

Addiction as a Chronic Disorder

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Modern medicine has recognized that chronic diseases cannot and should not be treated and managed like acute disorders.

Acute disorders such as bacterial infections, broken bones and even emotional trauma from shock or injury, can typically be traced to a clearly identifiable source (e.g., an infectious agent, physical trauma) and can be “cured” through treatment and recovery processes that span a relatively short period of time. The onset, course and resolution of acute disorders may be intense and disruptive, but they generally leave no lasting mark on one’s identity or functional capabilities. The treatment process essentially returns the body to its original state — the treated individual is no more (or less) susceptible to a return of the disease or condition than an individual who never had the disease. Thus, while a treated individual may again break a bone or get another infection, this is considered a new occurrence and not a relapse. In contrast, chronic diseases such as diabetes, asthma or heart disease spring from and are complicated by, multiple biological, psychological and social factors, some of which cannot be clearly identified. Many times “lifestyle” or personal behavioral choices are intimately involved in the onset and course of these disorders. While there are usually several potentially effective treatments for chronic disorders, they are of necessity more complex and protracted than acute treatments and they do not produce the same kinds of outcomes as acute treatments.

All chronic treatments, regardless of disease, share three important features. First, they can usually remove or reduce the symptoms of the disease, but cannot affect the root causes of the disease. For example, beta blockers reduce blood pressure and insulin improves the body’s ability to digest sugars and starches, as long as the affected individual continues the treatment. However, these treatments do not return the affected individual to normal.

The second feature associated with all chronic treatments is that they require significant changes in lifestyle and behavior on the part of the patient to maximize their benefit. Again, even if individuals with diabetes regularly takes their insulin as prescribed, this will not stop disease progression if they do not also reduce sugar and starch intake, increase exercise and reduce stress levels.

The third feature derives from the first two. Because of the complexity of factors that can lead to a chronic illness and because of the need for ongoing medical care and lifestyle change, it should not be surprising that relapses are very likely to occur in all chronic illnesses. For these reasons, most contemporary treatment strategies in chronic illness involve regular in-person and/or telephone monitoring of medication adherence, coupled with encouragement and support for pro-health changes in diet, exercise and stress levels. Increasingly, family members are being trained to also provide continued monitoring and support for the behavioral changes necessary to maintain symptom remission and sustain good quality of life.

As is evident from this short preface, the onset and course of chronic illnesses are not like those of acute illnesses; and for these reasons chronic care has to be quite different from acute care. While many in our

field have come to consider some (not all) forms of addiction as chronic, this change in thinking has not been followed by changes in treatment strategy, monitoring methods, insurance coverage or outcome expectations. With this as background, the current article: 1) summarizes the history of the conceptualization of severe alcohol and other drug dependence as a chronic disease; 2) updates the scientific evidence comparing alcohol and drug dependence to diabetes mellitus, hypertension and asthma; and 3) identifies the central messages that addiction professionals can communicate to clients, families and referral sources regarding addiction treatment and long-term recovery management strategies.

Historical background

The earliest conceptualizations of chronic drunkenness as a medical condition by Drs. Benjamin Rush and Thomas Trotter were followed by more substantive treatises by Drs. M. Huss, W. Marcet, T.D. Crothers and others, all of whom noted the prolonged course of alcohol dependence and the professional challenges involved in its treatment. The origins of terms such as habituation, inebriety, dipsomania, alcoholism and addiction were rooted in efforts to convey a condition far more complex and enduring than the threat posed by an episode of acute alcohol or other drug intoxication. The recognition of the chronicity and complexity of severe alcohol and other drug problems led to the calls for special institutions for the care of the inebriate (Woodward, 1838) and the subsequent birth of inebriate homes, inebriate asylums and private addiction cure institutes (White, 1998).

There were several early pioneers who suggested that the treatment of addiction should mirror the treatment of other chronic diseases. In 1828, Dr. J.H. Kain penned an essay on the treatment of intemperance in which he invoked the medical maxim, “chronic diseases require chronic cures” (Kain, 1828). Dr. T.D. Crothers expressed similar sentiments in an 1879 editorial in the *Journal of Inebriety*:

The permanent cure of inebriates under treatment in asylums will compare favorably in numbers with that of any other disease of the nervous system which is more or less chronic before the treatment is commenced (Crothers, 1879).

