipated	4	3	2	1
20. I do not feel healthy	4	3	2	1
21. My room makes me feel scared	4	3	2	1

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
22. I am afraid of what is next	4	3	2	1
23. I have a favorite person(s) who makes me feel cared for	4	3	2	1
24. I have experienced changes which make me feel uneasy	4	3	2	1
25. I am hungry	4	3	2	1
26. I would like to see my doctor more often	4	3	2	1
27. The temperature in my room is fine	4	3	2	1
28. I am very tired	4	3	2	1
29. I can rise above my pain	4	3	2	1
30. The mood around here uplifts me	4	3	2	1
31. I am content	4	3	2	1
32. My wheelchair (bed) makes me hurt	4	3	2	1
33. The view from my room inspires me	4	3	2	1
34. My personal belongings are not here	4	3	2	1
35. I feel out of place here	4	3	2	1
36. I feel good enough to walk	4	3	2	1
37. My friends remember me with their cards and phone calls	4	3	2	1
38. My beliefs give me peace of mind	4	3	2	1
39. I need to be better informed of my health	4	3	2	1

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
40. I feel out of control	4	3	2	1
41. I feel crumby because I am not dressed	4	3	2	1
42. My room smells terrible	4	3	2	1
43. I am alone but not lonely	4	3	2	1
44. I feel peaceful	4	3	2	1
45. I am depressed	4	3	2	1
46. I have found meaning in my life	4	3	2	1
47. It is easy to get around here	4	3	2	1
48. I need to feel good again	4	3	2	1

23. For the following questions, choose the best answer for how you felt over the past week?

1. Do you often feel sad or depressed? Yes_____ No_____
2. Are you basically satisfied with your life? Yes_____ No_____
3. Have you dropped many of your activities and interests? Yes_____ No_____
4. Do you feel that your life is empty? Yes_____ No_____
5. Do you often get bored? Yes_____ No_____
6. Are you hopeful about the future? Yes_____ No_____
7. Are you bothered by thoughts you can't get out of your head? Yes_____ No_____
8. Are you in good spirits most of the time? Yes_____ No_____

9. Are you afraid that something bad is going to happen to you? Yes_____ No_____

10. Do you feel happy most of the time? Yes_____ No_____

11. Do you often feel helpless? Yes_____ No_____

12. Do you often get restless and fidgety? Yes_____ No_____

13. Do you prefer to stay at home, rather than going out and doing new things Yes_____ No_____

14. Do you frequently worry about the future? Yes_____ No_____

15. Do you feel you have more problems with memory than most? Yes_____ No_____

16. Do you think it is wonderful to be alive now? Yes_____ No_____

17. Do you often feel downhearted and blue? Yes_____ No_____

18. Do you feel pretty worthless the way you are now? Yes_____ No_____

19. Do you worry a lot about the past? Yes_____ No_____

20. Do you find life very exciting? Yes_____ No_____

21. Is it hard for you to get started on new projects? Yes_____ No_____

22. Do you feel full of energy? Yes_____ No_____

23. Do you feel your situation is hopeless? Yes_____ No_____

24. Do you think that most people are better off than you are? Yes_____ No_____

25. Do you frequently get upset over little things? Yes_____ No_____

26. Do you frequently feel like crying? Yes_____ No_____

27. Do you have trouble concentrating? Yes_____ No_____

28. Do you enjoy getting up in the morning? Yes_____ No_____

29. Do you prefer to avoid social gatherings? Yes_____ No_____

30. Is it easy for you to make decisions? Yes_____ No_____

31. Is your mind as clear as it used to be? Yes_____ No_____

24. I am now going to ask you some questions about your stay here at Deer Lodge Centre. Each of the questions has two parts. The first part is a yes or no question. The second part tasks you to rate your stay at Deer Lodge Centre on a scale from 1 (not so good) to 4 (very good).
(Display response choices)

If the respondent says a question does not apply to them, circle 5 as not applicable.

