

BOOK REVIEWS

Recent Developments in Alcoholism, Volume 12: Alcoholism and Women, by Marc Galanter (Ed.). New York: Plenum Press, 1995, 472 + xxiii pages, \$89.50 (cloth).

Over the past 15 years it has been common to introduce reports about women and alcohol-related problems by noting that comparatively little research has focused on relevant topics, and that earlier perspectives on alcoholism in America were drawn from clinical impressions or observations limited largely to adult white men. Discussions of women's problems with alcohol variously asserted that women were constitutionally or culturally "protected" from experiencing alcohol problems; or that problem drinking, alcoholism and medical sequelae of excessive alcohol intake were identical for men and women; or that the prognosis for alcoholic women was poorer than that for men and betokened more severe pathology.

Available data showed that more women were abstainers or had low consumption levels. But, as changing attitudes heightened interest in women's health issues, some alarmed observers worried that social equality for women would be accompanied by their increased use of alcohol. Despite lower consumption, alcoholic women exhibit more severe consequences. Considerable discussion arose about gender differences in prevalence of alcohol use disorders, psychosocial and biological factors promoting or maintaining alcohol abuse, and physiological and social sequelae. About the same time that exploration of gender differences was recognized as a valid scientific endeavor, studies of substance abusers became increasingly urgent as more people, both women and men, were seen to need medical treatment for a chronic relapsing disorder.

Researchers began to examine a broad range of relevant topics in the laboratory and in the community. Knowledge advanced through use of elegant animal models, sophisticated sampling frames, clinically grounded classifications of psychological disorders, and advanced analytical tools ranging from valid and reliable interview schedules to biochemical assays to brain imaging techniques to statistical assessment of treatment outcomes. There is no longer a dearth of research on women's use of alcohol. This invaluable volume presents 21 state-of-the-art summaries grouped into four major subsections: epidemiology, physiology, behavior and treatment issues, and social and cultural issues. I regret that space constraints do not permit detailed discussion of all chapters or acknowledgement of each contributor.

Epidemiology. The lead chapter by Hill discusses genetic and cultural factors and mechanisms that could confer vulnerability to alcoholism. Hill carefully reviews both neurobiological and sociocultural studies, focusing especially on

gender differences in classificatory schemes for types of alcoholism. Having examined "high-risk" indicators (e.g., reduced amplitude of P300 and N250 wave forms in response to stimuli) among alcoholic women and their relatives, women appear as likely as men, *or perhaps even more so*, to carry a genetic propensity to become alcoholic. The decisive factor is exposure to alcohol, a socioculturally shaped variable.

A chapter by Wilsnack and Wilsnack examines recent drinking patterns and problems among U.S. women. Drinking has decreased since their landmark cross-sectional survey in 1981, but their longitudinal data show that women ages 21 to 34 undergo the most change in drinking patterns and are at greatest risk of developing alcohol-related problems. Also at risk are "marginalized" women—those who are uncomfortable with, or are lacking, social roles; working at jobs previously the province of men; cohabiting with, but not married to, their partners; and in ethnic groups experiencing transitions from traditional to Americanized behaviors. Women exposed to excessive drinking by a partner, or who experience dysphoria associated with depression, or who have a history of sexual dysfunction or of sexual or physical abuse are also vulnerable.

Age, gender, marital status, occupation and health status are all important variables in epidemiological studies. Subsequent chapters are Gomberg's discussion of alcohol and prescription drug use by older women; Miller and Downs on associations between violence and victimization and substance abuse; Blum et al. on working women's use of employee assistance programs (EAPs); and Waller and Blow on women's drinking and driving. Traditionally, driving under the influence (DUI) was an almost exclusively male infraction. Public awareness has resulted in fewer DUIs, but the proportion of offenses committed by women has been slower to diminish. Contributing factors for women may be greater sensitivity to alcohol effects at comparable doses, and their increased driving exposure due to delayed marriage and greater disposable income from increased workforce participation.

Physiology. This section focuses predominantly on exploration of the greater vulnerability to alcohol effects observed in women. That this phenomenon is addressed by eight chapters amply illustrates the significant gains made in basic research on gender differences in alcohol effects. Topics include alcohol and metabolism, mental and physical health, gonadal hormonal levels, neurotransmitters, and genotypes in both humans and animal models. Important factors include dose, route of administration, pharmacokinetics, body composition, gastric absorption, maturational effects on endocrine function, and liver function.

Lancaster observes that female rodents consume more than male, the reverse of drinking patterns in humans.

