

**2.5**Contact Hours
See text on pp. 253–254

An Integrative Review of the Concept of Well-Being

■ **Ruth Ann Kiefer, RN, MSN, CRRN**

Well-being can be defined in terms of an individual's physical, mental, social, and environmental status with each aspect interacting with the other and each having differing levels of importance and impact according to each individual. A change in the different aspects of well-being of an individual may be reflected in an alteration of behavior or the performance of a task or activity. Although the current research environment has emphasized the importance of well-being, little emphasis has been placed on this concept from the individual's point of view or perspective. The definition of well-being is usually assumed or lacking in clarity with similar terms used interchangeably. Well-being has been measured in research using various scales, which may not capture the complexity of the concept. This integrative review clearly indicates the need to explore how individuals define and conceptualize health and wellness and to discover what they perceive to be the major facilitators and barriers to health and wellness for themselves and other individuals living with disability. **KEY WORDS:** *education, elderly, occupational therapy, physical therapy, psychology, quality of life, well-being* *Holist Nurs Pract* 2008;22(5):244–252

The many definitions of well-being suggest that it is an intangible and amorphous concept with perception differing from person to person.¹ *Well-being* can be defined in terms of an individual's physical, mental, social, and environmental status with each aspect interacting with the other and each having differing levels of importance and impact according to each individual. A change in the different aspects of well-being of an individual may be reflected in an alteration of behavior or the performance of a task or activity.² Components relevant to the concept of well-being are illustrated below.

- Individual characteristics of people such as functional ability and physical and mental health.
- Physical environmental factors including facilities, amenities, and housing standards.
- Social factors such as family and social networks.
- Living environment including household status, household conditions, and neighborhood.
- Socioeconomic factors including income, standard of living, and ethnicity.

- Personal autonomy factors such as ability to make choices and control.
- Subjective satisfaction on the person's evaluation of their quality of life.
- Psychological health such as psychological well-being, morale, and happiness.
- Activities such as hobbies, leisure, and social participation.
- Life changes such as traumatic or disruptive events or lack of change.
- Care including expectations, amount, and kind of support.²

The *purpose* of conducting this integrative review is to determine how the concept of well-being is defined in the literature. A multidisciplinary approach was used to provide a broad perspective of the topic.

A review of the literature was completed using CINAHL, Medline via OVID, PubMed, and Health Sciences in ProQuest databases. The following search terms were used alone and combined: well-being, elderly, education, psychology, sociology, occupational therapy, physical therapy, and quality of life. Each term yielded over 1000 entries. The articles were scanned for appropriate terminology to indicate a possible match with the subject under study. From this search, 86 articles were retrieved. The primary criterion for inclusion in this literature review was that

Author Affiliation: Drexel University, University City Main Campus, Philadelphia, Pennsylvania.

The author has no conflict of interest.

Corresponding Author: Ruth Ann Kiefer, RN, MSN, CRRN, Drexel University, University City Main Campus, 3141 Chestnut Street, Philadelphia, PA 19104 (rak37@drexel.edu).