	Not so good 1	OK 2	Good 3	Very Good 4	N/A 5
1. Do the doctors treat you well? Yes____No____ How well do they treat you?	1	2	3	4	5
2. Do the doctors come quickly when you ask to see them? Yes____ No____ How would you rate the time it takes to come to see you?	1	2	3	4	5
3. Do you have confidence in the doctors' abilities? Yes____ No____ How would you rate your confidence?	1	2	3	4	5
4. Do the nurses treat you well? Yes____ No_____ How well do they treat you?	1	2	3	4	5
5. Do the nurses come quickly when you call them? Yes____ No____ How would you rate the time it takes to come to you?	1	2	3	4	5
6. Do you have confidence in the nurses' abilities? Yes____ No____ How would you rate your confidence?	1	2	3	4	5

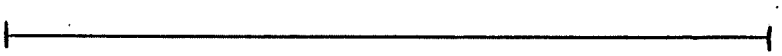
	Not so good 1	OK 2	Good 3	Very Good 4	N/A 5
7. Do you enjoy mealtime? Yes____ No____ (presentation, service, choice, taste) How would you rate mealtime?	1	2	3	4	5
8. Do you like your room? Yes____ No____ (cleanliness, roommate, space, temperature) How would you rate your room?	1	2	3	4	5
9. Do you get enough quiet and privacy? Yes____ No____ How would you rate the amount of quiet and privacy?	1	2	3	4	5
10. Do you like the daily schedule? (visitation, mealtime, bedtime, wake-up time) Yes___ No____ How would you rate the daily schedule?	1	2	3	4	5
11. Considering everything how would you rate your overall satisfaction? (doctor, nursing care, facilities, etc.)	1	2	3	4	5

25. I am going to ask you some questions about life in general that people feel different ways about. Listen to each question and tell me whether you agree or disagree. *(Display response choices)*

	Agree 1	Disagree 2	Unsure 3
1. As I grow older, things seem better than I thought they would be.	1	2	3
2. I have had more chances in life than most of the people I know.	1	2	3
3. This is the dreariest time of my life.	1	2	3
4. I am just as happy as when I was young.	1	2	3

5. These are the best years of my life.	1	2	3
6. Most of the things I do are boring or monotonous.	1	2	3
7. The things I do are as interesting to me as they ever were.	1	2	3
8. As I look back on my life, I am fairly well satisfied.	1	2	3
9. I have made plans for things I'll be doing in a month or a year from now.	1	2	3
10. When I think back over my life, I didn't get most of the important things I wanted.	1	2	3
11. Compared to other people, I get down in the dumps too often.	1	2	3
12. I've got pretty much what I expected out of life.	1	2	3
13. In spite of what some people say, the life of the average person is getting worse, not better.	1	2	3

26. Place a mark on the line to indicate your level of pain in the past week.
(Display visual analogue scale)



No Pain

Pain as bad as it could be

I have completed all of the formal questions.

Do you have any other comments about comfort?

Do you have any other questions?

Appendix G

Code Number_____

Nurse Questionnaire

Question 1 to be independently completed by interviewer (not to be asked of respondent).

1. Sex of Respondent: Male ( ) Female ( )

Interview to begin at Question 2.

2. In which of the following categories does your present age fall in?

Under 20	_____
20-29	_____
30-39	_____
40-49	_____
50 or older	_____

3. In what nursing capacity are you presently employed?

Registered Nurse	_____
Registered Psychiatric Nurse	_____
Licensed Practical Nurse	_____

4. How many years have you worked as a nurse? _____

5. How many years have you worked in a long term care facility or nursing home?
_____

6. What does the word "comfort" mean to you?
Probe: How would you describe or define the word "comfort"?

_____

_____

_____

_____

_____

All of the remaining questions will relate to Mr./Mrs. X (patient's name).

7. In the past week, how many days have you provided care for Mr./Mrs. X?

One day _____
Two days _____
Three days _____
Four days _____
Five days _____
Six days _____
Seven days _____

8. Place a mark on the line to indicate Mr./Mrs. X's overall comfort level in the past week.
(Display visual analogue scale)

very uncomfortable — very comfortable

9. I am going to read some statements that may describe Mr./Mrs. X's comfort in the last week. Please state whether you strongly agree, agree, disagree, or strongly disagree with each statement. Remember these questions relate to Mr./Mrs. X's comfort in the last week.
(Display response choices)

If the respondent says a question does not apply to the patient, circle strongly disagree.

