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It is a great honor to have been invited by Dr. Charlene Winters and Dr. Helen Lee to write the foreword for *Rural Nursing*, the third edition. In reflecting on the history and development of the rural nursing phenomenon, I note the role faculty and graduates connected with Montana State University–Bozeman (MSU) have played for more than three decades.

Initially, in the mid-1970s, Dr. Anna Shannon, former Dean of the College of Nursing at Montana State, developed a master’s degree program focusing on nursing in the rural environment. At that time Dr. Helen Lee was a nursing instructor at MSU and I was fortunate to be a student in the program. Subsequently, Dr. Lee wrote a chapter that discussed definitions of “rural” for a text that I edited on rural nursing (Sage, 1991). Several years later Dr. Lee edited *Conceptual Basis for Rural Nursing* (Springer, 1998), highlighting scholarly findings from MSU nursing faculty and students and primarily focusing on the intermountain region of the United States. Dr. Lee’s *Rural Nursing: Concepts, Theory, and Practice, 2nd Edition*, co-authored by Dr. Charlene Winters, expanded on the concepts for an evolving theory for rural nursing; and, included perspectives from Canada and beyond the intermountain region.

The third edition of *Rural Nursing: Concepts, Theory, and Practice* by Dr. Winters and Dr. Lee has an even greater scope—geographically and contentwise. While seminal chapters from the two previous texts are updated herein, along with the Canadian perspective, information from Australian experts is included. Other timely topics focus on health disparities, public health issues, evidence-based practice, childhood obesity, challenges confronting male caregivers, community-based participatory research within tribal communities, and complementary therapy. The authors of the various chapters are leaders in rural nursing, and for me, reinforce the MSU connection among many of them. This extended text...
on rural nursing is definitely a significant contribution to the knowledge base on a phenomenon that is of significant importance to nurse educators, researchers, policy makers, and clinicians.

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The third edition of *Rural Nursing: Concepts, Theory, and Practice* will provide nurses with a broad understanding of the characteristics of health care in rural settings and what is required for effective nursing practice in this context. The book had its genesis in a small working group at Montana State University–Bozeman, which has been developing a theoretical model of the practice of rural nursing for more than 30 years. This expanded edition contains information of interest to all nurses whose practices are primarily in rural settings, those who are preparing nurses for this type of practice, as well as those conducting research with rural populations. The unique characteristics of this environment are explored in this text.

Several differences exist between the second edition of *Rural Nursing: Concepts, Theory, and Practice* and this edition. New chapters were added to the third edition on male care giving, complementary therapy, evidence-based practice, community resiliency, childhood obesity, and gaining access to Native American communities for the purposes of conducting research. Many chapters retained from the second edition were updated with references to the latest literature or newly collected data. The third edition continues our tradition of branching out to colleagues from around the world by including chapters written by Montana State University–Bozeman College of Nursing faculty, graduate students, and former faculty, as well as colleagues throughout the United States, Canada, and Australia.

As with the first and second editions, we are reporting on the continuing quest to provide a theory structure, the “seeking of patterns which [are helping and those that] ultimately will help rural nurses provide better care for persons in rural communities” (Lee, 1998, p. xxi). Part I contains the seminal article on the rural nursing theory base, followed by two chapters in which the authors examine the rural theory base and report on the exploration of rural nursing theory in a comparison
research study. Part II includes chapters about the perspectives of rural persons, and Part III focuses on rural dwellers and their response to illness. Part IV begins with the seminal article about rural nursing practice and follows with reports of studies conducted with nurses in differing rural nurse practice settings. Part V contains chapters devoted to rural public health and Native American communities. Part VI, the final section, contains two chapters: in the first the authors outline implications for rural nursing education, practice, and policy, and in the second, the authors provide an updated analysis of the key concepts first introduced in the first edition.

Several factors led to the publication of the third edition of this text. The first was our continued involvement in teaching the Rural Health Nursing course at Montana State University–Bozeman. The second is our ongoing interest in rural nursing, rural health issues, and the development of rural nursing theory. The third was our positive experience of working with the editorial staff from Springer Publishing and the many authors from a variety of rural settings who contributed to the second edition. We hope our readers find the third edition thought-provoking, and we look forward to the comments and critique from our rural nursing colleagues.

Charlene A. Winters
Helen J. Lee

REFERENCE

A logger suffering from “heart lock” does not have a cardiovascular abnormality. He is suffering from a work-related anxiety disorder and can be assisted by an emergency room nurse who accurately assesses his needs and responds with effective communication and a supportive interpersonal relationship. A farmer who has lost his finger in a grain thresher several hours earlier does not have time during the harvesting season for a discussion of occupational safety. He will cope with his injury assisted by a clinic nurse who can adjust the timing of his antibiotic doses to fit with his work schedule in the fields.

Many health care needs of rural dwellers cannot be adequately addressed by the application of nursing models developed in urban or suburban areas but require unique approaches emphasizing the special needs of this population. Although nurses are significant, and frequently the sole, health care providers for people living in rural areas, little has been written to guide the practice of rural nursing. The literature provides vignettes and individual descriptions, but there is a need for an integrated, theoretical approach to rural nursing.

Rural nursing is defined as the provision of health care by professional nurses to persons living in sparsely populated areas. Over the past 8 years, graduate students and faculty members at the Montana State University College of Nursing have worked toward developing a theory
base for rural nursing. Theory development has used primarily a reductive approach, and data have been collected and refined using a combination of qualitative and quantitative methods. The experiences of rural residents and rural nurses have guided the identification of key concepts relevant to rural nursing. The goal of the theory-building process has been to identify commonalities and differences in nursing practice across all rural areas and the common and unique elements of rural nursing in relation to nursing overall. The implications of developing a theory of rural nursing for practice have been examined as a part of the ongoing process.

The theory-building process was initiated in the late 1970s. At that time, literature and research related to rural health care were limited and focused primarily on the problem of retaining physicians in rural areas and providing assessments of rural health care needs and prescriptions for rural health care services based on models and experiences from urban and suburban areas (Coward, 1977; Flax, Wagenfeld, Ivens, & Weiss, 1979). The unique health problems and health care needs of extremely sparsely populated states, such as Montana, had not been addressed from the perspective of the rural consumer. No organized theoretical base for guiding rural health care practice in general, or rural nursing in particular, existed.

**QUALITATIVE DATA**

The target population for qualitative data collection was the people of Montana. Montana, the fourth largest state in the United States, is an extremely sparsely populated state, with nearly 800,000 people and an average population density of approximately five persons per square mile. One-half of the counties in Montana have three or fewer persons per square mile, with six of those counties having less than one person per square mile. There is only one metropolitan center in the state; it is a city of nearly 70,000 people, with a surrounding area that constitutes a center of approximately 100,000 (Population Profiles, 1985).