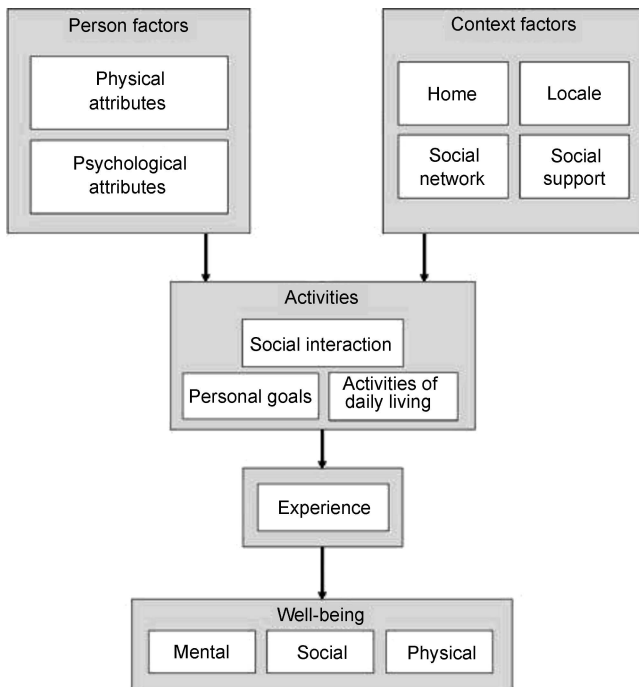


FIGURE 1. The ecological conceptual model of well-being.³

the article was a study based on research with an explicit purpose, aim, method, data collection, and data analysis being reported. The sample population was varied to address the concept from disciplines other than nursing. Well-being was reviewed from an education, occupational therapy, physical therapy, psychology, and sociology perspective. The studies examined date from 1995 to 2007 with some earlier studies included for concept definition. The concept was studied from both a quantitative and qualitative approach with the majority of the studies being quantitative.

The ecological conceptual model of well-being, modified and illustrated below depicts the interacting relationship between the varied components of the concept (Figure 1).

Person and context factors in this model refer to the attributes of the person, the immediate environmental context, and the wider sociocultural context. Person factors with a direct bearing on well-being include general health and fitness and coping mechanisms for adaptation to life changes. Context factors may also have an important effect on well-being through facilitation or constraint of goals and actions. Home environment, social support, social network, neighborhood, and services provided interact as a functional or dysfunctional relationship.

Activities refer to what the person actually does and relates to lifestyle, social interaction, personal goals, and self-esteem. Lifestyle includes the everyday activities of daily living (ADL) which includes the tasks that a person needs to do to live independently. Social interaction has an emphasis on interaction in the home or the world outside of the home. *Personal goals* refer to those activities important to the individual such as hobbies and leisure activities. Personal appearance and grooming also impact the person's self-identity and self-esteem.

Experience refers to the subjective interpretation of situations that provide personal significance. The significance of activities is directly related to subjective perception.

CONCEPT DEFINITIONS

As early as 490 BC to 429 BC, Pericles made the connection between health and feelings of well-being. Aristotle gave well-being much thought in his *Nicomachean Ethics* and eventually settled on the notion of *eudaimonia*, a Greek term translated as happiness, as central to one's being.¹ The World Health Organization in its 1946 definition of *health*, advanced the contemporary notion of health beyond the absence of disease by linking it to a state of mental, physical, and social well-being.⁴

Not surprisingly, definitions of well-being vary. Many dictionaries and Roget's new thesaurus refer to well-being using words like happiness, full of life, vital, energy, interest, and prosperity as well as health.⁵ Within health promotion, it has been described as "a subjective assessment of health which is less concerned with biological function than with feelings such as self-esteem and a sense of belonging through social integration."⁶ Johnson and Schmit (cited in Johnson⁷) described well-being as "a state that transcends the limitations of body, space, time, and circumstances and reflects the fact that one is at peace with one's self and others."^(p754) Christiansen and Baum⁸ defined it as "a subjective sense of overall contentment thought to be defined by affective state and life satisfaction."

The concept of well-being is most commonly viewed across 6 dimensions, which include social, emotional, intellectual, physical, occupational, and spiritual.⁹ The concept of self-responsibility is occasionally added as a dimension of well-being. *Self-responsibility* is defined as moral, legal, or mental

accountability, reliability, trustworthiness, balance, and stress management. Wellness can then be viewed as a state of being or feeling that is within the grasp of all persons, no matter what age, as long as one is willing to work hard this state of mind.

As defined by Ebersole and Hess, wellness is a balance between one's environment, internal and external, and one's emotional, spiritual, social, cultural, and physical processes.¹⁰ Moreover, Pender conceptualized wellness to have 5 dimensions; self-responsibility, nutritional awareness, physical fitness, stress management, and sensitivity to the effects of environment on wellness.¹⁰

Pender used health and wellness interchangeably to mean the actualization on inherent and acquired human potential through satisfying relationships with others, goal-directed behavior, and competent personal care. Individual ability to adjust to change maintains stability and integrity.¹¹

A state of spiritual well-being parallels Maslow's definition of self-actualization. If older adults are self-actualized, they are no longer dependent on their social and economic surroundings for life satisfaction. They possess the ability to extend the self beyond boundaries of the immediate and achieve new perspectives and experiences involving a faith that positively affirms life.¹²

