Health Promotion Model: A Critique

Focusing on Use in Advanced Nursing Practice

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The majority of health problems today stem from chronic illnesses instead of infectious diseases (McCullagh, 2013). This shift has caused changes in care approaches, with less focus on curing disease and more on chronic illness prevention. One promising approach towards the prevention of chronic illness is health promotion. Health promotion is defined by the Ottawa Charter for Health Promotion as "a process enabling people to increase control over and improve their health" (World Health Organization, 1986, p. 1). Health promotion enhances health and prevents chronic illness via the changing of lifestyle choices such as diet and exercise (among others) (McCullagh). Since many chronic illnesses are preventable with these simple changes in routine, public policy officials and health care providers alike have begun to understand the importance of health promotion for both individuals as well as society as a whole. McCullagh identifies the individual benefits of health promotion as prevention of disease and overall feelings of wellness. She also recognizes the possible benefits to society, which include decreases in social problems (violence, suicide and sexually transmitted diseases), increases in interpersonal harmony, and decreases in healthcare costs. These benefits of health promotion help increase the quality and longevity of life, which are major interests of nursing (McCullagh).

Nurses, especially advanced practice nurses (APNs), hold roles in society that are conducive for the promotion of health (McCullagh, 2013). Nurses continue to be the most trusted individuals in our workforce (American Nurses Association, 2013). This trust becomes very important during patient education; patients are receptive because they believe in and are accustomed to these care professionals (McCullagh). Family nurse practitioners (FNP) are a part of the APN discipline and have become one of the first-line primary health care providers in the

health system today. Their role includes not only that of the primary care provider, but also that of a trusted nursing professional and advocator for well-being. This relationship allows for the building of a rapport between the FNP and client, an opportunity that other care providers oftentimes do not get. FNPs can influence their clients before they reach a point of hospitalization by promoting and maintain a positive climate for change (Pender, Murdaugh & Parsons, 2010). However, to accomplish this, APNs need to understand the influencing health behaviors of their clients.

The Health Promotion Model (HPM) (Pender et al., 2010) gives practitioners the knowledge base to decipher the nature of their clients as they interact with their social and physical environments while in pursuit of health. This paper focuses on critiquing the most recent version of Pender's Health Promotion Model (sixth edition) using Whall's (2005) criteria for middle-range theories. This theory is considered a middle-range theory because it is not as abstract as grand nursing theories, yet it is still broad enough to "facilitate general application" (Whall, p. 13). However, it can also be applied to individual practice and thus is operationalizable (Whall). This evaluation will identify the basic considerations, internal analysis, and external analysis of the theory while addressing course themes of culture, ethnicity, and public policy. The goal of this evaluation is to inspire debates regarding the theory allowing for further discussion and revision so that providers can apply the most recent and accurate knowledge to their practice.

Basic Considerations

Whall (2005) identifies the basic considerations of a middle range theory as the definition and importance of the major concepts of the theory. This section also includes taking a look at the major theoretical statements and propositions and their relative importance.

Definitions and Major Concepts

The major concepts identified in the HPM include health and health promotion. Pender et al. (2010) defines health in a broader perspective, emphasizing that individual health depends on the health of one's family, community, nation, and world. Simply put, if society or a population is unhealthy, so is the individual. Therefore, a healthy individual is one who can adapt to the environment. Older definitions of health focus on disease, with health being defined as a disease free state (Wylie, 1970). While Pender et al. maintain that health includes disease in some capacity, this is not the defining factor of health. Health is holistic, and includes cultural lifestyles, strengths, weaknesses, potentials and capabilities. For FNPs, this definition offers a broad view of health that allows the provider to encompass all facets of their patient's life including for example an individual from a different ethnicity or socioeconomic background.