Such comparisons of addiction to other chronic disorders were lost in the larger collapse of the inebriate asylum movement in the opening decades of the twentieth century.

As interest in alcoholism as a public health problem arose again in the mid-twentieth century, alcoholism was again compared to other chronic diseases. A 1938 report of the Scientific Committee of the Research Council on Problems of Alcohol concluded, “An alcoholic should be regarded as a sick person, just as one who is suffering from tuberculosis, cancer, heart disease, or other serious chronic disorder” (Johnson, 1973). Also worthy of note is a 1947 article by Dr. R.E. Duncan published in the *Kansas City Medical Journal*. Duncan declared that alcoholism is a “chronic affair” and that “chronic conditions must be approached on a long range basis.” He further concluded, that to foster complete recovery, treatment must be continued for years after the patient has been sobered” (Duncan, 1947).

Duncan was one of the first practitioners to explore the full clinical implications of the chronicity of addiction. During this same period, Charles Franco, an early industrial alcoholism pioneer, wrote a 1951 article “Chronic Alcoholism as a Medical Problem in Industry.” He called for recognizing alcoholism “as much a disease as diabetes or tuberculosis” (Duncan, 1951).

One other important historical footnote from the mid-twentieth century was the 1942 publication of Howard Haggard and E.M. Jellinek's *Alcohol Explored*. In this text, which was overshadowed by Jellinek's later book *The Disease Concept of Alcoholism* (1960), Haggard and Jellinek suggest that "The progress of research has been impeded by two conceptions: the first that all habitual excessive drinking is a disease, and the second that it is the same disease" (Haggard & Jellinek, 1942). This statement anticipated much of the later debate over the question of whether alcoholism is a disease and whether all alcohol problems can comfortably fit within a "disease" or "chronic disease" rubric. Our focus in this article is not on what addiction is — a disease, illness, disorder, habit, problem, etc. — but on the temporal course of addiction and how the span of the disorder from onset through sustained recovery can be most effectively managed at personal and professional levels.

Treatment in an acute care model

The emphasis on alcoholism as a chronic disease was lost in the larger battle to convey to the American public and policy makers that alcoholism was a disease (Mann, 1944). This effort spanned the 1940s to 1960s and led to landmark legislation in 1970 that set the stage for the rise of community-based, time-limited addiction treatment in the United States. This was followed by a rapid process of professionalization and commercialization and subsequent emergence of an aggressive system of managed behavioral health care in the United States. Despite (or perhaps because of) these forces, nearly all modalities of addiction treatment migrated toward an acute care (AC) model of intervention — even traditionally long-term modalities such as therapeutic communities and methadone maintenance. The AC model is characterized by the following central elements:

- Services are delivered "programmatically" in a uniform series of encapsulated activities (screening, admission, a single point-in-time assessment, treatment procedures, discharge, and brief "aftercare" followed by termination of the service relationship).
- A professional expert directs and dominates the assessment, treatment planning and service delivery decision-making throughout this process.
- Services transpire over a short (and historically ever-shorter) period of time, usually as a function of a pre-arranged, time-limited insurance payments designed specifically for addiction disorders and "carved out" from general medical insurance.
- The individual/family/community is given the impression at discharge ("graduation") that "cure has occurred": long-term recovery is now self-sustainable without on-going professional assistance.
- Post-treatment relapse and re-admissions are viewed as the failure (non-compliance) of the individual rather than potential flaws in the design or execution of the treatment protocol.

By the later 1990s, the assumptions of the AC model began to be questioned (O'Brien & McLellan, 1996; Hser, Anglin, Grella, et al, 1997; Stout, Rubin, Zwick, et al, 1999). These early critiques were followed by widespread calls to extend the design of addiction treatment from an AC model to a model of sustained recovery management (McLellan, Lewis, O'Brien, & Kleber, 2000; White, Boyle, & Loveland, 2002; Godley, Godley, Dennis, et al, 2002; Dennis, Scott & Funk, 2003; Compton, Glantz, & Delaney, 2003; White, 2005; McKay, 2005; Dennis, Scott, Funk, & Foss, 2005; Scott, Dennis, & Foss, 2005; Flaherty, 2006; Dennis & Scott, 2007). One call to redesign addiction treatment was the publication of "Drug Dependence, a Chronic Medical Illness" in the *Journal of the American Medical Association* (McLellan, Lewis, O'Brien & Kleber, 2000). In the next section, we summarize and update the major findings of this seminal article.

