

## Arab American Women's Health Promoting Behaviors: Applying Pender's Model

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### Abstract

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**Purpose:** To synthesize relevant literature concerning Arab American women's health, applying Pender's health-promotion model to facilitate a clearer understanding of their health needs, risks, and challenges. "Arab" is a linguistic and cultural term used to identify people who have the Arabic language as their mother tongue and a historically shared broad culture with diverse traditions. **Design:** the health-promotion model was employed as a framework to elucidate factors that might influence Arab American women's decisions to engage in healthy behaviors. The resulting conclusions about Arab American women's health-promotion behaviors might be applicable to other ethnic groups, particularly those who share similar life experiences. **Implications for practice:** this manuscript is anticipated to raise the awareness of healthcare professionals, especially community health nurses and health policymakers, regarding the needs of this population.

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**Keywords:** Arab American. Health-promotion behaviors. Health-promotion model. Women

### Introduction and Background

Health promotion is a focus of the public as well as healthcare professionals. One of the primary goals of *Healthy People 2020* is to create social and physical environments that promote good health for all (HealthyPeople.gov, 2013). Additionally, health promotion is one of the main functions of nursing: Nurses are committed to promoting the health of individuals, families, and communities through culturally competent services and programs. This manuscript provides a synthesis of the relevant theoretical and empirical literature about factors that might influence the decisions Arab American women (AAW) make in adopting health-promoting lifestyle behaviors. Factors are examined in the context of Pender's health-promotion model. The literature review was conducted using many search engines, including but not limited to (a) Pub Med, (b) Psych Info, (c) CINHALL, and (d) Google Scholar. The keywords used in the literature search were Arab Americans, self-efficacy, acculturation, stress, social support, and health promotion. Searches were limited to the English language and the information related to the Arab American demographics was found by searching via the Arab American Institute (AAI), the Arab Community Center for Economic and Social Services (ACCESS), and the U.S. Census Bureau.

### Arab American Women

The designation Arab Americans (Auras) indicates Americans of Arab descent, most of whom originated from Lebanon, Syria, and Palestine. There are also substantial communities from Egypt, Yemen, and Iraq (Arab American Institute [AAI], n.d.). Arabs migrated to the United States in waves, with the first immigrants arriving in the late 19th century. A second wave of immigration started after World War II and continues.

The total population of ArAs is more than 3.5 million, with 72% population growth occurring between 2000-2010. They live in all 50 states, with 94% concentrated in metropolitan areas. Los Angeles, Detroit, New York, Washington D.C., and Chicago are the top localities where ArAs are concentrated (AAI, n.d.).

According to the American-Arab Anti-Discrimination Committee (ADC), one of the largest national Arab American organizations, Arab is a linguistic and cultural term used to identify people who speak Arabic as their mother tongue and have a historically shared broad culture with diverse traditions. Meleis (1981) defined an Arab as a person who speaks the Arabic language and shares the values and beliefs of Arab culture. Arabs vary in their physical characteristics and religious background. The majority are Muslims; however, millions are Christians, and thousands are Jewish (ADC, 2013). Arabs live in 22 countries in the Middle East and North Africa.

### **Health Models and Theories**

Different theories and models explain the determinants of healthy behaviors. The health belief model (HBM) and protection motivation theory (PMT) play a role in altering health behaviors by motivating health-protective behaviors (Pender, 1996). Pender's HBM proposes that an individual's perception of a threat or the benefits of an action are the motivators to protect personal health. Similarly, the PMT motivates individuals to change health-damaging behaviors by focusing on a health threat or the fear of negative health consequences (Pender, 1996). Fishbein and Ajzen (1975) developed the theory of reasoned action and the theory of planned behavior. These theories explain the roles of beliefs and attitudes in shaping an individual's health behavior. Perceived self-efficacy is a central concept in Bandura's (year) Social Cognitive Theory (SCT) and is important in explaining and predicting health behavior. According to Bandura (1986), self-efficacy depends on an individual's judgment of his or her own ability to accomplish a certain level of performance by employing a specific health behavior.

