

# Drafting a dual diagnosis program: a tailored intervention for patients with complex clinical needs

## *Presa in carico integrata del paziente con doppia diagnosi: complessità e implicazioni per la pratica clinica*

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**SUMMARY. Background.** Clinical practice of mental health services changed in 1978 after the Basaglia Law was passed, and it is now characterized by usually voluntary treatments offered by community-based services. That broadened the interventions' focus from the single subject to their environment. Dual diagnosis is defined by WHO as «the co-occurrence in the same individual of a psychoactive substance use disorder and another psychiatric disorder». It is considered to be a “border territory” since entails networking between different medical services. **Materials and methods.** A literature search was performed in PubMed, Web of Science, Scopus and Google Scholar. Search terms were: “guidelines”, “treatment”, “comorbidity”, “substance abuse”, “alcohol”, “dual-diagnosis”, “psychiatric illness”, “outpatient”, “inpatient”, “health care service”, “clinical practice”. National and regional regulations about health and addiction were screened too. Out of 598 titles, 31 studies were included in this article for their relevance on treatments and networking between services for dual diagnosis cases. **Results.** There are not any guidelines for clinical practice in the literature, neither there are any shared treatment strategies on a national level. Considering the autonomy that every regional health service has, several different courses of action are possible. Here there are reported the ones available. **Conclusions.** After discussing the weak points of the treatment options, we suggest the “Multidisciplinary Healthcare” model to best address the difficulties represented by dual diagnosis cases.

**KEY WORDS:** dual diagnosis, alcoholism, treatments, multidisciplinary healthcare, guidelines.

**RIASSUNTO. Introduzione.** La tutela della salute mentale in Italia, dopo la Legge Basaglia del 1978, è caratterizzata da trattamenti (di norma volontari) erogati da servizi centrati sulla comunità, che hanno allargato gli interventi al contesto di vita dell'individuo, alla sua rete di appartenenza e ai gruppi sociali di riferimento. La doppia diagnosi è definita dall'OMS come la «coesistenza nel medesimo individuo di un disturbo dovuto al consumo di sostanze psicoattive e di un altro disturbo psichiatrico». È considerata un “territorio di confine” poiché la competenza clinica e quindi trattamentale è condivisa tra diverse branche della medicina. **Materiali e metodi.** È stata effettuata una ricerca sistematica della letteratura sui principali motori di ricerca quali PubMed, Web of Science, Scopus e Google Scholar. Sono stati presi in considerazione articoli pubblicati dal 1980, anno di pubblicazione del DSM-III, al 2015. I termini di ricerca sono stati: “guidelines”, “treatment”, “comorbidity”, “substance abuse”, “alcohol”, “dual-diagnosis”, “psychiatric illness”, “outpatient”, “inpatient”, “health care service”, “clinical practice”. Sono inoltre state consultate le normative nazionali e regionali in merito a salute e dipendenze. Dei 598 articoli emersi, 22 sono stati inclusi in questo articolo per la loro rilevanza sulla definizione sulla definizione di percorsi clinici e di trattamento della doppia diagnosi. **Risultati.** Non sono disponibili in letteratura delle linee-guida sulla gestione clinica dei pazienti affetti da doppia diagnosi, né sono state individuate delle strategie di trattamento condivise a livello nazionale. In considerazione inoltre dell'autonomia in termini di organizzazione dei servizi sanitari in capo alle regioni sono possibili una pluralità di opzioni. Vengono riportate quelle disponibili. **Conclusioni.** Dopo aver discusso le criticità dei modelli assistenziali proponiamo il modello della continuità assistenziale per rispondere al meglio alle criticità presentate dai pazienti con doppia diagnosi.

