Chapter 7

Applying Middle-Range Concepts and Theories to the Care of Vulnerable Populations

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OBJECTIVES

At the end of this chapter, the reader will be able to

1. Describe how middle-range theories in nursing apply to vulnerable populations.
2. Apply at least one theory to a specific population of interest to the reader.
3. Provide at least one research example that uses a middle-range theory.

INTRODUCTION

The disciplinary focus of the nursing profession is to improve the quality of life and health of individuals, families, communities, and society (McCurry, Hunter Revell, & Roy, 2010). Contemporary nursing care is heavily influenced by knowledge development that is happening within a dynamic, evolving social and environmental healthcare context (McCurry et al., 2010). Risjord (2010) argued that nursing knowledge development, which he termed the *nursing standpoint* starts from "nurses lives" (p. 74), or that the problems and solutions in nursing are identified within nurses' daily practice. Problem identification leads to the development, refinement, and dissemination of knowledge, with theory providing the foundation (Risjord, 2010). Risjord posits that appropriate

theories for the nursing profession address nursing problems, whether they are proposed by nurses, or borrowed from other disciplines.

Middle-range theories are useful in addressing the problems of nursing, especially among vulnerable populations. Although middle-range theories address specific phenomena within nursing practice, the theories are broad enough to be applied to a variety of patient populations, and across many practice settings. Middle-range concepts and theories selected for this chapter were adapted from content in a graduate-level family nurse practitioner course on healthcare theory. In the course, family nurse practitioner students applied middle-range concepts and theories to practice. Either the concept or an associated theory are discussed and applied to the care of the vulnerable. Concepts from this chapter could be used in doctoral courses for concept analysis and explored in the context of vulnerability.

In this chapter, eight middle-range concepts or theories will be discussed. Individual-level middle-range theories, social middle-range theories, and middle-range theories that integrate multiple perspectives will be presented. Definitions of the concepts comprising each middle-range theory will be provided. The middle-range concept or theory will be applied to the care of vulnerable populations using a specific example from the literature. Practical application of each middle-range concept or theory in the care of vulnerable populations will be given.

INDIVIDUAL-LEVEL MIDDLE-RANGE THEORIES

In proposing solutions to problems of vulnerability, it is essential to begin by understanding individual-level factors. Once the concepts are understood from an individual level, the influence of families, communities, and populations can be examined. The individual-level middle-range concepts or theories of self-efficacy, adherence, and change will be discussed.

Self-Efficacy

Self-efficacy has been defined as a system of self-monitoring where an individual judges his or her capability to carry out a behavior or course of action (Bandura & Perloff, 1967; Bandura, 1977). Cognitive processing, in the form of reflective thought, helps individuals to set standards for their behavior and then generate skills necessary to accomplish behavioral goals. Bandura and Perloff (1967) noted that individuals generate self-prescribed rewarding or punishing consequences that they apply depending on how their behavior compares to a self-selected external evaluation criterion. An assumption of self-efficacy theory is that individuals have the cognitive ability to exercise behavioral control and create evaluation criteria to judge their abilities.

In social cognitive theory, Bandura (1986) asserted that self-efficacy was an important mediator within the triad of reciprocity among behavior, cognition, and other personal/environmental influences. Bandura (1977) proposed two components of self-efficacy: self-efficacy expectations and outcome expectations. Bandura defined self-efficacy expectations as an individual's belief that he or she can successfully carry out a behavior to produce an anticipated outcome. Bandura defined outcome expectations as a person's estimation that a particular behavior will lead to a particular outcome. An individual may believe that a particular behavior leads to a certain outcome (outcome expectations), but may or may not possess the belief that they can successfully carry out the behavior (self-efficacy expectations).

Bandura and colleagues' early work with individuals who suffered from snake phobias provided the foundation for self-efficacy theory (Bandura, Blanchard, & Ritter, 1969). Bandura (1977) asserted that individuals who are motivated by fear avoid threatening situations that they believe exceed their coping abilities, whereas individuals who believe themselves capable will unquestionably handle situations or problems. Self-efficacy expectations influence the amount of effort an individual expends in making a behavioral change, and how likely an individual is to persist with accomplishing the behavioral change in spite of obstacles (Bandura, 1977). Bandura was careful to note that expectations alone do not produce behavioral changes, and individuals may be capable of change but do not possess the incentive to engage in the process.

Self-Efficacy Sources

Bandura (1986) proposed that individuals use four informational self-efficacy sources that work in a reciprocal manner: (1) enactive attainment, (2) vicarious experience, (3) verbal persuasion, and (4) physiological feedback.

Enactive Attainment

Enactive attainment is defined as personal mastery experiences or the actual performance of the behavior (Bandura, 1977, 1986). Bandura (1995) acknowledged that an individual's perception of the difficulty of the behavioral change, amount of effort required, context/environment of the behavioral change, and past pattern of successes and failures had an impact on self-efficacy. Bandura (1977, 1986) theorized that mastery of one behavioral change can have a carry-over effect in the execution of other behavioral changes.