Health promotion is defined as the "art and science of helping people make lifestyle changes [that are] conducive to health" (Pender et al., 2010, p. 29). In practice, health promotion and primary prevention oftentimes overlap and thus can be confused (McCullagh, 2013). For example, exercise may prevent cardiovascular problems (primary prevention), and at the same time make the person feel more energetic (health promotion) (McCullagh). Pender et al. do not point out the potential for mix-up with these concepts, although they do mention that the two go hand-in-hand. They identify health promotion as an action that contributes to health whereas primary prevention is the avoidance of disease or illness. These concepts are important as the overall goal of the HPM is not prevention, but the pursuit of health (Pender et al.).

Theoretical Statements

The HPM is based on two human behavior theories. The first theory is called the expectancy-value theory (Fishbein & Ajzen, 1975). This theory recognizes that when a goal is of value to an

individual, the person is more likely to work towards that goal (Fishbein & Ajzen). Pender et al. (2010) states, "If positive consequences result, the probability is high that the behavior will occur again." (p. 55). This means that if individuals see positive results from health promotion, they will "buy" into it, changing their lifestyle in the process. This is one statement that helps differentiate the HPM from other similar theories such as the Health Belief Model (HBM), which was developed by Rosenstock and a group of psychologists in the 1950s (Rosenstock, 1960). The HBM includes fear as a source of motivation, which holds some merit in the immediate future as a source of motivation, but overtime loses strength (Pender et al.). Pender et al.'s HPM however, prefers to avoid threat as a major source of motivation.

Bandura's (1986) social-cognitive theory is the second theory on which the HPM is based. Pender et al. (2010) states, "Prior behavior is proposed to indirectly influence health-promoting behavior through perceptions of self-efficacy, benefits, barriers, and activity-related affect" (p. 46). This statement is congruent with the social-cognitive theory, which identifies that these four factors influence prior behavior and are indicative of future behavior. These four constructs are also the basis for many of the theoretical propositions identified by Pender et al. The researchers identify that personal factors such as age or socioeconomic status have an influence on health behaviors. These can oftentimes be perceived as barriers, which directly affect an individual causing the potential for a blocking of health promoting behavior. However, these barriers can be overcome by committing to a plan of action. As long as competing demands are avoided, an individual can remain on a path that promotes health (Pender, Murdaugh & Parsons, 2002). Pender et al. (2010) consider the four constructs stated above as part of the basis for their model. They fall under the "behavior-specific cognitions and affect" stage (see Appendix for the complete, revised HPM framework).

Internal Analysis and Evaluation

The internal analysis and evaluation of a middle range theory falls into four categories: assumptions and their relationship to philosophy of science positions, relations of statements, internal consistency and congruency, and empirical adequacy of the theory (Whall, 2005). The following section analyzes and evaluates Pender et al.'s HPM from an internal perspective.

Assumptions and Relationship to Philosophy of Science Positions

A theory's assumptions are those that are "assumed to exist as a basis for the theory" (Whall, 2005, p. 15). The HPM has several assumptions. With regards to individuals on the receiving end of health promotion, the theory assumes that people have self-awareness, which gives them knowledge of their capabilities and limits (Pender, 2011). The HPM also assumes that individuals have control over their own behaviors. Finally, it assumes that people are striving for positive growth. When considering health care providers who are applying the HPM in practice, the theory assumes that the interaction between health care providers and patients is necessary to change behavior. The theory also assumes that individuals have interactions with these healthcare providers throughout their lives (Pender).

When considering the HPM's relationship to the philosophy of science on an application level, some may argue that the HPM has questionable positions within the philosophy of science. Philosophy of science is represented by many different concepts. One example is epistemology, which asks questions as to how a phenomenon is known and how humans evaluate these claims (Godfrey-Smith, 2003). The HPM, like most health promotion theories, evaluates its claims using a research process that engages those who are the users of the research (Mantoura & Potvin, 2012). Mantoura and Potvin call this form of research participatory research and consider it a "fragile posture on which to position research practice" (p. 1). They argue that since health

promotion research is focused around social practices, people are compelled to participate from an epistemological standpoint thus causing an overlapping between knowledge production and the "performance of reality" (Mantoura & Potvin).

