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SELF-CARE PRACTICES OF WELL-ELDERLY PEOPLE

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SELF-CARE PRACTICES OF WELL-ELDERLY PEOPLE

by

Patricia Jo Nolan

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STATEMENT BY AUTHOR

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ELEANOR E. BAUWENS
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December 3, 1982

Date

This study is affectionately dedicated to my family,
whose faith, love, and respect inspired me to continue.

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ABSTRACT

This study was designed to describe how well-elderly individuals define health and to identify self-care activities they use to maintain health. Concepts of health and self-care, adapted from Orem's (1980) self-care model provided the conceptual framework for the study.

A convenience sample consisted of 25 well-elderly people. Data were collected using a semi-structured interview guide, consisting of four open-ended general questions.

Study findings revealed: (1) Fourteen descriptions and definitions of health; (2) Ninety-nine diverse self-care actions done to maintain health; (3) Seventeen self-defined deviations from health for which elderly people used self-care; (4) Eighteen self-care practices used for self-defined deviations from health. The findings also revealed self-care practices similar to those reported in earlier research. Among the recommendations made for future study were: (1) to replicate the study using a controlled sample, and (2) to redesign the study to investigate self-care practices specifically related to developmental changes characteristic of the elderly.

CHAPTER 1

INTRODUCTION

Self-care is a recognized universal phenomenon which has been practice throughout history. Self-care behaviors are found as part of the lifestyles of people from all age groups and all cultures. Fry (Levin, Katz and Holst 1975) points out that "without self care, any health system would be swamped" (p. 9). Fry also suggests, along with others (Pratt 1973; Kirscht 1974; Estes and Lee 1981), that approximately 75 percent of all health care is self-care.

Self-care includes the areas of primary, secondary, and tertiary health prevention. Primary prevention refers to such actions as dietary control, routine exercise, and adequate rest which people take to prevent the occurrence of illness and disability. Secondary prevention includes self assessment and decision-making behaviors such as weighing oneself and performing a self-breast exam, undertaken by individuals to detect changes in their health. Tertiary prevention involves the self-management of deviations from health, whether short-term, such as a cold, or long-term (chronic), such as asthma or hypertension.

The recent explosion of interest in self-care in the United States has been attributed to soaring medical costs, shortages of health professionals, and limited accessibility to facilities in some

areas. In addition, there is an increasing realization that much of today's disease and disability, such as cancer, heart disease, and lung disease, is a result of personal behavior and lifestyle. Within this context, a change in behavior to promote health can be considered the goal of self-care.

Promotion of self-care by health professionals and policy makers, as well as by government workers at the federal level, contrasts with past strategies of care which emphasized "curing" by the medical profession. Levin (1976) calls this new emphasis on self-care "the rediscovery of the lay function in health" (p. 207).

The nursing profession has also joined the movement to promote self-care, incorporating the principles of self-care into nursing theory and practice. Some nursing leaders such as Orem and Kinlein regard the concept of self-care as a basic framework for nursing theory and as a goal for nursing practice. Kinlein (1977) defines nursing as "assisting the person in his self-care practices in regard to his state of health" (p. 601). Orem (1980) identifies the individual's need for professional nursing as "the absence of the ability to maintain continuously that amount and quality of self-care which is therapeutic in sustaining life and health, in recovering from disease or injury, or in coping with their effect" (p. 7).

Self-care concepts applied to the elderly have important implications for nursing practice, especially in the more independent speciality of community health nursing. Sullivan (1980), in discussing the self-care model for nursing the aged, has identified self-care as

a unifying framework for gerontological nursing which provides a sense of meaningful care for this population. The model also demands that nursing be health-focused with an emphasis on clients rather than on clients' problems or disease (Sullivan 1980). Furthermore, the self-care model provides the greatly needed identification of the nurse's role and position in relation to other disciplines within the health care system.

Most importantly, the self-care system for the aged recognizes the need to protect, maintain, and promote independence. Within the aged population, independence, both as a state of being and a state of mind, represents a manifestation of the universal self-care demand to be normal (Sullivan 1980). The relationship between independence and worthwhile existence for the aged cannot be overemphasized. Transference of the responsibility of health maintenance to elderly individuals recognizes the fact that along with their limitations, elderly people have their own unique capabiliites for caring for themselves. A self-care approach to treating the elderly is based upon the premise that many behavior-related problems can be prevented, even in the later lifespan, if capabilities are supported and utilized. The self-care approach also assumes that these capabilities, when supported, can be used for self-management of problems that occur in deviations from health.

Problem

Although a significant amount of new data and literature exists on the topic of self-care (Williamson and Danaher 1978; Levin et al. 1976; Fry 1978), meager data have been collected in the specific area of health or self-care practices as seen through the layman's perspective, and especially that of the elderly individual. This lack of knowledge, coupled with the need to explore this aspect of self-care, has been noted in the literature (Williamson and Danaher 1978; Levin 1976; Kinlein 1977). Williamson and Danaher (1978) state:

> We know relatively little about "how" people seek help in times of illness and we know even less about why. Unfortunately, the response to symptoms and the decisions taken to resolve them are not only key factors determining the demand made on the (Great Britain's) National Health Service, but are also possible limitations to the success of any self-care policy (p. 41).

Levin (1976) identifies the lack of knowledge regarding self-care behavior and suggests that self-care is generally taken for granted. Furthermore, he reports that members at the Copenhagen Symposium on the Role of the Individual in Primary Health Care agreed that research on pre-existing self-care behavior is almost non-existent and is seldom considered in health planning.

Kinlein (1977) states that the biggest still unanswered question in the health field is "Why are healthy people healthy?" Considering evidence that life-style and activities of daily living play a large part in determining whether health can be retained, Kinlein suggests that self-care practices should be focused on as a source of information for valid nursing and medical data.

This study was designed to identify and describe how well-elderly individuals define health and to identify the self-care practices used by well-elderly individuals. The following questions were investigated:

1. How do well-elderly people define health?
2. What things do well-elderly persons do to maintain health?
3. For which self-defined deviations from health do well-elderly people use self-care?
4. What self-care actions do well-elderly persons take for self-defined deviations from health?

Study Purpose

The purpose of this study was to identify and describe how well-elderly people define health and to describe self-care activities that they use in order to maintain their health. Well-elderly persons who identify themselves as healthy were selected as informants for the study. For the purpose of this study the informants were considered the experts in health maintenance and self-care.

Significance

Application of Orem's (1980) self-care theory to the care of elderly individuals recognizes the elderly person's need for independence, the financial burden that illness has on the elderly person and society, and the likelihood that many health problems are more easily prevented than cured. Maintaining independence has been identified as one of the major developmental tasks of old age (Mezey and

Rauckhorst 1980). In the United States, being dependent violates one of the most pervasive values of our society, that of independence (Fry 1980). Dependency, according to Fry, is regarded as "a confession of one's own incompetence or inadequacy, and justification for degradation in the eyes of the community" (p. 218). Deterioration of the ability to maintain care for oneself is most likely to continue to the point of precipitating a dependent situation (Silberstein, Kassowsky and Lilus 1977).

Maintenance of health becomes increasingly difficult as age progresses. The elderly become more susceptible to deviations from health because of normal age-related bodily changes. In 1976, older people had about a one in six chance of being hospitalized during a year, as compared to a one in ten chance for people younger than 65 years old (U.S. Department of H.E.W. 1978). In the same year, on the average, older people had more physician visits (6.9) than people under 65 years old (4.7) (U.S. Department of H.E.W. 1978). When such changes in health occur, they usually create a greater problem and frequently take longer to resolve for older rather than for younger persons. In 1976, the average length of hospital stay for older Americans was about five days longer (11.6 versus 6.9) than for people under 65 years old (U.S. Department of H.E.W. Administration on Aging 1978).

Health maintenance also has become an increasing expense as one grows old; for example, in 1976, the per capita health care cost for an older person was $1,521 per year, nearly three times as much as

the $547 spent for younger adults (U.S. Department of H.E.W. 1978). Adding to the problem is the factor that while health costs have usually risen, the older individual's income has often declined. As of March 1, 1979, 3,233,000 (13.9%) of the total U.S. population of elderly people fell below the poverty levels (an annual income of $3,749 or less for an individual over 65 years of age) as compared to 24,479,000 (11.4%) of the rest of the adult population (poverty index $3,778). The mean yearly income for persons 70 years old and over in 1978 was $7,586 as compared to the mean yearly income of $13,113 for the general adult population (U.S. Department of Commerce 1980).

Although preventive self-care neither slows the process of aging nor cures many existing chronic diseases such as arteriosclerotic heart disease, high blood pressure, or cancer, it can play an important role in detecting diseases earlier, minimizing the effects of existing problems, and preventing further complications of an elderly person's health status (Combs 1978). The areas of safety, maintenance of body weight, diet, balances of activity and rest, along with the avoidance of smoking and drinking, have been shown to be associated with positive health status (Anderson 1976, Belloc and Breslow 1972; Palmore 1970).

Personal responsibility for self-care can be exercised at all ages by those capable of rational decision making. The surgeon general has stated that "health promotion and disease prevention . . . should be applied to the elderly. After, all many will be elderly for 10 or 20 years" (U.S. Department of H.E.W. 1979,

p. 367). The concept of self-care "recognizes and emphasizes the inherent human attributes of individual domain over one's actions" (Kinlein 1977, p. 598). In the case of elderly persons, the potential for self-care can often be realized with a little support and understanding by the community and its professional care-givers. The ability to identify pre-existing behaviors enables health professionals to support and build upon positive behaviors and to understand the consequences of negative behaviors. The findings of this study should add to the store of knowledge of those persons promoting self-care and working with the elderly.

Conceptual Framework

The conceptual framework for this study has been adapted from a model proposed by Dorothy Orem (1980). The concepts of health and self-care from the model will be described in the following sections.

Health

Health is a term used to describe living things which are structurally and functionally whole or sound (Orem, 1980). Stating that living things or their parts are structurally and functionally whole means that nothing has been omitted, ignored, or lessened; stating that living things are sound means that they possess vigor and strength and the absence of disease and morbidity (Orem 1980). The concept of health can be applied to all living things--plants, animals, and human beings--along with their individual parts or components.

The meaning of health, as a description of human functioning, embodies a considerable amount of diversity and flexibility. As a result of the individuality and complexity of human beings, the range of what is normal or healthy for given individuals varies widely. In the same light, the state of an "absence of health," which is a change or deviation from an individual's normal range of health, has its own range before one actually becomes unhealthy or sick. Structural and functional changes--say, an uncomplicated injury of an extremity--which do not seriously interfere with integrated functioning or which do so but in a limited fashion, would not be considered indicative of poor health but rather of an "absence of health."

The health of an individual has four inseparable components: physical, psychological, social, and spiritual. When changes or deviations occur in one of these components of health, the other components frequently are affected as well, albeit indirectly or inadvertently. For example, a change on the level of psychological health --say, during grief over the death of a significant other--would create changes in a person's physical, spiritual, and social health status, resulting in an undermining of health. In a situation in which changes become so severe that they almost totally interfere with human functioning, as occurs in prolonged grief, the individual may then become "unhealthy."

Self-Care

Self-care is the "practice of activities that individuals initiate and perform on their own behalf in maintaining life, health, and well-being" (Orem 1980, p. 35). Self-care is a form of self-management necessary for health, human development, and general well-being. Without the use of self-care, illness or disease will occur (Orem 1980).

Self-care involves a set of activities learned through human interaction and communication in the course of day-to-day living. Learning is aided by intellectual curiosity, instruction, and supervision, and by experience in performing self-care. Self-care activities are learned according to the beliefs, habits, values, and practices of the individual's culture.

Self-care is a deliberate action in that it is purposeful and goal- or result-seeking. This means that the individual is aware of the supposed result of the action, whether it be preventive or restorative in nature, prior to performing the activity. According to Orem (1980), "action is deliberate when it is based on an informed judgement about outcomes being sought from acting in a particular way" (p. 68).

Self-care also involves a choice. Sometimes individuals are forced to choose between self-care values and other values, such as time, money, convenience, and immediate pleasure. Adults also have the right to decide about the amount of responsibility they wish to take in the maintenance of their own health.

An individual's ability to perform self-care activities is related to age, life experience, and the person's perceived health state. A person's way of meeting self-care needs is also related to these factors.