Even in Plato's era, healthcare providers were encouraged to care for the whole person. Well-being has its roots in Greek and Oriental cultures where the observations of philosophers expressed the principles of holism.¹² Plato wrote, "As you ought not to attempt to cure the eyes without the head, or the head without the body, so neither ought you to attempt to cure the body without the soul." "The part," he added, "can never be well unless the whole is well." The "being" of an older adult emerges when the human physical and spiritual dimensions act together as complementary, supportive pathways. With consideration for the integrated whole, which is greater than the sum of its parts, individuals and society can move to higher levels of self-actualization.^{12(p12)}

Psychological well-being is not solely the absence of mental disorder. It is the state in which the individual can fulfill an active role in society, interacting appropriately with others, and overcoming difficulties without major distress or disturbances in behavior. The impact of poor well-being can have devastating consequences for health and quality of life.¹³ Emotional well-being is an individual's avowed feelings toward and emotional reactions to their lives.

It is often measured as the evaluation of happiness and satisfaction with life or as the subjective report of the frequency of positive and negative affects over a time period.¹⁴

CONCEPT REVIEW

Hettler's dimensions of the concept of well-being focus on self-responsibility, stress management, and the impact of cultural, social, and the physical environment.¹⁵ With the differentiation of wellness from illness and health on the health-illness-wellness continuum model and current focus on the wellness model, groundwork has been laid for increased awareness of health promotion activities.^{16,17} Several potential perceived barriers to health promotion activities designed to increase individual well-being can be categorized as individual or structural and include social or environmental factors, time constraints, physical inaccessibility, transportation problems, and inability to pay.¹⁸

Issues of health and wellness for people with disabilities are becoming prominent issues on the national health agenda.¹⁹ New models of health and wellness specific to persons living with disability are attempting to understand and operationalize health and wellness within the disability experience. These models show that many people living with disabilities conceptualize that a person can be healthy and well and live long term with disability.²⁰ Much of this shift in perspective stems from a new disability paradigm that views disability as a situational experience, a function of the relationship between the individual and the environments that surround that individual; cultural, social, natural, and architectural.²⁰

One of the primary indicators of health and well-being in the elderly is the ability to perform ADL with relative ease. The presence of disease no longer completely defines the level of health of an aging person. It is now recognized that the elderly are far less concerned about medical diagnosis than their ability to perform necessary personal and household chores and go about their daily errands and social activities.²¹

Simplistically, can well-being be considered wellness of the body, mind, and spirit? On the basis of the information that research has provided to this point, is the concept of well-being sufficiently defined and successfully operationalized? A gap in the research literature exists in defining and measuring the concept secondary to the multifaceted nature of

well-being and the individualized subjectivity of measurement of feelings of well-being.

METHODS

In White, the wellness themes that emerged from the findings across all ethnic groups were self-reliance and responsibility, social interaction, spirituality, exercise and nutrition, environmental factors, stress management, and the balance of work and leisure.⁹ Culture was a factor determined to influence health outcomes as evidenced by the varied focus of support. The church was indicated as the focal point of support among the African-American race; whereas family members were counted on the most in the remainder of groups studied.

Results from focus groups studied indicate that health and wellness are perceived as distinct from disability, as a multilevel phenomenon encompassing dimensions of the person, the community, and the systems that govern interactions within social and physical environments.²² Preliminary studies indicate that people with disabilities hold both common and unique definitions of health and wellness across a wide range of domains. These findings complement those of other health studies, which suggest that people with disabilities have somewhat different definitions of health and wellness than practitioners and health and wellness professionals. Participants identified 4 characteristics of health and wellness; being able to function and do what they wanted to do, being independent or self-determining, having both a physical and emotional state of well-being, and an absence of pain. Factors in defining health and wellness seemed to center on the ability of self-care and control of one's life. Several participants' health and wellness centered on being able to work or contribute in some way that they perceived as meaningful or manageable.

In a qualitative study conducted by Putnam, adults with long-term disability felt that health and wellness encompassed both physical and emotional well-being, that these 2 dimensions were interrelated, and that it is difficult to have one without the other. Three major themes surfaced at the personal level, emotional well-being, personal attitude, and health behaviors. Emotional well-being reflected one's affect, stress level, mental health, and feelings of depression.²² A study by Benyamini et al²³ found that people with disabilities and those without disabilities perceive

health as a complex, multidimensional concept including in their definitions not only physical health but being able to do what they want to do and have a general feeling of well-being.

