

Treatment and rehabilitation concepts for patients with addiction and concurrent disorders

From a transatlantic perspective

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Keywords

Concurrent disorder, mental health, addiction, system of care, rehabilitation

Summary

Background: Addiction and concurrent disorders give rise to a major burden of disease in both North America and Europe. However, these two continents have some fundamental differences in regards to the health care system and its funding as well as the types of vulnerable subpopulations to serve. For example, while emergency rooms are often the only available care for patients in the US and Canada due to financial barriers or structural deficits, stepped care approaches and separate rehabilitation systems are more commonplace in Europe. These differences can be observed not only on a transatlantic but also on an intra-European level. These differing attitudes and policies impact on treatment paradigms such as harm reduction, abstinence-based or opioid maintenance treatments etc. Structural components and clinical pathways lead to dissimilarities in access to care services such as detoxification, rehabilitation and community services. The role of primary care as an important treatment interface is much more recognized in Europe. While innovations are ongoing and scientific progress has been made in the treatment of concurrent disorders in recent years, implementing these findings into “real-world practice” has been insufficient so far.

Schlüsselwörter

Komorbidität, Sucht, Gesundheitssystem, Rehabilitation

Zusammenfassung

Hintergrund: Die Komorbidität von Sucht und psychischen Erkrankungen trägt wesentlich zum Anstieg der „burden of disease“ durch psychische Störungen in Nordamerika und Europa bei. Die Gesundheitssysteme auf beiden Kontinenten reagieren unterschiedlich darauf auch im Umgang mit den Hochrisikogruppen. „Notfallaufnahmen/Emergency rooms“ sind in Nordamerika oft der einzige Zugang zur Hilfe bedingt durch finanzielle und strukturelle Limitierungen, während stepped care und separate Rehabilitationssysteme in Europa eine wichtige Rolle spielen. Natürlich gibt es Unterschiede nicht nur im transatlantischen Vergleich, sondern auch in Europa selbst. Das reflektiert auch Unterschiede in Behandlungsparadigmen. Strukturelle Komponenten und klinische Behandlungswege führen zu Unterschieden im Zugang zur Therapie wie Entgiftung, Rehabilitation und ambulante Therapien. Die Rolle der Hausärzte als wichtiger Zugang ist in Europa mehr und systematischer etabliert. Innovationen und wissenschaftlicher Fortschritt sind in der Behandlung von Komorbidität in Modelleinrichtungen zu verzeichnen, die Implementierung von Forschungsergebnissen in die tägliche Praxis bleiben oft unzureichend.

Behandlungs- und Rehabilitationskonzepte für Patienten mit Komorbidität von Sucht

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Coincidence of addiction and mental illnesses has drawn an increasing attention in North America since the 1980s (1, 2) when substance use among clients with psychosis showed to be closely related to higher treatment dropout, lower retention and worse outcomes. Unfortunately, earlier classification systems (ICD-9 and DSM-III) did not allow a more descriptive diagnostic approach towards this entity. In fact, they summarized so called “secondary symptoms” under the main diagnostic categories, which indicates their neglect towards more differentiated treatment needs among these patients. Although well documented as early as the beginning of the 20th century among schizophrenic patients, coincidence of harmful substance use among patients with severe mental illness remained internationally neglected for a long while after that (3). However, the paradigm shift towards a more descriptive psychopathology in ICD 10 (4) and DSM III-R (5) was a noticeable step towards addressing this trend and accommodating the fact that dual disorders are more a rule than an exception (6).

Same burden of disease, same stigma, different cultures of care

Since late 1980s and in response to the special needs as well as unique clinical challenges associated with coincidence of addiction and mental disorders, particularly well-known concomitance of psychosis and addiction (2), specialized programmes were set up in the US and in Europe. Studying these developments and their subsequent outcomes can provide an opportunity to understand how research on a common challenge could lead to parallel significant changes and paradigm shifts in different health care systems with substantially different frameworks.