Addiction as a chronic medical illness

It is important to state at the outset that not all alcohol- and other drug-related (AOD) problems inevitably become chronic disorders; and that clinical research has not yet been able to clearly predict which early cases will ultimately become chronic. Many substance use problems are developmental and as such are often outgrown in the successful transition from adolescence into adulthood. Others occur in tandem with major life transitions (e.g., death of a loved one, divorce, job loss) and are resolved by time, natural support, brief professional intervention or peer-based intervention by others in recovery (Burman, 1997; Granfield & Cloud, 1999, Bien, Miller & Tonigan, 1993; Bernstein, Bernstein, Tassiopoulos, et al, 2005). Similarly, many of those who experience a period of high blood pressure will essentially get over this problem through change of lifestyle, loss of weight and increased physical activity. It is not currently possible to predict who will go on to develop chronic hypertension.

For many reasons, most of those entering addiction treatment are characterized by greater personal vulnerability for AOD problems (e.g., family history of AOD problems, early onset of AOD use, traumatic victimization); greater problem severity (e.g. substance dependence); greater problem complexity (e.g., concurrent medical/psychiatric illness, multiple drug use); and fewer personal and family resources to initiate and sustain a long-term recovery process (Bischof, Rumpf, Myer, et al, 2004; Granfield & Cloud, 1999). There are striking similarities between substance dependence as seen in the clinical setting and other chronic illnesses such as 2 diabetes mellitus, hypertension and asthma (McLellan, Lewis, O'Brien & Kleber, 2000). Severe substance dependence and these other primary chronic illnesses:

- Are influenced by genetic heritability and other personal, family and environmental risk factors.
- Can be identified and diagnosed using well-validated screening questionnaires and diagnostic checklists.
- Are influenced by behaviors that begin as voluntary choices but evolve into deeply ingrained patterns of behavior that, in the case of addiction, are further exacerbated by neurobiological changes in the brain that weaken volitional control over these contributing behaviors.
- Are marked by a pattern of onset that may be sudden or gradual.
- Have a prolonged course that varies from person to person in intensity and pattern.
- Are accompanied by risks of profound pathophysiology, disability and premature death.
- Have effective treatments, self-management protocols, peer support frameworks and similar remission rates, but no known cures.

These similarities between serious substance dependence and other chronic illnesses are striking. It is important to note that even substantial similarity does not mean that similar disease processes are at work across these conditions. However, at the very least, the similarities argue for consideration of the same kinds of chronic or continuing care strategies for alcohol and drug dependence that have been employed in other chronic diseases. If substance dependence is like other chronic illnesses, then this raises two important implications: 1) acute care models of intervention for severe substance dependence may reduce substance use temporarily but those reductions are not likely to sustain once care stops; and 2) methods used in the treatment of other chronic illnesses might be effectively adapted to enhance long-term recovery from substance dependence. These implications offer an explanation of the generally high

and rapid rates of relapse following cessation of most available addiction treatments (McLellan et al., 2000): there is simply no quick fix for the most severe forms of this disorder.

Changes in service infrastructure and practices

Recent years have been marked by pilot efforts to move addiction treatment beyond the acute biopsychosocial stabilization and patient education toward the goal of long-term recovery as measured by stable sobriety, global (physical, emotional, relational, spiritual) health and citizenship (Betty Ford Institute Consensus Panel, 2007). Efforts to create “recovery-oriented systems of care” are underway at national, state and local levels (Clark, 2007; Kirk, 2007; Evans, 2007).

However, it should be obvious at this point that elevating long-term recovery rates for severe substance dependence will require fundamental changes in the national, state and local infrastructure of addiction treatment as well as changes in front-line service practices (Roman & Johnson, 2002; D’Aunno et al., 1998; McLellan, Carise & Kleber, 2003) and service relationships (McLellan et al., 2005). Table 1 illustrates the direction of desired infrastructure changes that addiction professionals can anticipate, if the field can muster the collective will and resources to affect such changes.