Qualitative data were collected through ethnographic study by Montana State University College of Nursing graduate students. These data provided the initial ideas about health and health care in Montana. Since general propositions about rural health and rural health care did not exist, the gathering of concrete data was the first step toward subsequent development of more general theoretical propositions.
Graduate students used ethnographic techniques as described by Spradley (1979) to gather information from individuals, families, and health care providers. Interview sites were selected by students on the basis of specific interest and convenience. During a 6-year period, data were gathered from approximately 25 locations. In general, each student worked in depth in one community, collecting data from 10 to 20 informants over a period of at least 1 year. Data were gathered primarily from persons in ranching and farming areas and from towns of less than 2,500 persons. In some instances, student interest led to extensive interviews with specific rural subgroups, such as men in the logging industry or older residents in a rural town (Weinert & Long, 1987). Open-ended interview questions were developed using Spradley’s guidelines. The questions emphasized seeking the informants’ views without superimposing the cultural biases of the interviewer. The opening question in the interview was, “What is health to you . . . from your viewpoint? . . . your definition?” Interviewers used standard probes and a standard format of questions regarding health beliefs and health care preferences.

Spradley (1979) indicated that the goal of ethnographic study is to “build a systematic understanding of all human cultures from the perspective of those who have learned them” (p. 10). The goal of data collection in Montana was to learn about the culture of rural Montanans from rural Montanans. Emphasis in the cultural learning process was on understanding health beliefs, values, and practices. Rigdon, Clayton, and Diamond (1987) have noted that understanding the meaning that persons attach to subjective experiences is an important aspect of nursing knowledge. The ethnographic approach captured the meanings that rural dwellers ascribe to the subjective states of health and illness and facilitated the development of a rich database.

As the database developed, the following definitions and assumptions were accepted as a foundation for theory development. Rural was defined as meaning sparsely populated. Within this context, states such as Montana, which are sparsely populated overall, are viewed as rural throughout, despite the existence of some population centers within them. Further, based on this definition, rural regions or areas can be identified within otherwise heavily populated states. The assumption is made that, to some degree, health care needs are different in rural areas from that of urban areas. Also, all rural areas are viewed as having some common health care needs. Finally, the assumption is made that urban models are not appropriate to, or adequate for, meeting health care needs in rural areas.
Retroductive Theory Generation

Faculty work groups were developed to examine and organize the qualitative data. The work groups involved three to five nursing faculty members, each with rural nursing experience, but with varied backgrounds and expertise. Thus, a work group included experts from various clinical areas, as well as persons with direct experience either in small rural hospitals or in larger, metropolitan centers within rural states. Standard ethnographic content analysis (Spradley, 1979) was used to sort and categorize the ethnographic data. Groups worked toward consensus about the meaning and organization of specific data. Recurring themes were identified, and these were viewed as having relevance and importance for the rural informants in relation to their views of health.

A retroductive approach, as originally described by Hanson (1958), was used to examine the initial ethnographic data and build the theory base. Specific concepts and relational statements were derived from the data, and more general propositions were induced from these statements. The new propositions were then used to develop additional specific statements which could be supported by existing data or which were categorized for later testing. The retroductive approach was literally a “back and forth” process that permitted persons familiar with the data to move between the data and beginning-level theoretical propositions. The process was orderly and consistent and required group consensus about data interpretation and the relevance of derived propositions. The retroductive process continued in work groups over several years as additional ethnographic data were gathered. Consultants participated at key points in the process, in order to raise questions, add insights, and critically evaluate the group’s theory-building approach. Walker and Avant (1983) have noted that the retroductive process “adds considerably to the body of theoretical knowledge. It is, in fact, the way theory develops in the ‘real world’” (p. 176).

QUANTITATIVE DATA

Following several years of ethnographic study, the faculty members involved in theory development wished to enrich the qualitative database by collecting relevant quantitative data. Kleinman (1983) stated,
“Qualitative description, taken together with various quantitative measures, can be a standardized research method for assessing validity. It is especially valuable in studying social and cultural significance, e.g. illness beliefs interaction norms, social gain, ethnic help seeking, and treatment responses” (p. 543). Hinds and Young (1987) noted, “The combination of different methodologies within a single study promotes the likelihood of uncovering multiple dimensions of a phenomenon’s empirical reality” (p. 195).

A survey developed by Weinert in 1983 attempted to validate some of the rural health concepts that had emerged from the ethnographic data. These concepts were health status and health beliefs, isolation and distance, self-reliance, and informal health care systems. Survey instruments with established psychometric properties were selected to measure the specific concepts of interest. A mail questionnaire completed by the respondents included the Beck Depression Inventory (Beck, 1967) and the Trait Anxiety Scale (Spielberger, Gorsuch, & Lushene, 1970) to tap mental health status, and the General Health Perception Scale (Davies & Ware, 1981) to measure physical health status and health beliefs. A background information form assessed demographic variables, including length of residence and geographic locale. The Personal Resource Questionnaire (Brandt & Weinert, 1981) assessed use of informal systems for support and health care.

The convenience sample of survey participants was located through the Agricultural Extension Service, social groups, and informal networks. All participants lived in Montana, completed the questionnaires in their homes, and returned them by mail to the researcher. The 62 survey participants were middle-class Whites, with an average of 13.5 years of education and a mean age of 61.3 years, who had lived in Montana an average of 45.6 years. The survey sample consisted of 40 women and 22 men residing in one of 13 sparsely populated Montana counties. The most populated county has a population density of 5.9 persons per square mile and one town of nearly 6,000 people. In the most sparsely populated county, there is one town of 600 people and an average population density of 0.5 persons per square mile.

Findings from the quantitative study were used throughout the theory development process to support or refute concept descriptions and relational statements derived from the ethnographic data. Survey findings are discussed in the following section as they relate to key concepts and relational statements.
REFINING THE BUILDING BLOCKS OF THEORY

To order the data and foster the formation of relational statements, an organizational scheme for theory development was adopted. Using the paradigm first described by Yura and Torres (1975) and later by Fawcett (1984), ethnographic data were categorized under the four major dimensions of nursing theory: person, health, environment, and nursing. The data were then ordered from the more general to the more specific. This process led to the identification of constructs, concepts, variables, and indicators.

An example helps to illustrate this process. Ethnographic data had been gathered from “gypo” loggers. These men are independent logging contractors from northwestern Montana who work in rugged isolated areas, usually living in trailers or tents while working. Examples of quotes from these loggers and their associates as found in the data are: A logger states, “We worry about the here and now”; a local physician says, “Loggers enter the health care system during times of crisis only”; the public health nurse in the area says, “Loggers don’t want to hear about health care problems; they don’t return until the next accident.”

Table 1.1 shows the scheme used to organize these data. The concepts “present time” orientation and crisis orientation to health are identified. These are placed under the person dimension. In this example, the constructs are not fully developed, but are viewed as psychological,
sociocultural, or both. The important variables identified thus far are definitions of time and of crisis. Possible indicators are measures of time, such as hours or seasons, and measures of crisis, such as numbers of illnesses or injuries.

**Key Concepts**

In the process of data organization it was noted that some concepts appeared repeatedly in ethnographic data collected in several different areas of the state. In addition, aspects of several of these concepts were supported by the quantitative survey data (Weinert, 1983). Using Walker and Avant’s (1983) model of concept synthesis, these concepts were identified as key concepts in relation to understanding rural health needs and rural nursing practice. These key concepts are as follows: work beliefs and health beliefs, isolation and distance, self-reliance, lack of anonymity, outsider/insider, and old-timer/newcomer.