Importantly, despite increased attention and regional initiatives, the care for patients with complex concurrent disorders still remains one of the major problematic areas in the system of care (7). Currently, delivering mental health care is still inappropriate in Europe and North America. For example in the US, only 1/10 of patients in need of mental health care are visited by specialists, 1/3 receive professional care mainly through family medicine, while 2/3 receive no help at all. The coverage in most parts of Western Europe is slightly better but still with significantly delayed interventions and little support for those with addiction and concurrent mental disorders (8). For instance in Europe, it takes on average 10 years from appearance of first psychiatric symptoms to starting first professional interventions (9).

Epidemiology in the system

Although substances use disorders and concurrent mental illnesses represent a similarly high burden of disease in both continents (8, 13), substantial differences exist in the proportions of patients subpopulations and the barriers to support and health care not only between the US, Canada and Europe, but also between poor and rich countries in Europe itself.

The prevalence of coexisting addiction and mental illness increases when moving from the outside to the inside of the system of care. For example, in emergency rooms (ERs) and acute care settings, patients with substance use disorders and additional mental as well as physical health concerns become more the rule than the exception (figure 1). In North America, this reflects little or lack of capacity in the existing system of care for tertiary care services or comorbidity experts within the community. So the populations with high needs are not served properly and are

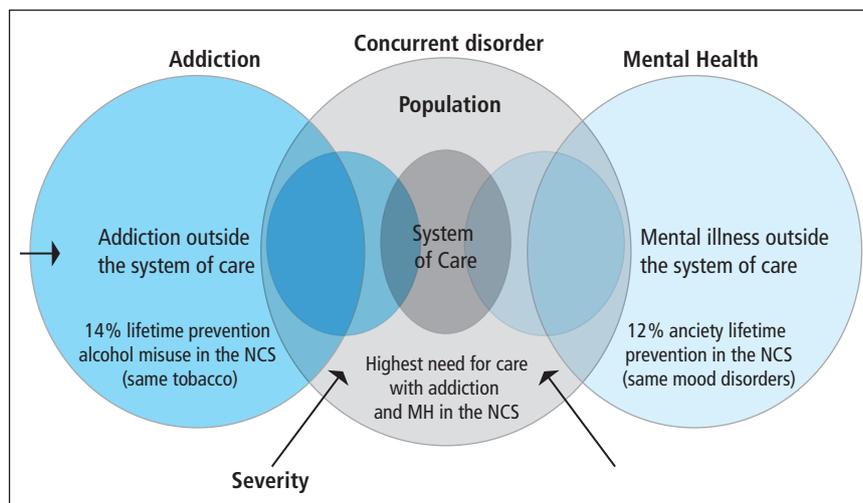


Figure 1
Severe Addiction and Mental Illness (SAMI) based on Population and in the System of Care; NCS=National Comorbidity Survey (13)

forced to access the system only through the emergency services.

In summary, if you move from milder symptoms not in need of acute or emergency care (level in front) towards a crisis requiring acute care (level in the back), the complexity of symptoms increases and concurrent disorders become the rule and not the exception.

Special high need populations

Considerable number of patients with addiction and concurrent mental disorders are part of specific subpopulations with various levels of social functioning. This results in different additional support needs, access to care and treatment options unique to these subpopulations. Due to different social and health care systems in North America and Europe, it is important to acknowledge these subpopulations and their related specific challenges for the system of care and the society as a whole.

The on-going First Nations and Native American health crisis (14, 15) is specific to North America and Australia. The indigenous population is in an alarmingly critical state due to precarious living conditions on reserve, social marginalization, and extreme levels of trauma, substance use and lifestyle-related physical illnesses such as metabolic syndrome and obesity, with little or no health care available in their communities. They are also overrepresented in all marginalized groups such as homeless, those living in foster care or in early imprisonment. Also, the prevalence of complex concurrent disorders is significantly higher among them (15).