Each action involved in the self-care process has a requisite or specific purpose. According to Orem (1980), "Requisites are expressions of the kinds of purposive self-care that individuals require" (p. 41). Requisites for self-care may be divided into two categories or types: universal self-care requisites and health-deviation self-care requisites. Universal self-care requisites are common to all human beings, although they may be modified by age or the perceived health state of the individual. They are related to life processes and are necessary for maintaining the integrity of human structure and functioning. Orem (1980) suggests that the following eight universal self-care requisites are common to all human beings:

1. The maintenance of a sufficient intake of air.
2. The maintenance of a sufficient intake of water.
3. The maintenance of a sufficient intake of food.
4. The provisions of care associated with elimination processes and excrement.
5. The maintenance of a balance between activity and rest.
6. The maintenance of a balance between solitude and social interaction.

7. The prevention of hazards to human life, human functioning, and human well-being.

8. The promotion of human functioning and development within social groups in accord with human potential, known human limitations, and the human desire to be normal (p. 42).

Health deviation self-care requisites arise from the absence of health or from poor health. The absence of health is exemplified by such conditions as the common cold, the flu, a headache, or even minor surgery. Examples of poor health include chronic or terminal diseases. Although Orem (1980) has identified six categories of health-deviational self-care requisites, only one of the six categories will be used in this study of describe actions to meet self-care requisites. The category used throughout this study is health-deviation self-care as defined by Orem (1980): "Being aware of and attending to the effects and results of pathological conditions and states" (p. 51). The other five categories concern the patient's role when medical intervention is required for deviations from health. These will not be examined in this study.

The model in Figure 1 illustrates the relationship between health and self-care. The goal of self-care, which includes both actions to meet universal and health deviational self-care deficits, is good health or health results. This relationship is illustrated by a solid line in the model. The varying ranges between good health and the absence of health have been illustrated by overlapping circles.

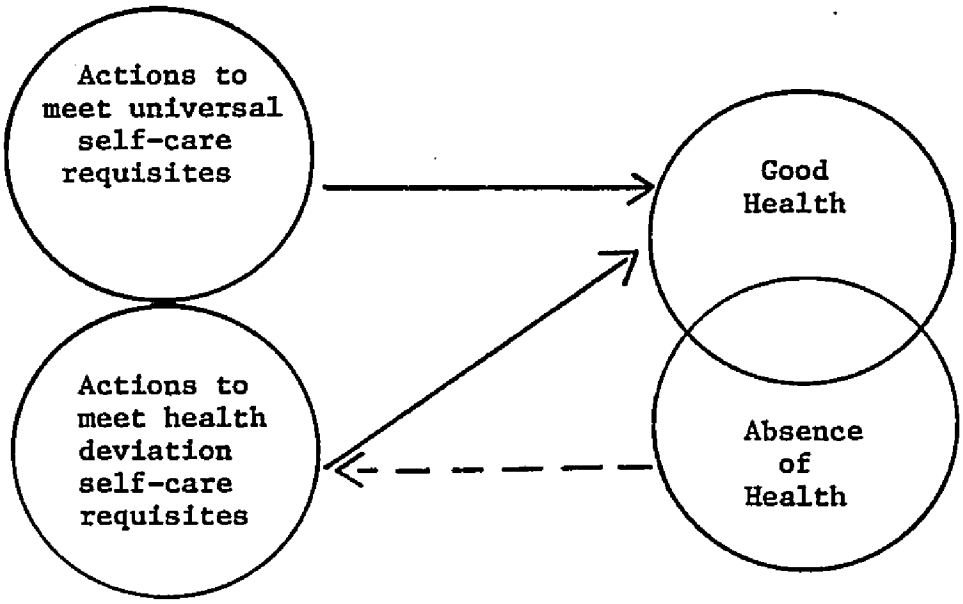

Figure 1. Self-Care Model

The need or requisite for actions to meet health-deviation self-care requisites arises from the absence of health. This relationship is illustrated by broken lines.

The self-care model, as proposed by Orem (1980), includes a third category of purposes or requisites of self-care. This class, identified as developmental self-care requisites, includes "specialized expressions of universal self-care requisites that have been particularized for developmental processes" (p. 47). Examples of such requisites include those which occur with developmental changes such as pregnancy, birth, environmental changes, and loss. Although many of the self-care actions identified may be classified as developmental changes that occur during the aging process, to distinguish them from the actions taken for universal self-care requisites is beyond the scope of this study. For this reason, developmental self-care requisites have not been included in the conceptual framework of this study.

Definitions

The following operational definitions are used in this study:

Well-elderly persons--persons aged 70 years and over who identify themselves as healthy.

Self-care--the practices or activities individuals take on their own behalf for the purpose of health promotion and disease prevention, care, detection, and treatment.

Self-defined deviations from health--conditions or symptoms individuals evaluate as a negative change in health status.

Summary

The purpose of this study was to describe how well-elderly people define health and to describe self-care activities that they use in order to maintain their health. The study's purpose, the problem which served as the impetus for the research, the significance of the study, the conceptual framework and model upon which the study is based, and the terms which will be used throughout the study have been presented.

CHAPTER 2

REVIEW OF THE LITERATURE

This chapter presents a selected review of the literature, focusing on five areas: (1) health, (2) self-care activities and needs, (3) health status and self-care behavior, (4) self-medication, and (5) self-care from the informants' point of view.

Health

Two facets of the literature concerning health are reviewed here. The first involves the many definitions which have been proposed for health throughout history, and the second involves the literature regarding the meaning of health from the point of view of the layman.

Definitions of Health

The word health, as we know it today, first appeared around the year 1000 AD (The Philosophic Society 1933). It was derived from the Old English word Hoelth, which was the state or condition of being hal, that is, safe and sound. This classical concept of health as soundness and wholeness has found its way through history into many of the modern day definitions of health.

Earlier in history the word health also assumed a religious significance and came to represent spiritual salvation, moral and

mental soundness. Many of the early English translations of the Bible used the word health to imply salvation (Dolfman 1973). This meaning has also extended into many recent definitions, while health and healing have themselves become a focus of several modern day religions.

The concept of health as a disease-free state or condition was extremely popular during the first half of this century (Dolfman 1973). Then, in 1947, the World Health Organization (WHO) proposed that health was an idealistic or utopian concept, viewing it as the possession of distinct positive qualities. WHO defined health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity" (World Health Organization 1947, p. 29). Today, this definition is recognized by many as the definition of health, although many other definitions have since been proposed.

Oberteuffer (1960) for one, proposed that health is a state or condition which enables individuals to function adequately. He defined health as "the condition of the organism which measures the degree to which its aggregate powers are able to function" (p. 47).

Health has also been viewed as that state or condition which enables adaptation to the environment (Dubos 1965). A person's health is evaluated by his abilities to accomodate and adjust to the various tensions and strains he encounters. Here a healthy individual may actually become sick and if he is able to adapt, he is

deemed healthy. Dubos (1965) proposed that "the states of health and disease are the expressions of the success or failure experienced by the organism in its efforts to respond adaptively to environmental changes" (p. xvii).

Some authors have equated health with a specific lifestyle and quality of life. Williams (1946) defined health as "the quality of life that renders the individual to live most and serve most" (p. 12). Bauer and Schaller (1955) viewed health as "that condition of the human organism that permits one to live happily and successfully. It favors efficiency, but does not assure it. It helps towards attaining goals and ambitions of life" (p. 15). Hoyman (1962) stated that "health is optimal personal fitness for full, fruitful, creative living" (p. 253).

Parsons (1979) proposed that health (and illness) are culturally determined and that different conceptions of health can exist in different cultures and societies. He defined health as "the state of optimum capacity of an individual for effective performance of the roles and tasks for which he has been socialized" (p. 169). Here health is defined with reference to a person's participation in the social system and is relative to his status in society which, within an individual society, can be determined by sex, age, and level of education.

Dolfman (1973) stated that health is a family of concepts--as opposed to a singular concept--referring to a number of different entities. Operationally Dolfman related the meaning of health to

the concepts of successful functioning, adaptation, and normality. In his view an individual is healthy (this is, he has attained or is in the state or condition known as health) if he is functioning adequately in a stated environment, and if while functioning in his environment he is subjected to some sort of stress, he is able to adapt to this stress within the range of normal functioning,

The Meaning of Health from the Layman's Point of View

The meaning an individual attributes to health varies from person to person, culture to culture, and even from time to time (Williamson 1978). Health may be considered both a cultural and personal phenomenon. Health is ever-shifting, dependent on the ever-changing environment and man's varying ability to adapt to the environment. Williamson and Danaher (1978) proposed that it is man's ability to adapt, or part of the adaptation process, which causes the absence of health.

The layman's experience of health is an extremely personal one. There are no universal criteria for defining health since, while the medical professions have their definitions involving absences of specific scientific diseases, laymen define health according to personal experiences. Williamson and Danaher (1978) stated that the experience of health versus disease is related to what one expects from his body. Expectations are learned through the experience of living. The experience of health versus its absence can vary among individuals within a given culture, within a subculture,

or even within a family. This experience might also change in a single individual during the life span.

Certainly the latter portion of the life span brings changes which affect an individual's personal sense of health. Mechanic and Cleary (1972) proposed several factors influencing an aging individual's perception of well-being: one's expectations of health in old age; one's adjustment to declining energy; cultural norms of activity or inactivity in old age; and the likelihood that one's rewarding roles and activities can be continued in old age.

Few studies were found defining health from the veiwpoint of the individual. Bauwens (1974) studied 50 informants in Douglas, Arizona, in order to investigate concepts of health from individuals' points of view. For the ten individuals who identified themselves as being in good health, three general criteria for health were identified: "no identifiable illnesses, had recovered from an illness, and no impairment of physical activity" (p. 128).

In order to explore concepts of health, Baumann (1961) studied 182 clinic patients and 252 medical students in New York City. The clinic group varied in age, ranging from 14 to 90 years, and in educational background. The medical students were, almost without exception, in their early twenties and had attended college. Each of the 434 respondents was asked to identify what health meant to him. Three recurrent themes emerged from Baumann's (1961) study, reflecting three general orientations to health, physical fitness,

and good physical condition: (1) A general feeling of well-being, (2) Absence of general or specific symptoms of illness, and (3) An idea concerning what a person who is in good physical condition should be able to do. Clinic patients tended to emphasize feelings and performance while medical students emphasized symptoms.

Yialelis (1979) conducted a descriptive study to determine a definition of wellness in a selected group of Seventh-Day Adventist Anglo women. From interviews with ten women, Yialelis identified fifty-seven words and phrases pertaining to the definition of health. From the lists of words and phrases three specific categories emerged: Physical, Mental, and Spiritual. All ten informants perceived health as being physical. In addition, seven (70%) also perceived health as mental, and three (30%) perceived health as spiritual.

Self-Care Activities and Needs

The literature abounds with lists and categories of self-care needs and behaviors (Belloc and Breslaw 1972; Haggerty 1977; Shamanski and Hamilton 1979; Mechanic and Cleary 1980; Palmore 1970; Orem 1980; and Ferguson 1980). Despite much overlapping, there is no uniformity in what the various authors included as health practices, nor even in how they defined health behavior. Some lists are very general (Ardell 1977), while others are more specific (Travis 1977). Several of the authors have included specific avoidance behavior (Palmore 1970; Belloc and Breslow 1972; Haggerty 1977; Mechanic and Cleary 1980), while others have categorized activities

by the needs they meet (Orem 1980; Travis 1977). Steele and McBroom (1972), Haggerty (1977), and Mechanic and Cleary (1980), all identified use of medical care as part of self-care, while others (Palmore 1970; Belloc and Breslow 1972) excluded such a category.

Self-care has been defined to include the various actions individuals take when ill, or illness-behavior, too, although few authors included this. Some authors included illness-behavior under medical care. Chrisman (1977) proposed categories of illness-behavior, identifying them in terms of treatment actions: (1) Activity alterations such as exercise, bed rest, or sweat baths; (2) Application or ingestion or injection of substances, such as poultices or pills; (3) Verbal or ritual behavior, such as prayer; and (4) Physical interventions on the body, such as cupping.

Orem (1980) has addressed illness behavior with the six categories of health-deviation self-care requisites as identified in Chapter 1. These categories, like Orem's universal self-care requisites, are very general. In addition, she has included a set of categories for self-care needs that occur as a result of growth and development, such as those that occur during puberty and pregnancy. The inclusion of these developmental self-care requisites (also listed in Chapter 1) are what most saliently distinguish Orem's (1980) categories from those of other authors mentioned.

Health Status and Self-Care Behavior

Recent studies on health and illness behavior or on self-care have placed emphasis on determining whether people are performing suggested health behavior of known therapeutic value and on the relationship between such behavior and actual health status. Belloc and Breslow's (1972) study of 6,928 individuals in Alameda County, California, showed that certain common habits of daily living called "good health habits" are positively related to physical health status. The health habits Belloc correlated with positive health status are (1) sleeping seven to eight hours each night, (2) eating three meals a day at regular hours with little snacking, (3) eating breakfast every day, (4) maintaining desirable body weight, (5) avoiding excessive alcohol consumption, (6) getting regular exercise, and (7) not smoking.