When considering where the HPM fits within nursing science as a whole, a neomodernistic perspective can be argued. Neomodernism is identified as the advancing of ideals set forth by the combination of positivism and postmodernism (Whall, 2005). The neomodernistic paradigm considers both an individual's uniqueness (for example how one's culture may view smoking as a standard way of life) as well as universal principles (for example how the quitting of smoking can prolong one's life) (Reed, 2006). This represents a holistic approach that also emphasizes differences between each individual. Pender et al. incorporate this same neomodernistic viewpoint in their model through the way they indicate the need to understand the individual's characteristics and then apply this knowledge in a holistic manner. This linkage between the HPM and neomodernism is important because many theorists believe that neomodernism represents the current paradigm of nursing (Whall & Hicks, 2002).

Interrelation of Statements

The concepts in the HPM are interrelated. The model is clearly organized in a style that can be understood by both researchers and practitioners who apply the model in their practice. Pender et al. (2010) have created a schematic description (see Appendix) illustrating the key statements and their relations to one another. As stated above though, there is potential for confusion regarding the difference between health promotion and primary prevention. However, there is currently not any data regarding the effects of these competing motivations and thus any loss of information has yet to be seen (Kerr, 2013).

Internal Consistency and congruency

Whall (2005) states that middle range theories generally do not have a problem with internal consistency, which is identified as the use of constant definitions throughout the model. This holds true with the HPM as the researchers do an excellent job of identifying the end goal of the model (health-promoting behavior) and then keeping consistent terms throughout the theory so that uses of it do not get lost during its application. In general, the terms are universally understood and those that are not are defined appropriately.

Empirical Adequacy and Application in Practice and Research

The final category of the internal analysis and evaluation of a middle range theory identified by Whall (2005) is the empirical adequacy of the theory. Whall describes this as the ability to operationalize and measure the different aspects of the theory. This section also examines how the theory has been applied in practice and research. The empirical adequacy of the HPM should be considered both from an individual standpoint as well as a group (community or population) point of view due to its importance at both of these levels.

When considering the application of the HPM from an individual's standpoint, the theory's different aspects can all be measured. A recent study by Kerr, Savik, Monsen and Lusk (2007) used computer-assisted approaches to aid nurses in health promotion assessments identified in the HPM. The study found that technology could assist in the accurate measuring of the model-based variables and then assist with the tailoring of interventions keeping these assessments in mind (Kerr, et al.). However, when considering communities or populations (groups), there is a possible gap. Throughout the model, Pender et al. (2010) only focus on the *individual's* biological (genetics), psychological (social), and socioculture (ethnicity) factors. The reoccurring theme in the theory's description is the 'individual' thus leaving little room for application to groups of people. It would be difficult to operationalize aspects of the theory from

a group standpoint. Even though Pender et al. recognize the need for health promotion interventions geared toward society, the theory would need to work in collaboration with other models to achieve this goal.

With regards to application, the HPM has been extensively tested and applied in practice. Pender et al. (2010) identify multiple studies that test the predictability of the HPM. For example, Ronis, Hong, and Lusk (2006) identify that the revised model of the HPM has a 28% variance versus the original's 18% in a study focusing on construction workers and hearing loss. Ronis et al. suggest that the revised structure is better supported in practice and that in general the HPM is a strong predictor of the influence that the intervention in the study had on the use of hearing protection in construction workers. Another example of the HPM's application in practice is identified by Alkhalaieh, Bani-Khaled, Baker and Bond's (2011) integrative review. Alkhalaieh et al. claim their review "proves" that the HPM framework is a beginning to the understanding of the aspects that influence health behavior initiation in practice.

When focusing on the HPM in research, however, there have been few theoretical approaches for testing interventions thus indicating some potential gaps. Without the creation of these theoretically-based interventions, further changes cannot be made to the model. Another continuing problem that has been seen across revisions is the lack of testing of the model in its entirety. Instead, many researchers focus on testing one or two behavior-specific cognitions (see Appendix). However without further testing of the entire model, the empirical adequacy of certain aspects of the HPM will remain in question.