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
1. Mr./Mrs. X's body is relaxed	4	3	2	1
2. Mr./Mrs. X feels useful because he/she is working hard	4	3	2	1
3. Mr./Mrs. X has enough privacy	4	3	2	1

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
4. There are those Mr./Mrs. X can depend on when he/she needs help	4	3	2	1
5. Mr./Mrs. X doesn't want to exercise	4	3	2	1
6. Mr./Mrs. X's condition gets him/her down	4	3	2	1
7. Mr./Mrs. X feels confident	4	3	2	1
8. Mr./Mrs. X feels dependent on others	4	3	2	1
9. Mr./Mrs. X feels his/her life is worthwhile	4	3	2	1
10. Mr./Mrs. X is inspired by knowing that he/she is loved	4	3	2	1
11. Mr./Mrs. X's surroundings are pleasant	4	3	2	1
12. The sounds keep Mr./Mrs. X from resting	4	3	2	1
13. No one understands Mr./Mrs. X now	4	3	2	1
14. Mr./Mrs. X's pain is difficult to him/her to endure	4	3	2	1
15. Mr./Mrs. X is inspired to do his/her best	4	3	2	1
16. Mr./Mrs. X is unhappy when he/she is alone	4	3	2	1
17. Mr./Mrs. X's faith helps him/her to not be afraid	4	3	2	1
18. Mr./Mrs. X does not like it here	4	3	2	1
19. Mr./Mrs. X is constipated	4	3	2	1
20. Mr./Mrs. X does not feel healthy	4	3	2	1
21. Mr./Mrs. X's room makes him/her feel scared	4	3	2	1
22. Mr./Mrs. X is afraid of what is next	4	3	2	1

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
23. Mr./Mrs. X has a favorite person(s) who makes him/her feel cared for	4	3	2	1
24. Mr./Mrs. X has experienced changes which make him/her feel uneasy	4	3	2	1
25. Mr./Mrs. X is hungry	4	3	2	1
26. Mr./Mrs. X would like to see his/her doctor more often	4	3	2	1
27. The temperature in Mr./Mrs. X's room is fine	4	3	2	1
28. Mr./Mrs. X is very tired	4	3	2	1
29. Mr./Mrs. X can rise above his/her pain	4	3	2	1
30. The mood around here uplifts Mr./Mrs. X	4	3	2	1
31. Mr./Mrs. X is content	4	3	2	1
32. Mr./Mrs. X's wheelchair (bed) makes him/her hurt	4	3	2	1
33. The view from Mr./Mrs. X's room inspires him/her	4	3	2	1
34. Mr./Mrs. X's personal belongings are not here	4	3	2	1
35. Mr./Mrs. X feels out of place here	4	3	2	1
36. Mr./Mrs. X feels good enough to walk	4	3	2	1
37. Mr./Mrs. X's friends remember him/her with their cards and phone calls	4	3	2	1
38. Mr./Mrs. X's beliefs gives him/her peace of mind	4	3	2	1
39. Mr./Mrs. X needs to be better informed of his/her health	4	3	2	1

	Strongly Agree 4	Agree 3	Disagree 2	Strongly Disagree 1
40. Mr./Mrs. X feels out of control	4	3	2	1
41. Mr./Mrs. X feels crumby because he/she is not dressed	4	3	2	1
42. Mr./Mrs. X's room smells terrible	4	3	2	1
43. Mr./Mrs. X is alone but not lonely	4	3	2	1
44. Mr./Mrs. X feels peaceful	4	3	2	1
45. Mr./Mrs. X is depressed	4	3	2	1
46. Mr./Mrs. X has found meaning in his/her life	4	3	2	1
47. It is easy for Mr./Mrs. X to get around here	4	3	2	1
48. Mr./Mrs. X needs to feel good again	4	3	2	1

10. Place a mark on the line to indicate Mr./Mrs. X's level of pain in the past week. *(Display visual analogue scale)*

No Pain

Pain as bad as it could be

I have completed all of the formal questions.