**PAROLE CHIAVE:** doppia diagnosi, alcolismo, percorsi terapeutici, continuità assistenziale, linee-guida.

## INTRODUCTION

### Mental Health Care in Italy: laws and services

In 1978 the Law 180 was approved, known as “Basaglia law”, so called from the Friulan psychiatrist, which first believed in a necessary change in psychiatric medical practice. This law started a national process of de-institutionalization of the mental illness with the consequent psychiatric hospital closures at the end of the nineties, and the affirmation of a revolutionary territorial assistance model. The new legislation main innovation was that, even in psychiatry, at the base of health care would not be the danger perception, but the right of the person to health and care. Consequently, the patient became the treatment focus with his needs, rights, capabilities and resources. In clinical practice, this principle was translated into attempt to integrate the patient, suffering of psychic discomfort, into his/her usual social contexts, promoting his skills and involving in these processes his/her social network. Mental Health Departments (DSM) today are the structures that oversee all clinical, administrative and social activities related to the mental health field, and manage the activities of the different programs in which the departments are composed. Their composition is largely heterogeneous and includes psychiatric services such as child-psychiatry, law psychiatry, clinical psychology, prevention or rehabilitation services: these programs aim to assist the patient in his illness history. The Mental Health Center (CSM) is the reference center for people experiencing mental health problems and coordinates prevention, care, and rehabilitation for patients with psychiatric disorders. The CSM intervention is diagnostic, therapeutic and social-rehabilitative. In addition, with the aim of creating a “nursing network”, it works as a liaison with general practitioners, providing psychiatric counseling and leading, in collaboration with others, therapeutic projects and training activities as specialist advice on “border pathologies” such as dual diagnosis<sup>1-3</sup>. The Drug Addiction Service (SerT) is, instead, the public service for Addiction of the National Health System established by the law 162/90. These centers treat all problems related to legal/illegal use/abuse of psychoactive substances and dependence, through multidisciplinary recovery and care assistance strategies, integrating medical and educational, social and psychological point of views.

Their territorial activities provide to inform and sensitize the community about the risks and consequences of substances use; interventions to contrast the risk factors; measures to promote protective factors improving collective health; damage reduction services addressed to substance dependent patients at risk of social marginality who do not directly turn to the service. In addition, the SerT provides support to family members in order to help them to solve the problems about this situation, possibly involving the person concerned<sup>4</sup>.

After the Basaglia Law, a large number of psychiatric rehabilitation facilities (also known as Rehabilitative Therapeutic communities) were created, intended to accommodate patients with severe mental illness. These structures are intermediate between the Mental Health Center, which takes care the patient in his usual context, in outpatient set-

ting, and the Prevention Diagnosis and Care Service, which manages the acute stages of psychopathology.

Therapeutic communities have patient's autonomy achievement, as long-term goal, in order to reintegrate him into his socio-environmental context. To achieve this, they rely on the territorial network and a tutoring service is a part of treatment. However, short term goals usually focused on overcoming relationship difficulties with the others, redefining their social role, and reducing the aggravation and chronicization of psychopathological disorders<sup>5</sup>.

Some residential structures are therapeutic communities specialized in dual diagnosis care. These communities have the main purpose of leading the patient towards prolonged substance abstinence, also initiating a pathway of acceptance, management and treatment of the psychiatric pathology and promoting the enhancement of patient resources from the rehabilitative point of view<sup>5-7</sup>.

### Dual diagnosis: an interesting “border field”

Dual diagnosis is defined by the World Health Organization (WHO) as «the co-occurrence in the same individual of a psychoactive substance use disorder and another psychiatric disorder»<sup>8</sup>.

Because considered a “border territory” between various branches of medicine, such as psychiatry, toxicology, gastroenterology, and internal medicine, dual diagnosis has not received an adequate attention in terms of nosographic-diagnostic framing and therapeutic strategies.

Dual diagnosis includes, *de facto*, a broad and diversified spectrum of clinical frameworks: a primary mental disorder which causes the increased substance intake and the possible development of an addiction; substance abuse and/or withdrawal from it leading to a psychiatric symptomatology or an established disorder; the reversible/temporary worsening of a psychiatric condition due to the substance intake; the co-existence, independently developed, of substance abuse and mental disorder<sup>9</sup>.

Such varied “clinical kaleidoscope” is also reflected in a nosographic complexity which often makes the therapeutic action ineffective or uncertain. In this regard, the 5th edition of Diagnostic Manual of Mental Disorders of 2013 provides effective operational criteria. Additionally, dual diagnosis is a critical issue for job seekers because the patients often have a strongly compromised social functioning with important difficulties in the socio-relational field (family, work, etc.), and also different and important organ damages. This is often accompanied by critical economic problems and, not rarely, by problems with the law<sup>10</sup>.