Vulnerable urban populations (16, 17), including those living in substandard housing or homeless, are typical for large metropolitan areas. In large cities, poor neighbourhoods, like Vancouver's Downtown Eastside, are of special concern. They are known for extreme levels of harmful substance use, trauma and mental illness (16), as well as difficulties in providing appropriate care due to the precarious housing situation. That was the initiative for a National research project in Canada, the At-Home – Chez Soi project (18), exploring housing and support for mentally ill homeless in five Canadian centres. It demonstrated that "housing first" with appropriate community support enables recovery even for patients severely affected by dual disorders (19).

Migrants newly arriving in a country are often a vulnerable population due to language barriers, traumatic experiences and insecure legal status. In Canada and the US, migrants are almost excluded from receiving formal health care (20) and even those with access have difficulties finding culturally suitable programmes.

The origin of immigrant population is different between Canada, Europe and USA. In Vancouver, nearly

50% of the people are of Asian origin where in California, Spanish has become the dominant language. In Europe, people from a different culture or origin other than the hosting country can suffer from exclusion. Two major populations are individuals from African origin or the former Soviet Union member states and their political satellites. Even though there are specific support programmes for migrants, they are often flawed by separating treatment systems for substance use and mental health. This can leave patients with substance use disorder out of psychiatric care centres, or neglecting medical assistance by social workers while providing psychosocial support in specific multicultural drug-counselling units.

Stigma and marginalization in the system of care

Addiction and mental illness are inarguably the most stigmatized and structurally discriminated conditions in the health care. Their growing burden particularly among youth is already one of the highest of all medical conditions and the mortality is tragically huge. Despite these stark facts, mental health and addiction remain the most underfunded areas of medicine (21).

Culture of care

Stigma, poverty, homelessness and social marginalization, and substance use, mental and physical comorbidities form a vicious circle. Regarding insufficient or absent specialized services, these patients are frequently not served in a regular mental health care programmes and as a result often tumble from crisis to crisis and left with no choice other than using ERs as the only access to care.

In North America, ERs are often overcrowded and unable to offer proper treatment. Moreover, they are not funded or equipped enough to replace community services, especially for high need patients with complex concurrent disorders. If families can afford private treatment programmes, a range of residential or community-based specialized providers are available. For example, university-affiliated clinics in particular offer effective standardized programmes (22, 23). But overall, these are neither accessible nor affordable for the average patients and relevant only for a small minority. In Europe, well-integrated clinical pathways and a coherent approach to care are comparably more common. For example, effective pathways is established in the Netherlands with stepped care approaches (24) as well as Switzerland and Germany (8). However, with recently upcoming structural and funding problems in European countries, similar trends towards in-

efficient ER-based models can develop (25). Although, the Canadian culture of care is similar to the European system and everybody has a briefed right to be treated, the services needed for stepped care are mostly missing, so the ERs become the inefficient hub of triage and care of patients with dual disorders.

So as shown in figure 2, ideally different levels and models should and could connect in clinical pathways (represented through the arrows), which unfortunately is often not the case in real world. Even when the capacities are available, which is an exception; they are not well integrated and properly connected.

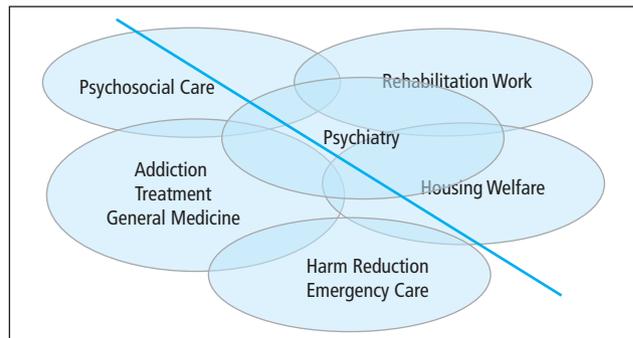


Figure 2 Levels of Care

Treatment paradigms and goals

In the last two decades, significant paradigm shifts have occurred in the area of mental health and addiction. Nearly all essential concepts of harm reduction such as substitution treatment, controlled consumption, and abstinence based care were questioned and underwent national and international reviews (e.g. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA) standards; Heroin assisted treatment (HAT); Harm reduction).