Belloc and Breslow (1972) found that the physical health status of 668 individuals who reported following all seven good health practices was consistently about the same as individuals thirty years younger who followed few or none of these practices. Belloc and Breslow (1972) also found that while men at age 45 who follow three or fewer of these practices can expect to live to be age 67, those who follow six or seven of the health practices can expect to live to age 78. Women aged 45 years who followed six or seven of these practices extended the average age of death to 81 years, while those who abided by three or fewer practices can expect to die at age 74.

A four-year longitudinal study of aging undertaken in 1970 by Palmore provided evidence that the health practices of exercise, weight control, and avoiding cigarettes were followed by less illness. Palmore (1970) studied 268 ambulatory, non-institutionalized subjects over the age of 60 who lived in the central North Carolina area. He noted a long-term relationship between health behavior and longevity.

Studies such as those of Belloc and Breslow (1972) and Palmore (1970) which used pre-defined self-care measures are somewhat limited in that health behavior is arbitrarily defined. As Steele and Bloom (1972) have pointed out, "The range and typology of health behavior indicators is limited only by the imagination of the researcher and the purposes of this research" (p. 382). Moyer (1981) concluded that because of this "arbitrary delineation of significant health practices . . . some lifestyle patterns that are crucial in promoting health may not yet have been operationalized" (p. 52).

Self-Medication

Self-mediation is a means of self-care and, more specifically, a means of illness behavior which has been highlighted in the research on self-care (Bush & Rabin 1976; Kohn and White 1976; Chien, Townsend and Ross-Townsend 1978; Guttman 1978; Gagnon 1978). In these studies self-medication refers to the use of non-medically prescribed drugs, which differs from self-administration, that is, the taking of medication prescribed by a physician. Self-medication

includes the use of over-the-counter drugs along with prescription medications which have not been prescribed for the individual.

Easing the strain on the health care delivery system, according to numerous authors, including Burney (1965) and Bush and Rabin (1976), is the significant advantage resulting from self-medication by health care consumers. Preventing physicians from being overflooded with minor complaints and self-limiting illnesses has often been cited as the primary advantage to self-medication. However, Wells (1974) has viewed self-medication not as an alternative to prescription by physicians, but as a positive and significant part of the total health care system.

While some writers and researchers (Levin et al. 1976; Fry 1978; Williamson and Danaher 1978) have promoted self-medication, others have expressed alarm at its extent, especially with regard to the older population. In order to document the problem Chien et al. (1978), surveyed 242 subjects over 60 years of age in reference to their use of both prescribed and over-the-counter medication. At the time of the survey, 301 different medications were taken by the subjects. Of the medications taken, 180 (60%) were prescriptions, and 121 (40%) were over-the-counter drugs. Neither reliability nor validity was documented for the study.

In 1977 Guttman (1978) interviewed 447 elderly persons living in Washington, D.C. The study sample consisted of a stratified sampling of ambulatory, community-living, and non-institutionalized elderly individuals. Over-the-counter

medications were found to be used by 308 (69%) of the individuals. Of these, 51 (16.6%) consulted their physicians about the use of over-the-counter drugs, and the remaining 257 (83.4%) relied on their own judgement or consulted neighbors, friends, or family.

Guttman (1978) also investigated in this study the types of over-the-counter medications taken. He found that internal analgesics were used by 231 (52%), making these the most commonly used over-the-counter medications, with vitamins the second most commonly used. Laxatives, antihistamines, nasal decongestants, oral decongestants, and sleeping aids were also frequently used.

Bush and Rabin (1976) found that the highest rate of use for nonprescribed drugs in their sample of 3,481 was in females aged 15 to 44 years. They also found that the use of nonprescription medications decreased for both males and females over age 44. They reported that healthy persons using nonprescribed medications were more likely to be using a prescribed medicine than those who did not use nonprescribed medications. Unfortunately, the results of the study are difficult to interpret since the study sample was not adequately defined in the report. The number of subjects in each group along with the male/female ratio of the sample were both omitted.

Haggerty and Roghmann (1972) studied the use of specific categories of nonprescribed medications for preventive as compared with curative purposes by 512 families. They concluded that illness

increased the possibility of taking not only curative remedies but preventive ones as well.

Gagnon (1978) did a cross-sectional study among rural blacks and whites in Rougemont and Bahama, North Carolina. The study sample consisted of 611 lower- and middle-class households (1,938 individuals). Gagnon found no significant difference between black and white individuals in the use of nonprescribed drugs. Among the 1,179 white individuals, 833 (71.5%) reported use of nonprescribed drugs at least once during four one-week periods. Among the 759 black individuals, 530 (69.8%) reported such use. Gagnon also found that internal analgesics were the most commonly used nonprescribed medication, with cough remedies second, drugs for relief of digestive disorders third, vitamins fourth, and drugs for use in skin and muscular disorders the fifth most commonly used.

Self-Care from the Informants' Point of View

Research on self-care behavior from the layman's point of view has usually been part of a lifestyle study and has usually been done by anthropologists (Bauwens 1974; Sullivan 1979). This could imply that some disciplines might not consider health behavior which has not been medically proven to be of therapeutic value as part of self-care. Sullivan (1979) did an exploratory study to investigate differences among expressed values, beliefs, and practices that might exist between older adults (over age 64) and the younger

general population (under age 64). Thirty-two older people and 33 younger people responded to open-ended questions on topics ranging from religion and politics to health and illness. When asked about preventive behavior, both age groups responded similarly. Eating a balanced diet was noted by 20 (62%) of the older people and 24 (71%) of the younger people. Other preventive behavior mentioned frequently by both groups included getting proper rest and sleep, exercising adequately, having a positive outlook on life, taking care of minor illnesses, dressing properly, facing up to everyday stresses of life, receiving better health education and health care, keeping busy and active, practicing cleanliness, and having regular doctor's checkups. While the older population placed greater emphasis on using good judgement and having a positive outlook on life, the younger people seemed to place more faith in exercise, busyness and activity, cleanliness, and regular doctor's checkups.

Sullivan (1979) also asked the younger and the older age groups to identify what they did for minor ailments. Responses varied considerably between the old and young informants. While older informants most frequently did nothing or went to a doctor if home remedies did not seem to be working, younger informants took aspirin or other nonprescription medications. Younger informants also mentioned relaxing, staying home, staying in bed, slowing down, taking vitamins, and doing something physical. Older people did not mention any of these practices.

Bauwens (1974) interviewed 50 lower-class Anglos in a descriptive study done in Douglas, Arizona. She found that 36 of her 50 informants (72%) were using vitamins, tonics, or similar products at the time of the study and six (12%) of her informants were using "health foods." Bauwens (1974) also found ten of the informants (20%) altered their diets to maintain health and 28 (56%) of the informants did something about their bowels, such as using laxatives, enemas, or dietary changes at least once a week.

Metzler (1980) interviewed six boys between the ages of 12 and 14 years to discover what self-care health activities the early adolescent boy practiced and what knowledge and beliefs supported these practices. From his analysis Metzler developed five taxonomic categories: "Kinds of things that boys do that make for a healthy body," "Kinds of things that boys do to take care of themselves," "Kinds of things that boys do to keep clean," "Kinds of things that boys do when they do not feel well," and "Kinds of things that boys do when they really get sick" (p. 83). Metzler's first three taxonomic categories were all related to the early adolescent boy's view of activities done to take care of himself. Informants included diet, exercise, keeping a healthy mind, and protection of their bodies as "things that boys do that make for a healthy body." Dieting, exercising, resting, keeping clean, eliminating wastes, going to the doctor or nurse, and learning how to care for the body were the "kinds of things boys do to take care

themselves." Informants described washing outside the body, cleaning teeth, and changing clothing as the "kinds of things that boys do to keep clean."

Metzler's fourth and fifth taxonomic categories included activities undertaken by the boys when they were unhealthy. The "kinds of things that boys do when they do not feel good" included resting, taking a shower, seeking help from parents or a school nurse, and listening to music. Informants reported asking mom or dad for something, sleeping or resting, drinking things, taking something, and throwing up as the "kinds of things that boys do when they really get sick."

Schank (1977) studied one specific aspect in self-care--foot care. She interviewed 125 individuals, aged 65 and over, about how they managed care of their feet. Of these 125, 101 had foot problems. Soaking the feet with such products as epsom salts, bleach, and foot soak powder was the most common practice. Foot care involved use of instruments such as nail clippers, files, pumice stones, scissors, razor blades, and the sanding disc of a rotary skill saw (reported by one man). Seventeen individuals (14%) reported wearing good shoes as part of their care. Use of arch supports was also commonly mentioned. Special foot aids were frequently reported, although none of the informants wore orthopedic shoes.

Summary

This chapter has presented a selected review of the literature regarding health and self-care activities, confining its focus to five major areas: (1) health, (2) self-care activities and needs, (3) health behavior as related to health status, (4) self-medication, and (5) self-care from the informants' point of view.

CHAPTER 3

METHOD

This chapter describes the study design, the sample and setting, the development of the study instrument, the protection of human subjects, the limitations, the data collection, and the data analysis.

Study Design

This study was designed to identify how well-elderly individuals define health and to discover the self-care activities they use to maintain health. A descriptive design utilizing an unstructured interview was used to determine (1) how well-elderly individuals define health, (2) the things they do to maintain health, (3) self-defined deviations from health for which they use self-care, and (4) the self-care practices they use for self-defined deviations from health.

Sample and Setting

The study sample consisted of 25 well-elderly individuals who agreed to participate in the study. This was a convenience sample of people referred to the investigator by friends and professional acquaintances in the community. Five informants were recruited from a Senior Now Generation Program, a community nutritional and socialization program; seven informants were recruited

through the investigator's contacts at the local county health department's home health agency; and 13 informants were referred by friends and acquaintances of the investigator. Informants recruited through the home health agency were not clients of the agency, but rather caretakers of clients, friends, and relatives who showed interest in participating in the study. All informants met the following criteria for acceptability into the study: identified by the investigator as Anglo, claimed to be 70 years or older, considered themselves healthy or healthy for their age, agreed to participate in the study, and read and understood English.

This study was conducted in Tucson, Arizona, a southwestern city of approximately 500,000 people. Known for its warm, dry climate and mild winters, the city attracts many older people, both on a seasonal and year-round basis.

Interviews with informants from the Senior Now Generation Program were conducted at the meeting site, in a small, quiet room adjacent to the lunch and crafts room. The remaining interviews took place in the private residence of the individual informants.

Development of the Study Instrument

A semi-structured interview guide (Appendix A) was used to collect data in this study. Four open-ended general questions to guide the interview were developed and tested by the investigator.

Questions were formulated after a review of the literature on self-care behavior and after examining questions used by Bauwens (1974), Bauman (1961), and Sullivan (1979) in their studies.

A pilot study was done to test the interview guide questions. Six well-elderly individuals known to the investigator were interviewed using the guide. The questions were found to be too general, producing mostly philosophical answers. Self-care behaviors practiced by some of these informants and previously identified by the investigator were not mentioned by the informants in response to the questions. After two revisions, the final interview guide questions were answered satisfactorily by four of the individuals. This final revision was then used in this study.

In order to identify how well-elderly people defined health, the first question asked was, "What does the word health mean to you?" The second question, "What types of things do you do to keep yourself healthy?" was asked to identify the self-care activities the informants practiced to maintain health and prevent illness. The third question, "Which minor ailments or health problems do you take care of by yourself?" was designed to identify the deviations from health for which informants assumed the responsibility for treatment and practiced self-care. The fourth question, "What do you do for the minor ailments/health problems you identified?" sought responses which would identify the self-care activities performed for deviations from health.

Protection of Human Subjects

Approval to conduct the study was obtained from the Human Subjects Committee of The University of Arizona. The study was explained to the informants immediately preceding the interview. In addition, each informant was given written information explaining implied consent at that time. The investigator gave each informant the opportunity to read and discuss this information. Confidentiality was maintained by excluding the informants' names on the interview schedules. Interviews were coded by the investigator and all data were reported as grouped data.

Limitations

The two major limitations of the study are: (1) Factors such as income, education, family size, religion, and birthplace, were not controlled; and (2) Several of the informants participated in community programs which emphasized self-care, therefore possibly introducing selective bias.

Data Collection

Each of the 25 persons who volunteered to participate in the study was contacted either in person or by telephone to set up an interview. Informants were telephoned a second time to confirm the appointment time. The investigator interviewed the informants at their residences or at the Senior Now Generation meeting site.