In the shift from an acute care to recovery management model, changes in local programmatic and service practices will be required in several critical areas. These changes will focus on such treatment system performance indicators as the following (White, Boyle, Loveland, 2003; Evans, 2007; White, in press):

- **Attraction:** identifying and engaging individuals and families at an earlier stage of AOD problem development (e.g., via assertive community education, screening and outreach programs).
- **Engagement:** enhancing access, therapeutic alliance, and retention (e.g., expedited service initiation, focus on relationship-building and regular re-motivation, altered policies related to administrative discharge).
- **Assessment:** developing assessment protocols that are global, family-centered, strengths-based and continual.
- **Service Planning:** transitioning from professional-developed treatment plans to client-directed recovery plans.
- **Service Menu:** focusing on service elements that have measurable effects on recovery outcomes; expanding the service menu to include non-clinical, peer-based recovery support services.
- **Service Duration:** shifting from “emergency room” models that emphasize brief, crisis-oriented services to “recovery models” that emphasize long-term, lower intensity recovery maintenance services.
- **Service Location:** extending the reach of services from the institutional environment to the natural environments of individuals and families, e.g., expansion of neighborhood-based, work-based and home-based services.
- **Service Relationship:** shifting from a professional expert model to a long-term recovery partnership/consultant model; philosophy of choice for individuals and families.
- **Continuing Care:** shifting from “aftercare” as an unfunded afterthought to assertive models of continuing care for all clients (regardless of discharge status), e.g., post-treatment monitoring, stage-appropriate recovery education and coaching, personal linkage to communities of recovery and, when needed, early re-intervention; expanded use of cell phones and Internet for long-term monitoring and support.

- Relationship to the Community: increasing utilization of indigenous recovery support resources in the community, e.g., recovery support groups, recovery community organizations (e.g., recovery support centers), recovery homes, recovery schools, recovery industries and recovery ministries.

Communicating about addiction as a chronic disease

Many communications about addiction, and especially communications comparing it to other chronic illnesses, can arouse strong feelings and unintended, harmful implications. Because of the significant family and social problems associated with addictive disorders, strong feelings are aroused when these conditions are discussed as “illnesses” or “chronic diseases.” To many in the public at large this represents inappropriate “medicalization;” abrogation of personal responsibility for those affected; and a ready-made excuse for ineffective treatment for the treatment field. Perhaps worse, many individuals with substance use disorders who have gained and maintained recovery may resent the idea that they have a “continuing chronic illness.”

Thus, care must be taken in how the chronic nature of addiction is communicated to the policy makers and the public, clients, family members, referral sources and to those working on the front lines of addiction treatment. In the service of better communication we first discuss what this concept of addiction as a chronic illness does NOT imply; followed by 10 concepts and correlates that may be helpful in thinking about and discussing appropriate and effective continuing care for chronic forms of this illness.

Things NOT Implied or Suggested by the Concept of Addiction as a Chronic Illness

- All AOD problems are NOT chronic, most do NOT have a prolonged and progressive course; some do, and research is needed to identify early signs of chronic progression.
- All persons with AOD problems do NOT need specialized, professional, long-term monitoring and support — many recover on their own, with family or peer support; again, research is needed to identify who is most likely to need intensive, professional care.
- Among those who do need treatment, relapse is NOT inevitable and all persons suffering from substance dependence do NOT require multiple treatments before they achieve stable, long-term recovery.
- Even among those who do relapse following treatment, families, friends and employers should NOT abandon hope for recovery. (Community studies of recovery from alcohol dependence report long-term recovery rates approaching or exceeding 50 percent (Dawson, Grant, Stinson, et. al., 2005).
- Having the serious chronic illness of addiction, DOES NOT reduce personal responsibility for continuous efforts to manage that illness, — just as those with serious diabetes or hypertensive disease must also manage their illnesses.
- Appropriate treatment for chronic addiction is NOT simply a succession of short term detoxifications or treatment stays. Appropriate continuing care requires personal commitment to long term change, dedication to self-management, community and family support and monitoring.
- Current addiction treatment outcomes are NOT acceptable simply because they are comparable to those achieved with other chronic disorders.

Things that ARE Important In Considering the Concept of Addiction as a Chronic Illness

- Chronic diseases vary. Not everyone at risk for a chronic disease contracts the disease or experiences the same course of the disease. Chronic diseases exhibit a high degree of variability in pattern of onset,

course and intensity (self-accelerating, constant, alternating cycles of remission and relapse, or decelerating). Each case of chronic disease varies in physiological severity, functional impairment, and the financial/emotional burden placed on the individual, family and society (Stein, et al, 1987). The course of chronic disorders is influenced by the interaction of such factors as type and degree of biological vulnerability, age of onset, problem severity, problem complexity (e.g., presence of co-occurring disorders) and degree of individual, family and community recovery capital (assets that can be drawn upon to initiate and sustain recovery) (Granfield & Cloud, 1999). Adding to the burden of chronic disorders is their propensity to beget other acute and chronic disorders such as depression and chronic pain.