Substantial regional differences in the best practice, especially for treating addiction, can significantly impact on the treatment of dual disorders. The dominant paradigms shifts in Europe as well as in the US and Canada have resulted from the pressure on the drug policy, necessity for response to the HIV epidemic and the obvious failure of the abstinence-focused system of care.

Neglecting substance use while treating patients with severe persistent mental illness led to low retention and compliance in the hospitals as well as community care programs and also adversely affected outcome of psychosocial treatment programmes. Thus, single programmes such as those in Dartmouth, US (1, 2), Hamburg, Germany (26) or Bern, Switzerland (27) or Antwerp, Belgium (28) started to address treatment of comorbid disorders, in particular co-occurring psychosis and addiction.

One of the most important lessons learnt from the trends in the last decades is that treatment capacity, funding, best practice and health politics are not only influenced by scientific evidences but also and sometimes even primarily by economic considerations and political priorities. Even drastic reported mortality rates and high public health risks per se have not been a reason for most governments to respond to need for change while implementing the harm reduction programmes as well as heroin-assisted treatment demonstrates the major impact of clinical innovation by saving thousands of lives, preventing life threatening infections such as HIV and promoting recovery on a large scale.

Harm reduction

There are three reasons why the harm reduction paradigm is relevant to treating patients with mental illness and severe substance use:

1. Due to their high-risk behaviours, patients with comorbid disorders are very vulnerable to severe infections and physical harm (29) and need protection and support.
2. Access to the system of care is more complicated for patients with dual disorders not only due to the system thresholds, social marginalization and homelessness but also because of some clinical disabilities like cognitive impairments. In the BC Homelessness survey, patients with more comorbid conditions received less appropriate support (16). Harm reduction programmes are important entry points to connect these patients with mental health and/or addiction care.
3. Harm reduction is one of the oldest medical principles and the common ground for treatment approaches beyond. Without survival, preventing physical harm and trauma, any recovery may be impossible. When the „harm“ in harm reduction is defined more inclusive than just AIDS, e.g. by incorporating social deterioration, deprivation or criminalization, then it becomes obvious that this is a prerequisite for any further step. Identifying dual disorders along with providing psychiatric services in harm reduction facilities would be the “low threshold” indeed. An example of such an intervention is providing opioid maintenance treatment (OMT) in established safe injection facilities in Switzerland.

It was not before very recent years that the US government and its funding agencies opened up to „harm reduction“ strategies and approaches. Before the Obama presidency, „harm reduction“ was more of a „non-word“, which might have influenced the decision of the National Institute of Drug Addiction (NIDA) to withhold funding or any

other support for programmes pursuing harm reduction approaches.

Canadian provincial governments, which are in charge of health care legislation and organization, took a different route, sometimes in conflict with the Federal government in Ottawa. The only official “safe injection site” in North America today is located in Vancouver backed by the provincial government in British Columbia (BC). Insite in Vancouver is still questioned and legally battled by the conservative Canadian federal government (30), despite needle exchange and similar low threshold programmes being widely accepted since the HIV epidemic.

In Europe, harm reduction strategies were implemented first in Switzerland, Germany and the Netherlands in the 1980s with a lag of about 10 years in the southern European states such as Spain, Italy and Greece (25). This resulted in up to tenfold difference in the HIV prevalence rate between these two districts. For example in Hamburg, the prevalence rate is about 3% compared to about 30% in Barcelona (31). The joint EU guidelines on harm reduction are the result of this tragic experience. Nowadays, even fierce opponents of harm reduction have changed their approach based on an unfortunate “natural public health experience” with hundreds of thousands of people infected and dying of HIV despite knowledge of what could have helped to prevent it.

Abstinence and moderate use

Internationally, abstinence is the treatment prerequisite as well as the treatment goal of most mental health programmes for treating patients with comorbid disorders. This is based on the concept that using substances such as alcohol and cannabis can trigger psychotic symptoms or mood swings. Currently, in most Canadian and US health care institutions, supported housing and other social services are not offered for those with even moderate substance use. Such patients are either forced to abstain through certification or seclusion or are denied access to care (e.g. in residential care settings). With this approach the most vulnerable urban populations with complex concurrent disorders and long histories of severe substance use are again excluded from care and social support.