Vicarious Experience

Bandura (1977) defined *vicarious experience* as expectations that are derived from seeing others perform a behavioral change (or threatening activity) without experiencing negative consequences. The observer subsequently self-models the behavior and uses social

comparison to persuade him or herself that he or she is capable of making the change with effort and perseverance. Bandura argued that an individual needs to have clear performance outcomes, otherwise improvements in self-efficacy may be based on the observed individual's successful performance of the behavioral change.

Verbal Persuasion

Verbal persuasion is defined as leading individuals, through verbal suggestion, into believing that they can successfully make behavioral changes (Bandura, 1977). Bandura stated that verbal persuasion is less effective than enactive attainment because an individual is not authentically experiencing success with the change and can easily be derailed by a disconfirming experience.

Physiological Feedback

Bandura (1977) asserted an individual's judgment of their ability to successfully make changes depends, in part, by their acknowledgement and response to physiological indicators (e.g., anxiety). Bandura originally termed this *emotional arousal* (p. 198). If the individual experiences negative physiological symptoms, he or she may be less inclined to engage in the behavioral change process.

Application to Vulnerable Populations

Vulnerability may increase the likelihood of threatening situations or obstacles to success. In order to support individuals who embark on the behavioral change process, nurses can use self-efficacy theory in order to understand barriers and facilitators to self-efficacy. Nursing interventions can be used to increase the opportunity for personal mastery experiences (enactive attainment), include family or support systems as role models in the behavioral change process (vicarious experience), use professional communication skills to help patients and families identify facilitators to change (verbal persuasion), and provide nursing care that helps to mitigate anxiety (physiological feedback). Assisting patients to improve self-efficacy in the behavioral change process can occur in any setting (e.g., long-term care), and among any population or subpopulation (e.g., pregnant adolescents).

Enhancing self-efficacy among vulnerable populations requires attention to the patient's (and family's) socioeconomic status, strength of the support system relationships, primary language spoken, literacy level, educational level, and the context/environment in which the patient and family lives. Opportunities for personal mastery experiences may be limited, for example, by lack of financial means or community safety issues. Nurses are well positioned to assess for barriers to self-efficacy, including demoralization from past efforts to change. Professional, empathetic communication is critical when helping to enhance self-efficacy among vulnerable populations.

Research Example

Sharoni and Wu (2012) examined self-efficacy with managing type 2 diabetes among a sample of 388 adults in Malaysia. Self-efficacy of diabetes management was measured using the Diabetes Management Self-Efficacy Scale (DMSES) (van der Bijl, van Poelgeest-Eeltink, & Shortridge-Baggett, 1999). The DMSES is a Likert-type scale that addresses an individual's confidence in managing blood glucose, diet, and exercise (van der Bijl et al., 1999). Sharoni and Wu (2012) assessed self-efficacy and correlated self-efficacy score with self-care behavior. Self-care behavior was measured by a patient's level of glycosylated hemoglobin, which is indicative of glycemic control. The participants reported a moderately high level of self-efficacy in managing their type 2 diabetes. Sharoni and Wu (2012) found that participants who reported higher levels of self-efficacy had better glycemic control. Lower levels of education impacted self-efficacy and glycemic control in a negative manner; this finding has implications for vulnerable patients who do not possess high levels of formal education.

Practical Application

Brenda is a 19-year-old woman, recently divorced from a physically abusive husband, and has just given birth to her first child. The vaginal delivery was without incident; both mother and child are recovering on the postpartum unit. Brenda has had three unsuccessful attempts to breastfeed her daughter. Brenda's primary nurse is concerned that it is an issue of low self-efficacy with breastfeeding. The primary nurse outlined several interventions to promote Brenda's breastfeeding self-efficacy including: (1) two sessions with a lactation consultant to increase opportunities for personal mastery (enactive attainment), (2) encouraging Brenda to observe her roommate who has been successful with breastfeeding attempts (vicarious experience), and (3) use of encouraging words (verbal persuasion) and empathetic listening to reduce anxiety (physiological feedback). After two sessions with the lactation consultant to practice breastfeeding techniques, and self-modeling after watching her roommate breastfeed, Brenda was successfully able to breastfeed her daughter.

ADHERENCE

In order to provide patient and family-centered nursing care to vulnerable populations, understanding the attributes of the concept of adherence, and factors impacting adherence is critical. Through concept analysis Cohen (2009) defined adherence as an agreement (or goal concordance) between or among a patient, family, and healthcare provider in determining necessary persistence in the practice and maintenance of desired, recommended health behaviors. McBride, Bryan, Bray, Swan, and Green (2012) argued that adherence differs from other health change outcomes because the focus is on persistence in practicing and maintaining treatment recommendations from a healthcare provider.

Cohen (2009) identified four attributes of adherence including: (1) patient (and family) behaviors align with provider treatment recommendations, (2) patient (and family) increase health knowledge and master the new behavior, (3) patient/family and healthcare provider have concordant goals with plans to overcome barriers, and (4) ongoing support for maintaining treatment recommendations.