- Chronic diseases require prolonged and active management. Chronic disorders require strategic, sustained stewardship of personal, family and community resources. Core strategies for achieving long-term recovery from chronic disorders include: stabilization of active episodes; global assessment; enhancement of global health; sustained professional monitoring and early re-intervention; continuity of contact in a primary recovery support relationship; and development of a peer-based recovery support network. Choices for the treatment and management of chronic disorders diminish through disease progression and expand with sustained stabilization and enhancements in global health.
- Both full and partial recoveries are possible. There are permanent solutions to severe alcohol and other drug problems. Millions of individuals and families throughout the world live full lives in long-term recovery from these problems. Their increasingly public stories, even more than the accumulation of scientific studies, offer living proof of this proposition. Partial recoveries are also possible. An essential strategy of chronic disease management is optimizing personal functioning and quality of life even after abstinence has been achieved. Recovery management strategies for persons with the most severe and persistent disorders include multiple goals: reducing the number, intensity and duration of relapse episodes; strengthening and extending the length of remission periods; reducing the personal and social costs associated with relapse; reducing the propensity for drug substitution and other excessive behaviors during early periods of recovery initiation; and enhancing the quality of personal/family life through both the remission and relapse phases of the disorder. Partial recovery may constitute a prelude to resumed substance dependence, a permanent state, or a stage of ambivalence and instability that precedes the achievement of full recovery.
- Recovery processes vary. There are multiple pathways, patterns and personal styles of long-term recovery (White & Kurtz, 2006). The time and resources required to fully resolve alcohol and other drug problems vary from individual to individual. Greater time and resources are often required as substance use disorders become more severe and complex and as a personal, family and community recovery capital diminish. Beyond this general guideline, there is no way to predict who will sustain recovery following a single effort, who will achieve recovery after multiple efforts or who will fail to achieve recovery.
- Lapses after recovery initiation are common but not inevitable. A lapse (episode of alcohol or drug use) or relapse (resumption of compulsive use and its related problems) following treatment does not mean that there is no hope for recovery. A significant portion of persons currently in long-term recovery experienced one or more lapse/relapse episodes before achieving sustainable sobriety. Such events do call for renewed intervention, a refinement in strategies of recovery maintenance, and greater resources for long-term support.
- Natural support matters. The prospects of long-term recovery for individuals are enhanced by sustained family and social support. Family members and friends can take concerted action to shorten a loved one's addiction career (the span of time from problem onset to stable recovery maintenance) and to enhance the health of all family members and the family unit.

- Intervening early makes a difference. Recognizing and intervening in the alcohol and other drug problems of a family member can shorten his or her addiction career. There are brief windows of opportunity within the course of addiction that can be capitalized upon to help initiate and solidify long-term recovery.
- Personal and family recovery take time. Some of the personal/family problems that preceded or developed after the onset of alcohol and other drug problems continue into the early years of recovery. The resolution of these problems requires time, sustained effort and quite often, professional help.
- Professional and peer support helps. Individual and family recoveries are enhanced by sustained professional and peer support. Monitoring the status of a chronic disease, the effectiveness of the efforts to manage it, and changing physical, psychological, behavioral and environmental risk factors are crucial elements in chronic disease management. Sustained participation in peer-based recovery support groups and other recovery community institutions (e.g., recovery homes, recovery schools, recovery ministries) can elevate long-term recovery rates. Primary physicians, addiction professionals and other frontline health care providers constitute an important resource for long-term recovery check-ups and support.
- Recovery is a marathon that can bring unexpected gifts. Recovery from severe alcohol and other drug problems, like recovery from other primary health problems such as diabetes, asthma or heart disease, requires sustained vigilance and effort. Recovery gives back to individuals and families what was taken through the addiction process. Some individuals and families will be stronger, healthier and live more personally meaningful and fulfilled lives as a result of their shared recovery experience.

A historical opportunity

Re-engineering addiction treatment into a system of sustained recovery support will be both a major challenge and an important opportunity for society. We invite those on the frontlines of addiction treatment to join us in writing this new future for addiction recovery in America.

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