It was only recently that, OMT patients in Germany are allowed to participate in residential rehabilitation programmes, which play a major role in the German addiction treatment system. Similarly, OMT has been growingly accepted in these institutions in Switzerland over the past 15 years. Unfortunately, specialized programmes working with the full range of addiction treatments are rare which can give rise to a situation that we will not be able to help patients with complex concurrent disorder.

There are a couple of programs as good examples for setting moderate use as the goal. Some treatment providers in Canada have started pilot projects for treating severely alcohol dependent patients to prevent them from drinking harmful “non beverage alcohol” such as hand sanitizer with up to 80% alcohol and easily found in any emergency department. These programmes distribute hard liquor to these patients in a controlled way, sometimes along with case management. In another example, despite the scepticism among the AA community, the discussion on “controlled use” has initiated a new approach in places such as in Germany (32). Based on this approach, the goal is to control and limit alcohol dependent patients use to a non-harmful level preferably in a structured and supported environment. The last Canadian example is the Burnaby treatment centre for mental health and addiction service, which focuses especially on patients (19) with a long history of trauma, severe substance use and physical as well as mental illness. In this centre, the goal is still abstinence but eventual relapse is considered as part of the disorder requiring constructive attention and not exclusion.

Maintenance

Treatment goals and legal regulations of OMT differ not only between North America and Europe but also between various locations within Europe. While abstinence is still the mandatory goal in Germany and treatment providers are sometimes forced to terminate OMT in case of ongoing substance use, this is not the case in Switzerland. Notably, the experience from USA shows that the exclusion from methadone maintenance programmes following illicit use leads to higher mortality rates not improvement (33).

Regarding availability of psychosocial interventions during substitution treatment, there is substantial difference between Germany, Switzerland and USA. In the former, psychosocial counselling is always available for all clients upon their request. However, in most programmes in the US and Canada, systematic counselling is rarely available. Visiting a psychiatrist is even more difficult in these treatment settings. Psychiatrists only provide a tiny fraction of all substitution treatment programmes. Also, patients are still excluded from psychotherapy and marginalized in the system. Likewise, in Europe, OMT providers are often not inclined to address comorbid mental illness although it is known how critical and how prevalent trauma, depression or attachment disorders are for sustainable recovery. For example, the larger part of maintenance treatments in Switzerland, Germany, Austria etc. is still provided by family physicians (34, 35).

Integrated versus sequential treatment of dual disorders

Abstinence-based programmes normally start with detoxification and continue with psychosocial programmes. Detoxification duration in North America is extremely short usually less than a week. Thus, many patients leave after basic stabilization and before detoxification is finished. In contrast, in Germany, Switzerland or the Netherlands, counselling and cognitive behavioural therapy is integrated to the early stages of treatment including detoxification so called “qualified detoxification”. There are three reasons why this is relevant to the treatment of concurrent disorders:

1. For a substantial group of patients, emergency care or detoxification is a short window of opportunity when they are in a pre-contemplative phase (36) not sure about additional treatments. The functional component of their substance use (self-medication, 37) i.e. dealing with their “emotional pain,” prevents them from stopping this (at least partially) effective tool though conscious about the possible risks.
2. Acute crisis and the experiences around it play an important role in the patient’s perception of his / her own mental challenges. Reducing treatment to the minimum level for physical management is insufficient and wastes this valuable opportunity.
3. During acute situations all disturbing mental symptoms such as anxiety, mood swings, psychotic symptoms as well as flash backs are more intense, which requires special attention. If these symptoms are not addressed sufficiently, they can encourage patients to prematurely leave addiction treatment “against medical advice”.