As key concepts in this theory, work beliefs and health beliefs are viewed as different in rural dwellers as contrasted with urban or suburban residents. These two sets of beliefs appear to be closely interrelated among rural persons. Work, or the fulfilling of one’s usual functions, is of primary importance. Health is assessed by rural people in relation to work role and work activities, and health needs are usually secondary to work needs.

The related concepts of isolation and distance are identified as important in understanding rural health and nursing. Specifically, they help in understanding health care-seeking behavior. Quantitative survey data indicated that rural informants who lived outside of towns traveled a distance of almost 23 miles, on average, for emergency health care and over 50 miles for routine health care. Despite these distances, ethnographic data indicated that rural dwellers tended to see health services as accessible and did not view themselves as isolated.

Self-reliance and independence of rural persons are also seen as key concepts. The desire to do for oneself and care for oneself was strong among the rural persons interviewed and has important ramifications in relation to the provision of health care.

Two key concept areas, lack of anonymity and outsider/insider, have particular relevance for the practice of rural nursing. Lack of anonymity, a hallmark of small towns and surrounding sparsely populated areas, implies a limited ability for rural persons to have private areas of their lives. Rural nurses almost always reported being known to their patients as neighbors,
part of a given family, members of a certain church, and so on. Similarly, these nurses usually know their patients in several different social and personal relationships beyond the nurse–patient relationship. The old-timer/newcomer concept, or the related concept of outsider/insider, is relevant in terms of the acceptance of nurses and of all health care providers in rural communities. The ethnographic data indicated that these concepts were used by rural dwellers in organizing their view of the social environment and in guiding their interactions and relationships. Survey data revealed that those who had lived in Montana over 10 years, but less than 20, still considered themselves to be “newcomers” and expected to be viewed as such by those in their community (Weinert & Long, 1987).

Relational Statements

In an effort to move from a purely descriptive theory to a beginning level explanatory one, some initial relational statements were generated from the qualitative data and were supported by the quantitative data that had been collected thus far. The statements are in the early stages of testing.

The first statement is that rural dwellers define health primarily as the ability to work, to be productive, to do usual tasks. The ethnographic data indicate that rural persons place little emphasis on the comfort, cosmetic, and life-prolonging aspects of health. One is viewed as healthy when able to function and be productive in one’s work role. Specifically, rural residents indicated that pain was tolerated, often for extended periods, so long as it did not interfere with the ability to function. The General Health Perception Scale indicated that rural survey participants reported experiencing less pain than an age-comparable urban sample (Weinert & Long, 1987). Further, scores on the Beck Depression Inventory and the Trait Anxiety Scale (Weinert, 1983) revealed that they experienced less anxiety and less depression.

The second statement is that rural dwellers are self-reliant and resist accepting help or services from those seen as “outsiders” or from agencies seen as national or regional “welfare” programs. A corollary to this statement is that help, including needed health care, is usually sought through an informal rather than a formal system. Ethnographic data supported both the second statement and its corollary. Numerous references were found showing, for example, a preference for “the ‘old doc’ who knows us” over the new specialist who was unfamiliar. Data from the Personal Resource Questionnaire (Weinert, 1983) indicated that
rural dwellers relied primarily on family, relatives, and close friends for help and support. Further, the rural survey respondents reported using health care professionals and formal human service agencies much less frequently than did comparable urban respondents in previous studies.

A third statement is that health care providers in rural areas must deal with a lack of anonymity and much greater role diffusion than providers in urban or suburban settings. This statement has marked significance for rural nursing practice. Although limited ethnographic and survey data have been collected from rural nurses thus far, some emerging themes have been identified. In addition to identifying a sense of isolation from professional peers, rural nurses emphasize their lack of anonymity and a sense of role diffusion. There is an inability to keep separate the activities and the behaviors of the individual nurse’s various roles. In a small town, for example, the nurse’s behavior as a wife, a mother, and a church attendee are all significantly related to her effectiveness as a health care professional in that community. Further, in their professional role, nurses reported experiencing role diffusion. Nurses are expected to perform a variety of diverse and unrelated tasks. On a single shift, a nurse may work in obstetrics delivering a baby, care for a dying patient on the medical-surgical unit, and initiate care of a trauma patient in the emergency room. Likewise, on evening shift or weekends, a nurse may be required to carry out tasks reserved for the pharmacist or dietitian on the day shift.

**RELATIONSHIP OF CONCEPTS AND STATEMENTS TO THE LARGER BODY OF NURSING KNOWLEDGE**

How people define health and illness has a direct impact on how they seek and use health care services and is a key concept in understanding client behavior and in planning intervention.

**Definition of Health**

The rural Montana dwellers primarily define health as the ability to work and to be productive. The work of other researchers supports the finding that residents of sparsely populated areas view health in terms of ability to work and to remain productive. Ross (1982), a nurse anthropologist, studied the health perceptions of women living in the Lake District along the coast of Nova Scotia. She conducted in-depth interviews with 60 women of both British and French backgrounds in small
coastal fishing communities. Similar to the rural dwellers in Montana, these women described good health as being “able to do what you want to do” and to be “able to work.” Lee’s (1987) recent work in Montana supports earlier findings on which the rural nursing theory was built. She found that work and health practices were closely related among farmers and ranchers; health is viewed as a functional state in relation to work. Scharff’s (1987) interviews with nurses practicing in small rural hospitals in eastern Washington, northern Idaho, and western Montana indicated that they viewed the health needs of rural people as overlapping those of people living in urban situations in many instances. The nurse informants, however, noted that rural people equate health with the ability to delay health care until they were very ill, thus often needing hospitalization at the point of seeking care.

Self-Reliance

The statement derived from the Montana data that “rural dwellers resist accepting help from outsiders or strangers” has been supported in data from research in rural Maryland (Salisbury State College, 1986). People living in the rural eastern shore area were described as highly resistant to care from persons viewed as outsiders, and rural shore residents often refused to go “across the bridge” to Baltimore to seek health care, even though this was a trip of less than 100 miles and would allow access to sophisticated, specialized treatment. Like the rural people in Montana, these Maryland residents sought health care information and assistance from local, and often informal, sources. The self-reliance of rural persons and their resistance to outside help were also reported by Counts and Boil (1987) in relation to residents of the Appalachian area. Self-reliance was noted as a major feature that must be considered in planning nursing care services for this population.

The rural Nova Scotia women studied by Ross (1982) indicated informal personal networks of family, friends, and neighbors as important sources of health information who also provided the physical, financial, emotional, and social support that contributes to well-being. When these women were asked what connection there was between health and the availability of hospitals, doctors, and other medical care, 42% indicated that it was the individual’s responsibility for health knowledge and care; 25% thought professionals were useful to a certain point in providing advice and services such as routine physical exams; 19% indicated
that these services were for sick persons, not healthy persons; and 9% felt the formal health care system had no relationship to health (Ross, p. 311). One woman commented, “Health is not a topic to discuss with doctors and nurses” (Ross, p. 309).