Before beginning the interview, the investigator again explained the study to the informants. All informants were given a

copy of the disclaimer and a copy of the interview guide questions to read. After they read the material and their questions about the study were answered, the investigator elicited information concerning their age, sex, marital status, living arrangements, educational level, and number of years residence in Tucson. The investigator then began the interview, writing the responses of the informants on paper. The respondents' answers usually involved much contemplation and thought, thus affording sufficient time to record the information reported.

The informants were asked further questions to help explain, expand, or clarify the ideas that they had mentioned. In addition, informants were asked questions to assist them to recall material pertinent to the interview guide questions. To assist them with the second question, "What types of things do you do to keep yourself healthy?" each informant was asked about any other activities he or she might carry out to keep healthy, such as rituals (religious and non-religious) one might perform, things one might take into the body, things one might put on the body or skin, and things one might avoid to stay healthy.

When informants were asked the third question, "What minor ailments or health problems do you care for yourself?" their responses included answers to the fourth question, "What do you do for these minor ailments or health problems?" To help informants recall problems and activities, all were asked to think about any other pains or discomforts or days they just did not feel well. The

interviews ended with one last general question, "Is there anything else you can think of that you do that contributes to your good health?" Informants were then instructed to telephone the investigator if they thought of any more information concerning the questions discussed, and the interview was concluded.

Data Analysis

The data recorded by the interviewer included both demographic information and informants' responses to interview questions. Frequency distributions for the demographic data (age, sex, level of education, marital status, and length of time in Tucson) were compiled. The informants' responses to the study's major questions, once coded into categories, were analyzed by frequency counts.

The positivist attitude toward research assumes that all data in the social sciences, including nonquantified data, can in principle be measured or classified. In analysis of non-numerical data, such as notes from an interview protocol, the task is to "refine" the data so that they are subject to quantification or categorization (Selltiz, Wrightson and Cook 1976).

The data from each interview question were organized into categories by the investigator. Two coders were recruited to verify the data collected from the notes and to validate the categories and subcategories into which the data were coded. The coders, both nurses with community health and geriatric backgrounds, independently checked the investigator's data analysis. The investigator met

separately with each of the two coders and gave each the following instructions, indicating the steps for data analysis:

1. All of the data in each of the categories must be identified in the interview notes.
2. The categories must accurately describe the data contained within them.
3. The subcategories must adequately describe all the data contained within them.
4. All data must be listed in the appropriate category.
5. The data analysis must be returned to the investigator within one week.

The investigator gave each of the coders a copy of the worksheet which included the coded data. Adjacent to the data entries on the worksheets, two spaces were provided for the coders to check 1) that the item in question was found in the interview notes, and 2) that it had been placed in the correct category and/or subcategory. The coders then reviewed the notes and checked the investigator's placement of informants' responses into appropriate categories. Both coders returned the coded material to the investigator within the one-week period requested.

Separate preliminary conferences between the investigator and each of the two coders provided opportunity to clarify the categorization of ambiguous items in the data (e.g., did informants discuss shading themselves from the sun in reference to care of the

skin or avoiding hazards to health? Did informants discuss use of make-up in reference to making them feel good about their appearance or in reference to skin care?). A final level of inter-coder agreement of 100% was reached for all components of the data analysis.

CHAPTER 4

PRESENTATION AND ANALYSIS OF DATA

The following questions have been investigated in this study:

1) How do well-elderly people define health?
2) What things do well-elderly people do to keep themselves healthy?
3) For which self-defined deviations from health do well-elderly people practice self-care?
4) What self-care actions do well-elderly people take for the self-defined deviations from health?

The findings and data analysis are presented in this chapter.

Characteristics of the Study Sample

The study sample consisted of 25 Anglo, non-institutionalized elderly people living in Tucson, Arizona. Eight of the clients were males and 17 were females. The informants' ages ranged from 70 to 94 years, with a mean age of 77.4 years. Although none of the 25 informants was a native of Tucson, 10 (40%) had resided in Tucson over 20 years; 7 (28%), between 11 and 20 years; 5 (20%), for one to ten years; 1 (4%), for less than one year; and 2 (8%) were visiting in Tucson at the time of the study. Seventeen (68%) of the informants lived alone. The mean number of years of formal education completed by the informants was 12.9 years. Nineteen informants (76%) completed high school

and 4 (16%) completed college. Two informants (8%) held masters degrees (Appendix B).

Data Analysis

The data collected during the twenty-five interviews were organized into the following four categories, each category corresponding to one of the four research questions:

Category I: Description and Definitions of Health

Category II: Self-Care Actions taken for Health Maintenance

Category III: Deviations from Health for which Well-Elderly People Practice Self-Care

Category IV: Self-Care Actions taken for Deviations from Health

The first category consisted of descriptions and definitions of health reported by well-elderly people. Although the data were collected in response to the question, "How would you define the word health?," informants generally expanded upon their definitions of health in responding to other interview questions. Informants responded not only with definitions of health, but included descriptions and qualities of health as well (Table 1).

The second category contained the self-care actions well-elderly people take to maintain their health (Table 2). Responses to the interview question, "What types of things do you do to keep yourself healthy?" were included in this category. As a result of the quantity and diversity of responses, the findings were divided into

Table 1. Category I: Descriptions and Definitions of Health Reported by 25 Well-Elderly People

Description/Definition	Multiple Responses n = 25*	Relative Percent
Feeling good	8	32
Something inherited	8	32
The ability to do things	6	24
Taking care of yourself	6	24
The absence of illness	5	20
Something very important	4	16
Having the ability to enjoy things	4	16
Being mentally well	3	12
Good physical make-up and well-being	3	12
Being spiritually well	2	8
The ability to overcome illness and other problems	2	8
Being independent	2	8
Not having to go to the doctor frequently	2	8
Wanting to do things	1	4

*Informants often included several descriptions or definitions of health in their responses, thus the total number of responses is greater than 25.

Table 2. Category II: Subcategories of Self-Care Actions Taken by 25 Well-Elderly People to Maintain Health

Subcategory	Multiple Responses n = 25*	Relative Percent
Practicing Nutrition and Dietary Control	24	96
Exercising and Keeping Physically Active	22	88
Establishing Psychological and Emotional Comfort	21	84
Protecting Oneself from Hazards to Health	20	80
Practicing Skin Care	16	64
Maintaining Bowel Elimination	13	52
Exercising Mentally and Keeping Mentally Active	10	40
Resting and Sleeping	9	36
Getting Sufficient Oxygen and Fresh Air	7	28
Taking Fluids	6	24
Practicing Mouth Care	4	16

*The number of responses is greater than n (25) since some informants reported more than one action.

eleven subcategories. Included in these subcategories were ninety-nine self-care actions that the informants described.

The third category included self-defined deviations from health for which well-elderly people used self-care. Responses to the question, "Which minor ailments or health problems do you care for by yourself?" were placed in this category. This category also included health problems and symptoms which informants felt they could treat themselves (Table 3).

The fourth category designated self-care actions taken for deviations from health. Responses to the question, "What do you do for the minor ailments and health problems you identified?" were included in this category. This category included the self-care treatments for the health problems and minor ailments that were reported and included in Category III, Deviations from Health for which Well-Elderly People Practice Self-Care (Table 4). Each of the categories will be discussed individually.

Category I: Definitions and Descriptions of Health

Defining health, or describing what the word health meant to them, was difficult for the informants, who usually required much thought before they answered the question. From their responses, typically one or two sentences combining several different approaches to health, fourteen words or phases describing the perceived meaning of health were collected (Table 1, page 42).

Table 3. Category III: Self-Defined Deviations from Health for which 25 Well-Elderly People Reported Using Self-Care Practices

Deviation from Health	Multiple Responses n = 25*	Relative Percent
Colds	12	48
Constipation	6	24
Pain	6	24
Headaches	5	20
Abdominal Discomfort	4	16
Muscle Aches	3	12
Arthritis	2	8
Coughs	2	8
Congestion	2	8
Foot Problems	2	8
Backaches	1	4
Cuts	1	4
Depression	1	4
Fever	1	4
Malaria	1	4
Sore Throats	1	4
Sunburn	1	4

*The number of responses is greater than n (25) since some informants reported more than one deviation from health.

Table 4. Category IV: Self-Care Practices which Well-Elderly People Take for Self-Defined Deviations from Health

Action	Multiple Responses n = 25*	Relative Percent
Self-Medicating for Relief of Symptoms	17	68
Increasing Fluids	5	20
Resting and/or Sleeping	4	16
Applying Dry Heat	3	12
Using Moist Heat	3	12
Massaging or Rubbing Substances onto/ into the Skin	3	12
Ignoring Problem	3	12
Using Commercially Prepared Laxatives	3	12
Using Enemas	2	8
Washing/Disinfecting Cuts or Open Wounds	2	8
Exercising	2	8
Keeping Warm	2	8
Taking Something to Make You Sweat	2	8
Padding Painful Area	1	4
Gargling	1	4
Soaking Affected Area	1	4
Taking a Shot of Whisky	1	4
Keeping Busy	1	4

*The number of responses is greater than n (25) since some informants reported more than one practice.

The most frequent definition of health reported by the informants was "subjective well-being" or "feeling good." Eight (32%) of the 25 informants, 6 males and 2 females ranging in age from 70 to 84 years, with a mean educational level of 12.4 years, reported "feeling good" as a criterion for health. Three of these 8 informants specifically mentioned "feeling good" in the morning.

The "absence of illness" was a criterion for health reported by 5 (20%) of the 25 informants, 3 males and 2 females, who ranged in age from 70 to 80 years. Two of these 5 informants, in reference to their health commented:

> That means without sickness of any kind. If you're not sick, you're healthy (Mr. T., 74 yrs. old).
>
> If you don't have any sickness and ailments and you don't have to be running to the doctor all the time (Mr. U., 72 yrs. old).

The "ability to do things" as a criterion for health was mentioned by 6 (24%) of the 25 informants, 5 females and 1 male. These informants ranged in age from 70 to 81 years. Two of these 6 informants reported:

> You could do many things when you're healthy (Mr. H., 71 yrs. old).
>
> You're able to do what you want to do (Mrs. Q., 77 yrs. old).

Three (12%) of the 25 informants, 2 males and a female, ranging in age from 70 to 88 years, included "physical well-being" in their definitions of health. Three (12%) of the 25 informants, included "mental well-being" and 2 (8%) of the 25 informants included

"spiritual well-being" in their responses. None of the 25 informants mentioned "social well-being." Only one (4%) of the 25 informants, a 71 year old retired librarian, combined physical, mental, and spiritual well-being in her definition. The other informant who mentioned "spiritual well-being" was a 94 year old woman who spoke frequently about religion and God during the entire interview.

Only 2 (8%) of the 25 informants, both male, included both physical and mental well-being in their definitions. These two informants, who were the least and most educated individuals in the study sample, defined health as:

> A strong body and a strong mind (Mr. S., 70 yrs. old, 8 yrs. formal education).
>
> The physical and mental condition of a person (Mr. T., 74 yrs. old, 18 years of formal education).

During the interviews, but not in particular response to the question concerning what the word health meant to the informants, 8 (32%) of the 25 informants, 2 males and 6 females, stated they felt they had "inherited their health." All 8 discussed a family history of health. Two of these 8 informants commented:

> It's the genes from your parents. My father was as strong as an ox. He died at 92. He got hit by a bus (Mr. S., 70 yrs. old).
>
> I've just been fortunate; I picked good parents (Mrs. Q., 77 yrs. old).

"Taking care of yourself" was mentioned by 5 (20%) of the 25 informants, 1 male and 4 females, in their definitions of health. This was explained by 3 informants as follows:

> I think it's the way you take care of yourself, watching what you eat, taking care of your body, making sure you stay well (Mrs. X., 70 yrs. old).
>
> Exercise, moving, walking, doing things (Mr. O., 82 yrs. old).
>
> Well, I hardly know, just means trying to do what's right. Don't abuse it, don't smoke and don't drink. Do what the doctor says (Mrs. F., 84 yrs. old).

Category II: Self-Care Actions Taken for Health Maintenance

The second category consisted of self-care actions well-elderly people take to maintain health. This category was divided into the following eleven subcategories:

1) Practicing Nutrition and Dietary Control;
2) Exercising and Keeping Physically Active;
3) Establishing Psychological and Emotional Comfort;
4) Protecting Oneself from Hazards to Health;
5) Practicing Skin Care;
6) Maintaining Bowel Elimination;
7) Exercising Mentally and Keeping Mentally Active;
8) Resting and Sleeping;
9) Getting Sufficient Oxygen and Fresh Air;
10) Taking Fluids;
11) Practicing Mouth Care.

Each of the subcategories will be discussed individually.