Many other models that explain health behaviors—such as transtheoretical, ecological, and interaction models of client health behavior—have been developed but are beyond the scope of this work. This manuscript will focus on Pender's (1996) health promotion model (HPM). The HPM will be described, followed by a discussion of its application to research regarding Arab American Women's health-promotion behaviors.

### **Health Promotion Model**

Pender's revised HPM was employed to guide this review. Expectancy value theory and social cognitive theory are considered the model's foundation. Expectancy value theory proposes that individual engagement in a specific health-promotion behavior is related to the anticipated outcomes of that behavior. Reinforcement or avoidance of the behavior might occur because of the value placed on the expected outcome. Social cognitive theory (Bandura, 1986)—the perception of self-efficacy in one's ability to achieve healthy behavior—added another dimension. Pender's model incorporates an assumption that humans will engage in activities to maintain and promote health. The HPM consists of three main components: (a) individual characteristics and experiences, (b) behavior-specific cognition and affect, and (c) behavioral outcomes (Pender, Walker, Sechrist, & Stromberg, 1990). Each component will be addressed concerning its relevance to AAW. However, there is a lack of literature to support some of the model components in this group. Further research is needed to bridge the knowledge gap and facilitate a more profound understanding of this population's health behaviors.

### **Health Promotion Behaviors**

Health promotion was the focus of a World Health Organization (WHO) international conference in Ottawa in 1986. Based on the conference, the WHO defined health promotion as the "process of enabling people to increase control over, and to improve, their health" (WHO, 1986, p. 2). The conference also developed a health-promotion action plan that included five components: (a) building healthy public policy, (b) creating a supportive environment, (c) strengthening community action, (d) developing personal skills, and (e) reorienting health services (WHO, 1986). Subsequently, health promotion was defined as "behavior motivated by the desire to increase well-being and actualize human health potential" (Pender, Murdaugh, & Parsons, 2006, p. 7). In this definition, Pender and colleagues considered the individual's motivation as the foundation for achieving health and well-being.

Health-promotion behavior is the outcome identified by the HPM and includes different aspects of health behaviors. According to Pender (1996), health-promotion behaviors are directed toward attaining positive health outcomes in all aspects of living throughout the individual's lifespan. Health behaviors might include quality sleep, exercise, nutrition, avoidance of smoking, safe consumption of alcohol, and general safety.

### **Individual Characteristics and Experiences**

The first component of HPM addresses the characteristics and prior experiences of the individual that can influence health promotion decisions. This component includes the individual's experiences related to previous health behaviors and personal biological, psychological, and sociocultural factors. Prior-related behavior directly influences engaging in health behavior through habit formation. This engagement is also indirectly influenced through the behavior-specific cognitions and affect component of the model. Personal factors influence health promotion behavior either directly or through altering behavior-specific cognitions and affect (Pender, 1996).

#### **Prior Experiences**

Pender's model was used to examine how prior related behaviors of AAW in their home countries might directly influence their adoption of health-promotion behaviors (such as breast cancer screening, eating behaviors, physical exercise, and smoking) after immigrating to the United States. Through habit formation, prior related behaviors might influence the women's decisions to adopt new healthy behaviors. Some health-promotion behaviors of women in the Arab world will be discussed and compared to practices adopted by AAW.

Arab women's mammography screening behavior has not been thoroughly studied in the United States or the Arab world (Donnelly et al., 2013; Schwartz, Fakhouri, Bartoces, Mansur & Younis, 2008). Despite many shared cultural and religious practices among most Arab countries, specific factors might influence screening behavior in each country. Generally, there is a lack of centralized programs for mammogram screening in most Arab countries. Women in Arab countries who participated in screening were either aware of the procedure's benefits or received a provider referral (El-Saghir et al., 2007). Mammography screening is decreased among one-third of AAW who are uneducated, uninsured, and unmarried (Schwartz et al., 2008).