Do you have any other comments about Mr./Mrs. X's comfort or comfort in general?

Do you have any other questions?

Appendix H

Synopsis of Research Study

Information for Nurses Working on the Personal Care and Interim Care Units at Deer Lodge Centre

You may be invited to participate in a research project on comfort being conducted by Kathleen Hohenstein, a graduate nursing student at the University of Manitoba.

The purpose of this study is to explore the factors related to the comfort level of chronically ill older adults living in long term care facilities. As well, the study will also compare nurse and patient perceptions of comfort.

Participation in the study will involve a 15 to 20 minute interview about the comfort level of one of your patients.
You are under no obligation to participate in the study.

If you would like further information about the study, please call the researcher at 478-6164 (daytime).

Appendix I

Approval Form from the Faculty of Nursing Ethical Review Committee

The University of Manitoba

FACULTY OF NURSING
ETHICAL REVIEW COMMITTEE

APPROVAL FORM

Proposal Number N#96/10

Proposal Title: "FACTORS RELATED TO THE SELF-PERCEIVED COMFORT OF CHRONICALLY ILL, INSTITUTIONALIZED ELDERLY."

Name and Title of Researcher(s): KATHLEEN HOHENSTEIN, RN, BN
MASTER OF NURSING GRADUATE STUDENT
FACULTY OF NURSING UNIVERSITY OF MANITOBA

Date of Review: MARCH 4, 1996; MARCH 26, 1996

APPROVED BY THE COMMITTEE: MARCH 26, 1996.

Comments: **APPROVED** with submitted changes dated March 18, 1996.

Date: MARCH 26, 1996.

Karen I. Chalmers, PhD, RN — Chairperson
Associate Professor
University of Manitoba Faculty of Nursing

Position

NOTE:
Any significant changes in the proposal should be reported to the Chairperson for the Ethical Review Committee's consideration, in advance of implementation of such changes.

Revised: 92/05/08/se

Appendix J
Copy of Consent Form: Older Adult Version

You are invited to participate in an interview for a research project on comfort being conducted by Kathleen Hohenstein, a graduate nursing student at the University of Manitoba. All of the residents on the personal care and interim care units at Deer Lodge Centre who met the study's criteria were asked to participate in this research study. The purpose of this study is to explore the factors related to the comfort level of chronically ill older adults living in long term care facilities. As well, the study will also examine nurse perceptions of the comfort level of older adults. The study has been approved by the Ethical Review Committee of the Faculty of Nursing at the University of Manitoba.

The interview involves questions about your health, your feelings about life, your care at Deer Lodge Centre, and your comfort level. There are also a few background questions about you and your family. The interview will last about 30-45 minutes. All the information that you give will be marked down on a questionnaire form and kept strictly confidential. Your name will not be used on any reports about the study or in future publications. Any specific details which might identify you will not be included. Only the researcher and her thesis advisor will have access to the completed questionnaires.

Once you have completed the interview, one of your nurses will also be interviewed. He or she will be asked questions about your comfort level. None of the information that you have given will be shared with this nurse. As well, following the interview, the researcher will also look at your health care record (chart) to obtain information about your date of birth, date of admission to Deer Lodge Centre, and medical diagnosis.

There are no benefits to you to participate in this study but the findings of the study may be published so that people will have a better understanding of what comfort means. Your participation in this study is completely voluntary. You are under no obligation to participate and may withdraw from the study at any time. Deciding not to participate in the study or withdrawing from the study will in no way affect your care at Deer Lodge Centre. If you have questions about the study, you can ask them at any time during the interview or you can call the researcher at
478-6164. You can also contact the researcher's thesis advisor, Dr. Lorna Guse, Associate Professor in the Faculty of Nursing at the University of Manitoba at 474-6221.

Your signature below indicates only that you agree to participate in the study. You will be given a copy of this form. If you wish, a summary of the research findings will also be sent to you.

I agree to participate in this research study.

