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# Perceived Barriers to Health Promotion Behavior of Women in Early Recovery from Alcohol Use Disorder

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PERCEIVED BARRIERS TO HEALTH PROMOTION BEHAVIOR  
OF WOMEN IN EARLY RECOVERY FROM  
ALCOHOL USE DISORDER

A Major Paper Presented

By

Renee Ann Graham

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PERCEIVED BARRIERS TO HEALTH PROMOTION BEHAVIOR OF WOMEN IN  
EARLY RECOVERY FROM ALCOHOL USE DISORDER

by

Renee Ann Graham

A Major Paper Submitted in Partial Fulfillment

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in

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## **Abstract**

Women with Alcohol Use Disorder (AUD) have a higher risk of chronic illness and a mortality rate that is 50 to 100% greater than men's (National Institute on Alcohol Abuse and Alcoholism, 2008). Lifestyle changes in the recovery from AUD include adopting behaviors that foster health and identifying women's barriers to health promotion behavior is important to fostering a healthy lifestyle. The purpose of this study was to explore perceived barriers to health promotion behavior of women in early recovery from AUD. Participants were women ( $N = 50$ ) who attended 12-step recovery meetings for alcoholism, of which: 86% were 26 to 57 years old; 72% had greater than a ten year history of consumption; 80% had less than six months of sobriety; 50% had relapsed three or more times. Results indicated some women perceived certain barriers to be very troublesome but generally barriers were only a moderate challenge. Greatest perceived barriers cited were financial aspects, fatigue, time management issues, self-efficacy concerns, and communication difficulties. Implications for practice include conducting research on the nature of the most concerning barriers and the impact that severity of disease, culture, ethnicity, or demographics has on these barriers. Increasing awareness of women's barriers, lobbying and supporting policies and systems processes that reduce barriers and support access to preventative services, early intervention, gender specific programs, and addressing patient-specific barriers will improve outcomes. Utilizing a comprehensive approach will have the greatest impact on the health promotion behaviors of individuals and the population health status of women with AUD.

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## Perceived Barriers to Health Promotion Behavior of Women in Early Recovery from Alcohol Use Disorder

### **Statement of Problem**

Alcoholism or alcohol dependence, classified in 2013 under the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) as ‘Alcohol Use Disorder’(AUD), is a common chronic disease that affects approximately 17 million persons aged 12 years or older in the United States (US) (Substance Abuse and Mental Health Services Administration [SAMHSA], 2012b). The lifetime prevalence rate has been estimated at 12.5% (Hasin, Stinson, Ogburn, & Grant, 2007). Additionally, according to the Centers for Disease Control and Prevention (CDC) report, *Alcohol and Public Health: Alcohol-Related Disease Impact*, alcohol-attributable deaths were estimated at approximately 88,000 between 2006 and 2010 and were responsible for a total of 2,560,290 years of potential life lost (Christenson et al., 2014). Hence, alcohol use is the third leading preventable lifestyle-related cause of death in the US (Mokdad, Marks, Stroup, & Gerberding, 2004). Furthermore, AUD crosses all race, ethnic, socioeconomic, educational level, occupational, age, and gender boundaries (Dawson, Grant, Stinson, & Chou, 2006). Thus, it is evident that AUD remains a major health concern in the US and the disorders’ impact affects an extended portion of the population.

Of particular interest are the gender differences associated with alcohol usage. According to the National Institute on Alcohol Abuse and Alcoholism (NIAAA, 2008), it is estimated that 5.3 million women in the US have AUD and the related mortality rate is 50% to 100% greater than men’s. Interestingly, women’s bodies react differently than

men's to alcohol consumption secondary to differences in stomach enzyme and chemical absorption rates, ratios of body fat to water, and alcohol metabolism rates. As a result, women are at a higher risk for diseases associated with AUD such as alcoholic liver damage, cardiovascular disease, breast, digestive, head and neck cancers, and alcohol-induced brain damage. Furthermore, during pregnancy consuming alcohol can pose severe risks for the fetus such as fetal alcohol spectrum disorder (FASD) and can lead to preterm labor (NIAAA, 2008).

There is no known cure for alcoholism but according to the National Quality Forum (NQF) workshop (2004), evidenced-based treatments are available to promote recovery that include acute withdrawal and detoxification, individual and family counseling, medications to prevent relapse, and support groups such as 12-step recovery groups. Recovery initiatives include those measures that focus on improving health by "overcoming or managing one's disease(s) as well as living in a physically and emotionally healthy way" (SAMHSA, 2012a, p. 3). Lifestyle changes necessary for recovery not only include abstinence from alcohol and addressing concurrent harmful lifestyle patterns, but also include adopting health promoting behaviors to foster a healthy lifestyle (SAMHSA, 2011a). One of the sequelae of AUD is that individuals often focus their attentions on attending to obtaining and consuming alcohol at the expense of other activities and responsibilities. This may include ignoring health preventative services and promotion measures such as annual health screenings and primary care visits (Merrick et al., 2008). Hence, because of the negative systemic effects of AUD and the related inattention to health preventative and promotion measures, it is imperative that

individuals be encouraged to maintain health promotion activities early in the recovery process. However, there are many barriers to health promotion behavior (HPB) and individuals in early recovery may experience a greater number of concurrent barriers related to the physical, environmental, socioeconomic, and psychological impact that alcoholism may have had on the individual.

A significant gap in literature related to barriers to HPB of women in early recovery from AUD remains. Identifying barriers to HPB specific to these women may provide health care professionals with important information necessary for fostering healthy lifestyle behaviors during the early stages of recovery. The purpose of this study was to explore the perceived barriers to HPB of women in early recovery from AUD. Next, a review of the literature will be presented.

## Review of Literature

A literature review was conducted in CINAHL, Medline, Pub Med, Cochrane Library and PsycINFO databases using key words: *alcohol; alcohol abuse; alcohol dependence; alcohol use disorder; alcohol treatment; alcohol recovery; health behavior; health promotion; health prevention; health activities, and barriers*. Multiple combinations of the concepts that included the words *women, alcohol, health, and barriers* were searched. In efforts to find key literature, no time period limits were placed on the review.

### Alcohol Use Disorder

Alcohol use disorder is a relatively new nomenclature found in the Diagnostic and Statistical Manual of Mental Disorders 5<sup>th</sup> edition (DSM-5) as of May 2013. This resulted from combining *alcohol abuse* and *alcohol dependence* from the DSM-IV into one classification with three sub-classifications that include *mild, moderate, and severe* determinations (Appendix A). A diagnosis of AUD is made when two of the 11 criteria are met during a 12-month period. The severity sub-classifications are based on the number of criteria met.

Caucasians have the highest overall number of AUD. However, the *American Indian or Alaska Native* group has the highest percentage per capita at 17.3% (SAMHSA, 2012b). In 2011, the National Health Interview Survey reported that the highest (13.7%) prevalence of heavy use was observed in the age group of 18 to 25 years (CDC, 2011a). However, AUD affects not only the individual but the family unit as well. It is estimated that the prevalence of fetal alcohol spectrum disorders in school-age children in the US

could be as high as 2 to 4% (May et al., 2009). Furthermore, according to the Center for Behavioral Health Statistics and Quality (2012), more than 10% of children live with a parent who has an alcohol problem. Liver disease is one of the manifestations of chronic alcohol usage and cirrhosis is a significant cause of death related to AUD. Forty-eight percent of all cirrhosis-related deaths reported are alcohol-related (NIAAA, 2012).

Therefore, it is not surprising that the economic burden of AUD to the US amounts to over 224 billion dollars a year (Bouchery, Harwood, Sacks, Simon, & Brewer, 2011). Stunningly, only 25% of individuals with AUD ever seek help (Dawson et al., (2006).

### **Alcohol Use Disorder: Women and Gender Differences**

The Drug and Alcohol Services Information System (DASIS) (2005) reported that approximately 5.3 million women age 18 or older met the criteria for AUD and that prevalence rates for women decrease with age (2005). Considering the Dawson et al. (2006) report that only 25% of individuals seek treatment and the report by the National Center on Addiction and Substance Abuse (NCASA) (2006) that stated that 92% of women with AUD do not receive treatment, it is evident that a significant gap in treatment between men and women exists and is widely in favor of men. In the US, women tend to use alcohol less than men (SAMHSA, 2011b). However, according to Grucza, Bucholz, Rice, and Bierut (2008), this gap is narrowing. Furthermore, despite drinking at lower levels, women are at a higher risk than men of developing acute and chronic alcohol-related problems (Polen, Green, Perrin, Anderson, & Weisner, 2010). This is related to body composition differences. Women's bodies have a higher body fat-to-water ratio thus do not dilute alcohol as well as men and reach higher blood alcohol

levels sooner given the same consumption. Compared to men, women have a reduced liver-mass-over-body weight ratio and fewer stomach enzymes and therefore absorb and metabolize alcohol differently. This may be in part responsible for women, even with less consumption, becoming addicted faster and for developing more severe brain damage or other alcohol-related diseases than men (Stevens, Andrade, & Ruiz, 2009).

Women with AUD are at increased risk of cardiovascular complications such as atrial fibrillation (AF) and hypertension. In fact, the risk of AF increases significantly related to increased consumption (Samokhvalov, Irving, & Rehm, 2010). Although light consumption of alcohol may actually reduce the risk of hypertension, in a meta-analysis of eight studies the authors found that women who had four or more drinks per day doubled their risk of developing hypertension. Those women who averaged about eight drinks per day tripled their risk (Taylor et al., 2009). Likewise, a meta-analysis of studies that evaluated the association between levels of alcohol consumption and risks of ischemic and hemorrhagic strokes concluded that light-to-moderate drinking was associated with a lower incidence of stroke, but morbidity and mortality rose significantly with heavier consumption. Specifically, the study demonstrated a protective effect up to four drinks per day but the relative risk (RR) of morbidity related to ischemic stroke increased and was observed at its highest at 12 drinks per day (RR = 2.15; 95% CI [1.62, 2.86]) (Patra et al., 2010). Rehm et al. (2010), in comparing the dose-relationship RR of mortality from liver cirrhosis between men and women, found that the RR of women's mortality developed at a faster rate than men's. Specifically, studies showed that the RR for five drinks per day for women was 14.7 (95% CI [11.0, 19.6]) compared to a RR for

men of 7.0 (95% CI [5.8, 8.5]) (Rehm et al.). In another meta-analysis involving the dose-response of 97 studies of alcohols' association with breast cancer, authors found that the risk of breast cancer development increased about 10% for every 10 grams of alcohol consumption per day (95% CI [5.0, 15.0]) (Key et al., 2006). Mann et al. (2005) explored differences of the impact of alcohol dependence on brain atrophy between men and women by using computed tomography to examine cranial volume and time effects. The authors found that time effects from week one and week six were more significant in alcoholic women than men. Hence, women were more susceptible to brain damage than men after a shorter exposure period to alcohol. This places them at greater risk of cognitive, sensory, and motor function impairments sooner (Sellers, 2005). Hence, it is clear that women suffer significant physical consequences that may develop at an accelerated rate when compared to their male counterparts. However, women with AUD suffer not only physical consequences but also may experience greater psychosocial concerns than the general population or their male counterparts.

Women substance abusers have more frequent issues of depression, anxiety, and eating disorders than men substance abusers (SAMHSA, 2005). Additionally, the risk of rape increases with intoxication and many women with AUD have been sexually assaulted. In fact, in a survey of college women who had been raped, two-thirds reported they were intoxicated at the time (Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). In a meta-analysis of 18 estimates of the association between frequency and/or quantity of youth alcohol consumption and domestic violence perpetration, it was found that intimate partner violence perpetration was positively and statistically significant in 13 (72%)

studies and the combined odds ratio was 1.23 (95% CI [1.16, 1.31]) (Rothman, Reyes, Johnson, & LaValley, 2011).