Practicing Nutrition and Dietary Control

The first subcategory delineated self-care activities related to nutrition and dietary control (Table 5). Such diet-related

Table 5. Subcategory I: Self-Care Actions Related to Nutrition and Dietary Control Reported by 24 Well-Elderly People

Action	Multiple Responses n = 24*	Relative Percent
Taking Vitamins/Minerals	8	33
Avoiding/Limiting Salt	6	25
Eating a Balanced Diet	5	21
Eating Regularly	4	17
Avoiding/Limiting Sweets	4	17
Avoiding/Limiting Sugar	4	17
Drinking Milk	3	13
Eating Good Food	3	13
Following a Medically Prescribed Diet	2	8
Avoiding/Limiting Soda	2	8
Avoiding/Limiting Cholesterol	2	8
Avoiding/Limiting "Junk Food"	1	4
Eating What God Tells You	1	4
Occasional Fasting	1	4
Avoiding Overeating	1	4
Maintaining/Controlling Weight	1	4
Avoiding Canned or Frozen Foods	1	4
Avoiding Manufactured Foods	1	4
Avoiding/Limiting Meat	1	4

*The number of responses is greater than n (24) since some informants reported more than one action.

actions were the most frequently reported kind of self-care practice mentioned by informants in this study. The range of responses classified into this subcategory included general eating patterns as well as specific dietary restrictions. Data revealed no specific universal eating patterns which were followed by everyone or even by a majority of the informants. All but one (4%) of the 25 informants reported using some kind of dietary control. Interestingly enough, when this 71 yr. old male was asked, "How do you define the word health?" he included in his response: "You could eat everything."

Nineteen different diet-related self-care practices were included in the subcategory of nutrition and dietary control. Avoiding or limiting the intake of certain types of food or food substances was commonly mentioned as a dietary control practice. Ten such restructions were reported. The most frequent, restriction of salt intake, was reported by 6 (24%) of the 24 informants, 3 males and 3 females. The restriction of sugar and of sweets was also reported. Four (17%) of the 24 informants, both female, reported limiting or avoiding sugar, and 4 (17%) of the 24 informants, 2 males and 2 females, specified limiting or avoiding sweet foods.

Three (13%) of the 24 informants, 2 females and 1 male, specifically stated they did not take vitamins because they either "did not believe in them" or felt that they "did not need them." Eight (33%) of the 24 informants, 6 females and 2 males, ranging in age from 70 to 84 yrs., stated that they took vitamins and/or minerals. Seven of the 8 (88%) took a combination of different vitamins,

and three (38%) of these used multivitamin preparations. The most frequently reported vitamin used was vitamin C, mentioned by 5 (63%) of the 8 informants. The most frequently reported mineral was calcium, reported by 2 (25%) of the 8 informants. Other vitamins and minerals taken included iron and zinc and vitamins A, B_6, and E.

Five (21%) of the 24 informants, all of whom were female, stated that they did not follow any specific diet, but kept what they called a "balanced diet." This balanced diet consisted of meat, vegetables, fruit, and dairy products. None of the 24 informants included starches when defining a "balanced diet." Four (17%) of the 24 informants stressed eating regularly, which was clarified to mean eating three meals, at approximately the same time each day, and avoiding snacks in-between meals. Other diet-related self-care actions, such as occasional fasting, avoiding overeating, and following a medically prescribed diet were also reported.

Exercising and Keeping Physically Active

The second subcategory included data about physical activity and physical exercise. Twenty-two (88%) of the 25 informants emphasized actions involving physical activity and exercise as an important aspect of self-care. Only 3 (12%) of the 25 informants, 2 females and 1 male, did not report exercise or physical activities among their self-care practices. Twelve specific physical activities were reported (Table 6).

Table 6. Subcategory 2: Self-Care Actions Related to Exercising and Keeping Physically Active Reported by 22 Well-Elderly People

Action	Multiple Responses n = 22*	Relative Percent
Walking	15	68
Cycling	8	36
Working (Hard or Continued)	6	27
Doing Calisthenics	5	23
Doing Housework	5	23
Golfing	3	14
Swimming	3	14
Lifting Weights	2	9
Doing Yard Work	2	9
Running/Jogging	1	9
Stretching Exercises	1	9
Practicing Yoga	1	9

*The number of responses is greater than n (22) since some informants report more than one action.

Walking was the most frequently mentioned activity reported. Fifteen of the 22 informants (68%), 10 females and 5 males, ranging in age from 70 to 94 years, reported walking to keep healthy.

"Hard work" was reported by 6 (27%) of these 22 informants, 3 males and 3 females, as necessary for health. Three of these explained:

> I've worked hard all my life. That's the solution, I keep busy as I can (Mrs. K., 80 yrs. old).
>
> I find hard work is not as hard on you as worrying (Mrs. Y., 81 yrs. old).
>
> All my life I've worked two jobs, so I guess work doesn't hurt you at all (Mr. I., 85 yrs. old).

Housework and yard work were considered as "good physical exercise" by some informants. Five (22%) of the 22 informants, 1 male and 4 females listed housework and 2 (9%) other informants, both female, reported yard work as forms of physical activity they engaged in.

Nineteen (86%) of the 22 informants participated in physical activities with other people. Three (16%) of the 19 incorporated strenuous exercise routines into their activities of daily living; for example, Mr. S., who defined health as a "strong body and a strong mind," reported:

> I take one hour of exercise every morning in the gym. I go six miles on the exercise bike, do 50 push-ups, work out on a rolling machine, use 40 pounds of weight for leg exercises, do 50 spring exercises, touch my toes 50 times, and walk 2 miles on the walking machine. I also swim and ride my bike outside when I have time.

The othertwo informants reported:

> I do a lot of rigorous exercise almost every day. I run, I swim, and I use the exercise bike (Mr. T., age 74 yrs.).

> I get to the European Health Spa about two to three times a week. I usually work out with weights, do leg presses, and ride the exercise bike. I also exercise at home before I go to bed. I went to a chiropractor for a while and he taught me some exercises. I feel so much better since I went to him (Mrs. G., age 70 yrs.).

Other self-care activities, such as golf, stretching exercises, and yoga were also included in the subcategory of exercising and keeping physically active.

Establishing Psychological and Emotional Comfort

The third subcategory of self-care consisted of eighteen actions related to psychological and emotional comfort. Twenty-one (84%) of the 25 informants reported such actions. Five (24%) of these 21 informants were males and 16 (76%) were females.

Nine (43%) of the 21 informants, 1 male and 8 females, reported various religious practices as part of their self-care regime (Table 7). Religious practices mentioned were believing, praying, going to church, and participating in church activities. The importance informants accorded to religion and its effect on health varied, as their comments show:

> I guess if you believe deeply you could get a little help (Mrs. N., 84 yrs. old).

Table 7. Subcategory 3: Self-Care Actions Related to Establishing Psychological and Emotional Comfort Reported by 21 Well-Elderly People

Action	Multiple Responses n = 21*	Relative Percent
Going to Church/Belief/Prayer	9	43
Keeping Busy/Active	8	38
Socializing	5	24
Positive Attitude	4	19
Avoiding Worrying	3	14
Caring/Helping Others	3	10
Keeping Good Thoughts	2	10
Maintenance of Appearance	2	10
Taking Time to Be Alone	2	10
Leading a Clean Life	2	10
Laughing/Good Sense of Humor	2	10
Avoiding People Who Discuss Illness and Death	1	5
Avoiding Arguments	1	5
Avoiding "Cluttering the Mind"	1	5
Avoiding References (TV, Books) to Violence	1	5
Avoiding Dwelling on Self and Problems	1	5
Being Conservative	1	5

*The number of multiple responses is greater than n (21) since some informants reported more than one action.

> I'm Catholic, but I'm not sure how much it helps; it doesn't hurt. Sometimes when I'm mad, I go into the Newman Center and tell God what's on my mind. I sure feel better afterwards (Mrs. W., 71 yrs. old).

> Religion eases your mind when you're thinking of stuff. I say the Lord's Prayer and after that I can go to sleep right away (Mr. I., 85 yrs. old).

Two of the 9 informants stated that belief played a specific role in health maintenance:

> I believe in trusting in the Lord. He gives you patience, understanding and health (Mrs. Y., 81 yrs. old).

> You must first depend on Christ to tell you what to do to keep yourself healthy (Mrs. D., 95 yrs. old).

Based on general living patterns reported during the interviews, nineteen (76%) of 21 informants reported lifestyles which kept them active and involved. Eight (42%) of these 19 informants specifically mentioned "keeping busy and active" as a self-care measure undertaken to maintain health.

Informants also commented that keeping "busy and active" was "healthy for the mind," for example:

> I think your mental health is important and activity is important to that. I keep active and involved (Mrs. Q., age 77 yrs.).

> When I came to Tucson, I was very depressed, mainly because of loneliness. Now I do a lot of volunteer work and everything is fine (Mrs. V., age 70 yrs.).

Socializing was reported as a self-care practice by 5 (24%) of the 21 informants, all of whom were females as well as widows. Socializing was mentioned also as a significant and major part of their lifestyles. Two informants noted:

> The way I live here is a marvelous way to live. Lots of friends, people and activity. I don't like quietness. I like noise and activity (Mrs. N., 84 yrs. old).
>
> I come down here (to the Senior Now Generation Program) and associate with people. I have good neighbors and I associate with them too (Mrs. L., age 72 yrs.).

Two (10%) of the 21 informants who discussed a need for solitude were also among the 5 female informants who reported that socializing played a significant role in their self-care practices. They stated:

> Every once in a while I have to shut the door and pull out the phone. I need solitude (Mrs. Q., age 77 yrs.).
>
> I need to be by myself sometimes. I love people but sometimes I just need to be alone, just to read and crochet (Mrs. V., 70 yrs. old).

Maintaining a positive attitude and having good thoughts were included as activities that one definitely had control over and could practice in order to maintain health. Four (19%) of the 21 informants reported having a positive attitude and two other informants mentioned good thoughts as part of self-care. Only one male reported activities in this category:

> My philosophy is when you feel a negative thought coming, replace it with a good one (Mrs. F., 84 yrs. old).
>
> I don't brood; I try to live each day to the fullest. I try to be optimistic (Mrs. K., 80 yrs. old).
>
> You know as well as I do that it's your attitude towards life in general that's half the battle (Mrs. K., 80 yrs. old).

Maintenance of physical appearance was reported by two (10%) of the 21 informants, both females, as making them "feel good."

Comments made by the informants who mentioned self-care activities to maintain appearance included:

> I put on make-up every day. Wouldn't appear at the door without it. You don't wear make-up do you? You should try a little (Mrs. F., 84 yrs. old).

> I go to the hairdressers once a week. I think that's good for morale (Mrs. Q., 77 yrs. old).

Other reported self-care actions, such as avoiding worrying, caring and helping others, laughing and having a good sense of humor, were also included in this subcategory.

Protecting Oneself from Hazards to Health

The fourth subcategory of self-care actions taken for health maintenance included practices to protect oneself from hazards to health. Eleven self-care activities reported by 20 (80%) of the 25 informants were included in this subcategory (Table 8).

Refraining from smoking and limiting alcohol intake were the two most frequently reported activities in this subcategory. Fifteen (75%) of the 20 informants, 5 males and 10 females, reported limiting alcohol intake. Thirteen (65%) of the 20 informants, 4 males and 9 females, reported both refraining from smoking and limiting alcohol intake.

Eight (40%) of the 20 informants, 3 males and 5 females, reported limited or avoiding medicine. Medication was noted as "not good for oneself" even though one often had to take it. Representative comments included these:

Table 8. Subcategory 4: Self-Care Actions Related to Protecting Oneself from Hazards to Health Reported by 20 Well-Elderly People

Action	Multiple Responses n = 20*	Relative Percent
Avoiding/Limiting Alcohol Intake	15	75
Refraining from Smoking	14	70
Avoiding/Limiting Use of Medicine	8	40
Avoiding/Limiting Caffeine Intake	3	15
Avoiding People Who Are Ill	2	10
Avoiding Eating before Bedtime	1	5
Avoiding Driving at Night	1	5
Getting a Flu Shot	1	5
Avoiding Drafts	1	5
Going to the Doctor for Regular Check-ups	1	5
Following Doctor's Orders and Advice	1	5

*The number of responses is greater than n (20) since some informants reported more than one action.

> That's my philosophy--you want to live, avoid the pills. If you want to die, take the pills (Mr. O., 82 yrs. old).
>
> People who chuck themselves full of medicine will never be healthy (Mrs. P., 72 yrs. old).
>
> I think people should take as little medication as possible (Mrs. G., 70 yrs. old).