Kawar (2013) studied barriers to breast cancer screening (BCS) among 107 Jordanian and Palestinian women in the United States. Some women considered the lack of BCS a habit, and annual screening was not part of their cultural health practices. Other women devalued the importance of health and considered that annual screening would not make a difference. This is congruent with the HPM assumptions of the influence of prior related behaviors on an individual's decisions to adopt specific health behaviors.

In another study, structured interviews were conducted with 864 Lebanese pregnant women to assess their attitudes toward smoking. The women were somewhat knowledgeable of the consequences of this behavior. Lack of knowledge contributed to one-fourth of the participants smoking and having permissive attitudes toward all forms of smoking (Chaaya, Jabbouri, El-Roueiheb, & Chemaitelly, 2004). Similarly, 6% of undereducated and low-socioeconomic-status pregnant AAWs reported smoking during pregnancy (Kulwicki, Smiley, & Devine, 2007). Likewise, 8% of AAW in another study reported current smoking (Sarsour, Tong, Jaber, Talbi, & Julliard, 2010).

#### **Personal Characteristics**

Pender's (1996) revised model categorized personal characteristics into biological, physiological, and sociocultural aspects. Pender assumed that personal characteristics directly affect and predict the rest of the model concepts.

**Biological characteristics.** This component includes several factors such as age, gender, race, body mass index, and physical health status. Age is related negatively to perceived health status among older Arab Americans, but without significant differences between men and women (Sarsour et al., 2010). Despite the established evidence that people of higher socioeconomic status in the United States have lower mortality (Elo, 2009), AAWs with higher income and higher educational status have higher age-related mortality, with 1.4 years less life expectancy, than white non-Hispanic women. This discrepancy has been attributed to cultural practices that foster lower physical activity and less healthy diets (El-Sayed, Tracy, Scarborough, & Galea, 2011). However, Dallo, Schwartz, Ruterbusch, Booza, and Williams (2012) found AAW to have a lower mortality rate from heart disease, cancer, stroke, and diabetes compared to their White and Black counterparts. These findings may explain some of the factors that encourage AAW to stay inactive or not be actively involved in health promotion behaviors.

**Psychological characteristics.** Stress and perceived health status are other personal factors that might influence health behavior. Recently, studies have focused extensively on stress's physiologic and cognitive influence, but little is known about variations in stress perception among different cultural groups. Hattar-Pollara & Meleis (1995) studied immigration stress and the daily living experiences of American Jordanian women. Three themes emerged from the study as perceived sources of stress in this population: “the daily living of settling in, a quest for maintaining an ethnic identity, and the work attached to recreating familiarity with their new host country” (Hattar-Pollara & Meleis, 1995, p. 528). Learning English, dealing with children’s school issues, daily living skills, and challenging relationships with neighbors were sources of stress as well as motivators to successful resettlement. Stressors associated with living as an immigrant may amplify women’s health risks and influence health behaviors.

Perceived health status (PHS), or self-rated health, is measured in surveys by a single item asking participants to rate their health status on a scale from *poor* to *excellent* (Pender, Walker, Sechrist, & Frank-Stromborg, 1990). Perceived health status has been found to moderate the relationship between an individual’s critical thinking and participation in health-promotion behaviors (Settersten & Lauver, 2004). Abdulrahim and Baker (2009) examined the predictors of self-rated health among Arab Americans in Detroit. Immigration status and language preference were found to predict self-rated health. Arab immigrants who speak only Arabic and little or no English have poorer self-reported health status in comparison with their counterparts who speak English and were born in the United States.