Animal models cannot completely replicate human experience, but can illuminate gender difference studies by permitting examination of specially bred animal strains, brain reward systems, and complex interactions between alcohol and steroid hormones. McClearn reminds us that it is more appropriate to think about limits or influences that stem from gender differences rather than sex-linked genotypal differences, and also to consider differential activation of various gene loci. Jones and Whitfield underscore the importance of recombinant inbred strains and genetic correlational analyses. Controlling confounds when determining the extent of genetic influence in the presence of interacting biological and environmental factors constitutes a complex, if not Herculean, task, especially if "environment" in humans subsumes subtle differences in exposure to toxins or in nutritional history. Women's greater vulnerability to alcohol exhibits phenotypic diversity, including higher rates of comorbidity with other psychological disorders and increased mortality from physical health consequences—especially alcohol-related liver disease.

Behavior and treatment issues. Part of the opprobrium leveled at women's drinking stems from beliefs about alcohol's purported "disinhibition" of sexuality. Beckman and Ackerman note that physiological arousal, sexual feelings and socially-learned alcohol expectancies constitute different variables. While it has been commonplace to report clinical findings of sexual dysfunction among alcoholic women, many studies have been retrospective. Longitudinal studies suggest that dysfunctions preceded excess alcohol intake. Concern about high-risk sexual activities and STD or HIV transmission has prompted study of alcohol expectancies. Women who report sexual inhibition may believe that alcohol use will facilitate sexual expression, and some report that alcohol use accompanies initial sexual encounters that involve high-risk behaviors.

Nixon and Glenn summarize current knowledge about cognitive and psychosocial impairments and recovery in female alcoholics. Cognitive deficits affect visual-spatial processing, perceptual-motor skills, learning and memory, and abstraction and problem-solving. No significant differences were seen between deficits of female or male alcoholics, despite women's shorter drinking histories. Irrespective of gender, a family history of alcoholism tended to increase the magnitude of deficits, and some studies also showed deficits associated with childhood behavior disorders. Assessments made as long as 10 years after baseline found that both men and women improved if abstinent, but their level of function never attained that of controls.

Social and cultural issues. These four chapters grapple with social and cultural complexity. Rouse and colleagues address race/ethnicity influences on alcoholism treatment for women. This is no easy task since the census categories (e.g., "Hispanic," "Asian/Pacific Islander") subsume important group differences (place of origin, recency of migration, or language preference) yet are used customarily to classify patients. Minority status typically means marginalized status, and lower income and education are interrelated impinging factors. Minority heritage, however, is important because these populations are projected to grow more rapidly than whites.

Edwards and colleagues note that ethnic minority adolescent women generally abstain or have minimal alcohol consumption, a pattern most sharply observed among recently migrated Hispanics. Native American youths are an exception, with similar consumption by male and female high school students. The unique patterns of Native American youths in some locales may betoken strong peer influence, but can also indicate diminished family cohesion and erosion of traditional values. Barthwell discusses alcoholism in black and Native American families. For blacks, slave status left a legacy of tainted identity in oppression and racism. Key factors are social injustice, societal inconsistency and personal impotence. Native Americans experienced colonization, and domination through decimation by disease, warfare and "removal" from desirable land. Both groups have been exposed to drinking patterns of dominant groups, and both have consumption extremes: high abstinence and high problem rates.

Access and equity are always important factors in obtaining treatment. Both "majority" and minority women must confront barriers that generally reflect women's roles as caregivers, lower disposable income and greater household responsibilities. Women out of the labor force lack an important referral source that operates for men (EAPs), but they may have access through Medicaid. Black and Hispanic women typically have more severe problems when they enter treatment, but some of the burden stems from delayed entry, which could be remedied by outreach strategies. Comprehensive screening for physical and mental health status and inquiries about personal, economic and social resources are necessary when minority women are admitted for treatment and referred to community resources. It is less clear whether clients and staff need to have similar origins. Not only are there fiscal constraints on the ability of multi-ethnic programs to provide a full array of counselors, but common heritage does not guarantee a treatment alliance. Instead, respect for explanatory models of illness espoused by clients, regard for individual dignity, and courtesy are appropriate for all providers.

The final chapter, by Fillmore et al., examines gender differences for risk of alcohol-related problems in a meta-analysis of cross-sectional cross-national data obtained from the U.S., Canada, the U.K., Scotland alone, and the Federal Republic of Germany. Age and quantity-frequency of drinking were held constant, and data were partitioned by female workforce participation and suicide rates (a measure of societal-level stress). Contrasts were made between "traditional" and "modern" contexts, and evidence sought for externalization behavior by men and "internalization" by women. In traditional contexts, men were predicted to "act out" and commit suicide (a measure of stress) more frequently than women. As expected, where women had more workforce participation (modern context), both women and men exhibited belligerence, and greater societal stress was associated with comparable suicide rates for men and women.

