

Men, Women & Alcohol: A Distinctly Unequal & Dangerous Relationship

By Marta Kushnir, M.D.

Vice President and Medical Director CIGNA Reinsurance

ABSTRACT

This article illustrates how women who abuse alcohol are at greater risk physically, emotionally and socially than their male counterparts. As a result, I recommend that clinical assessment and underwriting of women, who abuse or have the potential to abuse alcohol, change to reflect the increased risks which these women face.

METHODS

I reviewed 134 sources from journals and textbooks encompassing clinical studies, academic research, and literature reviews; utilized the National Clearinghouse for Alcohol Information (NCALI) on-line search and personally interviewed five alcoholic women from distinct age, ethnic, racial and socioeconomic groups.

INTRODUCTION

Of the 13.7 million alcoholic Americans, about 4 million are women.¹ Of the 100,000 Americans who die annually from alcohol-related causes, 40,000 are women.¹ To put those deaths into a perhaps more meaningful context, this about the same number of women who die annually from breast cancer.²

While alcohol use in women has many psychosocial and physiological health implications worldwide, unfortunately, research activity on women's drinking habits and their sequelae during the past 30 years is sparse contrasted to similar efforts focused on men.

In the past decade, however, research efforts on

women and alcohol have begun to accelerate.

Indeed, recent research suggests that the risks and benefits derived from drinking are very different for men and women. For example, young women who drink heavily are one and one-half times more likely to die prematurely from alcohol-related illnesses than heavily drinking men.³ A commentary by Dr's Jackson and Beaglehole published in the September 16, 1995 issue of *The Lancet* notes "The mortality-related benefits of light-to-moderate drinking begins to outweigh the risks among men in their 40's and women in their 50's,...Thus the proposal of 21 units per week for men and 14 units per week for women (1 unit is defined as 8g of ethanol) is appropriate only for middle-aged and older people in western countries." Their commentary further states that "In men and women under the age of 40 years, alcohol consumption is associated with an increase in all-cause mortality even at low levels of consumption... and all-cause mortality is higher in young women who drink less than 1-2 units per day than in abstainers..."

Furthermore, an article published in the *Annals of Internal Medicine* in 1992 noted that women are significantly more susceptible to the increased mortality of alcohol. Researchers led by Arthur L. Klatsky, M.D. of the Kaiser Permanente Medical Center in Oakland, CA studied 128,934 enrollees of an HMO from 1978 through december 1985 and found that the risk of death among persons who drank six or more drinks per day was higher by 40% in men and 160% in women. This gender difference cut across racial and age categories and suggests that gender specific outcomes apply to most major alcohol related causes of death, natural and unnatural.

Trends in Women's Alcohol Use

In 1993, 63.3% of all American women reported using alcohol in the last year.¹ Of that number, 46.7% reported use in the previous month.¹ The presence of these figures has prompted some investigators to suggest that female drinking patterns are becoming more similar to male habits; however, with the exception of the trend towards heavier and more frequent drinking among young women, it has been found that female drinking patterns have actually stayed the same for at least the past 15 years.⁴ What has changed is the increase in reporting of alcohol use by women. In the '40s, '50s, and '60s, drinking was regarded as a form of empowerment for women.⁵ Over time, though, that perception has begun to change.

Physiological Gender Differences in Handling Alcohol

The difference in physiology between men and women has long been proven to be a direct cause in the difference in the metabolism of ethanol. Because alcohol is distributed throughout the body in proportion to tissue water content, even if they are the same weight, a woman will produce a significantly higher blood alcohol content (BAC).

The reason for this is related to differences in the proportion of muscle mass to adipose tissue between the sexes. Furthermore, women produce a significantly smaller amount of the enzyme needed to effectively metabolize alcohol (alcohol dehydrogenase) in the gastrointestinal tract.⁶

What's more, research has indicated a linkage between the effects of alcohol and the hormonal variations produced during a woman's menstrual cycle.⁷ It is postulated that women may be more susceptible to the effects of alcohol during the follicular phase of the cycle.⁷ The reasons for this are still under investigation. Another study cited that some women with premenstrual syndrome self-medicate with alcohol to levels of abuse.⁸ Heavy drinking can also disrupt the normal hormonal cycling through altered liver function resulting in dysmenorrhea, Premenstrual Syndrome (PMS), miscarriage, premature births, anovulation and infertility.⁹

Increased Pregnancy Risks

In pregnant women who consume alcohol, Fetal Alcohol Syndrome (FAS) occurs approximately in 1-3/1,000 live births in the U.S.¹ It is one of the three most common causes of mental retardation (the others being Down Syndrome and Spina Bifida). Most of the damage occurs early in pregnancy. This fact makes prevention a challenge since women consuming alcohol may not even be aware that they are pregnant.¹⁰ According to the May 13, 1994 Morbidity and Mortality Weekly Report, no known safe level of alcohol use has been determined for pregnant women. Anecdotal claims that moderate alcohol use is not harmful to the fetus have been publicized but currently The Surgeon General and The American College of Obstetricians and Gynecologists officially state that abstinence during pregnancy should be maintained.