**Sociocultural characteristics.** Ethnicity, acculturation, education, and socioeconomic status are sociocultural characteristics influencing AAW’s decisions regarding health-promotion behavior adoption. Most of the Arab world is Muslim; Yosef (2008) described Islam as a way of life guiding Muslims’ health practices through the Quran and Hadith (the sayings or actions of Muhammad or his companions, together with the tradition of its chain of transmission). Islamic tenets encourage Muslims to live healthy lives and refrain from unsafe health practices. However, modesty, gender preference, and personal interpretations of predestination may hinder Muslims’ health-promotion practices. Acculturation is a complex construct that embraces social and psychological aspects. It was defined by Berry (2005) as a “dual process of cultural and psychological change that takes place as a result of contact between two or more cultural groups and their individual members” (p. 698).

Generally, the traditional patriarchal role of Arab men in the family influences the process of immigration decision-making, which is mainly controlled by the men who seek jobs or study opportunities in the host country. Arab women usually join their husbands later due to financial difficulties and lengthy immigration processes. Arab women’s main intention in immigration is family reunification, with less focus on job or study opportunities. The traditional separation of family members’ roles after immigration leaves the woman to manage domestic life, while most of the tasks that require societal contact are left to the man.

Language proficiency and length of stay in the host country significantly impact an individual’s acculturation level. Tami, Reed, Boylan, and Zvonkovic (2012) studied acculturation by Arab mothers and its relationship with dietary and physical activity behaviors. Like women from other ethnic minority groups, Arab women experience many acculturation challenges. Hattar-Pollara and Meleis (1995) highlighted the tendency of AAW to develop physical and mental illnesses because of cultural differences.

More than 80% of the mothers preferred using Arabic in speaking, reading, writing, and communicating at home and with friends. Gender and language are associated. For example, Arcia, Skinner, Bailey, and Correa (2001) found that Latina women have less language proficiency than men due to the lack of cultural orientation to the new society.

More than 40% of Arab Americans reported language as one of the barriers to obtaining health care. Additionally, 58% chose their healthcare provider based on language considerations (Sarsour et al., 2010). Shah, Ayash, Pharaon, and Gany (2008) also studied Arab American knowledge, attitudes, and beliefs about healthcare and cancer. They found that language was perceived as a significant barrier to accessing healthcare services. Approximately 12% of the women in their focus group reported speaking only Arabic. Despite other AAWs’ relative proficiency in English, many of them cannot fully explain their health complaints to providers. Consequently, women are forced to use their husbands or children as interpreters. The presence of a family member during a healthcare visit prohibits many women from discussing some female-specific issues.

Available documentation shows that health insurance may not be a major factor in limiting AAW access to health promotion services. Kawar (2013) highlighted that relatively few women reported a lack of insurance coverage as a barrier to BCS. Aqtash and Servellen (2013) studied the determinants of health-promoting lifestyle behaviors among Arab immigrants from the region of the Levant, and more than 80% of the participants reported having health-insurance coverage.

Based on this author's experience in Arab culture and observation of AAW's attitude toward attending health clubs, AAW refrains from utilizing these facilities due to cultural and sometimes religious considerations. For many AAWs, modesty is a major concern; they do not feel it appropriate or comfortable to share the same workout spaces with men. AAW are also reluctant to join health clubs that are exclusively for women because they are not entirely sure that their privacy will be protected.

### **Behavior-Specific Cognition and Affect**

Behavior-specific cognitions and affect comprise the second component of the health-promotion model and include six areas that mediate the influence of personal characteristics and experiences on the behavioral outcome component of the model. Considerations include (a) perceived benefits of action, (b) perceived barriers to action, (c) perceived self-efficacy, (d) activity-related affect, (e) interpersonal influences, and (f) situational influences. Individual characteristics and experiences influence the individual's perceptions, thoughts, and feelings. Furthermore, individual characteristics and experiences indirectly affect health promotion behavior by influencing commitment to a plan of action.

The greater one's perceived self-efficacy and perceptions of benefits to action, the greater commitment the individual will have to engage in health-promotion behaviors. Conversely, perceived barriers to action or negative feelings about the action decrease commitment to act. The Institute for Social Policy and Understanding (ISPU) (2011) reported on a qualitative study targeting the Muslim community in Michigan. The study addressed participants' perceptions about health, illness, and healing processes. Most participants perceived health and illness as being from God and as a way to remove sins. Consequently, the report recommended that health services for this community be more accommodating and culturally sensitive.

