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REVIEW

Addiction disorders: a need for change. Proposal for a new management. Position paper of SIA, Italian Society on Alcohol

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ABSTRACT

Various epidemiological and biological evaluations and the recent publication of the DSM-V (diagnostic and statistical manual of mental disorders) has imposed on the scientific community a period of reflection on the diagnosis and treatment of what in the DSM-IV was defined as "addiction". To date, the term "addiction" has been replaced by the DSM-5, because there is no global scientific consensus that has unequivocally characterized its clinical characteristics. This, we will talk about substance/alcohol use disorders (SUDs/AUDs) and disorders related to behavioral alterations (DBA) that can generate organic diseases, mental disorders, and social problems. In the first psychotic episode 40-70% of subjects meet the criteria of a SUDs/AUDs, excluding tobacco dependence. Substances can not only be the cause of a psychotic onset, but they can also disrupt a psychotic picture or interfere with drug therapy. The pharmacodynamic profiles of many substances are able to provoke the phenomenology of the main psychotic symptoms in a way that can be superimposed onto those presented by psychotic subjects without a history of SUDs/AUDs. The Department of Addictions (DAs) must not be absorbed by or incorporated into the Departments of Mental Health (DMH), with which, however, precise operational cooperation protocols will have to be defined and maintained, but it will have to maintain its own autonomy and independent connotation. Addiction Medicine is a discipline that brings together elements of public health, prevention, internal medicine, clinical pharmacology, neurology, and even psychiatry. The inclusion of the DAs in those of DMH refers purely to a problem of pathology that has to do with lifestyle, choices, and behaviors. These, over time, show their dysfunctionality and only then do related problems emerge. Moreover, epidemiological, social, and clinical motivations impose the creation of alcohological teams dedicated to alcohol-related activities. The collaboration with self-help-

groups (SHGs) is mandatory. The action of SHGs is accredited in numerous international recommendations both on the basis of consensus and evidence in the literature.

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KEY WORDS: Alcoholism - Behavior, addictive - Substance-related disorders - Self-help groups.

Various epidemiological and biological evaluations and the recent publication of the DSM-V[1] (diagnostic and statistical manual of mental disorders) has imposed on the scientific community a period of reflection on the diagnosis and treatment of what in the DSM-IV was defined as "addiction".

The recent growth in substance use in adolescence and adulthood has further complicated the overall picture. There is also a continual increase in problems not related to substances, but to behaviors (eating disorders, technological addiction, gambling, sex, shopping, etc.) (Table I).

General aspects

With regard to the term "addiction", we wanted to medicalize a natural and physiological relational bond and associate it with the concept of chronic relapsing disease, give it a negative meaning, and limit it only to substances: heroin, cocaine, THC, alcohol, tobacco, etc.

Human beings have an innate need to bond, to connect, to be interdependent, but when we are deprived of the opportunity to create positive bonds, we attach ourselves to anything that can give us a sense of relief.

TABLE I.—*Old and emerging problems that have been integrated and strengthened.*

Teenagers and poly-consumers
New synthetic substances
The links between the consumption of substances and psychopathological aspects
The association of substance use and behavioral alterations
Misleading advertising and economic interests
Organized crime
Low percentage of early identification
Reduced sensitivity to basic medicine
Stigma (general population and health workers)
Services are obsolete from a structural point of view
Inequalities

Plato argued that the root cause of epidemic "addiction" lies in the structure of society itself.

Plato's idea also proved to be true for health problems other than addiction. On examining the causes of the disease, that is, breaking the man-environment equilibrium, we can see how, in the past, the reasons for imbalance were almost exclusively linked to factors external to the individual and independent of him/her: factors of a chemical origin. Outside sources (cold, heat, poisons from plants, animals, or minerals, etc.) and those of alimentary origin (partial or global nutritional deficiencies) or of biological origin (viruses, bacteria, parasites) were the most frequent causes of death.

Today, however, it is man himself with his behavior and the society he has built that should be regarded as one of the main threats to people's health and the environment.

The diseases of today (and tomorrow if we do not intervene in time) have the common characteristic of being caused by artificial factors, *i.e.*, factors that are not pre-existent in nature, but are created, stimulated, or strengthened by the work of man; therefore, they are not physiogenic, but anthropogenic diseases such as arteriosclerosis, diabetes, addiction, and many mental illnesses.

A growing movement within the health profession and the World Health Organization (WHO) argues that many health problems are more fully explained by the fragmentation of modern society than by individual differences in genetic susceptibility or other risk factors; a broader analysis of the "necessary social determinants from the point of view of health" is becoming more and more useful in today's health profession.

To date, the term "addiction" has been replaced by the DSM-5, because there is no global scientific consensus that has unequivocally characterized its clinical characteristics.

This, we will talk about substance/alcohol use

disorders (SUDs/AUDs) and disorders related to behavioral alterations (DBA) that can generate organic diseases, mental disorders, and social problems.