The epidemiological available data in the literature, however, suggest that this is not a “marginal” clinical issue. Nora D. Volkow, director of the National Institute on Drug Abuse, states that «according to epidemiological studies, 6 of 10 people abusing of alcohol and drugs have also a mental disorder, and 25 to 60% of people with a mental disorder have also substances addiction»<sup>11</sup>.

The modern organization of Mental Health Care has certainly allowed a minor mental illness stigmatization and a greater focus on rehabilitation of patients at physical, psychopathological, social and environmental level.

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However, our health system seems to have some difficulties in managing those “border pathologies”, those complex symptomatic frameworks that should refer to multiple services at the same time. An example is the dual diagnosis.

The aim of this paper is to find in literature operative models of care assistance for patients with dual diagnosis. Starting from these data, we will offer some consideration about the feature we think useful to draft services tailored for dual diagnosis patients.

### **MATERIALS AND METHODS**

A systematic literature search was conducted on PubMed, Web Science, and Scopus, Google Scholar databases. Articles published from 1980, the year of publication of DSM-III, until 2015 were considered. The search strings were: [alcohol, OR Dual Diagnosis OR substance OR psychiatric comorbidity] AND [Guidelines OR health care service OR pathway OR care programs OR clinical practice]. National and regional health and dependency regulations were also consulted. Of the 598 articles emerged, 31 were included in this article for their relevance on the definition of dual diagnosis clinical pathways and treatment.

In particular, were considered articles sharing a multidisciplinary care pathway and the ones whose data supporting not only the pathology, but the patient in the different stages of his addiction history. More emphasis was given to those works that specifically treat the complexity of therapeutic pathways in patients with psychiatric comorbidity, in order to investigate the current applied methodologies and to refine an integrated approach to double diagnosis that can be shared and generalized in the various territorial structures.

### **RESULTS**

In the literature, dual diagnosis clinical management guidelines are not available and no nationally-based treatment strategies have been identified. Considering the autonomy in terms of health services organization across the regions, a number of options are possible<sup>12</sup>.

Below we will describe the available models in the literature, adopted by the Mental Health Centers and SerT of the Abruzzo Region<sup>13</sup> and by the Local Health Center of Sanluri (VS)<sup>14</sup>. These services, in a similar way, recognized that «the healthcare sector requires the involvement of multiple actors within an inter-professional, interdisciplinary and multidisciplinary system» and, based on regional regulations, proposed a technical-management process for dual diagnosis cases, completing the absence of formalized collaboration protocols and operating procedures between the mental health service and drug addiction services<sup>14</sup>.

Thanks to standardized protocols between services, the pathways include if a patient arrives at the CSM or at an addiction service.

In the ASL of Sanluri<sup>14</sup>, if the patient gets to CSM, the clinical diagnostic evaluation process will include the administration of the Brief Psychiatric Rating Scale (BPRS)<sup>15</sup>; Specifically for addiction treatment Service, the ASI (Adap-

tation Severity Index)<sup>16</sup> and the SOGS (South OAK Gambling Screen)<sup>17</sup> are used. Instead, in both areas the GAF (Global Assessment of Functioning Scale)<sup>18</sup> is administered, with a cutoff value of 50. In the health facilities of the Abruzzo Region<sup>13</sup> are used: the Alcohol Use Disorder Identification Test (AUDIT)<sup>19</sup>, the Barrat Impulsiveness Scale (BIS)<sup>20</sup>, the Hamilton Depression Rating Scale (HDS)<sup>21</sup>, the Hamilton Anxiety Rating Scale<sup>22</sup>, the BPRS<sup>15</sup> and the Minnesota Multiphasic Personality Inventory (MMPI-2)<sup>23</sup>. Of course, the use of these tools always accompanies a toxicological evaluation through anamnesis and laboratory investigation.

Medical doctors and psychologists of each care service may require the specialized counseling of other operating units if psychiatric/substance or alcohol-related symptoms and signs emerge from the assessment, or if these symptoms are important to justify clinical attention.