**Rural Nursing**

The Montana data and the theory derived from it indicate that nurses and other health care providers in rural areas must deal with a lack of anonymity. Nurses are known in a variety of roles to their patients, and in turn, know their patients in a variety of roles. Most of the nurses interviewed by Scharff (1987) felt that by knowing their patients personally they could give better care. Other nurses, however, noted that providing professional care for family or friends can be a frightening experience. Nurses indicated that there was no anonymity for them in the rural community, which at times was reassuring, and at other times, constricting (Scharff).

The concept of role diffusion in the rural hospital setting was very apparent in Scharff’s (1987) work. She reported that a rural hospital nurse must be a jack-of-all-trades who often practices within the realm of numerous other health care disciplines, including respiratory therapy, laboratory technology, dietetics, pharmacy, social work, psychology, and medicine. Examples of the intersections between rural nursing and other disciplines include doing EKGs, performing arterial punctures, running blood gas machines, drawing blood, setting up cultures, going to the pharmacy to pour drugs, going to the local drugstore to get medications for patients, ordering x-rays and medications, delivering babies, directing the actions of physicians, and cooking meals when the cook gets snowed in. As Scharff noted, some of these functions are carried out by urban nurses practicing in particular settings such as a trauma center or an intensive care unit. Rural nurses, however, are usually not circumscribed by assignment to a particular unit or department and are expected to function in multiple roles, even within one work shift.

This generalist work role and the lack of anonymity of rural nurses are substantiated by findings and descriptions from several other rural areas of the United States (Biegel, 1983; St. Clair, Pickard, & Harlow, 1986). A study of nurses in rural Texas noted, “Nurses play roles as nurse, friend, neighbor, citizen, and family member” within a community; further, rural nurses in their work roles were described as needing to be “all things to all people” (St. Clair et al., 1986, p. 28).
Generalizability

The issue of a situation or locale-specific theory and its relationship to the larger body of nursing knowledge needs serious consideration. The work of Scharff (1987) indicated that the core of rural nursing is not different from urban nursing. The intersections, however, those “meeting points at which nursing extends its practice into the domains of other professions”; the dimensions, that is, the “philosophy, responsibilities, functions, roles, and skills”; and the boundaries, which “respond to new and growing needs and demands from society” (American Nurses Association, 1980), appear to be very distinct for rural nursing practice.

Questions still remain as to how generalizable findings from Montana residents are to other rural populations. Clearly, there is a need for more organized and rigorous data collection in relation to rural nursing before these questions can be answered. A sound theory base for rural practice requires continued research, conducted across diverse rural settings.

IMPLICATIONS FOR NURSING PRACTICE

The findings from the Montana research about people living in sparsely populated areas have implications for nursing practice in rural areas. Since work is of major importance to rural people, health care must fit within work schedules. Health care programs or clinics that conflict with the rural economic cycle, such as haying or calving, will not be used. Since health is defined as the ability to work, health promotion must address the work issue. For example, health education related to cardiovascular disease should highlight strategies for preventing conditions that involve long-term disability, such as stroke. These aspects will be more meaningful to rural dwellers than preventive aspects that emphasize a longer, more comfortable life.

The self-reliance of rural dwellers has specific nursing implications. Rural people will often delay seeking health care until they are gravely ill or incapacitated. Nursing approaches need to address two distinct aspects: nonjudgmental intervention for those who have delayed treatment and a strong emphasis on preventive health teaching. If the nurse can provide adequate health knowledge, the rural dweller’s desire for self-reliance may lead to health-promotion behaviors. With a good information base, rural people can make appropriate decisions about self-care versus the need for professional intervention.
Health care services must be tailored to suit the preferences of rural persons for family and community help during periods of illness. Nurses can provide instruction, support, and relief to family members and neighbors, who are often the primary care providers for sick and disabled persons.

The formal health care system needs to fit into the informal helping system in rural areas. A long-term community resident, such as the drug-store proprietor, can be assisted in providing accurate advice to residents through the provision of reference materials and a telephone backup system. One can anticipate greater acceptance and use by rural residents of an updated but old and trusted health care resource, rather than a new professional but “outsider” service (Weinert & Long, 1987).

Nurses who enter rural communities must allow for extended periods prior to acceptance. Involvement in diverse community activities, such as civic organizations and recreational clubs, may assist the nurse in being known and accepted as a person. In rural communities, acceptance as a health care professional is often tied to personal acceptance. Thus it appears that rural communities are not appropriate practice settings for nurses who prefer to maintain entirely separate professional and personal lives.

The stresses that appear to affect nurses in rural practice settings have particular importance. Rural nurses see themselves as cut off from the professional mainstream. They are often in situations where there is no collegial support to assist in defining an appropriate practice role and its boundaries. The educational preparation of those who wish to practice in rural settings needs to emphasize not only generalist skills, but also a strong base in change theory and leadership techniques. Nurses in rural practice need a sound orientation to techniques for accessing diverse sources of current information. If the closest library is several hundred miles away, for example, can all arrangements for interlibrary loan and access to material via telephone, bus, or mail be arranged? Networks that link together nurses practicing in distant rural sites are particularly useful, both for information exchange and for mutual support.

**SUMMARY**

It is becoming increasingly clear that rural dwellers have distinct definitions of health. Their health care needs require approaches that differ significantly from urban and suburban populations. Subcultural values,
norms, and beliefs play key roles in how rural people define health and from whom they seek advice and care. These values and beliefs, combined with the realities of rural living—such as weather, distance, and isolation—markedly affect the practice of nursing in rural settings. Additional ethnographic and quantitative data are needed to further define both the common and the locale-specific conditions and characteristics of rural populations. Continued research can provide a more solid base for the nursing theory that is required to guide practice and the delivery of health care to rural populations.

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NOTE


REFERENCES


We have four purposes for this chapter. First, we present a brief historical perspective of the rural nursing theory development. It is followed by a summary of the rural nursing theory structure explicated by Long and Weinert in 1989. Then, we present a review of the literature supporting or refuting the viability of the theoretical statements and concepts. Based on the findings from the literature review, we propose changes in the theoretical structure of the rural nursing theory and make suggestions for future work.

HISTORICAL PERSPECTIVES

“Sparsely Populated Areas: Toward Nursing Theory” was the title of a Western Council on Higher Education for Nursing (now Western Institute of Nursing) symposium presented in 1982 by Montana State University–Bozeman. Organized by faculty member, Jacqueline Taylor (1982), the symposium was introduced to its audience by the Dean of the School of Nursing, Anna Shannon. In her introductory remarks, Dean Shannon (1982) stated that the presentation to the council members would demonstrate to its audience how a school could “maximize its resources, provide opportunities for faculty and student research and contribute . . . to the development of an empirically based theory of
rural nursing” (pp. 70–71). She noted the lack of literature and research about rural nursing plus the placement of little emphasis on the context of environment within nursing theories.

The symposium included faculty and graduate students’ studies about (a) the beliefs and practices of Crow Indian women, Hmong refugees, and Hutterite colony members; (b) sodium in drinking water and adolescent blood pressure; and (c) the role of distance in home dialysis adjustment. Concluding remarks, given by faculty member Ruth Ludeman, included the information that a plan for theory construction and testing was in place using retroduction, a process involving both inductive and deductive reasoning. Theory development activity continued at Montana State University–Bozeman College of Nursing resulting in the subsequent publication of the initial theoretical article titled “Rural Nursing: Developing the Theory Base” (Long & Weinert, 1989).