Your Signature_____Date_____
Researcher
Signature_____Date_____

Appendix K

Copy of Consent Form: Nurse Version

You are invited to participate in an interview for a research project on comfort being conducted by Kathleen Hohenstein, a graduate nursing student at the University of Manitoba. All of the nurses on the personal care and interim care units at Deer Lodge Centre who met the study's criteria were asked to participate in this research study. The purpose of this study is to explore the factors related to the comfort level of chronically ill older adults living in long term care facilities. As well, the study will also examine nurse perceptions of the comfort level of older adults. The study has been approved by the Ethical Review Committee of the Faculty of Nursing at the University of Manitoba.

The interview involves questions about the comfort level of one of your patients, Mr./Mrs./Miss/Ms._____. There are also a few background questions about you. The interview will last about 15-20 minutes. All the information that you give will be marked down on a questionnaire form and kept strictly confidential. Your name will not be used on any reports about the study or in future publications. Any specific details which might identify you will not be included. Only the researcher and her thesis advisor will have access to the completed questionnaires.

There are no benefits to you to participate in this study but the findings of the study may be published so that people will have a better understanding of what comfort means. Your participation in this study is completely voluntary. You are under no obligation to participate and may withdraw from the study at any time. If you have questions about the study, you can ask them at any time during the interview or you can call the researcher at 478-6164. You can also contact the researcher's thesis advisor, Dr. Lorna Guse, Associate Professor in the Faculty of Nursing at the University of Manitoba at 474-6221.

Your signature below indicates only that you agree to participate in the study. You will be given a copy of this form. If you wish, a summary of the research findings will also be sent to you.

I agree to participate in this research study.

Your Signature_____Date_____

Researcher
Signature_____Date_____

Appendix L

Frequencies of Medical Diagnoses Appearing in Health Care Record

Medical Diagnoses	Frequency (%)	n
Cerebral Vascular Accident	45.7	16
Osteoarthritis	31.4	11
Depression	25.7	9
Previous Hip Fracture/Replacement	20.0	7
Chronic Obstructice Pulmonary Disease	20.0	7
Hypertension	17.1	6
Congestive Heart Failure	17.1	6
Cataracts/Previous Cataract Surgery	17.1	6
Diabetes	14.3	5
ETOH abuse	14.3	5
Anemia	14.3	5
Peripheral Vascular Disease	11.4	4
Ischemic Heart Disease	11.4	4
Arteriosclerotic Heart Disease	8.6	3
Previous Myocardial Infarction	8.6	3
Multiple Sclerosis	8.6	3
Dementia	8.6	3
Seizure Disorder	8.6	3
Hiatus Hernia	8.6	3
Rhematoid Arthritis	8.6	3
Schizophrenia	5.7	2
Cervical Stenosis	5.7	2
Hypothyroidism	5.7	2

Medical Diagnoses	Frequency (%)	n
Chronic Pain	5.7	2
Asthma	5.7	2
Parkinson's Disease	5.7	2
Osteoporosis	5.7	2
Angina	5.7	2
Cardiac Arrhythmias	5.7	2
Blindness	5.7	2
Glaucoma	5.7	2
Neurogenic Bowel/Bladder	5.7	2
Ulcer	5.7	2
Diverticulosis	5.7	2
Prostatism/Prostatitis	5.7	2
Inguinal Hernia	5.7	2
Cancer	5.7	2
Gout	5.7	2
Normal Pressure Hydrocephalus	2.9	1
Cerebral Arteriosclerosis	2.9	1
Shy-Draber's Disease	2.9	1
Supranuclear Palsy	2.9	1
History of Drug Abuse	2.9	1
Polyneuritis	2.9	1
Progressive Demylenating Disease	2.9	1
Previous Wrist Fracture	2.9	1
Previous Pelvis Fracture	2.9	1
Chronic Leg Dislocation	2.9	1