### **Perceived Benefits**

In theory, the anticipated benefits of certain behaviors motivate individuals to pursue such behaviors. The motivation is based on direct personal experiences or observation of role models engaging in similar behavior. Intrinsic and extrinsic benefits may result from certain behaviors. Extrinsic benefits play a role in behavior continuation, but the internal effect is more significant (Pender, 1996). In one study, for example, mothers reported the importance of physical activity and correlated physical activity with controlling health issues; however, only a few exercised 3-5 times a week (Tami et al., 2012). Salman (2012) studied Arab Muslim women's health beliefs and practices related to cancer screening and found that 87% of women 41 years of age or older had received mammography screening. Most of the women surveyed were aware of the purpose and importance of breast cancer screening.

### **Perceived Barriers**

According to Pender et al. (2006), many studies highlighted perceived barriers to action as one of the determinants of behavioral change. For example, perceived barriers strongly influenced healthy eating among rural middle-aged and older women (Yates et al., 2012). Underserved women face many barriers to health-promotion behaviors. Language and lack of cultural and linguistic support services have been perceived as major barriers in studies of AAW (Kawar, 2013; Shah et al., 2008). Salman (2012) highlighted screening timing, insurance coverage, and modesty as perceived barriers to BCS. Kawar (2013) specified four barriers to BCS: (a) culture-specific barriers, (b) immigration-related barriers, (c) general barriers, and (d) irrelevant barriers. For example, embarrassment related to breast examination by a male physician was one of the cultural barriers to BCS. Qahoush, Scott, Alawneh, and Froelicher (2010) studied physical activity among Arab women in southern California and found that 40% of the women had sedentary lifestyles. Time constraints, negative attitudes toward exercise, and lack of knowledge about how to exercise were reported as barriers to engaging in this health-promotion behavior.

### **Perceived Self-Efficacy**

Self-efficacy is the perception of one's abilities to perform the actions needed to produce a desired effect. One of the cornerstones of self-efficacy theory is expectancy belief. Bandura (1986) elucidated two types of expectations: efficacy expectations related to the person's belief in his or her ability to perform certain behaviors and outcome expectations that reflect the individual's beliefs about the probable outcome or success of a specific behavior.

Because perceptions of self-efficacy vary from task to task and from one context to another, multiple studies have been conducted to address different health-promotion behaviors. Many of these studies demonstrated a significant relationship between perceived self-efficacy and health-promotion behaviors. For example, Eisa and Sobayel, (2012) studied women's self-efficacy, health beliefs, and physical activity in Saudi Arabia and found a significant relationship between self-efficacy and physical activity. Conversely, low self-efficacy strongly predicted AAW inactivity in another study (Qahoush et al., 2010). Tami et al. (2012) found that many Arab American mothers demonstrated self-efficacy in changing dietary behaviors, such as trying new recipes and reading food labels.

### **Activity-Related Affect**

Subjective feelings about a specific health behavior might influence the individual's decision to continue in such behavior; positive affect is more likely to be associated with behavior repetition (Pender, 1996). One group of Arab American mothers reported feeling great and energetic after physical activity (Tami et al., 2012). Conversely, more than 25% of women reported that they hate exercise or feel fine without it (Qahoush et al., 2010).

### **Interpersonal Influences**

Pender's (1996) revised health-promotion model integrates social support as one of the six aspects of behavior-specific cognitions and effects that influence health-promotion behaviors. Interpersonal influences play a vital role in influencing health promotion behaviors among AAW. For example, social support played a significant role in a weight-reduction program targeting Arab Americans with diabetes. No other demographic or psychosocial factors influenced their weight-reduction trials. Women's weight-reduction goal attainment was positively correlated with family social support and negatively correlated with fatty food consumption (Pinelli, Brown, Herman, & Jaber, 2011). Based on this author's experience in Arab culture, it is critical for AAW to feel included in their community to balance the adverse effects of immigration. The need to interact with other women and be accepted within the Arab American culture may influence the adoption of health behaviors among this population.