The robustness of these findings should be viewed with caution, not only because of limitations of meta-analysis, but especially because it is difficult to transform dynamic "culture" into "static" equations. Certain variables upon which the model stands actually may be proxies for other factors

(e.g., "symptomatic drinking" actually refers to signs of alcohol dependence), including culturally shaped gender differences (workforce participation of women was not balanced by unemployment rates for men or women; the *means* of committing suicide are typically gender-specific but were not dichotomized into violent versus passive methods; "accidents" referred only to automobile crashes), data were all cross-sectional and data sets were largely drawn from English-speaking Euroamerican nations. An obligatory reference to beer brewing by African women suggests that there are societies where women may drink more alcohol or control its production and distribution, but these beverages not only are typically low in alcohol content, but also are valued less than the higher alcohol-content European beers and distilled beverages with which many young men, and some women, get into trouble.

Conclusions generally support the notion that women may be at equal or slightly greater risk for health problems, while men are more likely to experience behavioral "problems" in more public contexts. The inherent bias, however, is that men's roles still emphasize activities outside of the household and employed women retain obligations to perform appropriately within the household. It is difficult to identify dichotomous variables with consequences shared equally in weight by men and women in nuclear families. A father's failure to change a baby's diapers could become an issue in marriage counseling, while a mother's failure could become a key factor in a social worker's substantiation of child neglect.

Despite limitations, the sum of these papers gives depth and breadth to current knowledge about alcohol effects in light of biology, culture, and culture *and* biology. The scope of topics presents a challenge to review, but this book is a basic resource and required reading for clinicians and investigators in the field of substance abuse.

BARBARA W. LEX, PH.D., M.P.H.
Department of Psychiatry
Harvard Medical School
Belmont, Mass.

Drugs, Crime, and other Deviant Adaptations: Longitudinal Studies, by Howard Kaplan (Ed.). New York: Plenum Press, 1995, 253 + xiv pages, \$39.50 (cloth).

Howard Kaplan has put together an impressive collection of empirical studies that examine the interrelationships among various types of deviant behavior. The book consists of 10 chapters divided among six sections. The first section is a long introductory chapter by Kaplan, in which he discusses the nature of deviance and reviews the literature on the interrelationships among a variety of deviant behaviors within an integrative model. This model, which includes concepts from labeling, strain, social control and social learning theories, is used to explain the motivations for committing deviant acts, the factors that both enhance and inhibit engagement in deviant acts and the factors that determine whether deviant behavior continues or desists. The next four

sections each contain two empirical studies that address antecedents, consequences, reciprocal relationships, intervening variables and moderating variables that account for the relationship between drug use and crime. Each section begins with a short introduction by Kaplan summarizing the similarities between the two studies. The book concludes with a chapter by the editor in which he describes the current state of research on deviance.

Each of the empirical studies is longitudinal and addresses complex issues in the relationship between drug use and crime. The first four studies examine the generality and specificity of predictors of various types of deviance and suggest that, while deviant behaviors have common antecedents, there are specific predictors for each specific type of deviance. Wu and Kandel find that the intergenerational transmission of cigarette smoking and criminal behavior is sex-specific; Brook and colleagues demonstrate that there are both specific and common antecedents for drug use, theft and aggression; Stacy and Newcomb conclude that the relationship between drug use in adolescence and criminal behavior in adulthood cannot be explained by a spurious model; and McCord finds that deviant behavior in childhood and adolescence predicts adult criminality but not alcoholism.

The remaining four studies examine mediator and moderator variables. Martin and Robbins find that attachments to parents, school and deviant peers do not mediate the effects of sensation seeking in the sixth grade or of drug use in the ninth grade. They do find, however, that sensation seeking moderates the effects of peers on drug use. Krohn and colleagues report that early drug use is a significant predictor of later dropping out, but early delinquency is not. In addition, dropping out does not affect subsequent drug use or criminality, when school variables are controlled. Kaplan and Damphousse find that self-derogation and antisocial personality moderate the relationship between drug use in the seventh grade and violent behavior in young adulthood. Finally, Apospori and colleagues' results indicate that family and peer variables interact with prior deviance in a different manner for white, Hispanic and black adolescents.

Although each of these studies examines the longitudinal relationship among deviant behaviors, they differ from each other in several ways. The follow-up time frames of the studies vary greatly from a 1-year lag to more than 50 years; one study even examines the effects of parental deviance on deviance in their adolescent offspring. The studies also differ in the types of statistical analyses used, ranging from simple frequencies to complex structural equation models. Overall, most of these studies conclude that a common cause model cannot fully explain the association between drug use and delinquency because each behavior has some specific predictors. They also demonstrate that personality traits, demographic characteristics and variables from family, school and peer domains moderate the effects of drug use on delinquency and of delinquency on drug use.

Kaplan and others argue that the inconsistency across studies as to whether drug use predicts later deviance and whether early delinquency predicts later drug use is due, in part, to factors that condition the effects, and, therefore, studies need to examine moderating variables. Mixed findings could also result from differences in samples, measures, and