Three (15%) of the 20 informants, 1 male and 2 females, avoided caffeine found in coffee and tea. Two (10%) more of the 20 informants, 1 male and 1 female, avoided people who were ill. Other actions that informants listed were avoiding eating before bedtime, avoiding driving at night, avoiding drafts, getting a flu shot, going to the doctor for regular check-ups, and following doctors' advice and orders.

Practicing Skin Care

The fifth subcategory concerned skin care. Seventeen of the informants (68%), 2 males and 15 females, reported activities pertaining to care of the skin, mentioning a total of eight different self-care practices. Ten (57%) of the 17 informants, 2 males and 8 females, reported the use of skin moisturizers, such as lotions, creams, and oils. Four (24%) of the 17 informants, all female, reported use of special soaps. Seven (41%) of the 17 informants, also all females, reported shading skin from the sun, especially in the summer by wearing hats, using umbrellas, employing sun repellents, staying indoors, and staying in the shade. One (6%) of the 17 informants, avoided abrasive soaps and another avoided perfume. Three (18%) of the 17 informants, all female, reported general cleanliness, while one (6%) other informant, used a body brush when showering.

Four (24%) of the 17 informants, all women, specified care of the skin on their feet as part of self-care. One (6%) informant, soaked her feet, while three (18%) of the 17 stated they wore good shoes (Table 9).

Maintaining Bowel Elimination

The sixth subcategory, maintaining bowel elimination, included activities undertaken for maintenance of bowel elimination. Seven different practices were reported by 13 informants (52%), 1 male and 12 females. Only one of the 13 informants routinely took a laxative that was prescribed by her physician. She denied ever having a major problem with her bowels but stated "the doctor told me to take milk of magnesia every night just to keep my bowels going" (Table 10).

Individuals reported taking natural laxatives routinely to prevent constipation. These included such foods as prunes and prune juice, reported by 4 (31%) of the 13 informants, whole grains, reported by 4 (31%) of the 13 informants, and an array of other fruits and vegetables such as broccoli, sauerkraut and grapefruit, reported by 6 (46%) of these informants. Three (23%) of the 15 informants reported drinking a cup of hot water once a day.

Exercising Mentally and Keeping Mentally Active

The seventh subcategory included activities concerned with mental activity and mental exercise. Ten (40%) of the 25 informants reported self-care actions in this subcategory and eight different

Table 9. Subcategory 5: Self-Care Actions Related to Practicing Skin Care Reported by 17 Well-Elderly People

Action	Multiple Responses n = 17*	Relative Percent
Using Creams or Lotions	9	53
Shading from the Sun	7	41
Using Special Soaps	4	24
Cleanliness	3	18
Wearing Good Shoes	3	18
Avoiding Use of Perfumes	1	6
Using Body Brush when Showering	1	6
Soaking Feet	1	6
Avoiding Abrasive Soaps	1	6

*The number of responses is greater than n (17) since some informants reported more than one action.

Table 10. Subcategory 6: Self-Care Actions Related to Maintaining Bowel Elimination Reported by 13 Well-Elderly People

Action	Multiple Responses n = 13*	Relative Percent
Taking Prunes/Prune Juice	5	38
Taking Other Special Foods in Diet	5	38
Eating Whole Grains	4	31
Drinking a Cup of Hot Water Daily	2	15
Routinely Using Commercial Laxative (for preventive purposes only)	1	8
Using Blackstrap Molasses in Diet	1	8
Avoiding Confining Garments	1	8

*The number of responses is greater than n (13) since some informants reported more than one action.

actions were mentioned (Table 11). The measures indicated to keep the mind active varied, as the following examples reveal:

> There is nothing better to keep your mind active than word puzzles (Mrs. X., 70 yrs. old).
>
> To keep mentally alert you have to stay involved, especially with younger people. You have to stay involved with politics and what's going on (Mrs. Y., 81 yrs. old).
>
> I keep my mind very active. One of the things I do is watch the commodity machine (Mr. R., 71 yrs. old).

Six (60%) of the 10 informants reported reading as part of their self-care regimen. Although this activity could be undertaken to meet numerous needs, such as relaxation or emotional comfort, these informants explicitly reported using reading along with other similar multipurpose activities--puzzles, games, and needlework--to keep the mind active. One informant reported activities which she felt kept her from "getting senile:"

> I like figures; I always do my own income tax. I read a lot too. I think that keeps me from getting senile, keeps me from forgetting (Mrs. A., 84 yrs. old).

Resting and Sleeping

Actions related to rest and sleep were included in the eighth subcategory. Eight (32%) of the 25 informants, 2 males and 6 females, reported "getting adequate sleep" as an important self-care practice. Only one of the 8 informants reported a problem sleeping and none admitted taking something to sleep. One of the 8 informants reported that "saying the Lord's Prayer" was an effective measure for him (Table 12).

Table 11. Subcategory 7: Self-Care Actions Related to Exercising Mentally and Keeping Mentally Active Reported by 10 Well-Elderly People

Action	Multiple Responses n = 10*	Relative Percent
Reading	6	60
Doing Puzzles and Games	5	50
Keeping Mentally Active	4	40
Doing Needlework	3	30
Doing Own Income Tax	1	10
Staying Involved with Politics	1	10
Avoiding "Dissipating"	1	10
Continuing Education	1	10

*The number of responses is greater than n (10) since some informants reported more than one action.

Table 12. Subcategory 8: Self-Care Actions Related to Resting and Sleeping Reported by 8 Well-Elderly People

Action	Multiple Responses n = 8*	Relative Percent
Getting Adequate Sleep	8	100
Taking an Alcoholic Beverage for Relaxation	1	13
Watching Television	1	13

*The number of responses is greater than n (8) since some informants reported more than one action.

Only 2 (25%) of the 8 informants reported incorporating resting and relaxation into their self-care regimes. One of these two reported that he "got very little sleep" and noted that he rested by "watching television." The other informant reported relaxing with her daughter over a glass of wine after the daughter came home from work.

Getting Sufficient Oxygen and Fresh Air

Actions related to getting adequate oxygen and fresh air were listed in the ninth subcategory. Six self-care practices were reported by 8 (32%) of the 25 informants. Actions included controlling one's own activity and controlling the environment. The only activity mentioned with frequency was deep breathing, reported by 3 (38%) of the 8 informants. Mrs. B. reported "deep breathing is important, the body needs new oxygen." Another informant, 80 year old Mrs. J., reported doing breathing exercises in exercise class three times a week. "Airing the house out" and "keeping the widows open at night" were also reported as self-care practices. Informants stated:

> I air my house daily; that's extremely important. Even in the dead of winter I open all the windows for at least 10 minutes (Mrs. D., 95 yrs. old).
>
> Fresh air is something you need to have. I always sleep with windows open at night (Mrs. Y., 81 yrs. old).

Seventy year old Mrs. G. reported taking a steam bath at the spa three times a week. Seventy-six year old Mrs. B. avoids "rooms full of smoke" along with practicing deep breathing (Table 13).

Table 13. Subcategory 9: Self-Care Actions Related to Getting Sufficient Oxygen and Fresh Air Reported by 8 Well-Elderly People

Action	Multiple Responses n = 8 *	Relative Percent
Deep Breathing	3	38
Airing House Out	1	13
Keeping Windows Open at Night	1	13
Taking a Steam Bath	1	13
Getting Out of Rooms Full of Smoke	1	13
Breathing Exercise	1	13

*The number of responses is greater than n (8) since some informants reported more than one action.

Taking Fluids

The tenth subcategory concerned taking fluids. Only one action was reported in this subcategory, "drinking a lot of water." Six (24%) of the 25 informants, 1 male and 5 females, reported drinking "a lot of water" as part of self-care.

Practicing Mouth Care

The eleventh and final subcateogry consisted of actions related to mouth care. Four (16%) of the 25 informants reported a total of six activities in this area, each of the six actions was only reported once: brushing teeth, flossing teeth, clearing throat "of junk" every morning, cleaning dentures, going to the dentist regularly, and using a water pick on teeth and gums (Table 14).

Category III: Deviations from Health for which Well-Elderly People Practice Self-Care

Informants reported seventeen different self-defined deviations from health for which they used self-care practices. Although five (20%) of the 25 informants initially denied minor ailments or health problems, all informants reported some type of deviation from health after the investigator asked "What about any aches and pains?"

One of the five informants who initially denied minor ailments reported:

> I don't have any minor ailments, and if I have pain, I live with it. That's my philosophy, learn to live with pain. Oh, I get a little cold once in a while too, but I do nothing (Mr. O., 82 years old).

Table 14. Subcategory 11: Self-Care Actions Related to Practicing Mouth Care Reported by 4 Well-Elderly People

Action	Multiple Responses n = 4*	Relative Percent
Brush Teeth	1	25
Flossing Teeth	1	25
Clearing Throat "of Junk" Every Morning	1	25
Cleaning Dentures	1	25
Going to the Dentist Regularly	1	25
Using a Water Pick on Teeth	1	25

*The number of responses is greather than n (4) since 2 of the 4 informants reported more than one action.

The common cold was the most frequently reported deviation from health. Twelve (48%) of the 25 informants considered the common cold as either a minor ailment or as a health problem for which they would use self-care.

Constipation was the second most common deviation from health reported. Six (24%) of the 25 informants reported constipation as a minor ailment or health problem for which they could practice self-care. Other deviations from health included headaches, general pain, abdominal discomfort, which included "hangovers," gas and indigestion, respiratory and skin allergies; arthritis; backaches and muscle aches; coughs, fever and congestion; sore throats; sunburn; and, most interestingly, malaria (Table 3, page 45).

Category IV: Self-Care Practices Used in Deviations from Health

The fourth category included the self-care practices well-elderly people used for deviations from health. Eighteen self-care practices were identified, including, in addition to specific actions, the informants' choice to take no action or to ignore a problem. While 22 (88%) of the 25 informants reported self-care actions used in deviations from health, 3 (12%) of the 25 informants reported "ignoring the problem or doing nothing."

Self-medication was the most frequently reported self-care action observed in this category. Seventeen (68%) of the 25 informants, 13 females and 4 males, indicated that they practiced self-medication. Five (30%) of the 17 informants, 4 females and 1 male,

who reported avoiding or limiting medicine, were among those reporting self-medication. The 5 informants stressed severity of the experienced deviation from health as an indication for use of self-medication. Some comments were:

> I don't take aspirin or anything else. It's hard for me to take medicine. For colds I take nosedrops. I do take aspirin at night if I have a very bad cold (Mr. H., 71 yrs. old).
>
> I don't believe in medicine. If pain is strong enough, I take 1 Tylenol per 24 hours (Mrs. J., 77 yrs. old).

Aspirin, the most frequently reported form of self-medication, was mentioned by 10 (59%) of the 17 informants, 4 males and 6 females. The most common reason for taking aspirin was for colds. The second most common reason was for headaches. Informants also reported the use of aspirin for general pain. One informant reported the use of Tylenol for arthritic pain. Two informants specified that they used Anacin instead of plain aspirin.

Cold tablets for treatment of colds were used by 3 (18%) of the 17 informants, 1 male and 2 females. One of these informants specified the use of Contact and another reported using Coricidin-D.

Two (12%) of the 17 informants noted the use of external analgesics for muscle aches and arthritic pain. Products used were Mentholatum Deep Heating Rub and Ben Gay. One informant reported use of the external decongestant, Vicks Vapor Rub, for treatment of congestion during a cold.

Two (12%) of the informants used antacids for abdominal distress. Antacids reported were Di-Gel, Mylanta and Pepto Bismol.

Another measure undertaken as part of self-care was the use of heat. Six (24%) of the 25 informants reported using heat, with 3 of the 6 specifying dry heat (referring in each instance to a heating pad), and 3 specifying moist heat. Sources of moist heat included a jacuzzi, steam bath, hot bath, and hot compresses. Heat was used for arthritis and back pain.

Massaging or rubbing something into the skin was reported by 3 (12%) of the 25 informants. Products rubbed into the skin were rubbing alcohol and burn ointment, used to treat arthritis and burns respectively.

Exercising was another type of self-treatment reported for relief of pain. One informant did back exercises every morning for chronic back pain associated with arthritis. An 82 year old informant exercised for muscle pain but also commented "without straining" in her report.

Drinking fluids and resting and sleeping were frequently practiced as self-care activities. Five (20%) of the 25 informants, four females and 1 male, reported increasing fluids and four females reported resting and/or sleeping as part of their self-care regime for treating health deviations. These activities were most often used for the treatments of colds, although one informant used these measures, along with taking tonic water and keeping warm, to treat malaria.

