

## Innovation, education and treatment of drug abuse with dual diagnosis (INNUENDO)

*Innovazione, istruzione e trattamento dell'abuso di droghe con doppia diagnosi (INNUENDO)*

### Background

The concept of dual diagnosis in the field of addictive behaviors has increased in the last years. This interest concerns not only the clinicians but more generally, people and organizations involved in this area. It is as if, after decades, we realized the importance of the role of psychiatric diagnosis in addictive behavior and that primary or secondary psychiatric conditions should be understood and addressed in people who frequently are turning to services dealing with addictions.

The term dual diagnosis was coined some years ago by the American Psychiatric Association to indicate the co-existence of a serious mental illness (particularly psychotic) and an abuse/addiction disorder, whilst only recently some attention has been paid to this clinical occurrence in Italy.

Cases with dual diagnosis are common for the Services for Addiction, Mental Health Services and private and / or voluntary social services and, as a consequence, it is necessary to avoid duplication or absence of interventions as a result.

There is a need to integrate these two domains with a case managing of these clients.

The frequent coexistence of two disorders, however, does not necessarily mean that the client needs to be looked after by two different services.

The rates of substance use in psychotic disorders are significantly higher than those reported for the general population<sup>1,2</sup>. Different studies have also observed a high prevalence of substance use, particularly cannabis and alcohol, among individuals with a first psychotic episode<sup>3-9</sup>. The increased use of cannabis also has an impact on long-term outcome, in terms of lack of clinical remission and increased levels of symptoms<sup>10,11</sup>. Addington & Addington recently<sup>6</sup> examined the prevalence of substance use and its impact on the clinical outcome three years after the first psychotic episode. The authors have reported that 51% of subjects evaluated showed a comorbidity with a substance use disorder; in 33% of cases the substance was cannabis and in 35% of cases alcohol.

Similar results have been observed by an Italian study carried out on subjects hospitalized for the first episode of schizophrenia in the Ospedale Maggiore in Milan. The results showed that 34.7% of subjects had a history of substance abuse and cannabis was the substance most

frequently used (49%), followed by alcohol (13%) and cocaine (4%)<sup>12</sup>.

The connection between substance use and psychotic disorders has been widely investigated both from the epidemiological and the neuropharmacological point of view. Most of the epidemiological studies have focussed their attention on the relationship between substance use and the development of psychosis, whilst the neuropharmacological studies have investigated how the use of substances may imbalance the neurochemical activities.

The Australian National Survey of Mental Health and Well-Being (quote here) showed that 12% of those individuals diagnosed with schizophrenia met the criteria for ICD-10 for cannabis use disorder. Adolescent cannabis users are at increased risk of experiencing psychotic symptoms in adulthood, even after taking into account the childhood psychotic symptoms preceding the cannabis use<sup>13</sup>.

Substance abuse also appears to be associated with worse levels of both compliance and response to treatment, with more episodes of dysphoria and irritability being reported, and more frequent hospitalization. Substance abuse was also associated with an earlier age of onset. In addition, Vukov et al.<sup>14</sup> showed that 41-43% of their recruited drug addicts suffered from personality disorders. Among heroin users, 32% presented with a dysthymic disorder, whilst 59% were diagnosed with an antisocial personality disorder. For these reasons, the availability of psychiatrists in the drug services, per se, is not enough to ensure an adequate management of this kind of patients. In fact, their needs are not limited to a prescription of drugs and/or to the provision of a psychotherapeutic treatment.

### Think differently: from teaching to practice

A "traditional" facility for drug addiction that should be able to provide psychological, welfare, and educational services combining different thresholds and different clinical settings, for very different types of customers is absolutely incongruent with the necessity to create individualized treatment plans.

According to the bio-psycho-social nature of addiction, treatment of these issues involves an integrated medical, relational, psychological and social rehabilitation. These interventions should be administered in a logic which is "unified", by a multidisciplinary integrated team.

For these reasons, we would like to improve the interface between health agencies promoting a better and healthier behaviour creating a new health operator, the case manager for dual diagnosis (DIAGrAM: Dual dIAGnosis cAse Manager), a professional who is an expert in the fields of both psychopathology and addiction and who is included within the health care network. The dual diagnosis case manager is a new professional, who collects the patient's needs and presents them to the remaining team professionals. The case manager will work with the patient from the beginning to the end of the clinical event, in order to articulate a range of suitable interventions to draft an individual treatment plan. For these reasons, the present proposal will focus on creating this new figure, the DIAGrAM, who will integrate the case manager activities with those of the clinical psychologist, the drug dependence unit physician, the family members and/or caregivers, the community physicians and the remaining institutions (e.g. the school).

The aim of this proposal is to stimulate a range of research activities to assess the effectiveness of a training programme on the case manager attitudes, confidence and knowledge related to working with dual diagnosis.

### Teaching translation

The case manager will act on three levels: directly with the patient, within the team and between the services. The case manager will work close to the patient, aiming at reducing the length and rates of hospital admissions, at decreasing rates of both acute psychiatric episodes and levels of chronicity, whilst at the same time improving the client's quality of life, reducing the social and familial burden, and increasing the possibility of sobriety.

The case manager will facilitate the coordination of the different health professionals (i.e. psychiatrist, psychologist, social worker, nurse, rehabilitators, emergency doctor, addiction professionals) involved in the individual therapeutic plan, in order to ensure the best treatment approach, avoiding the duplication of efforts and increasing the empowerment of patients.