Increased Risk for Liver, Organ and Neurological Damage

Women are more sensitive to liver damage than are men. The risk of cirrhosis of the liver begins to climb when women ingest two or more alcoholic drinks per day.¹¹ This is half the amount estimated for men. Compounding this are the facts that African-American women have rates of cirrhosis 1.8 times greater than those of white women in the same age group and native American women have rates six times higher than those of white women.¹²

Young women, as a group, have fewer benefits than risks associated with alcohol use such as cerebrovascular diseases like strokes and subarachnoid hemorrhage or progressive, irreversible cardiomyopathy and heart failure. Women who drink heavily are one and a half times more likely to die prematurely from alcohol related illnesses than heavily drinking men.³

In general, it has been documented that the end-organ damage resulting from ethanol use occurs more rapidly and progressively in women.¹³ Women also are more sensitive to the neurotoxic effects of alcohol. Female alcoholics have been found to exhibit cognitive impairment and other neuroanatomical abnormalities comparable to male alcoholics but with shorter drinking histories and lower drinking levels.¹⁴

Questionable Cardiovascular Benefits

Alcohol use has been recently touted as a way to help prevent cardiovascular disease. However, just as women have been excluded in many cardiovascular studies to date, so has there been a lack of evidence for the equal protective properties of alcohol in the female cardiovascular system. While studies have shown that men who consume a drink a day cut their risk of heart disease and heart attack nearly in half, the benefit offered women seems to be most significant during the menopausal ages when the risk of heart disease for women approaches that of men or in premenopausal women with known independent risk factors for coronary artery disease.^{15 16}

Increased Risk for Osteoporosis

The effect of alcohol to prevent osteoporosis by raising levels of estrogen also appears to be most valuable after menopause, particularly in women not on estrogen replacement therapy. In alcoholic young and pre-menopausal middle-aged women without cirrhosis or gonadal dysfunction, this has not been shown.¹⁷ However, even in post-menopausal women, the bone protecting benefits of alcohol drop off after the ingestion of about seven drinks a week. If more¹⁴ drinks per week are consumed, the risk for osteoporosis actually increases along with liver and heart disease.

Increased Risk for Cancer

Several recent studies have claimed that three or more drinks a day may increase a woman's risk of breast cancer - possibly through the mechanism of estrogen production in the liver and alteration of lipid synthesis.¹⁵

If this is true, heavy consumption of alcohol would account for only about 3.5% of breast cancer cases; however, this statistic still reflects a gender specific outcome due to alcohol use.

Other than the physiological risks and potential damage to the body as a direct effect of the toxic effects of alcohol, the psychological, behavioral and social indirect effects are staggering.^{18 19} Alcohol and other drugs are often involved in a wide range of violent crimes in which women are victims.²⁰

Psychological, Behavioral, Social Effects

According to a study by the Center on Addiction and Substance Abuse, 90% of all rapes on college campuses occur when alcohol is being used by either the assailant, victim or both. According to a recent Columbia University study, the percentage of college women who report drinking to "get drunk" has more than tripled from about 10% in 1977 to more than 35% today.

Teenage Girls

Although fewer adolescent girls use alcohol than their male counterparts, the discrepancy is smaller than years ago.²¹ What's more, studies are showing an increasing association between eating disorders and alcohol abuse.^{22 23 24} In addition, teenage girls who use alcohol have been found to experience increased rates of school failure, delinquency, motor vehicle accidents, early sexual activity, sexually transmitted diseases, and unplanned pregnancy.^{25 26}

The risk of suicide is especially high for this group.

Older Women

Alcohol use patterns in older women are less known, but risk factors for alcohol abuse such as smoking, use of prescription drugs, depression, living alone, being single, divorced or separated and the absence of a solid social network are strong indicators.¹⁸

Homeless Women

Due to the increasing proportion of homeless women and children this issue has become a bona fide women's health problem. In 1989, 67% of homeless women in Baltimore, MD were found to have a substance abuse problem.²⁷ Homeless women who drink are especially susceptible to trauma, tuberculosis, peripheral vascular disorders as well as sexual and physical abuse.