Conceptually, adherence involves a group of characteristics that leads to an outcome of improved health outcomes. Characteristics of adherence include communication, goal setting, practice of health behaviors/skills, and self-management. Since adherence can apply to a variety of treatment recommendations (e.g., taking a medication, engaging in physical activity) the way the concept is operationalized can vary. In general, adherence has been operationalized as percentage of time that an individual correctly or properly fulfills a treatment recommendation. For example, Walsh, Mandalia, and Gazzard (2002) measured 30-day medication adherence using a self-report diary, while Colbert, Sereika, and Erlen (2012) used electronic event monitoring (a medication cap containing a microchip that records the date and time the bottle is opened) to assess the percentage of prescribed medication administrations taken.

Application to Vulnerable Populations

There is a constellation of personal, family, social, economic, religious, environmental, and societal factors that impact an individual's ability to adhere to a healthcare provider's treatment recommendations. In addition to sociodemographic factors including age and educational level, researchers have explored an individual's functional health literacy (Colbert et al., 2012) and self-efficacy (Nokes et al., 2012) as factors impacting adherence to treatment recommendations. While Colbert and colleagues did not find a strong association between functional health literacy and adherence to treatment, Nokes and colleagues found that self-efficacy was a significant predictor of treatment adherence. The treatment itself, especially if the treatment creates untoward side effects, can be a barrier to adherence.

When caring for vulnerable populations, sensitivity to an individual's or family's life circumstances including family income, employment status, ability to afford health insurance, environmental living conditions, transportation issues, and personal beliefs/value systems is necessary. While a desire to adhere to treatment recommendations may be present, social or financial issues may impact adherence. As Cohen (2009) noted, two critical attributes of adherence are ongoing support and plans to overcome barriers to treatment adherence.

Research Example

Fair, Monahan, Russell, Zhao, and Champion (2012) examined perceived benefits and risks of adherence to yearly mammograms among a group of 299 African American

women in Indiana. Fair and colleagues defined mammography adherence as a woman's fulfillment of a yearly screening mammogram via self-report. Fair et al. interviewed women to understand their perception of benefits (e.g., decreased death from cancer) and risks (e.g., fear of finding cancer) to engaging in yearly screenings, as well as their readiness to fulfill the annual screening. Fair et al. reported low rates of mammography adherence among women with high perceived risk and low perceived benefit toward mammography. Conversely, Fair et al. found that women who perceived mammography to be low risk had higher mammography adherence. Understanding factors related to mammography adherence can help to build interventions tailored to the needs of at-risk populations who historically do not participate in recommended health screenings.

Practice Application

George is a 57-year-old attorney who was recently diagnosed with hypertension. The nurse practitioner caring for George has recommended dietary modifications and physical activity, in addition to a low dose of an antihypertensive medication. George comes to his follow-up visit and tells the nurse practitioner that he stopped taking the antihypertensive medication after 2 days because he "felt funny." George shares that he does not have time to exercise, and has to eat at restaurants frequently with clients. The nurse practitioner begins to explore George's beliefs, values, and perceptions of the situation. George expresses fear about having to make lifestyle changes and take a medication for his blood pressure. George and the nurse practitioner come up with three manageable goals for George, discuss potential side effects of the medications and how to manage them, and give George a diary to keep track of his progress. On his next visit, George has been able to incorporate two walks per week into his schedule, has been taking his daily medications more than 85% of the time, and has been making an effort to have fruit or vegetables for a snack instead of potato chips or cookies.

CHANGE

In order for nurses to assist patients in successfully making behavioral changes, it is important to understand an individual's decision-making process as it pertains to behavioral change. In this section, the Transtheoretical Model of Change (Prochaska, 1979; Prochaska & DiClemente, 1982; Prochaska & DiClemente, 1983) will be discussed. The Transtheoretical Model of Change (TTM) is an individual-level theory that is useful for understanding medical decisions that start a behavioral change process in patients that nurses may historically label *nonadherent* or *resistant to change*.

The TTM was developed to assess readiness for change among a population of individuals who smoked (Prochaska & DiClemente, 1983). A guiding principle of the TTM is that healthcare providers may be more successful in helping patients change behaviors

if their interventions are tailored to a patient's place in the change process. Philosophi-cally, a nurse using the TTM respects the patient's self-determinism and autonomy in the decision-making process. Individual-level change theories involve numerous assumptions including, but not limited to: (1) individuals value good health; (2) individuals will make necessary changes to reduce unhealthy behaviors; (3) behavior is under volitional control; and (4) an individual's beliefs, values, attitudes, and perception drive health behaviors (Crosby, Kegler, & DiClemente, 2009).

Central Constructs of the TTM

The TTM has four central constructs: stages of change, processes of change, self-efficacy, and decision-making ability.