THE RURAL NURSING THEORY STRUCTURE

“Many disciplines exist to generate, test, and apply theories that will improve the quality of people’s lives” (Fawcett, 1999, p. 1). The quality of the lives of rural persons and the lack of empirical studies about their health care was of concern to Montana State University–Bozeman nursing researchers. A middle-range theory emerged from a recognized need of rural nurses for a practice framework that acknowledges the unique perceptions of rural persons and the generalist experience of nurses who practice in rural settings. Prior to the development of the theory, it was assumed that nursing care of rural persons was similar to the care of persons living in urban environments.

The resulting descriptive theory is the “most basic type of middle range theory” (Fawcett, 1999, p. 15). It emerged from observations gathered through qualitative and quantitative descriptive studies conducted in the sparsely populated rural setting of Montana. It describes specific characteristics and observations made of rural persons seeking health care and their health care providers. The published theory contains several key concepts and three theoretical statements (Long & Weinert, 1989).

The first statement is descriptive and states that “rural dwellers define health primarily as the ability to work, to be productive, to do usual tasks” (Long & Weinert, 1989, p. 120). Key concepts associated with this statement are work beliefs and health beliefs.
The second statement is relational and proposes that “rural dwellers are self-reliant and resist accepting help or services from those seen as ‘outsiders’ or from agencies seen as national or regional ‘welfare’ programs” (Long & Weinert, 1989, p. 120). Rural persons prefer to seek health care from insiders, persons with whom they were familiar. Additional key concepts pertaining to this statement are old-timer and newcomer. A corollary to the second statement is “that help, including needed medical care, is usually sought through an informal rather than a formal system” (p. 120).

The third statement is relational and focuses on health care providers; it indicates that lack of anonymity and role diffusion is experienced more acutely among rural providers than among providers in urban or suburban settings. Lack of anonymity also applies to the recipients of health care in rural areas as all persons in that environment have a “limited ability . . . to have private areas of their lives” (Long & Weinert, 1989, p. 119).

In addition to the above three statements, an understanding of the concepts “isolation” and “distance” is important in the health care-seeking behavior of rural residents. The concept of isolation refers to separation from or being placed alone (Lee, Hollis, & McClain, 1998). Distance is measurable time, physical distance between places, and personal perception of that space (Henson, Sadler, & Walton, 1998). Qualitative data upon which the theoretical work was based indicated that rural residents did not feel isolated despite the fact that they averaged 23 miles of travel to their nearest emergency room and over 50 miles to their primary health care source (Long & Weinert, 1989).

**RELATED NURSING LITERATURE**

The content of Long and Weinert’s (1989) rural nursing theory article was and is widely quoted in nursing literature, including community health and rural nursing texts, and in presentations given about rural nursing. However, a rural nursing literature review conducted in 2003 and 2008 contained few citations that specifically focused on health perceptions and needs of rural persons. We located three qualitative studies through conference proceedings, the contents of which were subsequently published (Bales, Winters, & Lee, 2006; Lee & Winters, 2004; Thomlinson, McDonagh, Reimer, Crooks, & Lees, 2004). Other sources included two nursing master’s theses (Bales, 2006; Moran, 2005), a study that focused
on the health care meanings, values, and practices of Anglo-American males in the rural American midwest (Sellers, Poduska, Propp, & White, 1999), a study exploring rurality and health in midlife women (Thurston & Meadows, 2003), and a study examining the health information seeking experiences of rural women in Ontario, Canada (Wathen & Harris, 2006, 2007). We also located several journal articles, mostly qualitative rural research, that included rural concepts found in this rural nursing theory. In the following sections, each theoretical statement is followed by findings from the literature supporting or refuting the statement.

**Theoretical Statement #1 (Descriptive)**

“...[R]ural dwellers define health primarily as the ability to work, to be productive, to do usual tasks” (Long & Weinert, 1989, p. 120).

Four qualitative studies conducted in the United States (one with rural men aged 25–49 years, one with rural men and women aged 28–63 years, and two with older rural persons aged 60–85) examined health perceptions. Three provided support for the above descriptive statement that defines health as being able to carry out important functions (Niemoller, Ide, & Nichols, 2000; Pierce, 2001; Sellers et al., 1999). In the fourth study, Averill (2002) found that definitions of health varied across her southwest United States sample that included older, more recent retirees, and Hispanic elders. The older retirees from mining and ranching communities viewed health in a similar manner to the original qualitative theory development samples while more recent retirees focused on strategies to remain healthy—proper diet, regular exercise, and regular health exams. The Hispanic elders in Averill's sample frequently mentioned incorporating home remedies and herbal preparations into their health maintenance practices.

Participants in the six health perceptions and needs studies (Bales, 2006; Bales et al., 2006; Lee & Winters, 2004; Moran, 2005; Thomlinson et al., 2004; Winters, Thomlinson, O’Lynn, et al., 2006b) conducted in the United States and Canada were more likely to define health holistically. Lee and Winters found that for rural persons working in service occupations, being able to function included being physically, mentally, and emotion ally fit. Participants in a study conducted by Bales et al. thought that being healthy meant being mentally and physically active, eating well, and having an overall sense of well-being. Thomlinson and her colleagues interpreted their participants’ responses by saying that health was a “holistic relationship between the physical, mental, social and spiritual
aspects of one’s life” (p. 261). This same view of health was echoed by Canadian middle-aged women in Thurston and Meadows’ (2003) study.

Australian women in de la Rue and Coulson’s (2003) study, ages 73–87, equated health with not being ill. They knew maintenance of their health was influenced by their geographical location and their desire to remain living on the land.

Summary

The literature both supports and refutes the first theoretical statement. Support appears in studies of rural male adults and of older persons and retirees from the extractive industries (mining, farming). Lack of support for the functional definition of health emerges from a variety of settings and from differing rural samples. It may be that age, the rural environmental setting, the influence of the work ethic, and culture are factors in defining health (de la Rue & Coulson, 2003). Potentially, younger rural participants may be influenced by increased media exposure and its emphasis on health promotion and use of preventive health practices. In addition, health care providers may be expanding their view of health beyond the illness care model and sharing this with their clients.

Theoretical Statement #2 (Relational)

“... [R]ural dwellers are self-reliant and resist accepting help or services from those seen as ‘outsiders’ or from agencies seen as national or regional ‘welfare’ programs” (Long & Weinert, 1989, p. 120).