Medical Diagnoses	Frequency (%)	n
Bilateral Knee Replacement	2.9	1
Limb Amputation	2.9	1
Paraplegia	2.9	1
Degenerative Disc Disease	2.9	1
Peripheral Neuropathy	2.9	1
Varicose Veins	2.9	1
Chronic Anxiety	2.9	1
Aortic Stenosis	2.9	1
Aortic Insufficiency	2.9	1
Heart Block	2.9	1
Deafness	2.9	1
Retinal Detachment	2.9	1
Dry Eye Syndrome	2.9	1
Kidney Mass	2.9	1
Abdominal Mass	2.9	1
Rhabdomycus	2.9	1
Pancreatitis	2.9	1
Obesity	2.9	1
Dysphagia	2.9	1
Benign Prostatic Hypertrophy	2.9	1
Hemorroids	2.9	1
Dupurytrens Contractures	2.9	1
Systemic Lupus Erythematosus	2.9	1

Appendix M

Means and Standard Deviations of GCQ Items (Scoring 4=Strongly agree; 1=Strongly disagree)

GCQ Items	Original GCQ		Modified GCQ	
	Mean	SD	Mean	SD
1. Body is relaxed	2.6	.85	2.5	.70
2. Feels useful	2.2	1.44	2.2	.74
3. Has enough privacy	2.6	.94	2.7	.88
4. Are those I can depend on	3.1	.68	3.2	.48
5. Don't want to exercise	2.3	.67	2.4	.75
6. Condition gets me down	2.9	.89	3.1	.53
7. Feel confident	2.7	.82	2.5	.66
8. Feel dependent	2.9	.87	3.0	.64
9. Feel life is worthwhile	2.6	.88	2.7	.65
10. Inspired knowing loved	3.0	.79	3.0	.74
11. Surrounding are pleasant	2.8	.80	2.7	.52
12. Sounds keep from resting	2.4	.81	2.6	.74
13. No one understands	2.1	.65	2.1	.65
14. Pain difficult to endure	2.3	.90	2.3	.63
15. Inspired to do best	3.3	.57	2.9	.59
16. Unhappy when alone	2.1	.77	2.3	.63
17. Faith helps not be afraid	3.1	.80	2.7	.62
18. Do not like it here	2.4	.95	2.4	.81
19. I am constipated	2.4	.88	2.4	.81
20. Do not feel healthy	2.6	.81	2.7	.64
21. Rooms makes me scared	1.8	.68	2.0	.71
22. Afraid of what is next	2.1	.91	2.6	.69

GCQ Items	Original GCQ		Modified GCQ	
	Mean	SD	Mean	SD
23. Have a favorite person	3.4	1.22	3.0	.58
24. Experienced changes	2.6	.88	2.7	.69
25. I am hungry	2.3	.80	2.2	.39
26. Want to see doctor more	2.4	.85	2.5	.78
27. Temperature is fine	3.0	.64	2.9	.37
28. Am very tired	2.6	.81	2.5	.56
29. Can rise above pain	3.0	.62	2.8	.41
30. Mood uplifts me	2.2	.78	2.7	.60
31. I am content	2.7	.80	2.6	.60
32. Wheelchair makes me hurt	2.1	.65	2.2	.38
33. View inspires me	2.8	.63	2.3	.58
34. No personal belongings	2.5	.56	2.3	.56
35. Feel out of place here	2.7	.90	2.3	.58
36. Good enough to walk	2.4	.84	2.4	.69
37. Friends remember me	2.7	.78	2.7	.74
38. Beliefs give peace of mind	3.1	.73	3.0	.69
39. Need to be informed	2.5	.70	2.4	.54
40. Feel out of control	2.3	.71	2.4	.61
41. Feel crumby, not dressed	2.4	.65	2.0	.42
42. Room smells terrible	2.0	.51	2.2	.63
43. Am alone not lonely	2.9	.68	2.6	.66
44. Feel peaceful	3.0	.57	2.6	.63
45. Am depressed	2.6	1.01	2.5	.56
46. Found meaning in life	2.9	.73	2.7	.67
47. Easy to get around here	2.8	.58	2.7	.70

GCQ Items	Original GCQ		Modified GCQ	
	Mean	SD	Mean	SD
48. Need to feel good again	2.9	.61	2.9	.63