Stages of Change

The TTM has six stages of change including precontemplation, contemplation, preparation, action, maintenance, and termination (Prochaska, 1979; Prochaska & DiClemente, 1982). The stages of change are temporal, or have a time orientation. Individuals progress through the following stages of change: (1) precontemplation, the individual has no intention of making a behavioral change in the next 6 months; (2) contemplation, the individual intends to make a behavioral change in the next 6 months; (3) preparation, the individual intends to make a behavioral change in the next 30 days; (4) action, the individual is actively making behavioral changes for fewer than 6 months; (5) maintenance, the individual has main-tained the behavioral change for greater than 6 months; and (6) termination, the individual has incorporated the behavioral change into their daily life and they have no temptation to relapse, or revert, to old behaviors (Prochaska, Redding, & Evers, 1997). At any stage an individual may relapse into old behaviors and is at risk for restarting the process.

Processes of Change

In order for behavioral change to take place, 10 processes, both overt and covert, are used to progress through each stage (Prochaska & DiClemente, 1983; Prochaska, Velicer, DiClemente, & Fava, 1988). The first five processes are cognitive, and are primarily used by individuals in the precontemplation, contemplation, and preparation stages. The last five processes are behavioral and are used by individuals who are in the action and maintenance stages. The 10 processes include: (1) consciousness raising, or increasing awareness about a problem behavior; (2) dramatic relief, emotional release about the problem behavior; (3) environmental reevaluation, a social reappraisal of how the problem behavior affects the environment; (4) social liberation, an individual's appraisal of how there are opportunities within their environment to make the change easier; (5) self-reevaluation, an individual's appraisal of themselves with or without the problem behavior; (6) stimulus control, an

individual reengineers his or her environment to remove things that remind him or her of the problem behavior; (7) helping relationships, identification of support persons to help with the change process; (8) counter conditioning, an individual learns to substitute healthy behaviors for problem behaviors; (9) reinforcement management, an individual rewards him or herself for avoiding the problem behavior; and (10) self-liberation, an individual makes a commitment to maintain the new healthy behavior (Prochaska & DiClemente, 1983; Prochaska, Velicer, DiClemente, & Fava, 1988).

Self-Efficacy

Self-efficacy (Bandura, 1977) was discussed earlier in the chapter. In terms of the change process, high levels of self-efficacy are especially important in high-risk situations when individuals are confronted with the opportunity to relapse into old behaviors.

Decision-Making Ability

A final construct of the TTM is decision-making ability; the weighting of pros and cons, or consideration of risks and benefits. Janis and Mann (1977) theorized that individuals experience decisional conflicts and proposed responses that an individual might use to resolve decisional conflicts. Janis and Mann (1977) proposed that individuals weigh the benefits of the decision to self and others, approval of self and others to make the decision, costs of the decision to self and others, and disapproval of self and others in making the decision.

Application to Vulnerable Populations

Labeling individuals as nonadherent to treatment recommendations or nursing plans of care has the potential of threatening the therapeutic relationship, especially among individuals who may be vulnerable based on age, gender, race, ethnicity, sexual orientation, or socioeconomic status. Using active listening, nurses can assess a patient's readiness for change using the TTM as a guide. Careful consideration of a patient's sociocultural needs is warranted. A patient might be amenable and ready to change; however, family issues, finances, cultural or environmental factors could have an impact on an individual's ability to move through the change process. Designing nursing interventions based on a patient's stage of change is important, especially if barriers to the change process are identified and managed in the treatment plan.

Research Example

Fahrenwald and Shangreaux (2006) examined the relationship between the TTM stages and physical activity behavior among a group of 30 American Indian mothers attending

a Women, Infants, and Children (WIC) program on a South Dakota Indian reservation. Fahrenwald and Shangreaux noted that low-income American Indian mothers in South Dakota are at an increased risk of leading sedentary lifestyles. A descriptive correlational research design was used. The participants completed five instruments including: a 7-day activity recall (Blair et al., 1985), stage of exercise adoption tool (Marcus, Rakowski, & Rossi, 1992), Pros and Cons of Exercise tool (Marcus, Rakowski et al., 1992), Self-Efficacy for Exercise scale (Marcus, Selby, Niaura, & Rossi, 1992), and Processes for Exercise Adoption tool (Marcus, Selby et al., 1992).

Fahrenwald and Shangreaux (2006) found that increased physical activity and increased self-efficacy correlated significantly with advancing stage of change. For example, a woman who was categorized within the action phase was meeting the minimum weekly standard for moderate physical activity and reported a high level of self-efficacy. The processes of change followed the pathway proposed by the TTM, and women who were categorized in earlier stages reported significantly lower pros and decisional balance (Fahrenwald & Shangreaux, 2006). The results of the study have implications in the design of interventions specific to a population of low-income mothers residing on an Indian reservation in South Dakota.