In conclusion, our objective is to demonstrate the usefulness of a new figure, the case manager, presenting with satisfactory levels of knowledge of both substance abuse and psychiatry.

Recent research has suggested that integrated dual diagnosis treatments are effective, but basic interventions are rarely incorporated into those mental health programs received by these clients<sup>15</sup>.

Mental health professionals need to acquire higher levels of knowledge relating to the basic skills involved in the assessment and management of substance abuse. Since

substance abuse heavily affects the lives of the clients diagnosed with severe mental disorders, all health professionals should learn these basic skills. Otherwise, substance abuse problems will continue to be missed and untreated in this population. Another fundamental point of this proposal will be the use of Information Technology (IT) as an important tool for the dissemination of information, data collection and communication with the health professionals.

### Relevance and impact for the National Health System (SSN)

The organizational model of case management is proposed as empirical tool in the development of care pathways, which may facilitate the treatment efficacy and improve cost control through the individualization of responses to health needs.

The term dual diagnosis refers to the co-occurrence of substance abuse and severe mental illness. Since the problem of dual diagnosis became clinically apparent during the early 1980s, researchers have established three basic and consistent findings.

First, co-occurrence is common; severe mental disorders are affected by substance abuse.

Second, dual diagnosis is associated with a variety of negative outcomes, including higher rates of relapse, hospitalization, violence, incarceration, homeless, and serious infections such as HIV and hepatitis. Third, the parallel but separate mental health and substance abuse treatment systems deliver a fragmented and ineffective care pathway.

Most clients are unable to navigate through the separate systems or make sense of the confusing and possibly conflicting messages received relating to treatment and recovery. Dual diagnosis clients are typically excluded from services because of the comorbid disorder occurrence and are typically asked to return for treatment when the other problem (e.g. substance misuse or psychiatric disorder) is under control.

Many clients with a dual diagnosis disorder may find difficult linking with services and participating into treatment. Conversely, effective programs should engage both the clients and the members of their support network by providing assertive outreach activities, usually through the combination of intensive case management<sup>15</sup>.

New costs to the mental health system relating to the implementation of dual diagnosis training could be offset by a better effectiveness in terms of improving those clients' substance misuse behaviour that are associated with hospitalizations. For these reasons, the staff needs both training and supervision to learn new skills, as well as a reinforcement for acquiring and using these skills effectively.

The case manager of dual diagnosis (DIAGrAM) will have the opportunity to plan and oversee the staff awareness of dual diagnosis issues.

Fabrizio Schifano<sup>1</sup>, Giuditta Di Melchiorre<sup>1</sup>, Alessandro Rossi<sup>2</sup>

<sup>1</sup> University of Hertfordshire, Hatfield, Herts, UK

<sup>2</sup> ASL Teramo, Università de L'Aquila

## References

- 1 Regier DA, Farmer ME, Rae DS, et al. *Comorbidity of mental disorder with alcohol and other drug abuse: results from Epidemiologic Catchment Area (ECA) Study*. JAMA 1990;264:2511-8.
- 2 McCreddie RG; Scottish Comorbidity Study Group. *Use of drugs, alcohol and tobacco by people with schizophrenia: case-control study*. Br J Psychiatry 2002;181:321-5.
- 3 Cantwell R, Brewin J, Glazebrook C, et al. *Prevalence of substance misuse in first-episode psychosis*. Br J Psychiatry 1999;174:150-5.
- 4 Van Mastrigt S, Addington J, Addington D. *Substance misuse at presentation to an early psychosis program*. Soc Psychiatry Psychiatr Epidemiol 2004;39:69-72.
- 5 Lambert M, Conus P, Lubman DI, et al. *The impact of substance use disorders on clinical outcome in 643 patients with first-episode psychosis*. Acta Psychiatr Scand 2005;112:141-8.
- 6 Addington J, Addington D. *Patterns, predictors and impact of substance use in early psychosis: a longitudinal study*. Acta Psychiatr Scand 2007;115:304-9.
- 7 Hambrecht M, Hafner H. *Führen alkohol und drogenmissbrauch zur schizophrenie?* Nervenarzt 1996;67:36-45.
- 8 Arseneault L, Cannon M, Witton J, et al. *Causal association between cannabis and psychosis: examination of the evidence*. Br J Psychiatry 2004;184:110-1.
- 9 Gonzalez-Pinto A, Vega P, Ibanez B, et al. *Impact of cannabis and other drugs on age at onset of psychosis*. J Clin Psychiatry 2008;69:1210-6.
- 10 Lambert M, Conus P, Lubman DI, et al. *The impact of substance use disorders on clinical outcome in 643 patients with first-episode psychosis*. Acta Psychiatr Scand 2005;112:141-8.
- 11 Grech A, Van Os J, Jones PB, et al. *Cannabis use and outcome of recent onset psychosis*. Eur Psychiatry 2005;20:349-53.
- 12 Mauri MC, Volonteri LS, De Gaspari IF, et al. *Substance abuse in first-episode schizophrenic patients: a retrospective study*. Clin Pract Epidemiol Ment Health 2006;2:4.
- 13 Arseneault L, Cannon M, Poulton R, et al. *Cannabis use in adolescence and risk for adult psychosis: longitudinal prospective study*. Br Med J 2002;325:1212-3.
- 14 Vukov M, Baba Milkic N. *Emotional life of contemporary human and drugs*. Nis: Prosveta 1992.
- 15 Drake RE, Essock SM, Shaner A, et al. *Implementing dual diagnosis services for clients with severe mental illness*. Psychiatr Serv 2001;52:469-76.