In Wilcock, responses to questioning concerning well-being centered on mental soundness, physical fitness, and being happy and healthy.¹ Work, leisure, rest, religious practices, selfless activity, and achievement were associated with well-being. What constitutes well-being for different people does vary, although the combined descriptions of well-being provided by the participants in this study were very close to the concept of health, happiness, and prosperity referenced in dictionaries and a thesaurus.

A multilevel school intervention program, the Gatehouse Project, resulted in a positive effect on the mental health and health-risk behavior outcomes of middle-school-aged children. This primary prevention program included group and individual focused components that promoted the emotional and behavioral well-being of the students. Health behaviors focused on alcohol and tobacco use as well as social interaction with intervention resulting in lower rates of substance use.²⁴ Similarly, schools rely on well-being evaluation tools to plan for implementation of programs designed to address holistic well-being in grades 4 through 12 in areas of school conditions, social relationships, means for self-fulfillment, and health status.²⁵

Job satisfaction, retention, and psychological well-being of staff nurses occur when work status congruence exists. Nurses working full-time or part-time hours and want to be working those hours fare much better in areas of work outcomes, satisfaction, and well-being than those nurses whose hours are mandated by need rather than desire.²⁶ Reductions in measures of psychological distress, depression, confusion, fatigue, tension, and anger and significant increases in positive well-being and vigor scores were reported following 30 minutes of moderate intensity exercise, although similar results were not observed following quiet rest.²⁷ Regular physical activity has a favorable effect on mood as well as self-image. Regular physical activity can help prolong functional independence where longevity of life has less focus than life quality of the remaining years. Individuals with regular exercise patterns have been known to adopt other healthy habits and behaviors.²⁸ Martin and McCain determined that regular exercise in older women provided a socially

supportive activity, maintained independence, and was liberating and enhanced well-being.²⁹

Well-being was described as a small—group experience and an outcome of group interaction in Ruffling-Rahal.³⁰ Group participation itself was an integral part of the wellness lifestyle in older individuals with resultant empowerment of the individuals involved.³¹ Three core themes referred to groups as a ritual, a celebration, and a community within the realm of an ecological model that characterized well-being as an orientation of personal meaning with integration of inner and outer realms of personal experience. Well-being is ecological in the sense that it integrates 3 major ecological/environmental dimensions of everyday experience: the biophysical, the psychological/spiritual, and the sociocultural. Ecological well-being represents a harmony between these 3 contexts.

The effects of emotional support toward well-being were studied due to its importance in protection against disease, disability, and mortality. The absence of emotional support has been implicated in the onset of cardiovascular disease as well as the risk of suicide, which dramatically increases with age.³² Positive affect seems to protect individuals against physical decline in old age.³³ A 2-year-cohort study on the effect of positive affect on functional status, mobility, and survival in a sample of elder Mexican Americans supported the concept that a higher positive affect predicted a lower incidence of ADL disability. Persons in a positive mood are more likely to engage in social relationships, be optimistic about their future, successfully cope with stressful situations, and feel in control of their lives.

Gender differences in subjective well-being was the focus of study by Pinquart and Sorensen.³⁴ Findings demonstrated that older men and women differ with regard to subjective well-being and aspects of self-concept such as self-esteem and subjective age. *Subjective well-being* can be defined as a positive evaluation of one's life associated with positive feelings. General subjective well-being is assessed through measures of life satisfaction, happiness, and self-esteem, which involve both cognitive and emotional components. Factors influencing women's lowered subjective well-being included health, marital status, appearance, and finances.³⁵

In a comparative study between the United States and Germany, age identity was determined to be more strongly identified with subjective well-being in the United States than in Germany.³⁶ These findings

supported the belief that Western culture places a greater emphasis and celebration of youth as evidenced by stereotyping and ageism. Americans do not want to think about aging. No other country has "gerontophobia" to the extent as that in the United States. Americans live in a youth-obsessed society trying to erase thoughts of aging while spending centuries trying to add years to their lives.³⁷

Wellness programs have been shown to increase healthy behaviors and subsequent health knowledge.³⁸ As a result of participation in the wellness programs, respondents reported greater psychological comfort and more confidence in their ability to maintain an independent lifestyle. Also significant is the strong association between practicing healthy behaviors and emotional well-being. Positive changes in lifestyle resulted in a more positive outlook on life and the assumption of self-care initiatives.