### **Treatment and Recovery**

Treatment and recovery from AUD starts with abstinence from alcohol. Hospitalization is important as the individual may experience symptoms of withdrawal such as delirium tremors, hallucinations, and seizures. Benzodiazepines and antiepileptics are frequently used and have been found satisfactory in terms of medical management and scientifically supported as to effectiveness (Berglund et al., 2003). In studies conducted on males during hospitalization, short-term interventions by healthcare providers that targeted alcohol use and motivation for abstinence have demonstrated positive results in reducing consumption and lowering death rates (McQueen, Howe, Allan, Mains, & Hardy, 2011).

After the acute withdrawal period, often individuals may pursue either inpatient treatment at a residential alcohol rehabilitation facility. This may include cognitive behavioral, individual, and family therapy; all of which have shown to have favorable effects (McQueen et al.). Additionally, the use of medications such as acamprosate, naltrexone, and disulfiram to deter consumption by causing an aversive physiological reaction when consuming alcohol were found to have significant effectiveness. However, many individuals will not receive inpatient treatment. Thus, outpatient treatment and Alcoholics Anonymous meetings or other such support groups are the mainstay of treatment for these individuals and have been shown to have favorable effects as well (McQueen et al.).



## **Alcoholics Anonymous**

Alcoholics Anonymous (AA) “is a fellowship of men and women who share their experience, strength and hope that that they may solve their common problem and help others to recover from alcoholism.” This is the *A.A. Preamble* (Appendix B) read at the beginning of AA meetings. The rise of AA came about in 1935 when two alcoholics met. Bill Wilson, a New York stockbroker, and Dr. Bob, an Akron Ohio physician, were unable to stay sober on their own account but found that by talking to each other they were able to do so. The first publication of the AA book, *Alcoholics Anonymous*, took place in 1939 and its’ main purpose was to show alcoholics precisely how they had recovered. Since then the membership has been estimated to have grown to more than 2 million that includes 100,800 groups in 150 countries around the world (Alcoholics Anonymous World Services Inc, 2001a).

**The founding of Alcoholics Anonymous.** In the first edition of *Alcoholics Anonymous*, Dr William D. Silkworth, a New York specialist on alcoholism, gave his professional account on the nature of alcoholism in which he described his encounters with alcoholics and found that many were hopeless in that no medical treatment seemed to be of help. He goes on to explain his theory that alcoholics may be bodily different from other individuals, have an allergy to alcohol, and therefore should abstain from consuming it. It was through Silkworth that Bill Wilson learned of the “hopelessness” of his condition. This philosophy of hopelessness was shared by other medical professionals as well. In the 1930s, a well-off Rhode Islander, Rowland H., sought the help of Carl Jung, the psychoanalyst, for help with his drinking problem only to find out that Jung

deemed him medically hopeless. Jung suggested that the only relief could come about through a vital spiritual experience and thus referred the Rhode Islander to the Oxford Group, a society based on spiritual tenants. It was during Rowland's time with the Oxford Group that he met another alcoholic from Vermont and was able to stay sober. This Vermonter paid his school friend, Bill Wilson, a visit in efforts to try to carry his message of hope to him. Wilson quickly took up many of the Oxford tenets. Wilson was only able to remain sober after this encounter with his alcoholic friend and claimed to have had what he calls a spiritual experience (Appendix C). Some of the adopted tenets were modified by Wilson and later became known as *The Twelve Steps of Alcoholics Anonymous (The Steps)* (Appendix D). *The Steps* serve as a guide to the individual toward a program of recovery that includes a moral inventory, confession of personality defects, restitution to those harmed, helpfulness to others, and the necessity of belief in and dependence upon a Higher Power or God. However, Wilson soon found himself struggling not to drink during a period in which his business took a downside. Intuitively, Wilson realized that in order to keep from drinking he must carry his message to another active alcoholic, namely Dr. Bob. As a result, both were able to stay sober and carry the "message of hope" to yet another "hopeless" alcoholic who was also able to stay sober. Thus, the first group of AA was formed and so started the mushrooming of the AA program (Alcoholics Anonymous World Services Inc, 2001a).

**Alcoholics Anonymous' publicity and public policy.** Alcoholics Anonymous catapulted into the public eye in 1939 when the editor of *Liberty* magazine printed an article named *Alcoholics and God*. Soon thereafter, John D. Rockefeller, Jr. gave a dinner

for friends and invited AA members to tell their stories. Later, AA was featured in the *Saturday Evening Post*. All of this exposure helped to secure AA in becoming a national institution. Early in the rise of the fellowship of AA, the principle of anonymity came about as a result of the membership being mostly businessmen or professionals. It was thought that there would be an overwhelming number of appeals by individuals who too would want to seek out a solution to their devastating problem. The professionals within the membership felt that they were too few to handle the requests and would have been greatly handicapped in their occupations as a result. Hence, they chose to remain anonymous and to help alcoholics within the privacy of their respected homes and communities (Alcoholics Anonymous World Services Inc, 2001a).

**The Alcoholics Anonymous book.** Though the book, *Alcoholics Anonymous*, which is affectionately known by members of AA as *The Big Book*, is in its' fourth printing, the first 164 pages have never been changed as this section of the book contains what AAs' like to call "the basic text" which has helped millions of individuals recover. The rest of the book contains individual stories of recovery that have been changed over time but editors have retained Wilson's and Dr. Bob's accounts of their recovery named "Bills Story" and "Doctor Bobs Nightmare," respectively (Alcoholics Anonymous World Services Inc, 2001a). Hence, Bill Wilson and Dr Bob are regarded as the original co-founders of AA.

**Alcoholics Anonymous' groups and the General Service Office.** Alcoholics Anonymous is a nonprofit organization of unusual nature. Alcoholics Anonymous groups claim there are no polices or rules to follow and that each group is autonomous in matters

except those affecting AA as a whole (Alcoholics Anonymous World Services Inc, 2001a). The development of *The Twelve Traditions (The Traditions)* (Appendix E), which serve as a guideline to AA groups, came about as groups spread in numbers. It became apparent that it was necessary to have some guidance on methods to conduct matters of business such as the distribution of the AA book and resultant literature pamphlets as well as the handling of monetary contributions. *The Traditions* maintain that there are no dues or fees for membership and the AA organization, its' literature, and all expenses are covered entirely by self-support from volunteer contributions by its members only.

The General Service Office (GSO) of AA is located in New York and serves as the hub of AA within the United States. The GSO is supported solely by the contributions of its members. Though many of the individuals who are employed at the GSO are volunteers and active members of AA, there remains a significant number of paid non-alcoholic professionals whose skills are needed to support the functioning of the GSO and ensure its' viability. Alcoholics Anonymous hosts many committees at the local, district, state, and national levels to serve and meet the recovery needs of special populations. Committees such as the Cooperation with the Professional Community committee provide information and assistance to professionals. The Corrections committee helps those who have been given obligations by the judicial system, and the Public Information committee deals with providing information to schools or other public entities (Alcoholics Anonymous World Services, Inc, 1990).

**The meetings of Alcoholics Anonymous.** There are many various types of AA

meetings. Alcoholics Anonymous' *Twelve Traditions* allow for its' members and those individuals interested in finding out more about recovery to attend "open meetings" of AA whereas only those individuals who are alcoholic can attend "closed" meetings. All meetings follow a general format that a group leader utilizes as a guide for each meeting. Many formats include the reading of AA approved literature such *The Big Book*, the *Twelve Steps and Twelve Traditions* book which elaborates on *The Steps* and *The Traditions*, or a recovery-based meditation book. Many meetings have a speaker format in which a recovering member of AA will share his or her account of their recovery from alcoholism. Regardless of the meeting type, all meetings allow members to share within the group any issues or concerns they may have in their day-to-day struggles with recovery. Each member who wishes may share their thoughts with the group without interruption, remark, or comments from the other members. Noteworthy is that groups are conscientious about reminding members to not share private information regarding who attends or what is said at a meeting. Hence, groups maintain the principle of anonymity at the group level to protect an individual's privacy (Alcoholics Anonymous World Services, Inc, 1990).

**Alcoholics Anonymous' membership characteristics.** Alcoholic Anonymous conducts random membership surveys every three to four years in an effort to keep AA members, the public, and the professional community informed of trends in membership characteristics. The survey conducted in 2011 included 8,000 members from the US and Canada. The survey reported that members attend an average of 2.6 meetings per week. The survey cited that 75% of members' doctors knew they were in AA and 40% were

referred to AA by a healthcare professional. The survey reported that 63% of the members had received some type of treatment or counseling before coming to AA, and of those that did, 74% reported that it played an important part in directing them to AA. Many members (62%) reported receiving some type of treatment or counseling after coming to AA and 82% of those that reported this felt it played an important part in their recovery from alcoholism. The members' most frequent answers to a multi-response question regarding methods of introduction to AA were: *through a member* (34%), *through a treatment facility* (32%), *self-motivated* (29%), *through a family member* (25%) and *court order* (12%). The most frequent reported occupations were: *retired* (17%), *unemployed* (10%), *manager/administrator* (9%), *professional/technical* (8%), *skilled trade* (8%), *non-working disabled* (6%), and *health professional* (6%) (Alcoholic Anonymous World Services, Inc., 2012). Appendix F displays other demographic characteristics of the members responding to the survey.

### **Treatment and Recovery in Women**

The typical woman in residential alcohol treatment is Caucasian, in the late 20s, has less than 12 years of education, is unemployed, and likely to be on public assistance (NCASA, 2006). Healthcare professionals should be alerted that women who are in treatment for AUD may be at higher risk for a compromised healthy lifestyle related to income, education, as well as other factors. Hofer (1996) studied certain health behaviors of women such as smoking, obesity, using seat belts, aerobic exercise, and receiving preventative services such as mammograms or pap smears. The author found there was a linear increase in the odds of receiving preventative services in those individuals with a

higher income as compared to those with a low income ( $< \$15,200$ ). In addition, the author found that a healthy lifestyle was more common among more highly educated groups and less common with those with less than a high school education. Furthermore, of individuals with AUD, women may be at greater risk of a compromised healthy lifestyle than men (Hofer, 1996).

Small, Curran and Booth's (2010) study of a community sample of at-risk drinkers ( $N = 733$ ) explored gender differences of barriers in alcohol treatment including predisposing factors and characteristics such as accessibility, affordability, acceptability, and social support. Women reported a greater exposure to sexual and physical abuse (14.41%) and a greater lifetime history of sexual abuse (48.54%) as compared to men (2% and 33.18%, respectively). Although analysis showed that levels of income between men and women were approximately equal, more women reported a negative lifetime financial event and a higher proportion of having significant difficulty in procuring basic necessities than men (23.56% vs. 21.9%, respectively). More women thought that the cost of talking to a mental health person regarding their drinking was a lot more than they could afford as compared to men (29.78% vs. 21.09%, respectively). As far as accessibility, women reported higher expected wait times to see a physician (6.15 [SD = 7.02] vs. 4.15 [SD = 4.80],  $p < .0001$ ) or a mental health professional (7.16 [SD = 6.99] vs. 4.97 [SD = 5.18],  $p < .0001$ ) for alcohol problems as compared to men. The analysis of acceptability showed that a greater number of women viewed the acceptability of alcohol treatment more negatively and reported being less willing to participate in self-help groups and a greater perception of community stigma (2.62 [SD = 0.31] vs. 2.55 [SD

= 0.32],  $p = .0071$ ). Women reported a higher mean number of individuals in their support system that were active daily drinkers (.034 [SD = 0.61] vs. 0.24 [SD = 0.53],  $p = .00140$ ) (Small et al.). A literature review regarding gender differences conducted by SAMHSA, included 2,395 substance abuse treatment facilities and 5,005 clients. The review provided an in-depth analysis of substance abuse treatment clients with a focus on women. The authors found that women experienced an increased stigma and social disapproval related to having a diagnosis of AUD as well as greater economic barriers. Women had a 5% greater chance of not having a high school education and 26% greater chance of being unemployed as compared to men (Brady & Ashley, 2005).

In summary, women who eventually receive treatment may have greater physical, psychological, and socioeconomic barriers to overcome in the early treatment phase than men. Hence, a gender-specific treatment approach that includes not only addressing the substance abuse issue but that also focuses on the scope of psychosocial and socioeconomic issues and needs that women face in recovery from AUD are essential for the provision of quality and holistic care. Additionally, considering that the current profile of the typical women in treatment for AUD indicates that they are less likely to have healthy lifestyle practices, it may prove beneficial for women to receive education regarding health promotion and preventative measures in efforts to promote recovery.