Two types of self-care activities were undertaken for constipation by five (20%) of the 25 informants, 4 females and 1 male. Three (60%) of the 5 used commercially prepared laxatives and 2 (40%)

of the 5 informants took enemas. Commercial laxatives used were milk of magnesia, Serutan, Nature's Remedy, Ex-Lax, and Feen-a-mint.

Taking something to promote perspiration was reported as a treatment for the common cold by two (8%) of the 25 informants, ages 71 years and 85 years. One took aspirin and the other drank hot water, sometimes adding a shot of whiskey.

Cleansing a wound or cut was also reported by 2 (8%) of the 25 informants, both female. One used Campho-Phenique and the other used witch hazel.

Other measures undertaken by individuals included padding a painful area (on the foot for a hammertoe), gargling for a sore throat, and soaking an affected area. (See Table 4 on page 46 for a complete listing of self-care practices.)

Summary

In this chapter, the categories and subcategories of informants' responses to the questions asked in this study were described, and the frequency distributions of responses were presented. The significance of these categories in terms of both the issues raised in the literature and the theoretical framework of this study is treated in the following chapter, as are the demographic characteristics of the study and the limitations of the study.

CHAPTER 5

DISCUSSION OF FINDINGS

This chapter includes a discussion of the demographic characteristics of the study sample, study findings as related to the the review of the literature, study findings as related to the theoretical framework, and limitations of the study.

Demographic Characteristics of the Study Sample

Among the 25 informants who participated in this study, 17 (68%) were female and 8 (32%) were male. Of the 17 females, 13 (52%) were widows while 1 (4%) of the 8 males was a widower. The sex distribution of the sample paralleled trends in the data reported by the United States Bureau of the Census in 1980 that 13,627,000 (59%) of the 23,175,000 persons over 65 years old were female. The United States Bureau of the Census (1980) also recorded that 7,110,000 (52%) of the 13,627,000 females over 65 years old were widows and that 1,350,000 (7%) of the 9,548,000 males were widowers.

The length of time the informants reported living in Tucson varied. Two of the informants were visitors, 2 had lived in Tucson less than 4 years, and the remaining 21 people reported residence in Tucson for over five years. It is difficult to speculate to what degree Tucson's lifestyle has affected its elderly population's self-care practices. Because of the climate and its reputation for

"healthy air," Tucson has attracted both healthy and unhealthy persons for health reasons. The investigator felt that Tucson's health consciousness affects segments of all age groups, among which could be the well-elderly population.

The percentage of elderly persons living alone in the study sample was higher than that found among the general elderly population (U.S. Department of H.E.W. 1978). Seventeen of the informants (68%) lived alone, while in 1976, only 5,733,000 (25%) of the 22,934,000 people sixty-five years old and older were living alone, and 3,234,170 (37%) of the 8,741,000 people seventy-five years old and over were living alone (U.S. Department of H.E.W. 1978). The percentage of study informants who lived alone is approximately two or three times that of the national population statistics. While the number of persons living alone has been steadily increasing (U.S. Department of Commerce Bureau of the Census 1978), the high percentage of informants who lived alone might be explained by assuming that a healthier population would have a higher percentage of persons possessing the ability to live alone if they so choose than a less healthy general elderly population.

The informants' level of formal education was higher than that of the general elderly population as recorded by the U.S. Bureau of the Census (1978). While 4,864,000 (22%) of the 22,468,000 elderly persons in the U.S. in 1978 had completed high school, 19 (76%) of the study's 25 informants had at least a high school education. Thirteen (52%) of the study's informants had at least some college, although only 4 (16%) completed college. According to the Bureau of

the Census (1978), 1,785,000 (7%) of the 1978 elderly population had a college diploma.

One reason why the level of education for the individuals in the study sample was higher than the national level might be the source of recruitment. Thirteen (52%) of the informants who volunteered to participate in the study were referred by the investigator's friends and acquaintances. These 13 informants had a mean educational level of 13.2 years, which was higher than the mean for the total study sample, 12.9 years. A possible "unconscious selection" of friends and acquaintances with similar educational backgrounds might have been operating here, on the part of both the investigator and the "friends and acquaintances" themselves. The mean educational level of the seven informants recruited by the investigator from her contacts at the local county health department was 13.7 years, which was also higher than the mean for the total sample (12.9 years). Here again the investigator might have "unconsciously selected" persons who appeared knowledgeable on the topic of self-care and who could intelligently discuss the topic. The five informants recruited from the Senior Now Generation's Nutritional and Socialization Program had a mean educational level of 10.6 years which was much lower than that of the other two groups. Here the investigator had no role in selecting individuals, other than to announce a need for volunteers.

No attempt has been made in this study to make generalizations from the study findings to the general elderly population since

the sample was one of convenience and is therefore not representative. Demographic data concerning age, sex, living arrangements, years in Tucson, and educational level have been discussed in order to present a description of the study sample.

Findings Related to the Review of the Literature

The study findings relating to issues raised in the review of the literature are organized into four areas: 1) descriptions and definitions of health, 2) self-care actions well-elderly people take to maintain their health, 3) self-defined deviations from health, and 4) self-care actions done for self-defined deviations from health.

Descriptions and Definitions of Health

The descriptions and definitions of health reported by the 25 well-elderly people in the study sample support Dolfman's (1973) statement that health is a family of concepts as opposed to a singular concept referring to a number of entities. These descriptions and definitions also supported Williamson and Danaher's (1978) proposal that the meaning a person attributes to health varies from person to person, culture to culture, and even from time to time. Informants reported a total of 14 different descriptions and definitions of health.

Definitions and descriptions of health reported by the informants paralleled definitions of health that have been documented in the literature. Oberteuffer (1960) has proposed that health is a state or condition which enables individuals to function adequately.

Six (24%) of the study's 25 informants described health as the "ability to do things." The concept of health as a disease-free state, popular in the first half of the century (Dolfman 1973) was reported by 5 of the study's informants (20%). Three of the informants (12%) proposed definitions similar in part to that of the World Health Organization's (1947) definition of health as "a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity" (p. 29). The view proposed by Dubos (1965) that health is the ability to accommodate and adjust to various tensions and strains encountered was supported by 2 (8%) of the study's informants. Authors such as Williams (1946), Bauer (1955) and Hoyman (1962) who equated health with happiness and quality of life, held views similar to those of 4 (16%) informants who reported that being healthy meant "having the ability to enjoy things." Being independent, reported by 2 (8%) informants, was also described in Parson's (1979) definition of health as "a state of optimum capacity of an individual for effective performance of the roles and tasks for which he had been socialized" (p. 120). To be dependent in our society has been regarded as "a confession of one's own incompetence or inadequacy and justification for degradation in the eyes of the community" (Fry 1980, p. 218).

Descriptions and definitions of health identified in this study have also been reported in other studies (Bauman 1961; Bauwens 1974; Yialelis 1979). None of the studies reviewed included a list of descriptions and definitions of health as specific and extensive

as those presented in this study. The studies reviewed presented definitions and descriptions for health in more general terms. Bauwens (1974) identified two criteria for health which were similar to those found in this study: the absence of illness and non-impairment of physical activity. Non-impairment of activity was assumed to hold the same meaning as "the ability to do things" and wanting to do things." "Not having to go to the doctor frequently" was assumed to hold a meaning similar to the absense of illness. Bauman (1961) identified three of the descriptions of health reported in this study: a general feeling of well-being, the absence of general or specific symptoms, and the abilities of a person who was feeling good. Yialelis (1979) reported three descritpions included in this study's findings: physical well-being, mental well-being and spiritual well-being.

Self-Care Actions Taken to Maintain Health

The second category, self-care actions taken to maintain health, was comprised of ninety-nine actions and practices which were coded in eleven subcategories. Subcategory titles described the type of self-care actions they contained; for example, activities related to eating were placed in the subcategory "Practicing Nutrition and Dietary Control."

The self-care practice subcategories identified in Category II have in varying degrees received recognition in the literature. The subcategories pertaining to nutrition and dietary control and to physical activity have been reported in the literature by Travis

(1977), Shamansky and Hamilton (1979), Haggerty (1977), Orem (1980), and Ardell (1977). Haggerty (1977), Ardell (1977), Shamansky and Hamilton (1979) and Travis (1977) all used different category titles to organize practices related to "Establishing psychological and emotional comfort" and "Exercising mentally and keeping mentally active." "Protecting oneself from hazards" was also identified by Orem (1980), while others (Haggerty 1977; Ardell 1977; Shamansky and Hamilton 1979; and Mechanic 1980) used different categories to describe similar self-care practices. Practices pertaining to mouth care and to resting and sleeping were reported by Haggerty (1977), Travis (1977), and Shamansky and Hamilton (1977). Taking fluids and getting sufficient oxygen were practices reported by Orem (1980) as components of her universal self-care requisites.

Nineteen of the ninety-nine self-care practices identified by study informants were also found in the literature reviewed (Palmore 1970; Belloc and Brewslow 1972; Bauwens 1974; Sullivan 1974; Schank 1977; Metzler 1980). While some of these studies were not investigating self-care specifically or exclusively, the overlapping of identified self-care practices provides added support for the generalizability of the findings of this study. The specific self-care actions in the literature which have been positively related to physical health status were identified in the findings of this study. All seven of Belloc and Breslow's (1972) practices and all three of Palmore's (1970) health practices were among the ninety-nine self-care practices found in this study.

Sullivan (1979) reported seventeen different self-care practices. Eight of these practices were also reported by the informants in this study. Sullivan's most commonly reported practices, "eating a balanced diet," "proper rest and sleep," "adequate exercise," and "having a positive outlook on life," were reported by informants in this study as were reported practices of "keeping busy and active," "cleanliness," and "regular doctor check-ups." "Not being self-centered," reported by one of Sullivan's 32 informants was interpreted as similar to the comment "avoid dwelling on self and problems," reported by one of the 25 informants in this study.

Bauwens (1974) reported that 10 (20%) of her 50 informants altered their diets and 6 (12%) used health foods to maintain or restore health. This study found 24 (96%) of the informants practicing at least one dietary-related activity for health maintenance. Fifteen (60%) informants reported at least one specific inclusion or restriction in their diets for health reasons. Bauwens also found that 36 (72%) of her 50 informants used vitamins and tonics while only 8 (32%) of this study's 25 informants reported use of vitamins and minerals.

"Foot soaks" and "wearing good shoes" were two of Schank's (1977) findings also reported by informants in this study. Without reporting the number of cases, Schank noted that foot soaks were the most frequently reported practice used by her 125 informants. In contrast, only one (4%) informant in this study reported foot soaks. While 17 (14%) of Schank's 125 informants reported

"wearing good shoes," 3 (12%) of this study's 25 informants reported doing so.

Metzler (1980) investigated an entirely different population, that of adolescent boys, to learn what they did to "take care of themselves." He found 12 different actions "which boys do to take care of themselves," 6 of which were also identified by the informants in this study: dieting, exercising, keeping a healthy mind, resting, keeping clean, eliminating wastes, going to the doctor and cleaning teeth.

The findings of this study revealed 79 self-care activities not reported in the literature reviewed, including avoiding salt, working hard, avoiding or limiting caffeine, keeping mentally active, breathing deeply, shading oneself from the sun, and avoiding worrying. This apparent discrepancy may be attributed to the design of the other studies, whose purpose might not have been to illicit such detailed and diverse activities, or to the possibility that these activities might be specific to the well-elderly population. The findings of Bauwens' (1974), Sullvian's (1974), and Schank's (1977) studies were not based exclusively on the reports of well persons. Some of the activities, for example those listed under "Exercising and Keeping Physically Active" and "Exercising Mentally and Keeping Mentally Active," might require a certain degree of health in order to participate in them.

The findings of some of the other studies reviewed (Metzler 1980; Bauwens 1974) were also not based exclusively on the reports of

elderly persons. Since older people are more susceptible to deviations from health because of normal age-related bodily changes, they may see a need to take a greater number or different types of actions than their younger counterparts in order to maintain health. Examples of such activities might be those included in the subcategory "Exercising Mentally and Keeping Mentally Active." These activities might reflect the myth-inspired fears that mental capacity deteriorates with age. Within a society where loss of cognitive capacity is the most feared of all human conditions (Ebersole 1981), engaging in actions which might maintain mental functioning would be understandable.

Self-Defined Deviations from Health

The third category, self-defined deviations from health for which well-elderly people practice self-care, consisted of seventeen symptoms and health problems. In the literature reviewed, only two studies identified the conditions or deviations from health for which persons might treat themselves. Bauwens (1974) identified twenty-five conditions which her informants stated they had during the previous year and for which they did not seek medical attention. Of the twenty-five conditions, nine were also reported by the informants in this study. These conditions or deviations from health were constipation, sore throat, runny nose (informants in this study identified both sore throats and colds), backaches, indigestion (identified as

abdominal discomfort in this study), arthritis, cough, headaches, and fever.