WELL-BEING IN THE ELDER POPULATION

The population of the world is aging. Population growth is at an annual rate of 1.7%; with individuals older than 65 years increasing by 2.5% each year.⁴ The numbers and proportions of the very old is also increasing with the fastest growing population group in most countries being those who are 80 years of age and older. The US Census Bureau projects that by the year 2030 older adults will constitute 20% of the population of the United States.³⁹ These projections result from the increase of the average life expectancy of males to a span of 74.1 years, whereas their female counterparts can be expected to reach an average age of 79 years.

The prevalence of disability and chronic health problems increases with age. As the number of older Americans grows at an unprecedented rate, there is concern that the proportion of who are disabled may be increasing.⁴⁰ The aging process gradually increases the vulnerability of the elderly to chronic illness accompanied by its numerous challenges and losses.⁴¹ At least 80% of persons older than 65 years report 1 chronic condition, many have multiple conditions. Nearly 50% of the aged population is unable to perform some ADLs such as bathing, dressing, eating, toileting, transferring, and ambulation and 7.6 million elders need assistance with daily activities including the preparation of meals, shopping, money management, and household cleaning and

maintenance, the IADLs, instrumental ADL.⁴² Increased dependency resulting from chronic illness and aging brings with it social and personal concerns in the areas of healthcare, community and home health services, and quality of life issues.⁴³ A clearer understanding of the extent to which changes in functional ability reflect changes in the underlying physiological capability of older Americans, may offer insight into future patterns of disability, thereby facilitating research and planning of medical and social services and interventions for the older population.⁴⁰ This need is compounded by government policies that aim to keep older people living in the community and the disappearance of intergenerational relationships.

Well-being is thus an important concept in the philosophy underpinning social support and the clinical practice on which it is built. It is important for those individuals that are part of the social support network addressing the needs of the elderly population to consider what understandings of well-being are in play in the way that they construct their practice and explore whether there is congruence between understandings of well-being held by health practitioners and the clients with whom they deal. If the concept is not well understood and incongruence exists, then well-being may be an elusive goal of clinical practice. Healthcare professionals need to be clear about what well-being is, before they can effectively enable their clients to work toward it. Furthermore, given the increasing numbers of elder individuals, it is even more imperative to understand what well-being is for older people.

The following table of evidence provides a listing of the studies reviewed and summarized for the development of this integrative review (Table 1).

DISCUSSION

Although the current research environment has emphasized the importance of well-being, little emphasis has been placed on this concept from the individual's point of view or perspective. The definition of well-being is usually assumed or lacking in clarity with similar terms used interchangeably. Well-being has been measured in research using various scales, which may not capture the complexity of the concept.⁴⁵ This integrative review clearly indicates the need to explore how individuals define and conceptualize health and wellness and to discover

what they perceive to be the major facilitators and barriers to health and wellness for themselves and other individuals living with disability. Qualitative studies on the concept were very limited and appeared to be focused predominantly in the fields of nursing and occupational therapy. A phenomenological study would provide a rich description of the experience of well-being, which could lead to better informed health professionals. A grounded theory study would enable the identification of the basic social processes in attaining and maintaining well-being, and possibly result in the development of a theory of well-being. There are opportunities to inform and enlarge both quantitative and qualitative research to provide interventions at various levels and in different forms to assist in health and wellness promotion efforts. At the individual level, developing coping strategies, interacting with peer groups, staying active, participating in exercise and sports activities, actively contributing to society through paid work or volunteer activities, and setting personal goals and challenges are paramount. In terms of the community, it is important to have positive social interactions that were valued and supported by friends and family. Health and wellness professionals are looked to for respect, concern, and information, with willingness to treat the whole person. At the systems level, increased access and accommodations in the physical environment, financial relief, and improved insurance coverage of integrative medicine, and assistive technology were targeted for change.²² It is essential that older adults are given the autonomy to select their own unique personal way of seeking integration and resonance with self and the universe as well as God, as defined by them.¹² A review of the literature on quality of life may provide increased clarity in defining the many facets of well-being as well as measuring determinants related to well-being.⁴⁶