The attribute of self-reliance dominates the literature about rural persons and their health-seeking behaviors (Davis & Magilvy, 2000; Jirojwong & MacLennan, 2002; Lee & Winters, 2004; Niemoller et al., 2000; Sellers et al., 1999; Thomlinson et al., 2004; Wathen & Harris, 2006, 2007; Winters et al., 2006b). Care was sought by rural residents after first “consulting books” (Jirojwong & MacLennan, p. 251) and trying “to deal with an illness themselves” (Thomlinson et al., p. 262). Because of the presence of chronic illnesses, older adults were knowledgeable about medical resources (physicians, physician’s assistants, and nurse practitioners) in nearby areas (Niemoller et al.; Pierce, 2001; Roberto & Reynolds, 2001), and, if available, would use them “to achieve their desired level of independence” (Niemoller et al., p. 39). However, if the desired resources were not available, these same older adults stated they would “manage” (p. 39).
Canadian women (age range 20–82) in the study conducted by Wathen and Harris (2006) shared differing strategies when faced with an urgent health situation. Some would visit a hospital emergency room while others would self-medicate and wait until the next morning to contact their family doctor. Decision making was influenced by their perception of the knowledge and skills of available professional practitioners and, in some situations, by the results of previous interactions with regard to managing their chronic illnesses. In addition, decisions were affected by the distances they needed to travel, especially during the winter.

**Corollary to Relational Statement #2**

“. . . [H]elp, including needed health care, is usually sought through an informal rather than a formal system” (Long & Weinert, 1989, p. 120).

The literature revealed a variety of findings related to the relational statement corollary. Bales (2006) found that mothers living in frontier settings in the United States would seek advice from family, friends, and neighbors and would initiate self-care activities if health care situations were not considered serious. However, if the illness or injury was gauged as serious, professional health care was immediately accessed no matter the distance involved. Bypassing the informal for the formal system because of the seriousness of the illness or injury also was found in studies conducted by Buehler, Malone, and Majerus (1998) and Thomlinson et al. (2004).

Participants in two Canadian studies (Thomlinson et al., 2004; Wathen & Harris, 2006, 2007) indicated that family, friends, and neighbors were cited as a major source of support, particularly during the information gathering phase (Wathen & Harris, 2006). Those particularly valued were persons who held a health care professional role or had experienced a disease or illness firsthand (Wathen & Harris). Although older rural women in the United States study conducted by Pierce (2001) stated they were eager to help neighbors and the less fortunate, they also shared their reluctance to tell family and neighbors about their needs unless really necessary.

Help gained through accessing informal knowledge via the media, popular magazines, books, libraries, and the Internet was cited in three studies (Roberto & Reynolds, 2001; Thomlinson et al., 2004; Wathen & Harris, 2007). A sample of older women living in the United States actively sought information about living with their osteoporosis (Roberto
& Reynolds); members of Canadian samples stated that they frequently made use of formal information sources through libraries, books, and computers (Thomlinson et al.; Wathen & Harris).

Summary

The second theoretical statement and its corollary is both sustained and refuted by the findings in the literature. Self-reliance remains a characteristic attribute of rural persons and influences the way they respond to illness or injury and their subsequent care-seeking behaviors. The informal system (family, friends, and neighbors) is still frequently used as a resource. However, the rural cultural barrier to accessing care through formal resources appears to be changing. The accessibility of knowledge through a variety of sources and the need to have information about health and the chronic illnesses they are experiencing may be beginning to remove the cultural barrier of approaching “outsiders” for health and medical care. In part, this may be occurring because desired health information can now be obtained through use of computers while maintaining anonymity. Prior to the current age of information technology, maintaining anonymity while seeking health information was not an option.

Theoretical Statement #3 (Relational)

“. . . [H]ealth care providers in rural areas must deal with a lack of anonymity and much greater role diffusion than providers in urban or suburban settings” (Long & Weinert, 1989, p. 120).

The findings for the two concepts forming this relational statement—lack of anonymity and role diffusion—are sustained in the literature about health care providers from Australia, New Zealand, and the United States. In relation to the lack of anonymity, authors stated that “in close knit communities . . . news travels fast” (Lau, Kumar, & Thomas, 2002, p. 10) and that “social life realities in small communities frequently blur professional boundaries” (Blue & Fitzgerald, 2002, p. 319–320). Social factors pertaining to practice in rural communities include privacy issues for both the professional and the clients for whom they give care (Lau et al.). Health care practitioners in rural environments who are known by their clients may find that older women prefer receiving professional care from a familiar person (Courtney, Tong, & Walsh, 2000; Pierce, 2001), whereas middle-aged women will prefer to go elsewhere for care
because of that familiarity (Brown, Young, & Byles, 1999; Lee & Winters, 2004). Lee and Winters found this particularly true for women’s health care and mental health.

Role diffusion was found in studies conducted with psychiatrists and nurses in Australia (Lau et al., 2002) and by Rosenthal (1996) in her study of rural nursing in America. Hegney (1997) described role diffusion in her study of Australian rural nursing practice as the generalist and extended practice role. Role diffusion was evident in the practice of hospice nurses in New Zealand (McConigley, Kristjanson, & Morgan, 2000). The reality in sparsely populated areas is that with fewer persons to perform the multiple tasks, more tasks must be undertaken by the individuals who choose to practice in those areas.

**Summary**

The third theoretical statement about lack of anonymity and role diffusion is well supported in the available literature. The concept of familiarity, the antonym of lack of anonymity, can be a facilitator or a barrier to seeking health and illness care from local health care practitioners. Familiarity is a distinguishing feature of rural nursing that allows rural nurses a special knowledge of those for whom they provide care within their communities (Hegney, 1997).

The lack of anonymity that health care providers experience in rural communities is in itself a paradox. On the one hand, it is often the familiarity and knowing of community members and the lack of anonymity that draws health care professionals to rural areas. Yet, it is often the same attribute of rural practice that can later drive them away.

The review of the literature pertaining to the descriptive middle-range rural nursing theory base revealed a variety of findings. The rural residents’ definition of health in the first descriptive statement is changing from that of a functional nature to a more holistic view that includes physical, mental, social, and spiritual aspects. The self-reliance of rural residents in the second relational statement is broadly supported; however, the resistance to seeking help from those seen as “outsiders” is changing. The third relational statement pertaining to health care providers and their lack of anonymity and role diffusion is supported. The findings for the concept of distance in the original rural theory development work
are not supported. This literature appraisal of the rural nursing theory base structure supports a need for change.

**THE REVISED RURAL NURSING THEORY STRUCTURE**

Based on the review of the literature, Lee and McDonagh (2006) recommended the following revisions to the first two theoretical statements originally proposed by Long and Weinert in 1989.

**Theoretical Statement #1 (Descriptive)**

“Rural residents define health as being able to do what they want to do; it is a way of life and a state of mind; there is a goal of maintaining balance in all aspect of their lives” (Lee & McDonagh, 2006, p. 314).

“Older rural residents and those with ties to extractive industries are more likely to define health in a functional manner—to work, to be productive, and to do usual tasks” (Lee & McDonagh, p. 314).

Essential to understanding rural persons’ motivation for illness treatment, health maintenance, and health promotion is knowledge of their health perceptions (Long, 1993). The above replacement statements provide a broader view of the health perceptions being found with more recent research with rural individuals, families, and communities. They reflect both the earlier emphasis on role performance that is evident among older residents and those employed in primary industries and the expanded view of health perception definitions elicited from other individuals living in rural communities.

**Theoretical Statement #2 (Relational)**

“Rural residents are self-reliant and make decisions to seek care for illness, sickness, or injury depending on their self-assessment of the severity of their present health condition and of the resources needed and available” (Lee & McDonagh, 2006, p. 315).

“Rural residents with infants and children who experience illness, sickness, or injury will seek care more quickly than for themselves” (Lee & McDonagh, 2006, p. 315).