### **Situational Influences**

AAW's ability to access healthcare and benefit from services, programs, and initiatives is probably inadequate. Consequently, lack of access might limit these women's opportunities to pursue health-promotion behaviors. For example, an unhealthy and fast-paced lifestyle, limited access to healthcare, poverty, and a complex social, cultural, and political situation were the perceived challenges to achieving good health among groups of Arab women (Daoud, 2008).

### **Behavioral Outcomes**

The last component in the Pender HBM model is behavioral outcomes, which focus on health-specific behavior. The outcome behaviors are mediated by two factors: (a) immediate competing demands and preferences and (b) commitment to a plan of action. The degree of engagement in any specific health-promotion behavior is based on the commitment to a plan of action for that behavior. This commitment is susceptible to alteration as it might be affected by competing demands and preferences.

### **Immediate Competing Demands and Preferences**

These are related to the occurrence of alternative behavior prior to the planned health promotion behavior. Individuals have low levels of control over competing demands but in comparison with high levels of control over preferences (Pender, 1996). Tami et al. (2012) found that despite dietary changes, Arab mothers in Lubbock, Texas, reported that they had solid preferences for traditional Arabic foods. However, many dietary changes were adopted due to their children's preferences for American food. Regarding physical activity, 48% of the participants preferred indoor physical activities over outdoor ones, and 45% preferred group programs exclusively for women as personal modesty is culturally demanded (Qahoush et al., 2010).

### **Commitment to a Plan of Action**

According to Pender's revised model (1996), commitment to a plan of action precedes and initiates health behavior. It requires an individual's commitment to engage in a specific behavior. The individual is committed to carrying out the behavior regardless of immediate competing demands and preferences. Lack of freedom in the decisions to engage in BCS, along with patriarchal family structure and relationships and male disapproval, have been found to limit AAW engagement in BCS behaviors (Kawar, 2013).

### **Implications for Nursing Practice, Research, and Policy**

The shift in nursing focus from acute care-based practice to one that is primarily prevention-based parallels the change in focus of the healthcare system in general. The nursing profession is promulgating the integration of health-promotion activities into the care of individuals, families, groups, and populations. Promoting healthy lifestyles in different settings will enhance public well-being and attenuate healthcare costs. A variety of health-promotion programs for AAW could be designed and executed by nurses based on individuals' needs in the areas of physical activity, nutrition, and stress management. Nurses' education and academic preparation position the profession to take the lead in this arena.

Nursing research is flourishing in many areas, especially in generating new knowledge that may lead to the development of new evidence-based health interventions. However, nurses need to take into consideration the individualized and cultural needs of vulnerable minority groups. The Health Promotion Model (Pender, Murdaugh, & Parsons, 2006) can serve as an excellent foundation for identifying and addressing influences on health promotion in ethnic population groups such as Arab American women, whose unique cultural needs remain largely unsearched.

Healthcare reform will positively affect women's health through the integration and utilization of cost-covered preventive health services (mammography, screening for cervical cancer, and prevention of sexually transmitted infections). Despite healthcare reform, further policy initiatives are necessary for cost-covered care services, especially for women in disadvantaged groups more susceptible to loss of healthcare coverage when compared to their male counterparts. Women from ethnic and minority groups need special attention that takes account of their cultural backgrounds and cultural barriers that may impede health promotion activities. The paucity of literature addressing AAW's health-promotion issues may decrease the quality of health services provided.

### **Conclusion**

This work demonstrates how Pender's revised HPM (1996) could be of value in planning future nursing research designed to identify and overcome the unique barriers to health promotion experienced by Arab American women. Future research built upon this multi-dimensional model can potentially enhance health promotion in this rapidly growing population.

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