### **Health Promotion Definition and Relationship to Alcohol Consumption**

Facilitating the practice of preventative health measures and health promotion behavior is an essential aspect in the treatment and recovery of individuals with AUD. The focus on health promotion and preventative measures has grown and evolved into



widespread worldwide initiatives (McLeroy & Crump, 1994). However, while health promotion has become a common thread touching not only global populations but also individual patient populations, many individuals in the US still do not have access to health care. In fact, despite the various means through private and public entities to access health care, 39% of the US 2012 population ages 0 to 64 were either uninsured or would have been without public assistance (Kaiser Family Foundation, 2012). Despite efforts to deliver health care, disparities exist amongst certain socioeconomic populations and there is a direct correlation between socioeconomic status, the uninsured, and lack of access. Many of these disparities have underlying currents of racial context. For instance, the Agency for Healthcare Research and Quality's Medical Expenditure Panel Survey revealed that 30% of Hispanics and 20% of Black Americans lack a usual source of healthcare compared with less than 16% of whites (Agency for Healthcare Research and Quality, 2013). Additionally, the Kaiser Commission on Medicaid and the Uninsured found that location impacted the likelihood of having coverage. Supporting data showed that uninsured rates varied widely from 4.4% in Massachusetts to 26.8% in Texas (Kaiser Family Foundation, 2013). Hence, the US healthcare system has many issues to overcome before health promotion and preventative services are available to every individual.

The growing health promotion worldwide initiatives prompted the 6<sup>th</sup> Global Conference on Health Promotion in August of 2005 that was sponsored by the World Health Organization (WHO). An outcome of the conference was the development of *The Bangkok Charter for Health Promotion in a Globalized World*. The charter established

that the United Nations recognized that the enjoyment of the highest attainable standard of health was a critical human right and that health promotion is based on this right. The conference defined health promotion as “the process of enabling people to increase control over their health and its’ determinates and thereby improve their health” (World Health Organization [WHO], 2009, p.10). Despite this united view, health promotion terminology continues to be elusive with its’ many definitions used throughout literature and by various organizations. Sartorius (2006) proposed that health promotion is affected by the differences in the definition of health. Despite these various definitions, what is evident is that health promotion on the individual level empowers people to change personal behaviors and lifestyles and to create an environment that is conducive to healthy living (O’Donnell, 2009; Shi & Singh, 2012; WHO, 2009).

In the US, an initiative to provide science-based national objectives for health promotion started in 1979 and was spelled out in the report entitled *Healthy People: The Surgeon General’s Report on Health Promotion and Disease Prevention* (U.S. Department of Health, Education, and Welfare, 1979). The report established 10-year objectives for improving health in the US. The *Healthy People* initiative is currently in its’ third decade and the current campaign, *Healthy People 2020*, serves to establish benchmarks in efforts to encourage community collaboration, assist individuals in making informed health decisions, and to measure the impact of prevention activities (US Department of Health and Human Services [USDHHS], 2014a). Specific *Healthy People 2020* initiatives related to alcohol usage include reducing the consumption of alcohol and the number of deaths related to alcohol use each by 10% and increasing the proportion of

persons needing treatment for AUD to those that receive treatment by 10% (USDHHS, 2014b).

The Office of Women's Health (OWH) in conjunction with the USDHHS establishes health agendas for women and provides guidelines for health care prevention and promotion in efforts to improve and help women achieve the best possible health. The women's health promotion programs or campaigns currently supported by the department focus on promoting health measures related to osteoporosis, lupus, heart disease, acquired immune deficiency syndrome, and attending to well-care visits. The department provides current guidelines for women's annual health screenings in efforts to reduce morbidity and mortality rates (OWH, 2010).

Health promotion and health promotion behaviors (HPB) are closely linked. Health promotion strategies help individuals or communities to have better control over health status by increasing health knowledge and changing attitudes that can have an impact on behavior. The goal of health promotion is to influence those health promotion behaviors that will likely impact the health status of individuals or populations the greatest.

### **Health Promotion Behavior**

According to Simons-Morton (2013), there are three distinct types of health behavior. *Personal-health behavior* relates to the health of the individual who engages in the behavior, whereas, *health-related behavior* is behavior related to those actions taken by others that affect another's health. Lastly, *health-protective behavior* is undertaken to foster the health of others.

Personal-health behavior relates to such behaviors as the individual's level of physical activity, dietary intake, the use of preventative measures such as safety belts, and procuring annual health screenings. Personal-health behaviors can be influenced either negatively or positively by environmental, situational, social factors, and cognitive perceptions (Glass & McAtee, 2006; Pender, Murdaugh, & Parson, 2006). In fact, many theories of behavioral change have proposed an individual's cognitions and perceptions as being a major determinant to health behavior. Some of the concepts included in these models are *perceived benefits of action* and *perceived barriers to action* (Health Belief Model; Penders' Health Promotion Model) *perceived susceptibility, severity, and threat of disease* (Health Belief Model), *perceived behavioral control* (Theory of Reasoned Action; Theory of Planned Behavior), *perceived self-efficacy* (Social-cognitive Theory; Penders' Health Promotion Model), and *perceived control* (Relapse Prevention Model) (Pender, Murdaugh, & Parson, 2006).

Health promotion behaviors can have an impact on the development of chronic disease and premature death. Many guidelines for health promotion and preventative measures have been established by the Institute of Medicine (IOM), the US Preventive Services Task Force, the Surgeon General's Office, and the OWH.

Heavy alcohol usage can have physical, cognitive, emotional, and psychological consequences all of which can be detrimental to an individual's health status and can impact behavior including health promotion behavior. Real or perceived barriers related to situational and social consequences associated with heavy alcohol consumption may also preclude individuals in practicing health promotion behavior. Thus, not only are

individuals with AUD at a greater health risk because of the negative impact that alcohol has on the body but also because of potential barriers to practicing health promoting behaviors as well.

### **Health Promotion Barriers**

The concept of health promotion barriers plays a significant part in many theories or models developed to help understand client HPB and to assist in facilitating such behavior. Numerous barriers to HPB have been identified to interfere with the practice of obtaining health care, leading to an increased risk of morbidity and mortality. Perceived barriers may be real or imagined. Some theories that utilize the concept of HPB include the Health Belief Model, Banduras' Social Cognitive Theory, Pender's' Health Promotion Model, and Easoms' Conceptual Model.

The Health Belief Model refers to perceived barriers as being a *cost* that must be subjectively acceptable and must be able to be overcome in order to follow a particular health recommendation (Rosenstock, Strecher, & Becker, 1988). However, cost is not measured or restricted to financial expectations. The Health Belief Model posits that barrier costs include the perceptions of engaging behavior such as dangers from side effects of a medical procedure, expense, inconvenience, and discomforts like pain and emotional upset (Rosenstock, 1974).

Bandura's (1997) Social Cognitive Theory considered perceived barriers to be impediments, deterrents, or blocks when undertaking or attempting to conduct a particular behavior. Specifically, an individual's perceived self-efficacy or the belief that one can change risky health behaviors personally was described as a potential barrier to

behavioral change. Hence, individuals with low perceived self-efficacy would have a greater likelihood of not being successful at changing unhealthy patterns into healthy behaviors.

According to Pender et al. (2006), barriers can be internal, interpersonal, or environmental. *Internal barriers* arise from the emotions and internal thoughts of the individual such as perceptions regarding the possible negative aspects of changing behavior (Pender et al., 2006; Strecher & Rosenstock, 1997). *Environmental barriers* are those barriers in the environment that make HPB difficult to practice and *interpersonal relationships* can be barriers when unhealthy behavior is encouraged or healthy behavioral change is discouraged by another individual (Pender et al., 2006).

Easoms' (2003) Conceptual Model utilized input from multiple models including the Health Belief Model, the Social Cognitive Theory, and Penders' Health Promotion Model. The model was developed specifically for older adults and identified barrier categories to include counseling which would make one aware of necessary self-care activities. Lack of time to fit such self-care activities into ones' schedule was also identified as a barrier. Additionally, lack of family support, fear, tiredness, lack of will power, financial means as well as environmental restrictions such as inclement weather were identified also as possible barriers (Easom).

Much research has been conducted on barriers to health promotion activities. Timmerman's (1999) study regarding the relationship between perceived barriers and self-care activities of 95 individuals ranging in ages 18 to 54 found that the most common perceived barriers were lack of time (62.1%), environmental constraints (31.6%), lack of

motivation (25.3%), and fatigue or tiredness (20.1%) (Timmerman, 1999). Another study exploring the relationship between perceived barriers and healthy eating, the researchers found that the main barriers were irregular work hours (29.7%), will power (29.7%), and unappealing food (21.3%) (Lopez-Azpiazu, Martinex-Gonzalez, Kearney, Gibney, and Martinez, 1999). Hence, though individuals thought that a healthy diet was important, perceived barriers prevented them from taking in such.

In a study of a convenience sample ( $N = 50$ ) of recipients of liver transplants on the impact of perceived financial restrictions to health promotion and self-care activities, Paris, Dunham, Sebastian, Jacobs, and Nour (1999) found that non-adherence of medication was significantly related to perceived financial restrictions. Non-adherence was greater in those participants who perceived financial capability as a barrier. Gulanick, Bliley, Perino, and Keough (1998) conducted a qualitative study ( $N = 45$ ) of individuals recovering from coronary angioplasty to identify perceived barriers to changes toward a healthier lifestyle. The sample included 26 men and 19 women with a median age of 61. Results showed that lack of spousal or family support, lack of willpower, a powerless attitude about disease progression, and fear of overexertion were barriers to making healthy lifestyle changes.

### **Women's Health Promotion Behaviors and Perceived Barriers**

Although there has been little research done specifically on the barriers to HPB of women with AUD, there have been several systematic reviews conducted on the HPB of other female populations. These studies may provide some insight into HPB and the health behaviors of women with AUD. Research conducted on mixed-gender samples of

individuals with AUD may also provide valuable information on the perceived barriers to health promotion behavior of women with AUD.

A correlational cross-sectional study, *Predictors of Health Promotion Behavior in Women Without Prior History of Coronary Heart Disease*, was conducted on women ( $N = 119$ ) ages 35 to 60 years to explore HPB and the best predictors of HPB in women who had no prior coronary heart disease (CHD) history. Data was measured using the Health-Promoting Lifestyle Profile II (Walker, Sechrist, & Pender, 1987) and the Barriers Scale (Murdaugh & Verran, 1987). It was found that women did not practice HPB regularly. The authors found that HPB positively correlated to education ( $p = .05$ ) and CHD knowledge ( $p = .01$ ) and was negatively correlated to perceived barriers to CHD risk modification ( $p = .01$ ). Additionally, it was found that HPB did not correlate with age, race, or income. Women with higher perceived barriers to risk modification and lower education and knowledge levels were more likely to not practice HPB in this population (Thanavaro, Moore, Anthony, Narsavage, & Delicath, 2006). Similarly, in a study of women who experienced chest pain, it was found that those who had less education viewed lower perceived benefits or higher perceived barriers to risk modification and were more likely to not practice HPB (Thanavaro, J., Thanavaro, S., & Delicath, T. 2010).

Notably, obesity has been associated with the development of diabetes and in the US “12.6 million or 10.8% of all women age twenty years or older have diabetes” (CDC, 2011b, p. 2). Contributory factors such as barriers may be playing a role in the development of chronic diseases such as diabetes. Speck and Harrell (2003) conducted a



systematic review that explored the relationship of women's physical activity to social environmental variables. One study of women ( $N = 1,232$ ) revealed that the most frequently cited barriers in the younger age group were insufficient time and lack of motivation. For the individuals aged 60 to 78 years old, injury or poor health were the most frequently cited (Booth, Bauman, Owen, & Gore, 1997). In another study of women ( $N = 393$ ) who were able to maintain regular physical activity for more than six months, it was cited that women reported work time (40%) and family time (24.2%) were barriers for them (Jaffee, Lutter, Rex, Hawkes, & Bucaccio, 1999). The authors of the systematic review concluded that barriers such as time constraints and obligations were significant barriers for women in maintenance of regular physical activity (Speck & Harrell, 2003).