Practice Application

Jeremiah is a student at a state university. He makes an appointment at the student health center on campus because he has gained 30 pounds since starting at the university, and is scared about developing health problems associated with being overweight. The nurse working at the student health center assesses Jeremiah; his body mass index is 32, putting him in the category of obese. Jeremiah expresses his desire to begin a reduced calorie diet and exercise program within the next 2 weeks. The nurse assesses that Jeremiah is in the preparation stage of the TTM. Using two processes of change, social liberation and self-reevaluation, the nurse and Jeremiah discuss opportunities on the college campus to make his change easier, and how Jeremiah sees himself currently being overweight and after he loses weight. Jeremiah identifies that the school track is in walking distance from his dorm, and the dining hall offers a salad bar where he can make a side salad instead of eating French fries with his meals. Jeremiah tells the nurse that he sees himself becoming more confident without his weight problem. The nurse plans to see Jeremiah in 2 weeks at the health center to assess where he is with the change process.

SOCIAL MIDDLE-RANGE THEORIES

Social middle-range concepts and theories address the structure and interactions of social support systems within relationships. Social support systems can include family members,

significant others, friends, and community groups. A middle-range theory of social support is discussed in this section.

Social Support

An individual's social network can impact their health status and health outcomes. The term social support was coined by Cassel (1974), who theorized that supportive persons might play a role in improving an individual's health status and helping an individual cope with stressors. Bowlby's (1971) attachment theory, which addressed an individual's ability to form and maintain socially supportive relationships, served as a basis for contemporary theories of social support. Bowlby maintained that if an individual experienced secure attachments in childhood this would translate into an ability to engage in well-adjusted adult social relationships.

Finfgeld-Connett's (2005) conceptual model of social support was selected for this section. Finfgeld-Connett's conceptual model is based on a concept analysis of social support which included four key aspects: (1) emotional support, or comforting behaviors that one person provides to another person in order to alleviate anxiety, uncertainty, or hopelessness; (2) instrumental support, when one person provides tangible goods or services to assist another person; (3) structural support, the involvement of a network of support persons including relatives, friends, coworkers, and community support groups; and (4) functional support, the provision of assistive information.

Application to Vulnerable Populations

When caring for vulnerable populations, it is important for nurses to identify social networks and support systems that are, or may be, influential in improving an individual's health status and health outcomes. Assessment of supportive individuals or groups includes the strength of the relationships and resources available. Of equal importance is identification of individuals or groups who may serve to threaten an individual's health status or health outcomes; minimizing or avoiding the inclusion of unsupportive individuals or groups in the nursing plan of care may help to overcome barriers that threaten the health of vulnerable populations.

Research Example

Sjolander and Ahlstrom (2012) explored the meaning of social support by interviewing 17 family members of persons newly diagnosed with advanced-stage lung or gastrointestinal cancer in Sweden. Using content analysis, the researchers sought to validate Finfgeld-Connett's (2005) conceptual model of social support. Sjolander and Ahlstrom found that the primary attribute of social support was the theme of confirmation through togetherness, which incorporated two of Finfgeld-Connett's aspects of social support: emotional

support (e.g., encouragement) and functional support (e.g., information from the spiritual community). Sjolander and Ahlstrom noted three additional subthemes as antecedents to social support including the need for support, the desire to establish deeper relationships with relatives/family, and identification of a social network to turn to. The findings of this study can be useful for nurses to help families identify critical support persons within their social networks that can provide emotional support and information.

Practice Application

Chad has been experiencing intimate partner violence for the last 2 years. His boyfriend, Phillip, has been verbally and physically abusive towards Chad. Chad has sought assistance from a local shelter in order to remove himself from the abusive situation. The nurse at the local shelter helps Chad to identify sources of social support. Chad tells the nurse that he has a tenuous relationship with his parents. He identifies two friends that can provide comforting words to him (emotional support). One of his friends has offered to drive Chad to and from his job as a store manager at a local coffeehouse (instrumental support). Chad identifies additional coworkers that will be supportive and protective of Chad's safety at work as he transitions away from his relationship with Phillip (structural support). Finally, Chad identifies functional support systems, including a local community support group for persons who have experienced intimate partner violence.

INTEGRATIVE MIDDLE-RANGE CONCEPTS AND THEORIES

Integrative middle-range concepts and theories incorporate multiple perspectives. Integration may include individual-level, social, community, or societal factors. The concepts or middle-range theories of health-related quality of life, health promotion, resilience, and chronic care will be discussed in this section.

Health-Related Quality of Life

Historically, scholars have had difficulty defining the concept of quality of life because multiple definitions of the concept exist (Sandau, Bredow, & Peterson, 2013). Despite multiple definitions of the concept, quality of life has been broadly defined as satisfaction with life, and has three primary aspects: assessment of well-being, broad domains (e.g., physical, psychological, economic, spiritual, social), and the definition includes components of each domain (Spiker, 1996). Health-related quality of life (HRQOL) shares the central aspects of quality of life, and has been characterized as multidimensional, temporal, and subjective (Sandau et al., 2013).