The diagnostic tests of each care service are therefore enriched by an information exchange resulting from a collaborative work. However, differential diagnosis tends to be difficult since psychiatric and poisoning syndromes can share many symptoms and diagnostic criteria. Substance-related disorders typically develop in close connection with substance abuse and generally show improvements since the first stages of abstinence, even without a specific treatment or therapy. Independent disorders, instead, generally occur before the onset of substance abuse disorder and require a specific therapeutic approach<sup>24</sup>. As already mentioned, this variety of symptomatic manifestations can obviously have implications in clinical practice. For example, if the patient, at the end of evaluation, has an active drug addiction and an “inactive” psychiatric disorder or vice versa, he will be taken care by the “primary” competent service while the other will have advisory functions. Instead, if a patient has an «active psychiatric disease and an active drug addiction at the same time»<sup>14</sup>, a mixed team makes a connected activity and a shared multidisciplinary diagnosis with the additional goal to create an individualized therapeutic pathway (PAI), residential or outpatient, in relation to the patient’s clinical condition, partner, family, and work<sup>13,14</sup>. In other words, the multidisciplinary team will be created in all cases where the patient cannot be managed by a single service.

In the health facilities in the Abruzzo Region, the team must be composed of two doctors, one of CSM and one of the SerT (or the Alcohol Treatment Service where it exists), two psychologists and two social workers. Other professional figures (professional nurses, educators, etc.) can be added if necessary. Each service will have its own reference operator for each case.

In the ASL of Sanluri, this team initially provides at least: a physician, to whom are added a psychologist, a nurse, and a social worker belonging to one of the two services; later the team may require other figures, if necessary for the specific case. One of these professional figures is also identified as a case manager who becomes the patient’s referral operator along his entire rehabilitation path.

PAI definition also includes the effectiveness evaluation of the treatment through a periodic monitoring until the patient’s discharge (i.e., remission and/or stabilization of one of the two pathologies).

In fact, the systematic development of care pathways has become critical to face the complexity of the patient’s needs (especially for patients with severe disabilities such as schiz-

ophrenia, mood disorders and serious personality disorders that account for 50% of the prevalence treated)<sup>25</sup>.

## DISCUSSION

Although important results are gaining from the point of view of pharmacological treatment<sup>27</sup>, it is still necessary to identify specific pathways for taking care of all patients, and it is possible only through a conjunct work of a multidisciplinary inter-services team making the appropriate and effective pharmacological strategies. This is due to the fact that patients with dual diagnosis often have also organic and psychological symptoms such as difficulties in family relationships and a strongly compromised social functioning. To this are added economic discomfort and, not rarely, problems with the law<sup>10</sup>.

By its nature, the dual diagnosis responsibility should be shared between different services and, in the specific case of Italian reality, there is the problem of integration between the drugs and the psychiatric services. Even in specific cases such as alcohol dependence, alcohol centers in Italy are often deficient, sometimes dependent arm of the SerT or, in other cases, autonomous centers. It is useful that structurally organized alcoholic centers, possess specialized experts on substance abuse and can quickly make use of structured psychiatric counseling, which frame the problem and provide for its management; it is also necessary that the alcohol centers work in a network with the other structures in/or functional units to target the patient's socio-health needs and the best strategies for an overall successful therapeutic intervention. In our opinion, it is appropriate to elaborate an individualized therapeutic project that is made up of different professionalisms, which can be in relation with other different services, but which forms a stable functional team sharing a common paradigm of intervention and is also equipped with homogeneous and shared measurements (e.g., clinical evaluation scale). This would ensure a higher quality of care for patients and their families.

Conversely, fragmentation, discontinuity of care and the lack of a systematic and networked approach are all barriers that prevent a proper collection of feedback on the effectiveness of diagnosis or treatment and, more generally, on the patient's health status, thus hindering the possibility of implementing/optimize evidence-based welfare pathways. The adoption of a nursing model, such as a Continuum of care Assistance program, where a variety of services and professional skills are put in a functional network, in the ways described above, which take care in synergistic way of patient's clinical complexity, could favor the therapeutic management of these patients, responding to their complex socio-sanitary needs and facilitating the medium and long-term follow-up<sup>28-31</sup>.

It is evident that both mental health services and pathological dependence services can lead to a number of issues related to a separate dual diagnosis treatment: diagnostic errors, therapeutic misunderstandings, lack of clarity in the work-making approach<sup>13</sup>. Today, there is a strong need for speeding in the networking between these services, in new coordinated intervention models, so that patients do not experience fractures, dissonances or contradictions between each intervention or structures. Moreover, it is important to recognize the role of private accredited services and it is necessary to de-

velop a shared and standardized protocol of intervention and evaluation between these programs and the public ones.

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