In the study of lesbian and bisexual women using anonymous questionnaires regarding breast-screening behaviors and barriers, Rankow and Tassaro (1998) evaluated a total of 591 usable responses. Of the participants, 27 of the women over 40 years of age had never had a mammogram and 63 had not had a mammogram screening according to national guidelines at the time. Barriers most frequently named were cost (24%), lack of feeling at risk (21%), lack of health insurance (18%), and concern about radiation (18%).

Research conducted on a nationally representative sample of men and women demonstrated mixed conclusions regarding the positive or negative influence that unhealthy drinking has upon HPB (Paul, Grubaugh, Fruch, Ellis, & Egede, 2011). The study used data from the 2006 Behavioral Risk Factor Surveillance Survey and the purpose was to determine the associations between binge, heavy drinking, and health behaviors. The sample consisted of the 344,793 respondents and included approximately

15% binge drinkers ( $n = 54,668$ ) and 5% heavy drinkers ( $n = 17,240$ ). The authors found that both binge and heavy drinking were more common in younger adult males, individuals with higher income, and those with some college education. Data collected on health behaviors included smoking status, physical activity or exercise within the past month, and the use of seatbelts. Data were categorized as female-specific, male-specific, and generalized. For all women, Pap test data was collected and positive responses were given if current guidelines had been followed in prior three years. Data regarding receipt of mammograms were also collected and analyzed separately for women over age 40 and women over age 50. General health-related behavioral data collected included home blood stool testing and if conducted within the prior two years was considered a positive response. Data were also collected on those participants ages 50 or older as to whether they had ever had a sigmoidoscopy which if conducted was considered a positive response. The study showed that binge drinkers were more likely to be current smokers (37.04 vs. 16.42;  $p < 0.001$ ) and less likely to use a seatbelt (84.09 vs. 73.22;  $p < 0.001$ ) or to have received a recent mammogram (except mammogram age 50+) (76.88 vs. 72.46;  $p < 0.001$ ), blood stool test (24.78 vs. 19.16;  $p < 0.001$ ), or sigmoidoscopy (59.45 vs. 51.81;  $p < 0.001$ ). However, they were more likely to report recent physical activity (81.95 vs. 74.86;  $p < 0.001$ ) and to have received a recent pap smear (87.99 vs. 83.41;  $p < 0.001$ ). They also reported more social support. Heavy drinkers mirrored binge drinkers except in the receipt of mammograms (age 40+) and perceived social support which were non-significant (Paul et al., 2011).

In Polen, Green, Perrin, Anderson, and Weisner's (2010) mixed gender study,

data were collected from 7,884 total participants (2,995 males and 4,889 females) ages 18 to 64. Data collected included sociodemographic characteristics and health-related attitudes and practices such as feelings regarding seeing the doctor or related concerns about disapproval from health care providers. Data on health care self-efficacy, skepticism toward medical care, and health-related risk were also collected. Health-related practices such as smoking, seatbelt usage, body mass index, frequency of eating breakfast, fruit and vegetable consumption, exercise practices, hours of sleep, stress management, and two measures of alcohol consumption (drinking status and frequency of heavy drinking days) were collected. Participants were placed in categories of drinkers which included lifelong abstainers, former drinkers, and active drinkers. The active drinkers were further categorized into four levels based on frequency of drinking. Health and functional status were also assessed using the Short Form (36) Health Survey.

Results indicated that women's drinking practices were much lighter than men's. They were twice as likely to be lifelong abstainers (16.6 vs. 8.9;  $p < 0.001$ ) and less likely than men to report heavier drinking (13.9 vs 30.8;  $p < 0.001$ ). Similarly, women who were current drinkers were twice as likely to report "never" engaging in heavy drinking episodes (81.6 vs. 40.8;  $p < 0.001$ ) as compared to men and were less likely to report heavy drinking at any frequency level than men. Multivariate analysis of health-related attitudes and values, health-related practices, and health status and functioning were conducted and analyzed for gender differences with the two drinking measures for each set of dependent variables. Results showed that of current drinkers, the more frequent heavy drinking days were negatively associated with better health-related attitudes and

values as they reported less collaborative relationships and greater dislike in going to the doctors [Mean (SE): 2.3 (0.08) vs. 2.2 (0.01)], more concern regarding their doctor's disapproval of their health practices [Mean (SE): 1.9 (0.08) vs. 1.4 (0.01)], and less confident they could change health practices [Mean (SE): 1.8 (0.08) vs. 2.3 (0.01)]. Women were more concerned about their doctor's disapproval of their health practices as compared to men [Mean (SE): 2.0 (0.14) vs. 1.8 (0.06)].

Regarding health-related practices, among the most frequent heavy drinkers, women were more likely to get less sleep [Mean (SE): 2.4 (0.07) vs. 2.2 (0.01)], to smoke [Mean (SE): 2.4 (0.07) vs. 2.2 (0.01)], and to cope with stress by smoking or drinking than men [Mean (SE): 2.4 (0.07) vs. 2.2 (0.01)]. Results cited that frequency of seat belt usage [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 3.8 (0.06) vs. 3.9 (0.01), respectively] and fruit and vegetable consumption [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 0.12 (0.05) vs. 0.22 (0.01), respectively] were inversely related to frequency of heavy drinking days but that exercise [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 2.4 (0.26) vs. 2.2 (0.04), respectively] or Body Mass Index (BMI) [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 26.9 (0.79) vs. 28.3 (0.12), respectively] were not. There was an inverse relationship between the number of drinks per month to frequency of eating breakfast [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 2.1 (0.09) vs. 2.3 (0.03), respectively] and but a positive relationship to hours of sleep [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 1.6 (0.08) vs. 1.7 (0.01), respectively].

Analysis of health status revealed that daily or almost daily heavy drinkers compared to less frequent heavy drinkers scored worst in general [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 48.4 (1.03 vs. 50.4 (0.16), respectively] and mental health scales [Mean (SE) frequent daily heavy drinking vs. never heavy drinking: 47.5 (1.16) vs. 50.0 (0.18), respectively]. Former drinkers scored lowest on the general [Mean (SE) former drinker vs. 90 or more drinks/month: 47.3 (0.24) vs. 49.4 (0.67, respectively] and vitality scales [Mean (SE) former drinker vs. 90 or more drinks/month: 48.2 (0.26) vs. 51.1 (0.72), respectively] of all the categories of current drinkers. Abstainers had the best mental health scores. Gender differences noted in the general health analysis cited that women scored worst in mental health and vitality than did men (Polen et al., 2010).

### **Summary and Critique of Literature**

In summary, AUD is most frequently observed in younger age groups and has the highest prevalence rate amongst Caucasians but the *American Indian/Alaska Native* group has the highest percentage per capita. The disorder impacts not only the individual with but the family unit as well. Many children in the US live with a parent with an AUD and many children in the US are born with fetal alcohol spectrum disorder. Hence, the US spends billions of dollars annually on the health care needs of individuals suffering from the effects of AUD.

Although effective treatments are available, still nearly 75% of individuals with AUD never seek help (Dawson et al., 2006). Gender differences have been found; women with AUD are at a higher risk of becoming addicted faster and for developing more acute

and chronic alcohol-related problems such as severe brain damage, even with less consumption than men. This can be attributed to differences in body composition. Unfortunately however, there exist a significant gap in treatment rates between men and women. Additionally, for women who do seek residential treatment for AUD, studies show that they are at a greater risk than their male counterparts for a compromised healthy lifestyle related to factors such as income and education. Women also view treatment with less acceptability, report less willingness to participate in self-help groups, and have a greater perception of community stigma.

Personal-health behaviors can be influenced either negatively or positively by environmental, situational, social factors, and cognitive perceptions. Individuals with AUD may have neglected many health promotion and preventive practices and may have a poorer health status secondary to the effects of alcohol. An essential aspect in the treatment and recovery of individuals with AUD is health promotion. Health promotion and HPB are closely linked. Health promotion strategies help individuals to have better control over health status. There are several organizations that have established health agenda guidelines for health care prevention and promotion with a focus on the female population. In the US, the *Healthy People 2020* initiatives have set population goals that include reducing the consumption of alcohol and the number of deaths related to alcohol use and increasing the proportion of persons needing treatment for AUD to those that receive treatment.

Health promotion barriers prevent individuals from partaking in HPB and may be real or imagined. The concept of health promotion barriers plays a significant part in

many theories such as the Health Belief Model, Banduras' Social Cognitive Theory, Pender's' Health Promotion Model, and Easoms' Conceptual Model which can be used to help understand an individual's HPB. Numerous perceived barriers have been identified to interfere with the practice of HPB.

Although little research has been done specifically on the barriers to HPB of women with AUD, there have been several systematic reviews conducted on the HPB of other female populations and on mixed-gender samples that may provide some insight into health promotion barriers and the HPB of women with AUD. Some of the perceived barriers cited included having lower education and knowledge levels as well as having time constraints, multiple obligations, health insurance status, treatment cost, and treatment related concerns.

Study results of HPB of individuals with AUD indicate that more frequent heavy drinking days are generally negatively associated with health-related attitudes and positively associated with less collaborative relationships, a greater dislike in going to the doctor, and more concern regarding their doctor's disapproval of their health practices. However, drinking has been showed to have mixed results on the practice of HPB. Analysis of health status regarding categories of drinking found that heavier drinking was related to poorer general and mental health scale scores as former drinkers scored the lowest on general and vitality scales, and abstainers had the best mental health scores. Gender differences cited were that woman scored worst in mental health and vitality than did men.

Identifying barriers to health promotion behavior of women in early recovery is

essential to health care providers so that efforts to assist the individual to overcome these may be given. Questions still unanswered are what these barriers are and whether women with AUD experience a greater number of concurrent barriers than the general population.

Although models linguistically define barriers in different manners all have a commonality of impeding health promotion behavior or activities. For the purposes of this study, perceived barriers will be defined as any factor that impedes health promoting activities or behavior and includes an individual's perceptions which may real or imagined. Next, the framework guiding this study will be reviewed.



## Theoretical Framework

### The Health Promotion Model

**Overview.** Nola Pender's Health Promotion Model (HPM) (Appendix G) was first developed in 1982 and was subsequently revised in 1996 secondary to changes in theoretic perspectives and empirical findings. Three new variables were introduced and appear in the revised model: activity-related affect, commitment to a plan of action, and immediate competing demands and preferences (Pender et al., 2006). The HPM is a middle range theory and its' key concepts include person, environment, nursing, health, and illness. The model's theoretical roots are based in the expectancy value theory in which individuals achieve goals based on engaging in actions they perceive as possible and personally valuable. The HPM also has roots in the social cognitive theory which proposes that an individual's thoughts, behaviors, and environments are interactive and dynamic. The model includes the concept of *perceived self-efficacy*. According to Pender's manual, *The Health Promotion Model Manual*, individual health is described as "the actualization of inherent and acquired human potential through goal-directed behavior, competent self-care, and structural integrity and harmony with relevant environments. Health is an evolving life experience" (Pender, n.d., p.3). According to Pender, the model is a "guide for exploration of the complex biopsychosocial processes that motivate individuals to engage in behaviors directed toward the enhancement of health" (Pender et al., 2006, p. 47). The HPM has been used extensively in various populations and settings (Alkhalaileh, Khaled, Baker, & Bond, 2011).

**Model components.** Pender proposed *individual characteristics and experiences*,

*behavior-specific cognitions and affect*, and *behavioral outcome* as the three major components of the HPM to “assist nurses in understanding the determinates of health behavior as a basis for behavioral counseling to promote healthy lifestyles” (Pender, n.d., p. 2). Individual characteristics and experiences pertain to two subcategories: *prior related behavior* and *personal factors*. These refer to the assessment of the individual regarding frequency of the same or similar behavior in the past and the individual’s biological, psychological, and sociocultural aspects, respectively. The second major model component, behavior-specific cognition and affect, pertains to eight subcategories. Five of the subcategories address the individual’s perceptions in regards to benefits to action, barriers to action, self-efficacy, and interpersonal and situational influences. The *perceived barriers to action* domain refers to those perceptions of challenges or personal costs of partaking a particular health behavior. The third major model, behavioral outcome, refers to the desired outcome of the *health promoting behavior* or outcome of the health decision-making and preparation for action (Pender et al., 2006).

