

INTRODUCTION

Although substance abuse by able-bodied persons is recognized as a national problem, alcohol and other drug use by persons with neurological disabilities have been overlooked or dealt with as an afterthought rather than as a primary condition. Compelling epidemiological studies that demonstrate high rates of intoxication at onset of traumatic injury and rates of substance abuse before injury no longer allow us to view substance abuse as an infrequent comorbidity. This special issue is designed to provide a starting point for rehabilitation clinicians to gain an understanding of substance abuse issues as they affect persons with neurological disabilities.

Dennis Moore provides a comprehensive approach to assessing the presence, nature, and extent of substance abuse issues in persons with neurological disabilities. He describes how individuals' lifestyles may place them at risk for substance abuse, how assessment of alcohol and other drug problems can be interactive and therapeutic, and how to structure assessments in the context of rehabilitation. Although the cognitive, affective, and behavioral impairments of persons with traumatic brain injury have been well documented, the additional consequences of substance use have not been so described. Francis Sparadeo and David Solomon provide such a summary. They review the neurological, neuropathological, and neurochemical changes accompanying head injury and the ways in which various substances can affect neurotransmitters.

Gregory Jones describes the controversy surrounding conceptual models of substance abuse and substance abuse treatment. He reviews the Minnesota model, cognitive-behavioral and social learning models, examines treatment components, including individual and group counseling, motivational counseling strategies, pharmacological approaches, and self-help groups, and examines treatment-matching paradigms that attempt to individualize treatment so that individuals' needs and functions are accommodated. He concludes by describing the model implemented at Vinland National Center and the continuum of care provided by this model.

Deborah Kiley, Allen Heinemann, and colleagues report the results of a survey of rehabilitation professionals regarding substance abuse policies, referral, and treatment practices. They make recommendations regarding the substance abuse education needs of rehabilitation practitioners, advocate for discipline-specific training that considers staff roles and responsibilities, encourage congruence between facilities policies and

practices, and emphasize the importance of attending to attitudes of professionals.

James Krause describes a model substance abuse program developed for patients receiving acute medical rehabilitation at Shepherd Spinal Center. The rationale and structure of the model are described, as well as barriers to implementation, such as institutional acceptance, staff enabling, and patient noncompliance. Mervin Langley and Deborah Kiley address life-style issues that may place persons at risk for substance abuse after sustaining neurological disability. They advocate abstinence after neurological disability, and review skill-based models of prevention that can help persons achieve this goal. A prevention sequence of evaluation, motivational enhancement, coping skill training, and structured generalization is described that can help clients learn alternative, nonchemical means of dealing with daily stressors.

Frank Sparadeo, David Strauss, and Kathleen Bradley Kapsalis provide a typology of family members' reactions to disability and a means of assessing their potential role in rehabilitation. This typology is used to describe how families are likely to receive substance abuse prevention messages and strategies rehabilitation professionals can use in engaging family members. Ways of categorizing the substance abuse risk of persons with brain injury are presented, as are means of employing family therapy to enhance life outcomes.

William Borden uses the representative case method to illustrate a case of AIDS-related cognitive impairment and alcohol abuse in a person who was treated with brief psychotherapy. The use of life structure review within the context of a chronic, neurological illness provided the opportunity to shift the client's focus from disability to personal growth. Bobby Greer's review of *Alcohol and Substance Abuse in Special Populations* by Lawson and Lawson provides readers with an avenue of pursuing further study of substance abuse topics.

These articles provide in a single source a means of enhancing rehabilitation professionals' understanding of how substance abuse can cause, be a consequence of, and impair rehabilitation outcome after neurological disability. Individuals and institutions can use this information for self-study, discussions about substance abuse policies and procedures, and enhancement of patient care.

*Allen W. Heinemann, PhD, Issue Editor
Northwestern University Medical School
Chicago, IL*