Structural components and clinical pathways

Treatment settings in the US, Canada and the European countries work distinctly and bear different burdens in the system. Primary care has an important role in treating patients with comorbid disorders as well as for treating substance use and mental illness “alone” (8). This fact was acknowledged in Europe decades ago and is also a hot topic in the system reform in Canada right now. Family medicine is the main interface but often not equipped and trained to deal with patients who need special care.

The role of emergency departments is more central in North America due to the insurance system and limited availability of mental health services (long waiting times, no psychiatrists, no detoxification capacity). As a result, ERs play several key roles in the system of care. Instead of being used as a last resort when other resources fail to ad-

dress the problem, they are also used because of lack of access to alternatives and if the person in need does not have insurance. In these situations, ERs can provide emergency triage and support often in collaboration with police. However, despite this important role, acute care has a relatively small capacity. For example, compared to Germany, Canada has 50% less beds available for mental health care and at the same time, community services are also less equipped. While, Canada is investing about the same amount of funding per capita into health care, psychiatry is the comparably horribly underfunded area in Canada.

Although most of the addiction programmes besides OMT in the US and Canada are mainly based on abstinence, detoxification and residential capacity are only accessible as an exception or for private payers. These basic features of care are far more accessible in Europe with a better quality of care. For example, in Germany, a separate system of “rehabilitation clinics” is providing psychotherapy and “psychosomatic” care including addiction treatment, which lacks in North America.

Treatment settings focusing on rehabilitation are broadly available in some European countries, especially in Germany, Switzerland and Austria and only available in private healthcare in the US and Canada. Two reasons are of special importance to understand this phenomenon, which are the system and outcome orientation in healthcare on the one hand and well-established rehabilitation research tradition on the other. Especially residential rehabilitation programs e.g. in Germany are directly supported by pension funds to avoid any kind of early retirement or disablement, which in the end would produce much higher cost. Structure and effects of the rehabilitation system are continuously evaluated and proven to be effective from a system cost perspective. This evidence-based interconnectivity does barely exist in North America.

Innovation in Europe and North America

There are a number of innovative initiatives in US, Canada and Europe that could potentially promote better care for dual disorders. New treatment settings for high need populations are being established in both inpatient and outpatient settings. Psychiatric hospitals mainly in Europe increasingly offer dual disorder units, where ideally, can address substance use and comorbidities simultaneously (although not always successful in achieving the goal, idea behind these units reflects this goal). The Burnaby Centre for Mental Health and Addiction in Vancouver, offering outpatient treatment for dual disorder patients, is also was implemented based on this concept. Gradually, in light of the aging population of OMT patients in Switzer-

land, service providers are integrating somatic health specialists (38). Best practice guidelines are also upgraded and increasingly reflect the common occurrence of dual disorders (see e.g. 39). Progressively, standardized interventions targeting comorbid disorders in substance users are invented, evaluated and established. These include specific training programmes, e.g. seeking safety, which targets trauma-related symptoms (40).

Conclusions

Despite relatively small treatment capacities in both Europe and North America for extremely vulnerable patients with dual disorders, more effective and focused treatment approaches have been developed in the past 30 years. Europe, US and Canada are substantially different in the current system of care for dual disorders especially regarding readiness for treatment approaches based on health outcomes instead of prohibition and the abstinence paradigm.

Clinical research could foster effective treatment strategies and settings, which, if implemented, would improve care substantially. If the mental health system could have been organized more based on scientific evidence and proven effectiveness, more vulnerable individuals would have a chance to survive and recover, and more patients with complex concurrent conditions could be treated successfully. Such an approach could decrease mortality and protect resources of all kinds against ineffective system use.

The systematic reintegration into society through a rehabilitation process and specialized institutions is an exception in North America as well as some European countries. In this regard the German rehabilitation system and capacity is unique in the world. It also opened up to marginalized populations like intravenous drug users over the last decade with new interventions and rehabilitation settings in the community. Systematic rehabilitation efforts are overall potential cost savings from a system perspective because they reduce the need for acute care and an early ending of being integrated into the work force.

Conflict of interest

The authors declare that they have no conflicts of interest concerning this study.

Compliance with ethical guidelines

This article contains no studies on humans or animals.

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