These theoretical statements refer to the health-seeking behaviors of rural residents. Key concepts from the 1989 model included self-reliance, seeking care from insiders, and the use of the informal system. Research
findings continue to assert that self-reliance is a key characteristic identified in the management of health care situations by rural persons. However, changes were seen in the health-seeking behaviors of these residents as they seek advice and care from insiders and outsiders and also make use of both informal and formal systems of care.

Additional concepts emerged from the comparative research about rural persons’ health behaviors: health-seeking behaviors and choice (Winters et al., 2006b). Health-seeking behaviors, defined as “conscious behaviors designed to promote healthy relationships among physical, mental, social and spiritual aspects of one’s life so that life balance is maintained,” includes three subthemes: symptom–action–time-line process (SATL) (Buehler et al., 1998), resources, and self-reliance.

Conscious choice is made in at least two domains of rural persons’ lives. The first is the choice to live in a rural environment; the second is in accessing health care resources. Choosing to live in a rural environment is closely associated with the concept of place (see discussion later in this paper).

**Theoretical Statement #3 (Relational)**

Health care providers continue to experience lack of anonymity and role diffusion. Because the original statement was well supported by the literature review, no changes are recommended.

**FUTURE DIRECTION**

Exploration of the literature regarding rural health perceptions and needs revealed many new avenues for future exploration. Themes of distance and resources were identified repeatedly in the literature reviewed. Newly proposed concepts emerging from the literature review included health-seeking behaviors, choice, environmental context, and social capital. Each of these concepts is addressed in the following sections.

**Distance**

Although distance was not part of any of the three theoretical statements making up the rural nursing theory base, the content of the rural literature we accessed for this review frequently touched on the concept. In the seminal article by Long and Weinert (1989), the participants included
in the multiple studies tended to see health services as accessible and did not view themselves as isolated. Canadian authors MacLeod, Browne, and Leipert (1998) stated that distance may not be a problem but said the concept exerts a strong influence in providing health care in rural areas. This view affirms Johnson, Ratner, and Bottorff’s (1995) assertion that one’s geographic location may influence or even determine the form of health-seeking behaviors rural residents demonstrate. In an article cited earlier, the older women described distance and geographical barriers with concern; yet, they seemed to take problems with accessibility “in stride” (Pierce, 2001, p. 52). However, the participants did express concern about the quality of nearby health services.

The remainder of the research all refuted the initial findings about distance and access to health care in Long and Weinert’s (1989) theory-based article. Racher and Vollman (2002) stated that access to health care services is a major concern for residents across North America’s rural and remote areas and the health professionals serving them. Fitzgerald, Pearson, and McCutcheon (2001) found that access to care is particularly a concern for Australian rural individuals with chronic illness; an expressed problem was finding the “best” doctor (p. 237). In a research-based computer intervention group of 142 women living in five sparsely populated western states, Winters and her colleagues identified that “distance was an overarching characteristic of the rural context that influenced the women’s ability to self-manage their chronic health problems” (Winters, Cudney, Sullivan, & Thuesen, 2006a, p. 273). Buehler and Lee (1992) found the more rural the persons experiencing cancer, the more limited were formal health care resources available to assist them and their families.

“Distance and travel needs” were of prime concern for women seeking perinatal care in rural California (West, 2006, p. 105). Distance to emergency care was an expressed concern of service providers in rural areas (Lee & Winters, 2004) and of mothers of children living in frontier areas (Bales, 2006). In a survey of middle-aged women, Brown and colleagues (1999) concluded that experiencing difficulties with accessing health care results in greater reliance on self-treatment and self-care, thereby leading to development of “attitudes of independence and self-reliance” (p. 151).

**Resources**

In addition to distance, *availability of resources* is a concept that directly impacts access to health care services (Winters et al., 2006a, 2006b). Authors Gulzar (1999) and Racher and Vollman (2002) discuss the
complexity of processes in accessing health services. The rurality or remoteness of a given place affects access to health services. Within the rural environment, such factors as geographical, political, and economical, as well as the acceptability and the education of health care providers, all influence the residents’ access to and choice of health resources. Studying patterns of health care use and feedback loops among residents may add to the understanding of the complexity of accessing health care services in rural and remote areas (Racher & Vollman). Delivery of health services across sparsely populated areas presents unique challenges because of the vast distances involved and the scarcity of health professionals. For example, the greater the nurse-to-patient or physician-to-patient ratio and the more rural or remote the community is from large urban centers, the more limited the health resources are for rural and remote community members.

Health-Seeking Behaviors

Health-seeking behaviors were defined as “conscious behaviors designed to promote healthy relationships among physical, mental, social and spiritual aspects of one’s life so that life balance is maintained” (Winters et al., 2006b, p. 34). The authors included three subthemes, SATL process, resources, and self-reliance, as part of health-seeking behaviors. The SATL process (Buehler et al., 1998) is used to describe the social process and identify symptoms of sickness, illness, or injury and then seek the appropriate level of requisite care. The level of care sought may be self, lay, or professional, depending upon the perceived seriousness and type of symptom. Accessing resources is a part of the SATL process. Self-reliance, defined as behaviors to promote or maintain health without seeking assistance from others, was prevalent in the data from Montana and the Canadian provinces of Alberta and Manitoba. Winters et al. considered self-reliance a subtheme of health-seeking behavior because of its paramount influence in seeking health care in sparsely populated rural areas.

Choice

Choice, the making of conscious decisions to live in a rural environment and access health care resources, was a new theme that emerged from the comparison study (Winters et al., 2006b). Explicitly evident in the Montana data and implicitly identified in the Canadian study through
the participants’ expressions of the benefits of living in rural environments, the theme is associated with the concept of “place.” Although we think of place in a geographical context, it is a broader entity that shapes one’s political, economic, spatial, geographic, and cultural views of the world (Kelly, 2003). De la Rue and Coulson (2003) found that rural participants’ well-being and health were very influenced by the “geographical location of living on the land” (p. 5). “Place” provided these rural residents with a kind of emotional or spiritual connectedness that affected the outcomes of their health experiences.

Wathen and Harris (2007) thought that rural living affected the choice of resources the members of their Canadian study sample (n = 40) would consult about a chronic health concern or an acute medical problem. If they wanted to avoid “bothering” the doctor or their available rural doctor “might not be the best or too up to date” (p. 643), they chose to use their informal system (colleagues, friends, family), medical books, pharmacists, and/or the veterinarian.

Choice in making decisions related to accessing health care can be affected by several factors. Questions often asked to aid in determining a course of action are: Where is the closest facility that will provide the health care needed? What are the qualifications of the persons who staff that facility? What level of confidence is there in the local health care providers? Does familiarity with the professionals who staff the facility make a difference in making the choice of where to go? Is anonymity an important factor in this situation? Does the health care facility accept the insurance carried by the individual or family seeking care (Moran, 2005)? What hours does the facility stay open? What are the weather conditions? During stormy conditions (in winter, snow, freezing rain, and ice; in summer, rain, wind, and flooding), what roads are better maintained? In an acute emergency, can a fixed wing aircraft or helicopter land nearby? These represent only a fraction of the factors that may play into the decision-making for accessing health care.