**Perceived barriers to action.** According to Pender’s book, *Health Promotion in Nursing Practice*, “anticipated barriers have been repeatedly found to affect intentions to engage in a particular behavior and to execute the behavior” (Pender et al., 2006, p. 53). Barriers can be real or imagined and include such issues as inconvenience, monetary cost, time investment, availability, and difficulty. Furthermore, such health concerns as smoking or poor dietary content may seem difficult for individuals to refrain from in efforts to seek improved health because despite being unhealthy, the individual receives satisfaction from these activities as well. The eventual outcome is avoidance behavior to

change. The components that have impact on behavioral change are *readiness to act* and *barrier levels* such that when barrier levels are high and readiness to act is low there is a low likelihood of the individual making behavioral changes. Likewise, when barrier levels are low and readiness to act is high, the individual's behavior is more apt to change (Pender et al., 2006).

**Relationships.** Each of the model components impact or influence other components. Prior related behavior influences behavior-specific cognitions and affect. Personal factors influence behavior-specific cognitions and affect and directly influence behavior. Behavior-specific cognition and affect influences the commitment to a plan of action, which ultimately influences health-promoting behavior. Perceived benefits to action and perceived barriers to action, perceived self-efficacy, and activity-related affect can directly influence health-promoting behavior (Pender et al., 2006).

**Assumptions.** The HPM assumes that individuals have the capacity for reflective self-awareness, self-initiation, and interacting with the environment, will seek to regulate their own behavior and value growth in positive directions, and will seek to express their unique human health potential. Furthermore, the HPM assumes health professionals as being a part of the individual's environment that pose an influence on the person throughout their life span (Pender et al., 2006).

Pender's Health Promotion Model served as the framework for this study. The study's emphasis was on the perceived barriers aspect of Penders' model. The study efforts were aimed at exploring the perceptions of challenges or personal costs of women struggling in early recovery from AUD that serve as factors which may impede them

from engaging in health promotion behavior. Exploring the nature of these perceived barriers, whether real or imagined, may provide professionals with insight on areas in which to focus efforts in assisting women in reducing barrier levels. A reduction in barriers may according to Penders' model, have an impact and improve the likelihood of a positive behavioral change towards health promotion and thus ultimately improved health and wellness outcomes for these women. Next, the methodology of the study will be discussed.

## **Methodology**

### **Purpose**

The purpose of this study was to explore the perceived barriers to HPB of women in early recovery from AUD.

### **Research Question**

What are the perceived barriers to HPB of women in early recovery from AUD?

### **Design**

The study employed a survey design.

### **Sample**

A convenience non-probability sampling method was used to recruit women who were attending 12-step recovery meetings for alcoholism from 32 sites across the states of Connecticut, Massachusetts, and Rhode Island.

In establishing an appropriate time period of sobriety, this writer referred to the *Journal of Substance Abuse Treatments*' special section: *Defining and Measuring 'Recovery'* which published the article: *What is recovery? A working definition from the Betty Ford Institute*. This was compiled from a consensus panel representing addiction treatment, policy, and research personnel in efforts to develop a definition of recovery. The following is an excerpt from the article:

Evidence indicates that for formerly dependent individuals, sobriety is most reliably achieved through the practice of abstinence from alcohol and all other drugs of abuse. Early sobriety = 1–11 months; sustained sobriety = 1–5 years; stable sobriety = 5 years or more (Betty Ford Institute Consensus Panel, 2007, p.

222).

Therefore, inclusion criteria required that the participant be: self-identified as having an AUD; had been abstinent from alcohol and other non-prescribed substances for more than 2 weeks but less than 12 months; age of 18 years or older; had the ability to consent, and was willing to complete an English-speaking survey. Exclusion criterion was male gender.

### **Procedures**

The data collection commenced after IRB approval was granted and continued until the desired sample size of 50 was achieved. In accordance with the direct correspondence with the General Service Office (GSO) of Alcoholics Anonymous (Appendix H) regarding establishing meeting leader contacts, this researcher approached 12-step meeting leaders before the start of an anticipated meeting and asked permission to attend a session and make an announcement for recruitment. The researcher read a Rhode Island College Institutional Review Board approved script (Appendix I) that invited individuals to participate in the study. After the meeting, those who were interested received the IRB approved consent form (see Appendix J) prior to completing the survey. The consent described the study, the assurance of anonymity, and a modest compensation of a recovery-themed coffee mug. The researcher answered any questions that the individual had about the consent process and study procedures.

Once the individual consented, the participant received the data collection materials. Upon completion, the participant was asked to drop the completed survey and the consent form in separate drop boxes. The participant was thanked for her

participation, given a copy of the consent form, and the compensation as previously mentioned.

## **Measurement**

The survey process included the use of a self-reported paper and pencil survey which captured demographical and perceived barriers to HPB data.

**Socio-demographic variables.** The variables collected included: age range, years of alcohol usage, length of alcohol abstinence period, and relapse history (Appendix K).

**Barriers to Health Promotion Activities for Disabled Persons Scale.** The *Barriers to Health Promotion Activities for Disabled Persons Scale* (BHADP) (Becker, Stuijbergen, & Sands, 1991) was utilized to measure the perceived barriers to HPB. Permission to use the scale was not required.

The BHADP was developed in 1991 to measure barriers to health promotion activities among persons with disabilities (Becker et al., 1991). The most recent version of the scale has been modified from its version and includes two additional barrier items. These were added at the suggestion of individuals with disabilities and include *weather* and *lack of help from health care professionals* (St David's Center for Health Promotion and Disease Prevention Research in Underserved Populations, 2013). The scale is an 18-item, 4-point likert-type scale that requests the respondent to indicate the frequency of the listed barriers that prevent them from carrying out HPB. The 18 barriers listed can be categorized according to intrapersonal, interpersonal, and environmental factors. Responses are scored 1 (*never*), 2 (*sometimes*), 3 (*often*) and 4 (*routinely*). Scores can range from 18 to 72. The greater the barriers that the individual reports, the higher the

score will be (Becker et al., 1991).

The scale was originally designed for use with persons with disabilities and has been noted to have a “ceiling effect” and that modification may alter its’ reliability and validity (St David’s Center for Health Promotion and Disease Prevention Research in Underserved Populations, 2013). The scale has been used not only to explore HPB of physically disabled individuals but other populations such as sheltered homeless women, childbearing women, community-dwelling older Chinese people in Hong Kong, individuals in long-term marriages, and healthy rural women (Alkhalaileh et al., 2011). The scale has not been used explicitly with individuals with AUD.

Becker, Stuifbergen, and Sands’ (1991) studied 135 disabled adults living in two southwestern cities. The authors reported that the scale demonstrated a Cronbach's  $\alpha$  of .82 for internal reliability with item-total correlations ranging from .25 to .59. Additionally, the article cited that low correlations were obtained for the total BHADP, Motivation, and External subscales and the Marlowe-Crowne Social Desirability Scale ( $r = -.21, -.24, -.15$ ) suggesting response patterns were not primarily attributable to response set bias.

A t-test analysis was conducted between a comparison group with 144 nondisabled individuals. The non-disabled group scored significantly lower than the disabled group on the total BHADP ( $t = 8.45, df = 269, p < .001$ ), the Motivation Subscale ( $t = 5.71, df = 272, p < .001$ ), and the External Barriers Subscale ( $t = 9.01, df = 271, p < .001$ ). These results indicate that the BHADP discriminates between disabled and non-disabled persons in terms of barriers to health promotion. The scale has been



utilized with many varied populations such as individuals with multiple sclerosis and post polio syndrome and has yielded good internal consistency reliability results as well (Becker, Ingalsbe, Sands, & Stuifbergen, 1989).

The BHADP scale had not been used with individuals with AUD. The scale was modified by this writer (Appendix L) to provide one open-ended response. The open-ended response, *other reasons*, allowed the participant an opportunity to disclose and elaborate on barriers particular to the individual's circumstances that had not been included in the scale and could be cause for recommendation for future inclusion. A pilot test consisting of a sample of three individuals was conducted. All participants completed the survey and were debriefed to determine if they found difficulty or need for revision on any portion of the form. No reports were given that would indicate a need for revision.

### **Data Analysis and Evaluation**

Data was entered by researcher and was verified manually. Results were displayed through tables and charts. Data analysis utilized descriptive statistics of demographic data. Frequency distributions and percents of the 18 structured-response items on the *Perceived Barriers Questionnaire* were evaluated. Qualitative responses to the one open-ended response were analyzed for content and themes. A Microsoft Excel data analysis program was used.

## Results

### Demographic Characteristics

Demographic characteristics of the sample are illustrated in Table 1 on the next page. Participants ( $N = 50$ ) represented all age groups except the 65 or older group. The majority of participants were 26 to 57 years old (86%). All subjects had three or more years of alcohol consumption, with 72% ( $n = 36$ ) of the participants having a greater than 10 year history. All classifications of sobriety lengths were represented. Thirty-four percent ( $n = 17$ ) had been sober from one month to less than three months, while 28% ( $n = 14$ ) had been sober for three months to less than six months. Hence, 80% of the sample ( $n = 40$ ) reported less than six months of sobriety. Fifty percent ( $n = 25$ ) of the participants had relapsed three or more times, with only 16% ( $n = 8$ ) reporting that they had never relapsed.

Table 1

*Characteristics of the Sample as Numbers and Percentage (N = 50)*

Characteristic	<i>n</i>	Percent
Age group		
18-25	6	12%
26-33	10	20%
34-41	10	20%
42-49	11	22%
50-57	12	24%
58-64	1	2%
65 or older	0	0%
Years of Alcohol Consumption		
Less than 1	0	0%
1 to less than 3	0	0%
3 to less than 5	5	10%
5 to less than 10	9	18%
More than 10	36	72%
Sobriety Length		
2 weeks to < 1 month	9	18%
1 month to < 3 months	17	34%
3 months to < 6 months	14	28%
6 months to < 1 year	10	20%
Number of Relapses		
None	8	16%
1 to 2	17	34%
3 or more	25	50%

### Participants' Perceived Barriers Responses

Table 2 on the next page provides participants' mean scores for each of the barrier responses. Individual responses for each barrier were ranked by the participants on a scale of 1 to 4. The rankings were reflected as *never* (1), *sometimes* (2), *often* (3), or *routinely* (4). No mean scores fell in the range of 3 to 4; 50% ( $n = 9$ ) of the mean scores ranged between 2.08 to 2.78 and 50% ( $n = 9$ ) ranged between range 1.64 to 1.94. Of the responses, women cited lack of money (mean = 2.78), too tired (mean = 2.54), lack of time (mean = 2.24), and feeling like I can't do things correctly (mean = 2.24) difficulty with communication (mean = 2.18) as the greatest perceived barriers. Least perceived barriers cited were no one to help me (mean = 1.64), not interested (mean 1.68), and bad weather (mean 1.68).

Table 2

*Participant Responses to Perceived Barriers Response on the BHADP Scale.*

Perceived Barrier	Mean
Lack of convenient facilities	2.16
Too tired	2.54
Lack of transportation	2.10
Feeling what I do doesn't help	2.08
Lack of money	2.78
Impairment	1.70
No one to help me	1.64
Not interested	1.68
Lack of information	1.72
Embarrassment about my appearance	1.94
Concern about safety	1.76
Lack of support from family/friends	1.78
Interferes with other responsibilities	2.12
Lack of time	2.24
Feeling I can't do things correctly	2.24
Difficulty with communication	2.18
Bad weather	1.68
Lack of help from health care professionals	1.90

Figure 1 provides a frequency distribution table representing the combined scores of the participants' responses to the *Barriers to Health Promotion Activities for Disabled Persons Scale*. Combined scores of the 50 participants ranged from 82 to 139. The barriers chosen most frequently by women as indicated by *often* and *routinely* were lack of money (36%,  $n = 18$ ), feeling I can't do things correctly (20%,  $n = 10$ ), lack of transportation (20%,  $n = 10$ ) and embarrassment about my appearance (20%,  $n = 10$ ).