Successful "agers" are robust, resilient individuals who remain physically, mentally, and socially active and who are determined to remain independent and control their future.⁴⁷ Sloane refers to this population as the "well-derly."^{48(p104)} Inherent in the aging of America, is the need for maintenance of the highest levels of health, vitality, and independence. Dunn's concept of high-level wellness works toward maximizing the potential of which the individual is capable within the environment where he is functioning.⁴⁹ This sense of personal autonomy enhances psychological well-being.³⁸ Remaining alert to opportunities for promoting a personal sense of

TABLE 1. Table of evidence

Author/date of publication	Conceptual Framework	Sample	Method/design	Measurement of variables
White ⁹	Pender's Health Promotion Model Determine health behaviors, attitudes, and beliefs	<i>n</i> = 28, representing Black, Hispanic, Caucasian, German, and Vietnamese ethnic groups	Qualitative methodology (ethnography)	Interview
Putnam et al ²²	None referenced Determine how individuals living with disability define and conceptualize health and wellness	<i>n</i> = 99, adults with long term disability	Qualitative Focus groups	Focus groups
Bartholomew et al ²⁷	None referenced Determine the effect of exercise on mood and well-being	<i>n</i> = 40, men and women with major depressive disorder	Aerobic exercise Quiet rest	Profile of mood states (POMS) Subjective exercise experiences scale (SEES)
Martin and McCann ²⁹	None referenced Determine the effect of exercise on older women's well-being	<i>n</i> = 10, women older than 50 y	Qualitative, grounded theory	Interview
Wilcock et al ¹	None referenced Determine individual's perception of well-being	<i>n</i> = 140, purposive, cluster sampling	Mixed methods. Exploratory study, cross-sectional descriptive survey design	Questionnaire formulated specifically for the study
Ruffing-Rahal ³⁰	Ecological well-being model Well-being as measured in a group setting	<i>n</i> = 14, women with a mean age of 77.	Qualitative Constant comparison	Group discussion
Keyes ³²	None referenced Determine the effect of emotional support on positive and negative affect by age	<i>n</i> = 3032 Data from MacArthur foundation midlife in the United States study <i>n</i> = 300, studies	Phone interview with follow-up questionnaire	Negative affect scale Positive affect scale
Pinquart and Sorensen ³⁴	None referenced Determine gender difference in regard to self-concept and psychological well-being	<i>n</i> = 3032 United States <i>n</i> = 4838 Germany	Meta-analysis	Life Satisfaction index
Westerhof ³⁶	None referenced Determine age identity and subjective well-being in a cross-sectional context		Questionnaires	Life Satisfaction Index
Stephens et al ⁴⁴	None referenced Determine the effects of pain and pain expression on husband's well-being and support	<i>n</i> = 101, elderly women with osteoarthritis and their care giving husbands	Interview/Self report Questionnaire	Arthritis impact scale
Ostir et al ³³	None referenced Determine the effect of emotional well-being on functional independence	<i>n</i> = 2282, Mexican Americans of 65–99 y	Two-year-prospective cohort study	Four-point positive affect scale created from the Center for Epidemiologic Studies Depression Scale (CES-D)
Bennett ³⁵	None referenced Determine the psychological well-being in later life with marital status change	<i>n</i> = 1042, baseline 4 y interval— <i>n</i> = 690 8 y interval— <i>n</i> = 410	Baseline survey with re-evaluation in 4 years and 8 years	Katz Index of Activities of Daily Living
Campbell and Aday ³⁸	None referenced Determine the benefits of a nurse-managed wellness program	<i>n</i> = 111, older adults	Questionnaire	Health and wellness inventory
Konu and Lintonen ²⁵	None referenced Determine the well-being of school aged students	<i>n</i> = 8285, 4th-12th grade students	Questionnaire	School Well-Being Profile

coherence as well as a sense of new possibility affords hope, integrity, dignity, and confidence, enhancing the well-being and quality of life in the older adult.⁵⁰ As the world's population is aging, it is becoming more and more evident that these individuals are seeking a quality to their life as opposed to quantity. Further research will enhance our knowledge of the concept allowing us to make contributions that will add life to the years rather than just adding years to the life.