External Analysis and Evaluation

The external analysis and evaluation of a middle range theory falls into three categories: congruency with related theories, the congruency within the perspective of nursing, and the

ethical, cultural, and social policy issues related to the theory (Whall, 2005). The following section analyzes and evaluates the HPM from an external perspective.

Congruency with Related Theories

The HPM is congruent with other health promoting theories both internal and external to nursing. Nurses help their patients to improve health, increase their quality of life, and boost their functional ability with the guidance of the HPM (McCullagh, 2013). An example of a theory that is congruent within nursing is Orem's Self-Care Theory (1985). Like the HPM, Orem's theory is built on constructs that revolve around an individual's uniqueness as well as their self-efficacy (self-care construct). The theory also identifies that individuals must overcome barriers (self-care deficits) to reach a health promoting behavior outcome. Finally, it recognizes the importance of nurses in this process (nursing systems). This theory is widely tested and three scales have been designed off of it that measure self-care agency (Orem, 1985). Therefore, despite its similarities to the HPM, this theory may be more appropriate when assessing one's self care agency, which is the belief that one can engage in self-care (Orem).

A theory that is external to nursing but is still congruent with the HPM is the HBM. The HBM is a behavioral change theory that is one of the earliest to consider health promotion. It focuses on why some people take action to prevent illness while others do not (Rosenstock, 1960). Rosenstock's HBM theory suggests that a combination of two reasons would convince individuals to take action: (1) some type of perceived threat and (2) the benefits outweighing the perceived barriers. Although the HPM does not consider threat as a motivating factor, it identifies the perceived benefits and barriers of an action as a major construct, much like HBM. While the HPM and HBM are similar in many ways, researchers will argue that one downfall of the HBM is its lack of recognition of subconscious choice, which is something that the HPM

recognizes throughout the model (Pender et al., 2010). Therefore, the HPM may be a better fit for practice and research today due to the importance of subconscious choice on behavior.

Congruency within the Perspective of Nursing

The HPM is congruent within the domain of nursing, especially within the FNP discipline. The American Nurses' Association (2004) identifies that FNPs "perform comprehensive assessments and promote health and the prevention of illness and injury" (p. 16). This public policy statement is congruent with the HPM because both have fundamental goals of health promotion. Using the HPM, FNPs can assess their clients and determine the specific behavior cognitions that need to be altered to achieve a health promoting behavior. The FNP can then implement behavior-specific- interventions developed by Pender at al., as well as other researchers to promote health in their clients.

Ethical, Cultural, and Social Policy Issues

The HPM has been utilized in a variety of situations including schools and workplaces as well as occupational and public health settings (McCullagh, 2013). This has introduced the theory to a diverse set of individuals as far as age and gender. However, the HPM has limits involving cultural diversity as past studies have only introduced the theory to limited populations (Korean and Japanese people) (Pender et al., 2010). Therefore, potential cultural issues still need to be explored. Ethically, the HPM follows standard behavioral change principles that encourage equity in all phases of change. The HPM allows the client to take charge in their lives to promote health. This approach is considered ethical and nonmanipulative (Pender et al.). Finally, the HPM touches base on the continuing social policy issue of preventing illness. Despite the criticism of the HPM, it remains an adequate middle range theory that can help guide the nursing discipline towards the promotion of health while combating preventable diseases.

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Individual Behavior-Specific Behavioral Characteristics Cognitions Outcome and Experiences and Affect Perceived benefits of action Perceived barriers to action Immediate competing Prior demands related (low control) behavior and preferences Perceived (high control) self-efficacy Activity-related affect Personal factors; Commitment Healthpromoting biological toa psychological Interpersonal plan of action behavior sociocultural influences (family, peers, providers); norms, support, models Situational influences; options demand characteristics aesthetics

Appendix
The Health Promotion Model

Adapted from *Health Promotion in Nursing Practice* (6th ed.) (p. 45), by N. Pender, C.

Murdaugh, and M. Parsons, 2010, Upper Saddle River, New Jersey: Pearson.