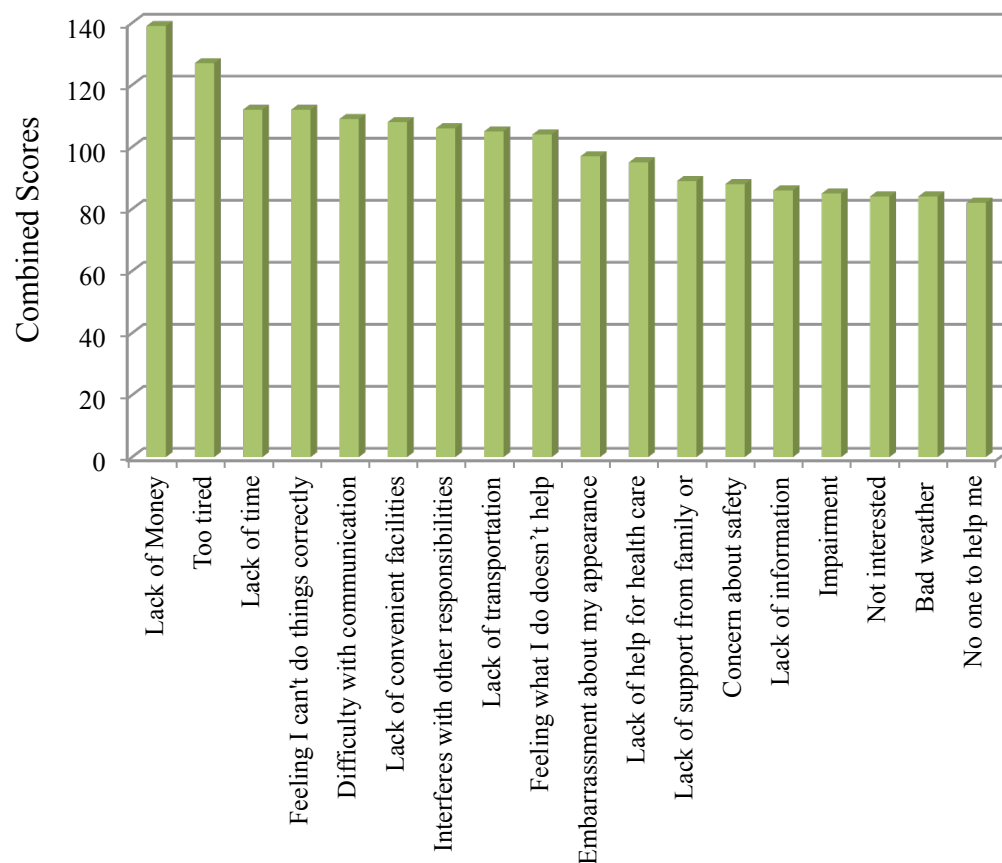


Figure1. Frequency distribution table of combined scores of the perceived barriers responses to health promotion.

Noteworthy are the responses to the one open-ended question that allowed participants to add barriers that were not included on the *Barriers to Health Promotion Activities for Disabled Persons Scale*. Only four participants responded to the open-ended question. Responses included that women are caretakers and that it was difficult to let someone help or take care of them. Other responses cited were having low self-esteem or self-confidence, being too depressed or anxious, and having other mental health issues. Next, the summary and conclusions will be presented.

### **Summary and Conclusion**

Alcohol Use Disorder is a common chronic disease that affects approximately 17 million persons aged 12 years or older in the US (SAMHSA, 2012). Alcohol Use Disorder is the third leading preventable lifestyle-related cause of death in the US (Mokdad et al., 2004). Furthermore, AUD crosses all race, ethnic, socioeconomic, educational level, occupational, age, and gender boundaries (Dawson et al., 2006). Though there is no known cure for alcoholism, evidenced-based treatments are available. Initiatives include measures that focus on improving health by “overcoming or managing one’s disease(s) as well as living in a physically and emotionally healthy way” (SAMHSA, 2012, p. 3). Gender differences are associated with alcohol usage as women’s bodies react differently than men’s to alcohol, placing women at higher risk for many chronic illnesses. As a result, the mortality rate for women with AUD is 50% to 100% greater than men’s (NIAAA, 2008). Identifying barriers to HPB of this population is important for health professionals in their efforts to foster a healthy lifestyle.

A study that employed a survey design was conducted. The purpose of this study was to explore the perceived barriers to HPB of women in early recovery from AUD. The study data collection commenced after IRB approval was granted. Utilizing a convenience non-probability sampling method, women ( $N = 50$ ) attending 12-step recovery meetings for alcoholism from a geographic area that included Connecticut, Massachusetts, and Rhode Island were recruited until sample size was achieved. Inclusion criteria required that the participant: be self-identified as having an AUD; had been abstinent from alcohol and other non-prescribed substances for greater than 2 weeks



but less than 12 months; age of 18 years or older; had the ability to consent; and was willing to complete a survey. The survey captured demographical data that included age range, years of alcohol usage, length of alcohol abstinence period, and relapse history. Perceived barriers data were collected utilizing the *Barriers to Health Promotion Activities for Disabled Persons Scale*.

The demographic data indicated the characteristics of the sample represented all age groups except the 65 or older group, with the majority of participants between 26 to 57 years old. All subjects had at least 3 years of alcohol consumption, with 72% ( $n = 36$ ) more than a 10 year history. All sobriety lengths were represented and 80% ( $n = 40$ ) of the sample reported less than six months. Fifty percent of the participants had relapsed three or more times and only 16% ( $n = 8$ ) reported they had never relapsed. Hence, the sample population consisted predominately of women with less than six months of sobriety with extended periods of alcohol consumption and multiple relapses in the past.

Like others, the study findings confirmed that personal-health behaviors can be influenced negatively by environmental, situational, social factors, and cognitive perceptions (Glass & McAtee, 2006; Pender et al., 2006). Nine (50%) of the mean scores fell between 1.64 to 1.94 and nine (50%) fell in range between 2.08 to 2.78 with an overall mean score of 2.01. Combined individual scores ranged from 82 to 139 out of a possible 200 for each of the barriers on the *Barriers to Health Promotion Activities for Disabled Persons Scale*. Women cited financial aspects, fatigue, time management issues, self-efficacy concerns, and communication difficulties as the greatest perceived barriers. Least reported perceived barriers included lack of a support system, disinterest,

and weather concerns. The most frequent combined responses of *often* and *routinely* were lack of money (36%,  $n = 18$ ), feeling I can't do things correctly (20%,  $n = 10$ ), lack of transportation (20%,  $n = 10$ ), and embarrassment about my appearance (20%,  $n = 10$ ).

Limitations of the study include a limited ability to generalize findings to the larger population of women with AUD. The study design, convenience sampling of self-identified individuals, may have resulted in a non-representative select sample.

Additionally, since the sample was community-based and focused only on those individuals who would chose to attend voluntary 12-step meetings, it is possible that differences in perceived barriers between individuals that attend 12-step meetings and those who choose other methods to support their recovery exist. Another limitation was the lack of stratification into the AUD sub-classifications of *mild*, *moderate*, and *severe* determinations, limiting the ability to determine severity of the disorder within the sample population. Severity of disease may have some effect on the barrier responses secondary to the physical, psychological, and socioeconomic consequences that are associated with the disorder. The sample itself represented only 12% of the population that has the highest prevalence (13.7%) of heavy alcohol use, the age group of 18 to 25 years (CDC, 2011a). Furthermore, the study did not address cultural, ethnic, and geographical differences and the degree of which these factors influenced perceived barriers to HPB. Lastly, because individuals with AUD often have co-occurring conditions, it is unknown the degree to which these co-occurring conditions were present in the sample population and its impact on the perceived barriers responses.

Overall, the results of the study indicated that although some women perceived

certain barriers to be very troublesome, generally women with AUD perceived barriers only as a moderate challenge. Nonetheless, it is important that health care professionals be aware that some women with AUD may have severe financial, transportation, and communication concerns that preclude them from obtaining their necessary health care services. Although some women are interested, have the information they need, and do have individuals to help them with carrying out HPB, they may not feel they have enough time or feel too fatigued to carry out HPB. These women also may have low self-esteem and self-efficacy issues that may deter them in caring for their needs. Thus, it is important for health care professionals to assess each individual's situation for issues related barriers that may be prohibiting the individual from attending to their health needs.

### **Recommendations and Implications for Advanced Nursing Practice**

The study findings have many implications for the role of the advanced practice registered nurse (APRN) in the areas of research, education, advocacy, health care policy, practice, and leadership. It is important to focus efforts in each of these areas to address the barriers to HPB that women with AUD face. Addressing issues on all levels provides a comprehensive approach that will have the greatest impact on individual HPB and population health outcomes.

Recommendations for research include efforts to clarify the nature, cause, and extent of the impact on HPB of the most frequently cited and concerning barriers for the population. Conducting research on women who choose other methods to support their recovery aside from 12-step programs and determining whether perceived barrier responses are consistent or differ would be important to establish as a particular approach to recovery may have better outcomes. Furthermore, stratifying the sub-classifications of AUD and determining if there is a correlation between the classifications and perceived health promotion barriers or behavior may provide some valuable information for targeting specific populations. Research that addresses cultural, ethnic, and geographical differences and the degree to which these factors influenced perceived barriers to HPB of women with AUD is an important aspect needed to provide patient-centered care. Research on the effectiveness of interventions and support programs to reduce barriers to HPB are important for designing and implementing effective programs for women.

Establishing prevention and educational programs that highlight the physiological differences between men and women with respects to alcohol usage is important to

increase public and professional awareness. Awareness can influence community leaders, health care professionals, and individuals in making better health care decisions that will impact population health. College-level healthcare programs must increase awareness of and provide education regarding gender differences, the barriers that women face, and the specific needs of women in early recovery from AUD in efforts to influence a gender specific approach in the care of individuals with AUD.

In regard to policy and advocacy, it is important for APRNs to serve as advocates for women with AUD and lobby for policies and legislation that supports evidence-based practice and reduces barriers to HPB. Advocating for policies and programs designed to meet the specific needs for women is important to reduce the disparities associated with gender. Specifically, supporting programs that focus on offsetting the financial burden that women face and improving access by considering innovative programs that take into account family and work obligations will aid women in carrying out HPB. Programs such as those that provide childcare programs may increase treatment percentages and improve outcomes.

Regarding practice concerns, the findings of this study provide a focus for APRNs when working with women with AUD. As mentioned earlier, the NCASA (2006) report cited that 92% of women with AUD do not seek treatment and the NIAAA (2008) publication on women's health cited women's mortality rate associated with AUD as being 50 % to 100% greater than men's. Hence, APRNs working in primary care and women's health need to work collaboratively with other disciplines to assess patient-specific barriers to HPB and assist them with finding solutions. Measures such as

connecting individuals with financial assistance through available federal and state-aided programs, assisting in obtaining health care insurance, and working with patients on logistics concerns such as communication, time management and transportation issues are important. Programs that provide flexible evening hour treatment options, behavioral home care services and use of innovative technology such as tele-counseling could improve access for many women, increase HPB, treatment percentages, and improve patient outcomes. A research initiative would be establishing if the finding of the study in which 50% of the sample had 3 or more relapses was decreased as a result of these interventions and would provide support for advancement of these programs.

Furthermore, in treating women with AUD it is important to assess for the presence and uncover the etiology of their fatigue. Assessments should focus on physical or psychological factors that may be contributing to fatigue. Treating the source of fatigue can help women in overcoming fatigue as a barrier to HPB. Advance practice registered nurses need to closely assess women for early warning signs of AUD and the development of the many chronic illnesses associated with AUD so that appropriate consultations and treatment can be expedited. Additionally, it is imperative that psychiatric APRNs working with women with AUD provide emotional support yet foster independence in efforts to help women develop confidence in handling concerns that will inevitably improve their self-esteem. Advanced practice nurses should provide appropriate referrals for counseling services as needed. Lastly, determining the applicability of the findings of this study to APRNs' practice in treating other addiction populations is important as many of the most concerning barriers that women with AUD

cited may be consistent with other populations. Finding solutions to barriers of those populations will improve their health status as well.