Wilson and Cleary's (1995) conceptual model of HRQOL will be discussed. Wilson and Cleary proposed that HRQOL comprises five dimensions that exist across a biologically, socially, and psychologically complex continuum. The five dimensions include:

(1) biological factors, (2) symptoms experienced, (3) functional status, (4) general perceptions of health status, and (5) overall quality of life. Wilson and Cleary proposed that individual characteristics, psychological support, social support, economic support, individual value/preferences, personality/motivation, and environmental factors have an impact on the five dimensions, and on quality of life overall.

Application to Vulnerable Populations

Vulnerable populations have unique sociocultural needs that impact HRQOL. Biological factors, including racial or ethnic disparities in disease prevalence, and lack of access to health services put individuals at risk for poorer health outcomes and lower levels of HRQOL (Institute of Medicine , 2003). As Wilson and Cleary (2005) proposed, the dimensions of HRQOL exist across a continuum; environmental, social, and economic issues experienced by the vulnerable have an impact on HRQOL. HRQOL is subjective, thus individual perception of health status can have an impact on the experience of disease symptoms and life satisfaction.

Research Example

Ozanne, Strang, and Persson (2011) examined HRQOL among patients diagnosed with amyotrophic lateral sclerosis (ALS) and their primary caregivers. Ozanne and colleagues noted that HRQOL for the individual diagnosed with ALS, and for the caregiver can be impacted during the long-term trajectory of the disease. Thirty five pairs (patients and caregivers) were recruited for the study. Ozanne et al. used a descriptive design. The dyads completed two instruments: the SF-36 (measures dimensions of HRQOL) and the Hospital Anxiety and Depression Scale (a self-assessment scale for anxiety and depression). The patients and their caregivers reported higher levels of depression and anxiety than the general population in Sweden. Ozanne and colleagues found that there was a positive correlation between the patients' and caregivers' levels of anxiety. Ozanne et al. concluded that an important nursing role is to address mental health needs of both patients with ALS and their caregivers.

Practice Application

Amelia, an 18-year-old woman, has recently been diagnosed with anorexia nervosa. Her current weight is 89 pounds and she is 5'4" tall. Amelia has entered an inpatient eating disorder treatment facility. She has begun counseling with a psychiatric-mental health clinical nurse specialist. Amelia shares that the eating disorder has impacted her quality life in the areas of overall life satisfaction, body satisfaction, and has impaired her physical functioning. She perceives her health status to be poor and fears that the eating disorder "will kill her soon." The clinical nurse specialist incorporates several dimensions of HRQOL into

Amelia's treatment plan including symptom management, assessment of personality and motivation, identification of psychological and social support systems, and economic support for Amelia's continued recovery after she leaves the inpatient program.

HEALTH PROMOTION

Health promotion integrates several concepts and constructs including self-efficacy, social support, and change. Health has come to be defined as more than the absence of disease; Pender, Murdaugh, and Parsons (2010) define health as an individual's drive toward achieving their fullest potential, which includes times of wellness and illness. Pender and colleagues' definition of health encompasses an individual's lifestyle, social relationships, and environmental factors.

The Health Promotion Model (HPM) (Pender, 1996; Pender et al., 2010) is a framework for delivering nursing care to support health promotion behaviors. The HPM was originally developed to target individuals; however the framework can be used to target families, groups, or communities. The HPM comprises three primary areas that nurses can use to assess health promotion behaviors: (1) personal characteristics and experiences, (2) behaviors-specific cognition and affect, and (3) behavioral outcome (Pender, 1996; Pender et al., 2010).

Personal characteristics and experiences include prior behavior and personal factors (e.g., biological, sociocultural) (Pender, 1996; Pender et al., 2010). Behavior-specific cognitions include perception of benefits/barriers to action, perception of self-efficacy, and movement (affect) toward actively engaging in health promotion behaviors (Pender, 1996; Pender et al., 2010). Interpersonal influences (e.g., social support) and situational/environmental influences are proposed to have an effect on cognition and activity-related movement. Finally, the HPM incorporates elements of the change process including commitment to a plan of action and acknowledgement of competing demands (Pender, 1996; Pender et al., 2010). The final outcome is engagement in health promotion behaviors.

Application to Vulnerable Populations

Health promotion, especially preventive care, is essential for ethnic minority groups and the economically disadvantaged—groups who often lack access to safe, effective, timely, equitable, and patient-centered care (Agency for Healthcare Research and Quality, 2008; Richardson & Norris, 2010). Understanding personal factors (e.g., lack of finances to afford health insurance), and an individual's perception of the benefits and barriers of engaging in health promotion behaviors is an important component of a nursing assessment. When working with vulnerable populations, screening recommendations and health promotion practices can be tailored to the patient's and family's cultural values and beliefs, finances, and access to support within the community.

Research Example

Attentional barriers to health promotion among community dwelling elders were examined by Stark, Chase, and DeYoung (2010). Attentional barriers were defined as: (1) physical/environmental (e.g., stairs), (2) informational (e.g. hearing changes), (3) behavioral (e.g., vulnerability related to mobility changes), and (4) affective (worries). Stark and colleagues recruited 141 community dwelling elders from senior centers and churches. The participants completed two questionnaires; one questionnaire on health promotion behaviors (e.g., nutrition, physical activity, stress relief, spiritual resources) and one questionnaire on attentional demands. Stark et al. found that elders who reported increased attentional demands participated in fewer health-promoting behaviors. Nurses can include attentional demands in an assessment and tailor interventions to promote access to health promotion activities for elderly populations.