REFERENCES

- Wilcock AA, van er Arend H, Darling K, et al. An exploratory study of people's perceptions and experiences of well-being. *Br J Occup Ther*. 1998;61(2):75–82.
- Sixsmith A, Hine N, Neild I, Clark N, Brown S, Garner P. Monitoring the well-being of older people. *Top Geriatr Rehabil*. 2007;23(1):9–23.
- Lawton MP. A multidimensional view of quality of life in frail elders. In: Birren J, Lubben J, Rowe J, Deutchman D, eds. *The Concept of Measurement of Quality of Life in Frail Elders*. San Diego, CA: Academic Press; 1991:3–27.
- World Health Organization. *Constitution of the World Health Organization*. International Health Conference, New York, Geneva: World Health Organization; 1946.
- American Heritage Dictionary. *Roget's New Thesaurus*. Boston, MA: Houghton Mifflin; 1980.
- Nutbeam D. Health promotion glossary. *Health Promot*. 1986;1(1):113–127.
- Johnson JA. Wellness and occupational therapy. *J Occup Ther Am*. 1986;40(11):753–758.
- Christiansen C, Baum C, eds. *Occupational therapy: enabling function and well-being*. 2nd ed. Thorofare, NJ: Slack; 1997.
- White VK. Ethnic differences in the wellness of elderly persons. *Occup Ther Health Care*. 1998;11(3):1–15.
- Ebersole P, Hess P. *Toward healthy aging, human needs and nursing response*. 4th ed. St Louis, MO: CV Mosby; 1994.
- Pender NJ. *Health Promotion in Nursing Practice*. New York: Appleton-Century-Crofts; 1982.
- Leetun M. Wellness spirituality in the older adult. *Nurse Pract*. 1996;21(8):60–70.
- Donaldson RJ, Donaldson LJ. *Essential Public Health Medicine*. London, UK: Libra Pharm Ltd; 1998.
- Diener E, Larsen RJ. The experience of emotional well-being. In: Lewis M ed. *Handbook of Emotions*. New York: Guilford Press; 1993:405–415.
- Hettler GW. High level wellness: a quality of life. *Health Values*. 1983;7(6):31–35.
- Hornberger CA. *Perceived Stressors, Perceived Stress Response, and the Level of Cardiac Reactivity in a Wellness Sample* [thesis]. Lawrence: The University of Kansas; 1989.
- Vawter S. Wellness nursing diagnoses: to be or not to be? *Nurs Diagn*. 1991;2(1):19–25.
- Odette F, Yoshida KK, Israel P, et al. Barriers to wellness activities for Canadian women with physical disabilities. *Health Care Women Int*. 2003;24:125–134.
- United States Department of Health and Human Services. *Healthy people 2010: with understanding and improving health and objectives for improving health*. Washington, DC: US Government Printing Office; 2000.
- National Institute on Disability and Rehabilitation Research. *NIDRR long-range plan: 1999–2003*. Washington, DC: National Institute on Disability and Rehabilitation Research; 2000.
- Butler FR. Minority wellness promotion: a behavioral self-management approach. *J Gerontol Nurs*. 1987;13(8):23–28.
- Putnam M, Geenen S, Powers L, Saxton M, Finney S, Dautel P. Health and wellness: people with disabilities discuss barriers and facilitators to well-being. *J Rehabil*. 2003;29(1):37–45.
- Benyamini Y, Idler E, Leventhal H, Leventhal E. Positive affect and function as influences on self-assessments of health: expanding our view beyond illness and disability. *J Gerontol Psycho Sci*. 2000;55B(2):107–116.
- Bond L, Patton G, Glover S, et al. The Gatehouse Project: can a multilevel school intervention affect emotional well-being and health risk behaviors? *J Epidem Comm Health*. 2004;58:997–1003.
- Konu AI, Lintonen TP. School well-being in grades 4–12. *Health Educ Res*. 2006;221(5):633–642.
- Burke R. Work status congruence, work outcomes, and psychological well-being. *Health Care Manag*. 2004;23(2):120–127.
