

Editor's Notes: In this issue, we introduce a summary of an annotated bibliography of current literature that addresses the recovery process for patients in substance abuse treatment; this research is timely since it informs OASAS as well as other single state agencies in their efforts to realign the states' service systems towards a recovery-oriented practice. The complete report is available at <http://www.oasas.state.ny.us/hps/research/documents/RECOVERYbibliography.pdf>.

Toward a Research Agenda that Supports Recovery-Oriented Systems of Care

Cynthia Bott, LCSW and Lynn A. Warner, MPP, MSW, PhD

As states move toward implementing recovery-oriented systems of care (ROSC), information about patterns and predictors of substance abuse recovery may be useful for policy makers, program directors, and service providers. For example, reliable data on recovery rates would establish benchmarks for gauging both the need for and adequacy of services. Data on predictors of recovery provide guidance about the impact on recovery rates that could reasonably be expected under different service configurations and for different sub-groups of the population. Because recovery is a process that occurs over time, studies that track individuals' substance abuse and service utilization at frequent intervals over extended periods are among the best sources of information for recovery-oriented planning and decision making. Ideally, these longitudinal studies would be based on representative samples of persons recruited from communities and/or service settings.

The purpose of this research brief is to provide a review of data from existing longitudinal studies. The review was initiated with the idea that a summary of results could help inform the development of an ROSC model. However, most of these studies were designed and conducted in ways that focus on addiction careers rather than recovery as currently defined by expert panels (e.g., the Betty Ford Institute, Center for Substance Abuse Treatment)^{1,2} and persons in recovery³. These panels emphasize health, wellness and improvements in functioning rather than narrowly focusing on sobriety or remission of disorder. Thus, a main contribution of this review is the identification of aspects that require additional research in order for longitudinal

studies to be responsive to current thinking in the field.

Background Information about the Studies

Thirty longitudinal studies of treatment- and community-based samples published in the last ten years were selected and summarized for this research brief. The articles were originally identified through Medline, Psychinfo and PubMed databases for another purpose.⁴

At the outset, it is important to note that comparisons across studies must be done cautiously because of differences in the conceptualization and measurement of "recovery." For example, some studies used the term "abstinence" which was variously measured as no alcohol consumption during some specified period,⁵⁻⁹ or some alcohol consumption, which included less than one drink a month for a year,¹⁰ and three ounces of alcohol or less per day and no alcohol related problems.¹¹ "Recovery" and "remission" were variously measured as not meeting DSM-IV abuse or dependence criteria,¹²⁻¹⁴ negative urine and hair drug screens,¹⁵ three or more years of abstinence,¹⁶ or some low level of substance use.¹⁷⁻²⁰ For ease of presentation, the remainder of the headings in the research brief will use the term "recovery," although the terms used by the authors will appear within the sections. Another reason that these studies must be compared with caution is the period of time over which participants were followed, which ranged from one year^{5-7,21} to 60 years.¹⁰ Additionally, in the majority of studies, alcohol was the primary substance of abuse, and the samples were predominately composed of white rather than minority racial group members.

Recovery Rates

Given the range of measures and study designs, it is not surprising that reported rates of recovery vary. For example, in studies based on treatment samples, the lowest and highest rates of recovery by the end of the study periods are 17 percent after two years²² and 72.6 percent abstinent after six months,²³ with several rates falling in between.^{6,15,17,24} Rates from community samples also vary, but they do not range as widely (e.g., from 12% abstinent after one year⁷ to 46% without a diagnosis after nine years¹⁴).

Recovery Patterns

Some studies report that recovery patterns are often characterized by long periods without any change in substance use behavior. For instance, alcohol abuse tends to persist for decades without remission, death, or progression to dependence.¹⁰ Similarly, a typical recovery pattern might consist of drinking accompanied by symptoms of alcohol use disorder for five to ten years before resolving into asymptomatic risk drinking, low risk drinking or abstinence.¹⁸ Also, the majority (62%) of people recruited from a mixture of courts and community settings had stable drinking patterns over nine years (i.e., they were either stable in their remission or in their substance dependence).¹⁴

Individual Characteristics Associated with Recovery

Recovery is less likely when (a) the *substance abuse profile* includes both alcohol and other drugs,²³ greater substance abuse symptom severity,^{18,21} and first occurrence of substance use at relatively young ages;²⁵ (b) the *psychosocial profile* includes co-occurring psychiatric symptoms or disorder,^{7,19} lower

self-efficacy,²⁰ and a history of sexual abuse or negative life events;⁵ and (c) the *social context* includes partners' who use drugs^{14,26} and stressed family and social environments.²⁷

Recovery is more likely with social support.^{13,14,24,28} Although cross-sectional and retrospective studies suggest that spirituality and quality of life are important correlates of recovery, few of the longitudinal studies examine those aspects.

Recovery With and Without Treatment

Most people with substance abuse problems do not access formal drug treatment services.²⁹ But when they do, the chances of recovery are greater,^{18,30,31} with more frequent treatment episodes¹⁴ or longer duration of treatment^{15,19,20} increasing the likelihood of recovery. Because of the treatment gap, the phenomenon of "natural recovery" has received special attention.³²⁻³⁴

One of the most consistent findings across studies is that people who attend self-help groups (usually 12-step groups such as A.A.) have better outcomes, whether assessed as abstinence,^{9,17,35,36}

remission,¹⁹ lower rates of alcohol consumption,^{21,36} fewer alcohol-related problems,³⁷ or fewer relapses.⁸

Future Research

Future studies need to use measures of recovery that assess its multiple dimensions as well as measures that focus on clinical criteria (substance use and disorder symptoms). Samples need to be selected so that rates can be estimated for key sociodemographic sub-groups and special populations such as people of color, adolescents and seniors.

Additionally, there is a need for studies of populations for whom substances other than alcohol are the primary drug of abuse. Finally, social support and other factors that cross-sectional studies have shown to be related to recovery (e.g., spirituality) should be routinely included in longitudinal studies.

Any longitudinal research project is challenged to limit the loss of study participants over time, and all of the studies summarized here noted this problem as a limitation. To the extent that the development of recovery-oriented systems of care leads to better integrated client data

and tracking systems, there is tremendous potential for developing a much more detailed and comprehensive picture of recovery. The success of all of these research endeavors will be greatly enhanced if the research and practice communities work collaboratively to design and field them.

Cynthia Bott is a doctoral student and Lynn Warner is an associate professor, both at the School of Social Welfare, University at Albany-SUNY. For more information contact Dr. Warner by email at lwarnar@uamail.albany.edu or telephone (518) 591-8734.

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All questions regarding this publication should be directed to John Yu, PhD, Research and Development, New York State Office of Alcoholism and Substance Abuse Services, 1450 Western Ave, Albany, NY 12203; (518) 457-0053; johnyu@oasas.state.ny.us

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