Practice Application

A community health nurse, who is a faculty member at a school of nursing, partners with an activities director at an apartment complex for economically disadvantaged families. The apartment activities director is concerned with the number of renters (adults and children) who are overweight or obese. The activities director wants to work with the nursing faculty member to establish a weekly family-oriented physical activity session at the apartment complex. The nurse understands that engagement in health promotion activities starts with understanding the families' past experience with physical activity, cultural values related to physical activity, perceived benefits and barriers to participating in the sessions, and commitment to a plan of action. The apartment complex is a tight-knit community of Hispanic families who interact socially on regular basis. Prior to planning the sessions, the nurse hosts two family dinner meetings to discuss the aforementioned issues so that the physical activity sessions can be tailored to the families, thereby increasing the likelihood that families will participate.

RESILIENCE

Vulnerable populations face varying types of adversity including, but not limited to, chronic health conditions. Positive adjustment to adverse life experiences is termed resilience (Haase & Peterson, 2013). Haase and Peterson state that understanding resilience helps nurses to improve health outcomes, especially among at-risk populations.

Resilience has been defined as a dynamic concept occurring as a personal quality enabling success, a process, and/or an intrinsic force that exists within individuals or groups (Richardson, 2002). Ahern's (2006) concept analysis of resilience will be used to describe key attributes of the concept. Ahern studied a population of adolescents;

however, the attributes of resilience Ahern proposed can be used to guide nursing interventions for populations across the lifespan.

Ahern (2006) defined the concept of resilience as a process that an individual undertakes to adapt to adversity or risk by using personal characteristics, family and social support, and community resources. In this context, Ahern defined risks as being either internal or external to the individual. Ahern identified several attributes including individual protective factors (e.g., competence, coping ability, sense of humor, connectedness, and health risk knowledge) and sociocultural protective factors (e.g., family connectedness and availability of community resources). Several of the attributes, including competence, are subjective perceptions of abilities in dealing with adversity; the degree of adversity is also subjective and unique to the individual.

Application to Vulnerable Populations

Internal (e.g., chronic disease) and external (e.g., physical abuse) risks experienced by vulnerable populations vary in degree and severity. Although adversity can be defined broadly, it is important for nurses to thoroughly assess an individual or family's knowledge of the health risk, perception of personal/family competency, coping mechanisms, sense of humor, social support networks, and resources available in the individual or family's community. Interventions can be designed to incorporate an individual or family's key strengths and to access resources in the community that best enable the individual or family to overcome adversity.

Research Example

Kornhaber (2011) explored Australian burn nurses' abilities to build resilience as a strategy for dealing with the exhaustion and distress of caring for patients who have experienced traumatic and disfiguring burns. Seven burn nurses were recruited for the study. Kornhaber conducted a qualitative phenomenological study using semistructured interviews to explore nurses' lived experiences in caring for severely burned patients. Kornhaber noted several themes about building resilience including: toughening up, emotional toughness, coping with challenges, regrouping, and emotional detachment. The findings of Kornhaber's study have implications for nurse managers in the areas of staff orientation and continuing staff education.

Practice Application

A nurse working in a public high school is planning interventions to address a recent act of violence on the high school campus. The nurse wants to engage the adolescents and their families in an intervention to promote personal and family competence in coping with the traumatic event. The nurse plans a series of support groups/debriefing sessions

for the adolescents alone, parents alone, and for families to encourage verbalization of fears and concerns within a supportive environment. The debriefing sessions will also be used for the adolescents and their parents to make plans for how to continue to ensure safety on the campus using resources within the community.

CHRONIC CARE

The chronic care model (CCM) is a population-based model that outlines a planned approach to chronic disease care delivery. The goal of the CCM is to provide high quality, comprehensive care that helps to improve chronic disease management, mitigate complications of chronic diseases, and improve health outcomes at the population level (Coleman, Austin, Brach, & Wagner, 2009). In the CCM, chronic conditions are defined as any condition that requires ongoing adjustments by the affected individual or family and continuing interaction with the healthcare system (Coleman et al., 2009).

The CCM has two major dimensions: community and health systems (Coleman et al., 2009). Within the two major dimensions there are subdimensions including self-management support, delivery system design, decision support, and clinical information systems. Self-management support, a subdimension of community, helps to empower individuals and families to take charge of disease management through goal-setting, planning, problem-solving, and follow-up. The goal of delivery system design is to deliver efficient, effective, evidence-based and culturally competent clinical and self-management care, including regular follow-up with the care team. Decision support helps to ensure that clinical care is based on patient and family preferences and values, in addition to evidence-based practice. Finally, clinical information systems help to organize patient data in order to achieve effective, individualized care planning, including open communication among the stakeholders (e.g., patient, family, providers) and timely reminders for follow-up care.