The findings of the study support the need for organizational and systems leadership of APRNs in regard to quality and safety measures in the care of women with AUD. Advanced practice registered nurses need to be aware of the impact that gender differences and perceived barriers have on treatment outcomes of women with AUD and the associated cost implications. Advance practice nurses must utilize leadership and change strategies in promoting organizational and systems processes and that reduce barriers and support access to preventative services, provide early intervention, and gender specific programs for women with AUD. Reducing barriers to HPB and utilizing gender specific programs will reduce the incidence and complications that women with AUD face. Managing resources by utilizing cost-effective evidenced-based treatment modalities are necessary in today's health care environment. This approach will improve the quality the population's health and in the long run reduce the economic and social burden of AUD on the US.

In conclusion, the study findings have many implications for reducing barriers to HPB and improving outcomes of women with AUD in the areas of research, education, advocacy, health care policy, practice, and leadership. The many facets of the APRN role can be instrumental in reducing these barriers and improving outcomes. Conducting research to clarify the nature and cause of women's barriers, the extent of impact on HPB of the most frequently cited barriers, and determining if different approaches to recovery are more effective in meeting women's needs is indicated. Determining what impact

severity of disease, culture, ethnicity, or demographics have on perceived barriers is important for the delivery of patient-centered care. Increasing awareness of gender differences, the barriers that women face in early recovery, and focusing efforts on gender specific programs supports efforts to reduce disparities associated with gender. Lobbying for policies and legislation that supports evidence-based practice and reduces barriers to HPB and working collaboratively with other disciplines to address patient specific barriers will improve outcomes. Advance practice registered nurses must utilize leadership and change strategies in promoting organizational and systems processes that will reduce barriers, support access to preventative services, provide early intervention, and gender specific programs for women. Thus, the APRN must use many avenues to help reduce barriers the HPB of women in early recovery from AUD. Utilizing a comprehensive approach will have the greatest impact on individual HPB and population health outcomes that will benefit society both economically and socially.



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## Appendix A

DSM-IV		DSM-5	
Any 1 = ALCOHOL ABUSE	Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home (e.g., repeated absences or poor work performance related to alcohol use; alcohol-related absences, suspensions, or expulsions from school; neglect of children or household).	1 Alcohol is often taken in larger amounts or over a longer period than was intended. (See DSM-IV, criterion 7.)	The presence of at least 2 of these symptoms indicates an <b>Alcohol Use Disorder (AUD)</b> .
	Recurrent alcohol use in situations in which it is physically hazardous (e.g., driving an automobile or operating a machine when impaired by alcohol abuse).	2 There is a persistent desire or unsuccessful efforts to cut down or control alcohol use. (See DSM-IV, criterion 8.)	
	Recurrent alcohol-related legal problems (e.g., arrests for alcohol-related disorderly conduct). <b>**This is not included in DSM-5**</b>	3 A great deal of time is spent in activities necessary to obtain alcohol, use alcohol, or recover from its effects. (See DSM-IV, criterion 9.)	
	Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of the alcohol (e.g., arguments with spouse about the consequences of intoxication, physical fights).	4 Craving, or a strong desire or urge to use alcohol. <b>**This is new to DSM-5**</b>	
Any 3 = ALCOHOL DEPENDENCE	Tolerance, as defined by either of the following: a) A need for markedly increased amounts of alcohol to achieve intoxication or desired effect b) Markedly diminished effect with continued use of the same amount of alcohol	5 Recurrent alcohol use resulting in a failure to fulfill major role obligations at work, school, or home. (See DSM-IV, criterion 1.)	The severity of the AUD is defined as: <b>Mild:</b> The presence of 2 to 3 symptoms <b>Moderate:</b> The presence of 4 to 5 symptoms <b>Severe:</b> The presence of 6 or more symptoms
	Withdrawal, as manifested by either of the following: a) The characteristic withdrawal syndrome for alcohol b) Alcohol is taken to relieve or avoid withdrawal symptoms	6 Continued alcohol use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by the effects of alcohol. (See DSM-IV, criterion 4.)	
	Alcohol is often taken in larger amounts or over a longer period than was intended.	7 Important social, occupational, or recreational activities are given up or reduced because of alcohol use. (See DSM-IV, criterion 10.)	
	There is a persistent desire or unsuccessful efforts to cut down or control alcohol use.	8 Recurrent alcohol use in situations in which it is physically hazardous. (See DSM-IV, criterion 2.)	
	A great deal of time is spent in activities necessary to obtain alcohol (e.g., driving long distances), use alcohol, or recover from its effects.	9 Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by alcohol. (See DSM-IV, criterion 11.)	
	Important social, occupational, or recreational activities are given up or reduced because of alcohol use.	10 Tolerance, as defined by either of the following: a) A need for markedly increased amounts of alcohol to achieve intoxication or desired effect b) A markedly diminished effect with continued use of the same amount of alcohol (See DSM-IV, criterion 5.)	
	Alcohol use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance (e.g., continued drinking despite recognition that an ulcer was made worse by alcohol consumption).	11 Withdrawal, as manifested by either of the following: a) The characteristic withdrawal syndrome for alcohol (refer to criteria A and B of the criteria set for alcohol withdrawal) b) Alcohol (or a closely related substance, such as a benzodiazepine) is taken to relieve or avoid withdrawal symptoms. (See DSM-IV, criterion 6.)	

Alcohol Use Disorder: A Comparison Between DSM-IV and DSM-5. Adapted from National Institute of Alcohol Abuse and Alcoholism, NIH Publication No.13-77999, November 2013 retrieved from <http://pubs.niaaa.nih.gov/publications/dsmfactsheet/dsmfact.htm>, June 12, 2014.

## Appendix B

Service Material from the General Service Office

### A.A. PREAMBLE©

Alcoholics Anonymous is a fellowship of men and women who share their experience, strength and hope with each other that they may solve their common problem and help others to recover from alcoholism. The only requirement for membership is a desire to stop drinking. There are no dues or fees for A.A. membership; we are self-supporting through our own contributions. A.A. is not allied with any sect, denomination, politics, organization, or institution; does not wish to engage in any controversy, neither endorses nor opposes any causes. Our primary purpose is to stay sober and help other alcoholics to achieve sobriety.

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## Appendix C

### II

#### Spiritual Experience

The terms “spiritual experience and “spiritual awakening” are used many times in this book which, upon careful reading, shows that the personality change sufficient to bring about recovery from alcoholism has manifested itself among us in many different forms.

Yet it is true that our first printing gave many readers the impression that these personality changes, or religious experiences, must be in the nature of sudden and spectacular upheavals. Happily, for everyone, this conclusion is erroneous.

In the first few chapters a number of sudden revolutionary changes are described, Though it was not our intention to create such an impression, many alcoholics have never the less concluded that in order to recover they must acquire and immediate and overwhelming “God-consciousness” followed at once by a vast change in feeling and outlook.

Among our rapidly growing membership of thousands of alcoholics such transformations, though frequent, are by no means the rule. Most of our experiences are what the psychologist William James calls the “educational variety” because they develop slowly over period of time. Quite often friends of the newcomer are aware of the difference long before he is himself. He finally realizes that he has undergone a profound alteration in his reaction to life; that such a change could hardly have been brought about by himself alone. What often takes place in a few months could seldom have been accomplished by years of self-discipline. With few exceptions, our members find that they have tapped an unsuspected inner resource which they presently identify with their own conception of a Power greater than themselves.

Most of us think this awareness of a Power greater than ourselves is the essence of spiritual experience. Our more religious members call it “God-consciousness.”

Most emphatically we wish to say than any alcoholic capable of honestly facing his problems in the light of our experience can recover, provided he does not close his mind to all spiritual concepts. He can only be defeated by an attitude of intolerance or belligerent denial.

We find that no one need have difficulty with spirituality of the program. Willingness, honesty, and open mindedness are the essentials of recovery. But these are indispensable.

“There is a principle with is a bar against all information, which is proof against all arguments and which cannot fail to keep a man in everlasting ignorance—That principle is contempt prior to investigation.”

---Herbert Spencer

Note. From *Alcoholics Anonymous 4th ed.* (pp.567-568), by Alcoholics Anonymous World Services, Inc., 2001, New York: Alcoholics Anonymous World Services, Inc. Copyright [2001] by Alcoholics Anonymous World Services, Inc. Reprinted with permission of A.A. World Services, Inc.

## Appendix D

### Service Material from the General Service Office

#### THE TWELVE STEPS OF ALCOHOLICS ANONYMOUS

1. We admitted we were powerless over alcohol—that our lives had become unmanageable.
2. Came to believe that a Power greater than ourselves could restore us to sanity.
3. Made a decision to turn our will and our lives over to the care of God *as we understood Him*.
4. Made a searching and fearless moral inventory of ourselves.
5. Admitted to God, to ourselves, and to another human being the exact nature of our wrongs.
6. Were entirely ready to have God remove all these defects of character.
7. Humbly asked Him to remove our shortcomings.
8. Made a list of all persons we had harmed, and became willing to make amends to them all.
9. Made direct amends to such people wherever possible, except when to do so would injure them or others.
10. Continued to take personal inventory and when we were wrong promptly admitted it.
11. Sought through prayer and meditation to improve our conscious contact with God, *as we understood Him*, praying only for knowledge of His will for us and the power to carry that out.
12. Having had a spiritual awakening as the result of these Steps, we tried to carry this message to alcoholics, and to practice these principles in all our affairs.

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SM F-121

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## Appendix E

Service Material from the General Service Office

### THE TWELVE TRADITIONS OF ALCOHOLICS ANONYMOUS (SHORT FORM)

1. Our common welfare should come first; personal recovery depends upon A.A. unity.
2. For our group purpose there is but one ultimate authority—a loving God as He may express Himself in our group conscience. Our leaders are but trusted servants; they do not govern.
3. The only requirement for A.A. membership is a desire to stop drinking.
4. Each group should be autonomous except in matters affecting other groups or A.A. as a whole.
5. Each group has but one primary purpose—to carry its message to the alcoholic who still suffers.
6. An A.A. group ought never endorse, finance, or lend the A.A. name to any related facility or outside enterprise, lest problems of money, property, and prestige divert us from our primary purpose.
7. Every A.A. group ought to be fully self-supporting, declining outside contributions.
8. Alcoholics Anonymous should remain forever nonprofessional, but our service centers may employ special workers.
9. A.A., as such, ought never be organized; but we may create service boards or committees directly responsible to those they serve.
10. Alcoholics Anonymous has no opinion on outside issues; hence the A.A. name ought never be drawn into public controversy.
11. Our public relations policy is based on attraction rather than promotion; we need always maintain personal anonymity at the level of press, radio, and films.
12. Anonymity is the spiritual foundation of all our Traditions, ever reminding us to place principles before personalities.