Schank (1977) investigated foot problems as a deviation from health for which elderly persons used self-care. Schank did not specify the number of informants using self-care for foot problems but reports that 101 (81%) of the 125 informants admitted to foot problems and that approximately 83 (66%) of the 125 informants did not seek medical attention for their feet. In contrast, only 2 (8%) of the informants in this study mentioned foot problems as a deviation from health for which they would practice self-care.

Self-Care Practices Used for Deviations from Health

The fourth category, self-care practices which elderly people use for deviations from health, consisted of eighteen actions and practices. The literature reviewed had categorized such actions as "illness behavior" (Chrisman 1977; Kirscht 1974) or as actions to meet "health-deviational self-care requisites" (Orem 1980).

Self-medication was the most frequently reported self-care action in this category. Seventeen of the 25 informants (68%) reported taking non-medically prescribed drugs. This study's findings were similar to those of Guttman (1978) who reported 308 of 447 elderly people (69%) practicing self-medication and of Gagnon (1978), who reported 833 of 1,179 white individuals (71.5%) and 530 of 759 (69.8%) black individuals using non-prescribed medications.

Aspirin use, the most frequently reported form of self-medication, was reported by 10 (40%) of this study's informants. Tylenol use was reported by one member of the study sample. These were only two internal analgesics reported by the informants. Guttman (1978) and Gagnon (1978) also found that internal analgesics were the most commonly used over-the-counter drug. The use of cold tablets, other decongestants, and laxatives reported by informants was noted as well by Gagnon (1978) and Guttman (1978). Gagnon (1978) also reported the use of external analgesics for muscle pain and of drugs for the relief of digestive disorders, as did informants in this study.

Sullivan (1979) reported self-care practices essentially identical to others identified in this study, namely resting and sleeping, ignoring the problem or doing nothing, and keeping busy. Metzler (1980) reported "rest and sleep" along with "drinking things," results consistent with this study's findings. Bauwens (1974) reported use of commercial laxatives and enemas, which were also reported in this study.

Findings Related to the Conceptual Framework

The conceptual framework for this study was based on the concepts of health and self-care proposed by Orem (1980) in her self-care model. Health is a term used to describe living things that are structurally and functionally whole or sound (Orem 1980). In this study, informants did not include the quality of wholeness in their

definitions of health. The concept of wholeness might have been too abstract to have any meaning for them. Informants did identify soundness as one criterion or quality of health. Although none of the informants used the term "sound," they did use such words as "strength," "the ability and desire to do things," and "the absence of illness."

Health is a concept which can be used with considerable general utility in describing a state of wholeness and soundness (Orem 1980). Informants provided evidence for this phenomenon when they identified fourteen different definitions and descriptions to the concept of health. A varying range in the absence of health can exist before one becomes "unhealthy," "sickly," or "in poor health." A structural and functional change which does not seriously interfere with integrated functioning, or which does so but in limited fashion, is an "absence of health" rather than poor health. Study findings substantiated this view with reports of seventeen different deviations from health experienced by informants who identified themselves as "healthy." Evidently informants believed that episodes of "absence of health" are allowable in a healthy person.

The health of an individual can be conceptualized as having four inseparable aspects: physical, psychological, social, and spiritual. The experience of health is an extremely personal one to the layperson (Williamson and Danaher 1978). Throughout the lifespan, individuals learn to identify components which serve them as indices of their health (Orem 1980). Informants in this study reported the physical and psychological and spiritual aspects of health in their

definitions of health. Although informants may not have thought to include the social aspect of health in their definitions, these findings could suggest that this population does not see social and interpersonal factors as components of health, and thus might not evaluate their own health status based on them. Since changes or deviations from health in any one of the components of health affect the others, changes in the social aspects of health could be experienced as a change in health status but identified as a change in the physical and psychological or spiritual aspects of health.

Achieving health (or health results) is the goal of self-care. The concept of self-care has been defined by Orem (1980) as "the practice of activities that individuals initiate and perform on their own behalf in maintaining life, health and well-being" (p. 35). Study findings revealed ninety-nine activities that the 25 informants reported performing on their own behalf for the purpose of health.

Self-care activities have been divided into two types, universal and health-deviational. These types of self-care, or "requisites" for self-care as Orem (1980) has identified them, are distinguishable terms of the general purposes of the activities.

Orem (1980) has identified eight universal self-care requisites in her self-care model. The findings of this study have included six of these:

1. Practicing Nutrition and Dietary Control or (in Orem's terminology), the maintenance of a sufficient intake of food.

2. Exercising and Keeping Physically Active and Resting and Sleeping or (in Orem's terminology), the maintenance of a balance between activity and rest.
3. Protecting Oneself from Hazards to Health or (in Orem's terminology), the prevention of hazards to human life, human functioning and human well-being.
4. Maintaining Bowel Elimination or (in Orem's terminology), the provision of care associated with elimination processes and excrement.
4. Getting Sufficient Oxygen and Fresh Air or (in Orem's terminology), the maintenance of a sufficient intake of air.
5. Taking Fluids or (in Orem's terminology) the maintenance of a sufficient intake of water.

The remaining two types of universal self-care requisites identified by Orem (1980) were coded into eleven subcategories in this study.

In addition to these universal self-care activities, this study identified eighteen practices falling within the rubic of health-deviational self-care requisites. Such practices were those involving being aware of and attending to the effects and results of pathological conditions and states (Orem 1980). The eighteen practices were identified as self-care practices which well-elderly people take for self-defined deviations from health.

Limitations of the Study

Limitations of the study include:

1. The sample was a limited convenience sample, making generalizations to populations other than the specific sample investigated of questionable validity.
2. Informants may have tried to impress the nurse investigator with reports of practices they should be doing, thus biasing the findings.
3. Informants may have withheld information regarding unconventional self-care practices for fear of disapproval by the investigator, similarly biasing the findings.
4. While the activities of self-care were reported from the point of view of the informants, the categories in which the data were organized were conceptualized from the viewpoint of the investigator and the coders. The investigator might have assumed that the informants were taking certain actions for one reason, while in reality they were doing so for other reasons. This might have resulted in the placement of informant responses into inappropriate categories or even in the development of inappropriate categories.

Summary

The major findings of this study have been discussed in the context of both the literature reviewed and of the conceptual framework of the study itself. The responses of informants in this study confirm and support many of the results and conceptualizations reported in

earlier research, while certain findings can be interpreted as innovative. This chapter included descriptions of the study sample and a discussion of the study's limitations, thus providing a further basis for evaluating the study's findings and claims. The study's conclusions and the major recommendations for future investigation will be presented in the next chapter.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS FOR FUTURE STUDY

This chapter presents the study's conclusions and implications for nursing practice. In addition, recommendations for future investigations are discussed.

Conclusions and Implications for Nursing Practice

The purpose of this study was to determine how well-elderly persons define and characterize health and to identify and describe the self-care activities they use to maintain health. In general, the findings illustrate the great diversity of meanings embodied in the term health and give support to the view that self-care is an integral part of the lifestyle and daily habits of individuals (at least for the study sample). The value of these findings, in part, lies in the implications they hold for nurses and other health-care providers who work with well-elderly individuals. In the most general terms, it would no doubt promote effective and efficient health care delivery if nurses and other health-care providers were made aware of the possible --indeed, likely--presence of self-care practices among well-elderly patients.

Specific conclusions and implications are considered below.

Descriptions and Definitions of Health

This study has identified eleven different descriptions and definitions of health reported by the 25 well-elderly informants. These descriptions and definitions illustrate the diversity found among the various meanings that individuals apply to health.

Since health is the goal of self-care, it is important that nurses using a self-care approach to health and other health-care providers be aware of the meaning health has for a given individual. This knowledge will assist the nurse working with the client to develop a realistic and effective nursing care-plan. A mutual understanding of an individual's definition of health will also help guide the nurse and the patient in goal-and-priority-setting. Without such an understanding, nurse and patient might inadvertently find themselves working at cross purposes. This study underscores the need for such a sensitivity to the well-elderly individual's personal conceptions of health, but it is likely that the study's findings hold similar implications for patients in general.

Self-Care Actions Taken to Maintain Health

The 25 informants in this study reported ninety-nine self-care practices used to maintain health. Self-care practices varied widely among the informants, and to organize the findings, eleven subcategories describing the kinds of self-care practices reported by the well-elderly were developed. The ninety-nine--a listing not seen as all-inclusive--

exemplify the types of activities well-elderly people do to maintain health and prevent illness.

The eleven subcategories which describe the kinds of practices reported suggest areas of self-care which need investigation by nurses or health care providers working with the elderly.

The diversity among the self-care practices reported in this study reinforces the importance of and need for individually assessing clients' self-care practices. The findings underscore the need to avoid the automatic or unthinking placement of people into pre-existing categories and the assumption that they necessarily practice certain behaviors because other people in their community or with similar backgrounds take such actions. The findings could serve to remind the nurse of all the possible self-care activities which might be practiced by the patient and to suggest specific areas for detailed investigation during health assessment.

Self-Defined Deviations from Health

Seventeen deviations from health for which informants reported use of self-care were identified in the study. Such findings again exemplify the types of health problems for which elderly people practice self-care, and the listing is not seen as exhaustive. The variety of examples reported in the study reinforces the need for the nurse to investigate not only the problems for which patients seek out nursing help and care, but also those problems they are caring for themselves. Clients may not see these deviations from health for which they use self-care as important aspects of their health history, and thus

important data regarding clients' health status might be overlooked. Most likely these deviations from health will have an effect on client total health status and on the care which he requires from nursing.

Self-Care Practices Used for Deviations from Health

Eighteen self-care activities used in deviations from health were identified by this study. As is the case with the other findings in this study, these self-care activities exemplify the kinds of activities which individuals might undertake when faced with deviations from health. The existence and nature of such practices might serve as clues to the nurse as to what types of activities, potentially helpful or even interfering, clients might be engaging in. As was the case regarding both deviations from health and the self-care activities used to maintain health, these activities will inevitably affect health status self-care and nursing care.

Recommendations for Future Study

The study's findings as well as limitations have raised questions appropriate for future investigation:

1. Replicate the study, using samples selected on bases that would permit exact statistical predictions generalizable to important, well-defined target populations.
2. Replicate the study, scheduling a second, follow-up interview to further validate the investigator's coding categories.

3. Replicate the study, using controlled sample population, thus permitting comparisons between types of informants (varying, say, in important demographic variables) and types of health-care practices.
4. Redesign the study to investigate self-care practices specifically related to developmental changes characteristics of lifespan, focusing not only upon those affecting the well-elderly (such as changes in the skin, living situations, or energy level) but also upon those important at other age stages.

APPENDIX A

SELF-CARE PRACTICES OF WELL-ELDERLY PEOPLE

INTERVIEW GUIDE

1. What does the word "health" mean to you?
2. What types of things do you do to keep yourself healthy?
3. Which minor ailments or health problems do you take care of by yourself?
4. What do you do for the minor ailments/health problems you identified?

APPENDIX B

DEMOGRAPHIC CHARACTERISTICS OF STUDY SAMPLE

Table B1. Demographic Characteristics of Study Sample

Informant	Age	Marital Status	Living Alone	Years In Tucson	Years of Formal Education
Mrs. A	84	Widowed	Yes	50 years	16
Mrs. B	76	Widowed	Yes	19 years	14
Mrs. C	88	Single	Yes	14 years	13
Mrs. D	95	Widowed	Yes	30 years	14
Ms. E	88	Single	Yes	Visitor	16
Mrs. F	84	Widowed	Yes	23 years	15
Mrs. G	70	Widowed	Yes	36 years	14
Mr. H	71	Married	No	5 years	12
Mr. I	85	Widowed	Yes	14 years	12
Mrs. J	77	Married	No	15 years	11
Mrs. K	80	Widowed	No	6 months	12
Mrs. L	72	Widowed	Yes	22 years	12
Mrs. M	71	Widowed	Yes	33 years	10
Mrs. N	84	Widowed	Yes	29 years	13
Mr. O	82	Single	Yes	7 years	7
Mrs. P	72	Widowed	Yes	12 years	10
Mrs. Q	77	Widowed	Yes	25 years	14
Mr. R	71	Divorced	No	10 years	9
Mr. S	70	Married	No	Visitor	8
Mr. T	74	Married	No	20 years	21
Mr. U	72	Married	No	36 years	14
Mrs. V	70	Widowed	Yes	7 years	12
Mrs. W	71	Single	Yes	18 years	17
Mrs. X	70	Widowed	Yes	2 years	12
Mrs. Y	81	Married	No	59 years	14

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