**Environmental Context**

Appearing repeatedly throughout the literature reviewed were terms like *place* or *geographical location* or *rural context* or *environmental context*. According to Jones and Ross (2003), nursing practice is “shaped by its situatedness” (p. 16). Authors speak of the context of a place and the resources needed that are particular to a context or place (Andrews 2003a, 2003b; Andrews & Moon, 2005; MacLeod, Misener, Banks,
Morton, Vogt, & Bentham, 2008; Poland, Lehoux, Holmes, & Andrews, 2003; Thurston & Meadows, 2004; Winters et al., 2006a). According to Lauder, Reel, Farmer, and Griggs (2006), “‘Context’ is an important unit of analysis. . . . A rural health context is both physical and relational and aspects of rural environments . . . may enhance or impede health” (p. 75).

Health perceptions, needs, and actions of rural persons are also influenced by the environmental context. This was particularly evident in the research reported by de la Rue and Coulson (2003); Thomlinson et al. (2004); and Winters et al. (2006a). Winters and her colleagues found in their intervention study of rural women with chronic illnesses that four themes emerged through the “overarching characteristic of distance: (a) physical setting, (b) social/cultural/economic environment, (c) nature of rural women’s work, and (d) accessibility/quality of health care” (p. 284–285).

Social Capital

Social capital is a concept that comes from sociology and has come into increasing importance over the last 20 years (Shookner, Scott, & Vollman, 2008). Rooker (2002, as cited in Lauder et al., 2006) defines the term as “forms of association that express trust and norms of reciprocity” (p. 75). The Policy Research Initiative (PRI) for the government of Canada (2005, as cited in Shookner et al., 2008) further clarifies social capital as the “networks of social relations that may provide individuals and groups with access to resources and supports” (p. 87). “Creating supportive environments is about building social capital” (p. 87) and is similar to the notion of building “rural capacity” (Hartley, 2005).

Nurses practicing in rural settings tend to be more actively engaged professionally and personally in the rural communities in which they live and work (Scharff, 1998; Bushy, 2000). However, the present role of nurses in creating supportive health care environments is not well understood, recognition, conceptualization, and measurement are needed “to more fully appreciate the impact nurses have on rural health access and services” (Lauder et al., 2006, p. 74).

Three qualitative studies about nurses spoke to the necessity of developing social capital within rural communities. Advanced practice registered nursing (APRN) graduates realized the importance of “rural connectedness” through development of support networks with other health care providers, relationships with urban health care centers,
connections with local communities, and support through electronic means (Conger & Plager, 2008). Nurses providing maternity care realized that they needed to know “their community—who lives in their community, what their skills are, and whether they are available to address local health needs or respond to emergency situations” (MacKinnon, 2008, p. 6). Nurses in solo mental health practice recognized the necessity of assisting rural and remote clients “to achieve a level of social functioning to integrate the person back into their community network” (Gibb, 2003, p. 248). To do this they found that they needed to work more closely with the potential support structures identified within the clients’ community. This was best achieved by fostering a caring home environment, trying to keep people with their families and in their place of employment (Gibb, Livesey & Zyla, 2003). By having such a support structure, rural mental practitioners can avoid sending the mental health client to a psychiatric institution when a crisis occurs.

**SUMMARY**

Theories are developed for the purposes of describing, explaining, and predicting phenomena (Fawcett, 2000). The intent of the early theory development work at Montana State University–Bozeman College of Nursing was to use the descriptive research data collected in sparsely populated rural areas to develop a middle-range theory, one that would provide a framework for nurses providing care to rural dwellers (Shannon, 1982). What evolved was a descriptive theory, the most basic type of middle-range theory (Fawcett, 1999). Middle-range theory focuses “on a limited dimension of the reality of nursing” and grows at the “intersection of practice and research to provide guidance for everyday practice and scholarly research rooted in the discipline of nursing” (Smith & Liehr, 2003, p. xi).

Although controversy exists about the placement and abstraction level of middle-range theories within the hierarchical structure of nursing theories (Peterson & Bredow, 2004), the basic theory structure, regardless of level, is similar—theoretical statements that describe or link key concepts (Fawcett, 1999). The interweaving of those concepts and statements provide a pattern of ideas that provide a new perspective of phenomena (Smith & Liehr, 2003). The pattern, once published and subjected to testing, should remain open to scrutiny, debate, change (if necessary), and the incorporation of new ideas.
By subjecting the middle-range rural nursing theory to testing in several studies (Bales, 2006; Bales et al., 2006; Lee & Winters, 2004; Moran, 2005; Thomlinson et al., 2004; Winters et al., 2006b) and the findings from several related studies, it has become evident that change has occurred over the past thirty years which has altered the applicability of the original published rural nursing theory base by Long and Weinert (1989). This change is demonstrated by revisions to the theoretical statements and in the newly emerging concepts reviewed above.

**Vision for the Future**

Because of the descriptive nature of the middle-range rural nursing theory, additional descriptive research is needed (Fawcett, 1999). Analysis methods can take several approaches, including the Wilson method (Walker & Avant, 1995), the evolutionary method (Rodgers, 1993), the empirical or inductive approach (Morse, 1995), or a combination thereof. Testing of the proposed changes to the rural nursing theory relational statements through qualitative studies (ethnography, grounded theory, phenomenology, narrative inquiry, historical inquiry, and photo voice) and participatory action research needs to take place in other sparsely populated areas. Development and testing of instruments to measure the concepts is also needed. Conducting surveys to measure attributes, attitudes, knowledge, and opinions using open-ended and semi-structured interviews and questionnaires is required (Fawcett). With a compilation of these focused research efforts can emerge a model, a schema, or a list of logically ordered statements that, when present, will provide guidance for the care of rural dwellers (Smith & Liehr, 2003).

**Moving the Work Forward**

A core group of nurse researchers from Montana and Alberta periodically meet to review and critique theoretical material and models. Members of this North American Study (NAS) group discuss and plan projects to further rural nursing theory development while offering research and educational opportunities to graduate students within their course work or independent studies. A rural nursing research and theory development listserv, developed at the Third International Congress of Rural Nurses in Binghamton, New York, provided a mechanism for online discussion for furthering rural nursing research and theory development. While this listserv is now dormant, two resources are potentially available

The NAS and listserv members did identify the following questions for exploration: (a) Are these health-seeking behaviors unique to rural residents? (b) Will health-seeking behavior activities of the SATL process fit under the same middle-range theory framework as those for health promotion? (c) How do illness variables affect rural persons’ health-seeking behaviors? (d) How do illness variables affect rural people’s choices of health care providers? (e) Are rural dwellers more accepting of “outsiders” if they are health care professionals working in partnerships with the rural community and local health professionals?

CONCLUSION

As we have argued in this chapter, the middle-range rural nursing theory as published by Long and Weinert (1989) is in need of revision. Advances in health service technologies and care along with the changes in the perception and behaviors of rural residents over the past 30 years may account for some of the emerging concepts that we have identified. Continued research and theoretical development efforts will increase the potential for a middle-range theory that can provide a structure for acceptable, adaptable, and appropriate nursing care to rural persons.

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