Working Women

By the year 2000, an estimated 81% of women will be working outside the home.²⁸ As many women have become employed, the stereotypical idea of the female alcoholic as a bored, frustrated housewife has been refuted. Although most research demonstrates that employment among women is generally associated with an increased sense of well being and self esteem - moderate to heavy alcohol use is reported particularly in single, full-time employed women.^{29 30} Conversely, married women with full time employment are found to drink less than their full time homemaker counterparts.^{28 29} The sociological and behavioral explanations vary so that insufficient data exists to reach any conclusion. The literature to date, has not substantiated the presence of women in the work force as a catalyst for any changes in drinking behaviors.

All in the Family

It is well known that alcoholism is a familial disorder. Data has indicated that alcoholics with a positive family history suffer a more severe course of physical and psychological impairments than those with a negative alcoholic family history. Studies which included female subjects support this finding. In addition, female alcoholics report more alcoholic relatives and are more likely to have alcoholic parents than their male counterparts.⁵ An association between paternal alcoholism and familial transmission exists for both male and female offspring. But, maternal alcoholism increases the risk of alcoholism only in female offspring.³¹

Gender Key to Reasons for Drinking

Important gender differences also exist between men and women in reference to motivations for drinking. Women with alcohol problems are more likely to be depressed, suicidal and to have been hospitalized for a mental disorder other than alcoholism.³² The depression that precedes alcoholism is difficult to distinguish from the depression that is a direct result of the chronic ingestion of alcohol. Still, the link between depression and alcohol is much stronger in women than in men.³³ At all stages over life span, female problem drinking is linked to depression. Support for

this theory comes from both epidemiological and clinical sources. Antecedent depression clearly is a risk factor for problem drinking. Helzer and colleagues (1991), examining Epidemiologic Catchment Area (ECA) evidence for depression co-occurring with alcoholism, found that depression precedes drinking problems in women in 66% of co-occurring depression and alcoholism cases examined. Female drinkers who report preexisting depression differ from primary problem drinkers in several ways. They less often have a positive history of problem drinking and have a more favorable prognosis. (Turnbull 1988) Some researchers have stated that women's alcoholism may be more reactive than primary.³⁴ However, recent data has shown that a subgroup of alcoholic women exhibit the same sociopathic and aggressive traits found in typical male alcoholics.^{35 5}

Women with alcohol problems report more marital and familial discord as a result of their drinking.³⁶ As in the case of depression, it is not clear whether the conflicts precede the drinking or vice versa. It has also been shown that men are more likely to leave an alcoholic spouse than are women.³⁵

A Finnish study documented differences in outlook between recovering alcoholic men and women: Men show more interest in the past. Women focus on the present. Men discuss narcotic and alcohol substitute use while women refer more to prescribed drug use. Men refer more to social deviance while women relate stories about social relationships. The drinking man is threatened by feelings of inferiority, the drinking woman by shame and guilt.³⁷

It is difficult to assign personality traits common specifically to alcoholic women. Features of alcoholic women in general characterize women with an emotional problem. The only commonality among alcoholic women is that they misuse alcohol. Women with alcohol problems tend to suffer from low self-esteem, hold a dim view of their physical selves, poor sense of personal worth in regard to relationships and may be highly anxious and depressed about these symptoms before the onset of problem drinking.

Alcohol and Sexual Disinhibition

The association between alcohol use (not abuse) and female sexual disinhibition has been refuted in multiple studies.³⁸ Research on alcoholic and non-alcoholic individuals has shown that personality, life circumstances and cultural background have more effect on whether a woman engages in sexual rela-

tions rather than a direct causal relationship between alcohol and sexual disinhibition.³⁹

CONCLUSION

The controversies surrounding women and alcohol are many. Recent statistics show that America's per capita consumption of beer, wine and distilled beverages has been falling over the past two decades; women, in particular, have not changed their alcohol consumption dramatically during this period.

However, what is changing is our awareness that women reap substantial health risks from drinking, and very few benefits, if any.

Since risks, morbidity, and ultimate mortality are of particular importance to the underwriting and medical profession, careful evaluation of applicants who use alcohol must be done. Any alcohol use in women should be weighed with respect to laboratory results, use of prescription or other drugs, family history, personal history and amount/duration of use in arriving at your underwriting or treatment decisions.

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