Application to Vulnerable Populations

The CCM is the only population-focused model presented in this chapter. Providers working in a community setting can use the elements of this model to design delivery systems within their practices that help to ensure patients and families receive care that supports self-management of chronic disease. For vulnerable populations, the assurance of timely, continued follow-up care is critical. Transportation issues, lack of ability to communicate with patients and families outside of office visits (e.g., lack of a phone), and language barriers can impede effective care delivery. Designing clinical information systems that address vulnerable populations' barriers to follow-up care is important. Open communication, using the primary language preference of the patient and family, and decision support incorporating a patient's and family's values may strengthen self-management of chronic disease.

Research Example

Adams et al. (2007) conducted a systematic review of the implementation of the CCM in the prevention and management of chronic obstructive pulmonary disease (COPD) among adults. Adams and colleagues identified 32 research studies in the literature that examined the use of the CCM in preventing or treating COPD. Adams et al. found that researchers who reported using two or more CCM elements noted lower rates of hospitalizations for COPD exacerbations, fewer emergency room or unscheduled office visits, and shorter lengths of hospital stays for patients who were readmitted to the hospital for a COPD exacerbation.

Practice Application

A family nurse practitioner (FNP) who runs a community clinic serving uninsured adults is concerned about the number of patients with type 2 diabetes who cancel their follow-up appointments. He determines that transportation issues, financial issues, and language barriers are three most common obstacles to follow-up care. The FNP uses the CCM to institute the following changes: (1) incorporation of goal-setting and problem-solving during office visits (self-management support), (2) assurance of the presence of an interpreter during office visits and routine use of prescription assistance plans to enable patients/families to afford medications (delivery system design and decision support), (3) partnering with a local charitable agency who will provide bus vouchers for patients (clinical information systems), and (4) reminder phone calls the day before the appointments (clinical information systems).

CONCLUSION

Eight middle-range concepts and theories were presented in this chapter. Key concepts and relevant studies are summarized in Appendix 7.1 at the end of this chapter. The middle-range concepts and theories were contextualized for the care of vulnerable populations. Examples of the use in research and clinical practice were given for each concept or model.

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APPENDIX 7.1

Summary Table

Concept/Theory	Authors	Topic	Notes
Self-Efficacy	Walker, Pullen, Hertzog, Boeckner, & Hageman (2006)	Impact of perceived self-efficacy on healthy eating among rural Midwestern women	A clinical trial of 179 women was conducted; greater self-efficacy predicted higher intake of fruits, vegetables, and whole grains, and lower fat intake.
Adherence	Nokes et al. (2012)	Increasing treatment self-efficacy to improve adherence to antiretroviral medications	Descriptive survey study of 1,414 United States adults diagnosed with human immunodeficiency virus on antiretroviral treatment; self-efficacy was a strong predictor of adherence to antiretroviral medications.
Change	Ohlendorf (2012)	Stages of change and postpartum weight management among adult postpartum women in the Midwest United States	Descriptive survey study of 191 adult postpartum women; 80% of the women reported higher stages of change (action or maintenance phases) 8 weeks after birth than in the immediate postpartum period.
Social Support	Lee (2010)	Social support as a predictor of adjustment to skilled nursing facilities among elderly residents in South Korean skilled nursing facilities	Descriptive cross-sectional study of 156 skilled nursing facility residents; successful adjustment to nursing home life was predicted by emotional support from staff and fellow residents.

Concept/Theory	Authors	Topic	Notes
Health-Related Quality of Life (HRQOL)	Sut, Kaplan, Sut, & Tekbas (2012)	The effect of overactive bladder on HRQOL among Turkish women	Descriptive, cross-sectional study of 280 pre- and post-menopausal women; women with overactive bladder reported significantly lower levels of HRQOL in the domains of coping, concern, sleep, and social than women without overactive bladder.
Health Promotion	Rosario et al. (2013)	Impact of an elementary school-based intervention on the consumption of low nutrition, energy-dense foods and beverages among 6–12 year old children	Randomized controlled trial of 464 children aged 6–12 years from seven Portuguese elementary schools; children in the intervention group who received a 6-month program based on the Health Promotion Model reported a reduced consumption of low nutrition, energy-dense foods compared to the control group.
Resilience	Im & Kim (2011)	Identification of factors associated with resilience among 7–15-year-old children diagnosed with atopic dermatitis	Descriptive survey of 102 children and their parents; children who reported higher levels of resilience reported shorter illness duration, lower symptom severity, and better relationships with parents, teachers, and friends.

Concept/Theory	Authors	Topic	Notes
Chronic Care	Nutting et al. (2007)	Association of using the chronic care model with diabetes outcomes among 30 United States small primary care practices	Descriptive survey of 90 primary care providers; providers that used elements of the chronic care model reported lower patient glucose values and lower ratios of total cholesterol to high-density lipoprotein cholesterol.