Appendix N

Responses and Categories to the Open-Ended Question on Comfort

Older Adult Responses	Nurse Responses
Simple things in life	**Simple things in life**
-lots of money -bottle of whiskey -smoking my pipe -reading a book with large print -watching sports on TV -having a cigarette -being around animals, horses -let me enjoy the simple things that I enjoy -sufficient things such as good books, enough decent clothes to not be ashamed of yourself -good hot bath -drinking warm water -getting fresh air -going outside	-sitting in your house on a warm winter night with a good book
Physical Health	**Physical Health**
-body is nice and warm -not being thirsty -someone to share my bed -sex -good health -when you are not sick -without a lot of surgery -regular bowel movements -no agitation	-being clean -well hydrated -being warm -not too cold and not too warm -good diet -relief of shortness of breath -being healthy

Older Adult Responses	Nurse Responses
Bed/Wheelchair	**Bed/Wheelchair**
-lying on a soft, warm bed with my cats -lying in bed, asleep -in bed, sleeping -have a better bed -sitting in a wheelchair that fits you -lying on my left side when in bed -getting into a bed with clean sheets -comfortable bed and chairs	-sit in a chair with your feet up -a dry bed, comfortable pillows, warm sheets -sleeping in your bed at night instead of working -a good night's sleep
Painfree	**Painfree**
-don't ache anywhere -have no pain -no pain -no discomforts	-without pain -painfree -no pain -no aches and pains -free from pain and discomfort -able to move around without discomfort -free from pain -freedom from pain -absence of pain -lack of pain -without pain and discomfort
Independence	**Independence**
-being able to do what I want, when I want to -feeling helpful -selecting my own menus for meals -having someone to help you do things -my ability to feed myself -being able to get around by myself	-being in your own home -able to do things for yourself -able to perform your normal activities -being involved in decision-making -having decisions -having choices

Older Adult Responses	Nurse Responses
Sense of Physical and Psychological Wellbeing	**Sense of Physical and Psychological Wellbeing**
-being at ease with yourself and everyone else -everything OK -feeling satisfied with everything -satisfaction in all areas -feeling happy with the way things are going -feeling good -being without worries -without worry -not having any worries -having a good life -have no worries -sense of wellbeing -wellbeing is good all over -feeling relaxed -relaxed -being able to relax -at ease with life -things not bothering you	-physically and emotionally at ease -spiritual, emotional, and physical wellbeing -optimal level of health and wellbeing -sense of mental and physical wellbeing -physiological and emotional wellbeing -wellbeing -happy with life -happy -comfortable in all aspects of daily living -having no problems -freedom from stress -anxiety free -peace of mind -feeling relaxed, both physically and mentally -relaxed -a "good feeling", physically and emotionally -satisfied with life -everything is going good in life -things are fine -everything on an even, happy keel -feeling happy and fulfilled -state of being content with diet, surroundings, and whole wellbeing -happy with your life
Environment	**Environment**
-satisfied with your surroundings	-quiet environment -comfortable surroundings -happy with surroundings -happy with your surroundings

Older Adult Responses	Nurses Responses
Needs Met -having everything you need	**Needs Met** -all needs met -having physical and emotional needs met -all needs fulfilled like cleanliness and hunger -basic needs met -meeting every aspect of their needs
Family and Friends -having my wife's health better -when I was home with my wife -being with my wife -spending time visiting with family and friends -having family around -having family involved -having family visit often -people smiling -pleasant visitors -someone loving you	**Family and Friends** -having my husband and kids around
Relationships with Nursing Staff -nurses who care for you like angels -nurses smiling, treating you right -nursing staff talking to me -nurses asking if they can do something for you -staff being honest with you	**Support** -not feeling lonely -feeling supported, reassured -security -sense of safety
	Quality of Life -having the best quality of life -good quality of life

Older Adult Responses **Spirituality** -going to church -reading the bible -talking to the Lord -praying for others, others praying for you -talking to fellow Christians **Privacy** -an all-encompassing leave me alone -privacy -staying in my room -time to myself -peace and quiet **Being in Control** -people doing what you want -know what's going on **Dignity** -dignity -dying with dignity **One Day Being the Same as the Next** **Going Back 25 Years**	