- Bartholomew JB, Morrison D, Ciccolo JT. Effects of acute exercise on mood and well being in patients with major depressive disorder. *Med. Sci. Sports Exerc*. 2005;37(12):2032–2037.
- Glickstein JK. Maintaining the independence of residents in retirement communities. *Geriatr Care Rehab*. 1995;9(6):1–8.
- Martin P, McCann TV. Exercise and older women's well-being. *Contemp Nurse*. 2005;20(2):169–179.
- Ruffling-Rahal MA. An ecological model of group well-being: implications for health promotion with older women. *Healthcare Women Int*. 1993;14:447–456.
- Purk JK. Support groups: why do people attend? *Rehabil Nurs*. 2004;29(2):62–67.
- Keyes CL. The exchange of emotional support with age and its relationship with emotional well-being by age. *Psychol Sci*. 2002;57(6):518–525.
- Ostir GV, Markides KS, Black SA, Goodwin JS. Emotional well-being predicts subsequent functional independence and survival. *J Am Geriatr Soc*. 2000;48:473–478.
- Pinquart M, Sorensen S. Gender differences in self-concept and psychological well-being in old age: a meta-analysis. *J Gerontol*. 2001;56(4):195–213.
- Bennett KM. Psychological well-being in later life: the longitudinal effects of marriage, widowhood and marital status change. *Int J Geriatr Psychiatry*. 2005;20:280–284.
- Westerhof GJ, Barrett AE. Age identity and subjective well-being: a comparison of the United States and Germany. *J Gerontol Psycho Sci*. 2005;60B(3):129–136.
- Miller MP. Factors promoting wellness in the aged person: an ethnographic study. *Adv Nurs Sci*. 1991;13(4):38–51.
- Campbell J, Aday RH. Benefits of a nurse-managed wellness program. *J Gerontol Nurs*. 2001;27(3):34–43.
- US Bureau of the Census. Sixty-five plus in America. *Current Population Reports*. Special issue P25–1092. Washington, DC: US Government Printing Office; 2000.
- Freedman V, Martin L. Understanding trends in functional limitations among older adults. *J Public Health Am*. 1998;88(10):1457–1462.
- Hickey T, Stilwell D. Chronic illness and aging: a personal contextual model of age-related changes in health status. *Educ Gerontol*. 1992;18:1–115.
- Curtain M, Lubkin I. What is chronicity? In: Lubkin IM, ed. *Chronic illness: Impact and Intervention*. Boston, MA: Jones and Bartlett; 1995.
- Blixen CE, Kippes C. Depression, social support, and quality of life in older adults with osteoarthritis. *J Nurs Sch*. 1999;31(13):221–226.
- Stephens MA, Cremeans JK, Martire LM, Druley JA, Wojno WC. Older women with osteoarthritis and their caregiving husbands: effects of pain and pain expression on husbands' well-being and support. *Rehabil Psychol*. 2006;51(1):3–12.

45. Stanley M, Cheek J. Well-being and older people: a review of the literature. *Can J Occup Ther*. 2003;70(1):51–59.
46. Baker PN, Lewsey J, Gregg PJ. The role of pain and function in determining patient satisfaction after total knee replacement. *J Bone Joint Surg*. 2007;89(7):893–900.
47. Gattuso S. Becoming a wise old woman: resilience and wellness in later life. *Health Sociol Rev*. 2003;12(2):171–177.
48. Sloane PD. How to maintain the health of the independent elderly. *Geriatrics*. 1984;39(10):93–104.
49. Dunn HL. What high level wellness means. *Can J Public Health*. 1959;11:447–457.
50. Cutillo-Schmitter TA. Aging: broadening our view for improved nursing care. *J Gerontol Nurs*. 1996;7:31–42.

ADDENDUM

Please note that Mio Ito, whose article “Heeding the Behavioral Message of Elders With Dementia in Day Care” appeared in *Holistic Nursing Practice* 21(1):12–18, 2007, is a doctoral candidate in the Graduate School of Health Sciences, Tokyo Medical and Dental University, Tokyo, Japan.