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Rev.5/9/02

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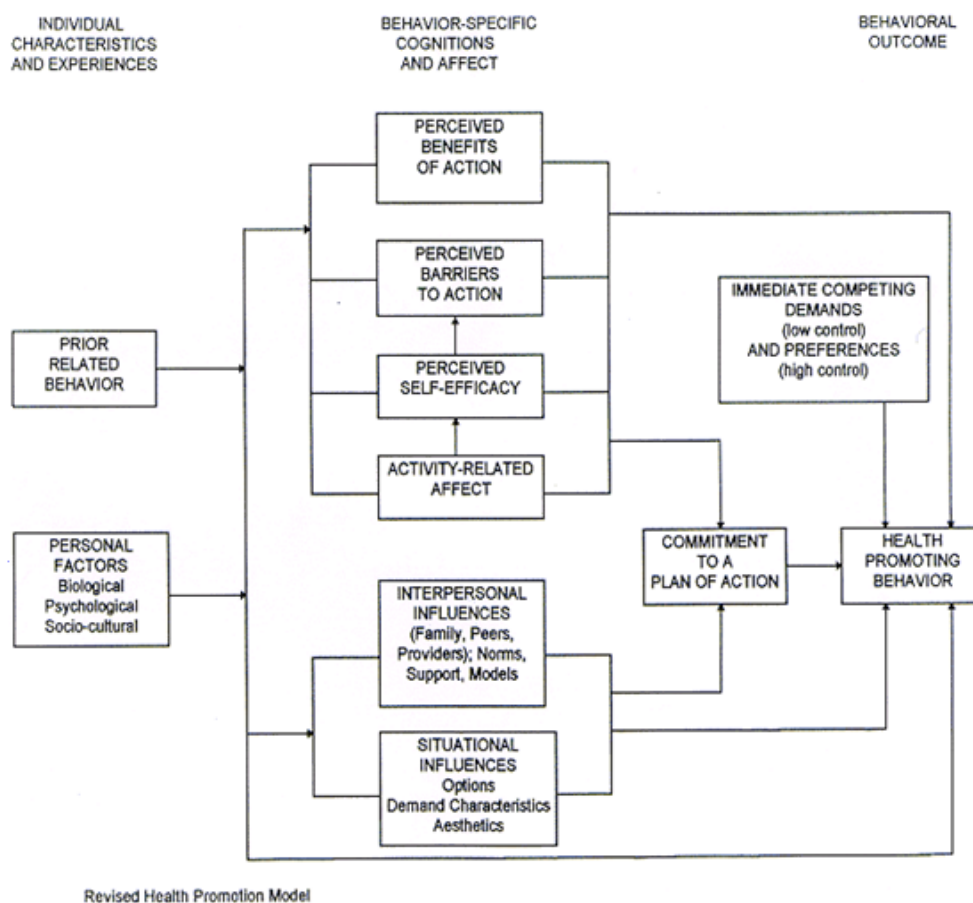
## Appendix F

### 2011 Alcoholics Anonymous Membership Survey

Characteristic	(n=8000)
Gender	
Male	65%
Female	35%
Race/Ethnicity	
White	87%
Hispanic	5%
Black	4%
Native American	2%
Asian	1%
Other	1%
Age	
Under 21	2%
21to30	11%
31to40	15%
41 to 50	24%
51 to 60	27%
61to70	6%
Over 70	6%
Marital Status	
Married	36%
Single	34%
Divorced	22%
Other	8%
Length of Sobriety	
Less than 1 year	27%
1 to 5 years	24%
5 to 10 years	12%
More than 10 years	36%

Alcoholics Anonymous World Services, Inc. (2012a). Alcoholics Anonymous 2011 membership survey. (AA Pamphlet P-48). Retrieved from <http://www.aa.org>. Adapted with permission of A.A World Services, Inc.

## Appendix G



The Health Promotion Model (revised). Adapted from Pender, N., Murdaugh, C. L., & Parson, M. A. (2006). *Health Promotion in Nursing Practice* (5th ed.), (p. 50). Upper Saddle River, New Jersey: Prentice-Hall.

## Appendix H

**From:**Staffcoord <staffcoord@aa.org> **To:**Rplais9058 <Rplais9058@aol.com> **Subject:**RE: Health Professional Request for Information on Research **Date:**Wed, Jul 16, 2014 11:40 am

---

Dear Renee,

Greetings from the General Service Office of Alcoholics Anonymous for the U.S. and Canada.

Thank you for your email and for your interest in Alcoholics Anonymous. It was a pleasure speaking with you on the telephone last week. As we discussed, A.A. has a long history of cooperation with professionals like yourself and from G.S.O. we are happy to help in any way we can.

In reply to your first question, yes, you are correct. We do not keep individual membership records, and although we list A.A. groups in our office the information is confidential and strictly for the purposes of A.A. communications.

In our experience, the approach described in your email has worked well in the past. Arriving early at an Open A.A. meeting, speaking with the person chairing or coordinating the meeting about the possibility of an announcement, and arranging to meet with willing individuals after the meeting has allowed for cooperation with professionals, while allowing each A.A. group to make its own informed decision. As you mentioned in your email, every A.A. group is autonomous. In the same manner, individual participation would be on a personal, voluntary basis.

For A.A. meeting information in the states covered in your research please contact the local A.A. area, central or intergroup offices. A list of contact resources may be accessed on our Web site at [http://www.aa.org/pages/en\\_US/find-aa-resources](http://www.aa.org/pages/en_US/find-aa-resources).

I hope that this information is helpful, but if you have any further questions please do not hesitate to contact us. In the meantime, all of us here wish you the very best in all of your endeavors.

Sincerely,

Julio Espallat

General Service Office

(212) 870-3124

## **Appendix I**

### **Recruitment Announcement**

Hello. My name is Renee Graham. I am a Masters of Nursing student at Rhode Island College. I am conducting research on women in early recover from alcoholism. I will be looking at reasons women find it difficult to do what they need to do to stay healthy such as not having a way to get to the doctor or not having enough time to go. In order to qualify for the study you must be: female; at least 18 years old; have an alcohol problem; be abstinent from alcohol and all non-prescribed substances for at least two weeks but less than 12 months.

You will be asked to complete a 10-minute survey after the meeting. No personal identifying information such as your name will be on any forms. Those who qualify and participate will be given a recovery-themed coffee mug for their complete participation.

This project is not affiliated with Alcoholics Anonymous or this meeting in anyway. Participation is not required to attend this or any other 12-step meeting and you may change your mind about participating at anytime without consequences. Those who may be interested please see me after the meeting for more information. Thank you for your time.

## Appendix J



Rhode Island College Institutional Review Board

Approval #: 1415-1137  
Expiration date: 10/30/2015

Participant's Initials: \_\_\_\_\_  
Document version: 2014-10  
Page 1 of 2

### CONSENT DOCUMENT

#### Rhode Island College

#### Perceived Barriers to Health Promotion Behavior of Women in Early Recovery from Alcohol Use Disorders

You are being asked to participate in a research study to explore the views of women who are in recovery from alcoholism or alcohol use disorders for the difficulties in doing what they want to do to stay healthy. You were selected as a possible participant because you have identified yourself as in recovery from alcoholism or alcohol use disorders, are female, are at least 18 years old, have been abstinent from alcohol and other non-prescribed substances for at least 2 weeks and up to 1 year and have the ability to consent. Please read this form and ask any questions that you may have before deciding whether to be in the study.

Renee Graham, a Masters' of Nursing student at Rhode Island College, is conducting this study.

#### Background Information

The purpose of this research is explore the reasons of women who are in recovery from alcoholism or alcohol use disorders have difficulty in doing what they want to do to stay healthy.

#### Procedures

If you choose to be a participant in this research, you will be asked to do the following things:

- Complete a self survey. The form includes some questions like age and number of years you consumed alcohol as well as questions about reasons for difficulties in having to do what is needed to stay healthy.
- The survey will take about 10 minutes.
- You will receive a recovery-themed coffee mug for your complete participation.

#### Risks of Being in the Study

The main risks of participating in this research are minimal, meaning that they are about the same as you would experience in your normal daily activities. If you experience distressing feelings that may have arose because of thinking about difficult personal situations and would like to talk to someone regarding your feelings, you may contact *The Samaritans of Rhode Island 24-Hour Crisis Hotline/Listening Line* at (401) 272-4044 or toll free in Rhode Island at (800) 365-4044.

#### Benefits to You

There are no direct benefits to you for participating in the study.



## CONSENT DOCUMENT

### Rhode Island College

#### Voluntary Participation

Your participation is completely voluntary. It is not required by any 12-step recovery program. You may choose to participate or choose not to participate in this research and it will have no effect on your ability to participate in any 12-step recovery program. Also, you may change your mind about participating at any time without negative consequences.

#### Confidentiality

The records of this research will be kept private. In any sort of report that might be published, the researcher will not include any information that will make it possible to identify you. Research records will be kept in a secured file, and access will be limited to the researcher. If there are problems with the study, the research records may be viewed by Rhode Island College review board responsible for protecting human participants and other government agencies that protect human participants in research. All data will be kept for a minimum of three years, after which it will be destroyed.

#### Contacts and Questions

The researcher conducting this study is Renee Graham. You may ask any questions you have now. If you have any questions later, you may contact her at 860-514-6178 or Cynthia Padula at [cpadula@ric.edu](mailto:cpadula@ric.edu). If you think you were treated unfairly or would like to talk to someone other than the researcher about your rights or safety as a research participant, please contact Dr. Christine Marco, Chair of the Rhode Island College Institutional Review Board at [IRB@ric.edu](mailto:IRB@ric.edu), or by phone at 401-456-8598, or by writing to Dr. Christine Marco, Chair IRB; c/o Department of Psychology, Horace Mann Hall 311; Rhode Island College; 600 Mount Pleasant Avenue; Providence, RI 02908. You will be given a copy of this form for your records.

#### Statement of Consent

I have read and understand the information above, and I agree to participate in the study *Perceived Barriers to Health Promotion Behavior of Women in Early Recovery from Alcohol Use Disorders*. I understand that my participation is voluntary and can be withdrawn at any time without negative consequences. I have received answers to the questions I asked, or I will contact the researcher with any future questions that arise. I am at least 18 years of age. I have been abstinent from alcohol and all non-prescribed substances for at least 2 weeks but less than 12 months.



## Appendix K

### Perceived Barriers to Health Promotion Measures of Women in Recovery from Alcohol Use Disorders Study

## Demographic Questionnaire

The following questions are related to demographic information. Please read carefully and circle the appropriate answer.

---

1. What is your age group
  - a. 18-25
  - b. 26-33
  - c. 34-41
  - d. 42-49
  - e. 50-57
  - f. 58-64
  - g. 65 or older
  
2. How many years did you consume Alcohol?
  - a. Less than 1
  - b. 1 to less than 3
  - c. 3 to less than 5
  - d. 5 to less than 10
  - e. 10 or more
  
3. How long of time do you have since the last time you consumed alcohol?
  - a. 2 weeks to less than 1 month
  - b. 1 month to less than 3 months
  - c. 3 months to less than 6 months
  - d. 6 months to less than 1 year
  
4. How many times have you relapsed (resumed use of alcohol or other drugs after a period of Abstinence)?
  - a. None
  - b. 1-2
  - c. 3 or more

## Appendix L

### Perceived Barriers to Health Promotion Measures of Women in Recovery from Alcohol Use Disorders Study

#### Perceived Barriers Questionnaire

Health Promotion Behaviors are such things as healthy eating, exercising and not smoking. The following questions are regarding your perceptions of the reasons that prevent women in recovery from alcoholism or alcohol use disorders from taking care of their health needs. People sometimes have problems doing what they want to do to stay healthy. Please circle the number that best indicates how much each of these problems keeps you from taking care of your health.

- 1 = Never
- 2 = Sometimes
- 3 = Often
- 4 = Routinely

- |     |   |         |
|-----|---|---------|
| 1.  | Lack of convenient facilities               | 1 2 3 4 |
| 2.  | Too tired                                   | 1 2 3 4 |
| 3.  | Lack of transportation Feeling              | 1 2 3 4 |
| 4.  | Feeling what I do doesn't help              | 1 2 3 4 |
| 5.  | Lack of money                               | 1 2 3 4 |
| 6.  | Impairment                                  | 1 2 3 4 |
| 7.  | No one to help me                           | 1 2 3 4 |
| 8.  | Not interested                              | 1 2 3 4 |
| 9.  | Lack of information                         | 1 2 3 4 |
| 10. | Embarrassment about my appearance           | 1 2 3 4 |
| 11. | Concern about safety                        | 1 2 3 4 |
| 12. | Lack of support from family/friends         | 1 2 3 4 |
| 13. | Interferes with other responsibilities      | 1 2 3 4 |
| 14. | Lack of time                                | 1 2 3 4 |
| 15. | Feeling I can't do things correctly         | 1 2 3 4 |
| 16. | Difficulty with communication               | 1 2 3 4 |
| 17. | Bad weather                                 | 1 2 3 4 |
| 18. | Lack of help from health care professionals | 1 2 3 4 |
| 19. | Other reasons: _____                        |         |