Also in this text we will use the term "addiction" (A), which in the current Oxford Online English Dictionary (OED) is defined as a state of being"... dedicated or devoted to a thing, esp. An activity or occupation, adherence or attachment, *e.g.* of an excessive or compulsive type".

Therefore, A is not only generated by the use of substances but also by socially accepted behaviors, which at first the individual decides to use voluntarily with a behavior consisting of research and experimentation of new sources of stimulation and gratification (typical of human beings and not only).

In this way, a condition of neuro-psycho-biological and social alteration (relational suffering) is created over time, with the ability to reduce autonomy and to analyze reality and decisions; this is followed by the exercise of the subject's free will with regard to the presence of a compulsive behavior characterized by the "desire-research-recruitment" spiral, which increases with social isolation (craving is the impulsive desire for a psychoactive substance, for a food, or for any other object or gratifying behavior: this impulsive desire supports the "addictive" behavior and the compulsion to benefit from the object of desire).

A is, therefore, characterized by an increasing difficulty of modifying and maintaining a state of positive relationships and with a reduced perception of the risks related to one's own behavior and a distortion of social relations.

The prefrontal sensory stimuli translate into a glutamatergic cascade that acts in different sectors of the limbic region: at the amygdala and the nucleus accumbens, emotional memory is formed (conditioned reflex, reinforcement action, drug seeking); in correspondence with the striated dorsal, the stimulus-reinforcement memory (habit) is formed and at the hippocampus the memory is consolidated. The resulting dopaminergic cascade creates non-voluntary behavior (Figure 1).

For these neuro-physio-pathological reasons, the concept of self-inflicted disease ceases to exist, especially when the start of substance consumption is promoted and favored by society itself.[2-9]

The SUDs/AUDs/DBA are, from a neurobiological point of view, mainly related to alterations in the "reward" mechanisms (reward) of the brain, of motivation, of memory, and of the connected circuits. These circuits involve specific biological, behavioral, social, and spiritual manifestations.

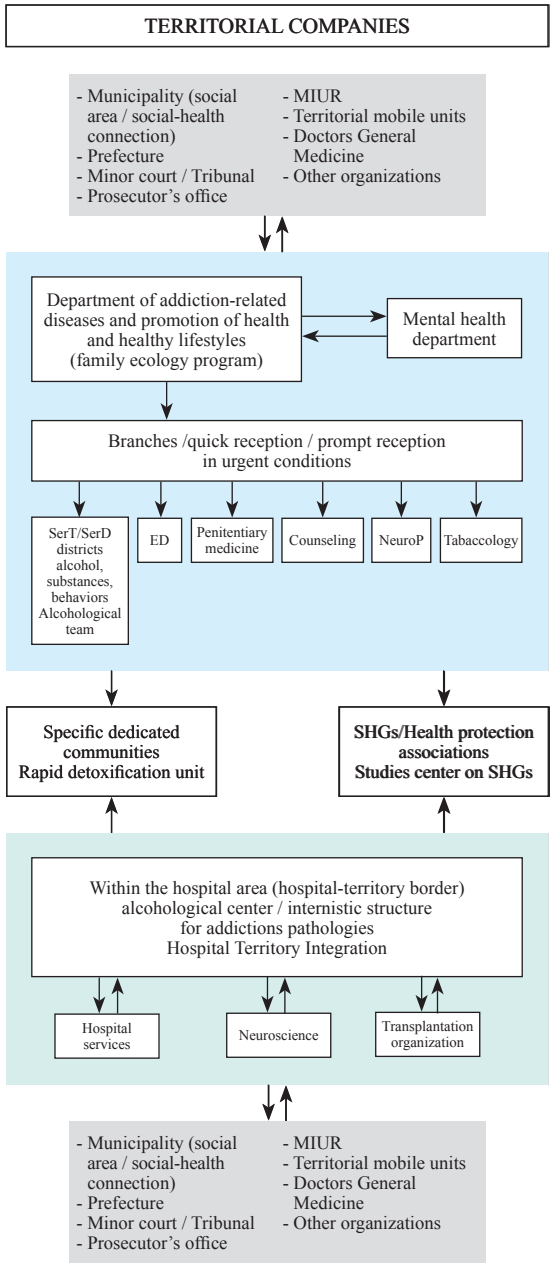

Figure 1.—Possible company/inter-company organization "addiction departments". Prevention, early contact, care, rehabilitation, autonomy, and reintegration.
SerT: territorial addiction service, SerD: territorial addiction service, ED: eating disorders, NeuroP: neuropsychiatry, SHGs: self-help groups.

All policies and strategies must be able to recognize that the use of any substance, even occasionally, is dangerous behavior and with a high risk to the health. Also, A is a condition that constitutes, in addition to being a social problem and a risk to safety, a serious public health problem that concerns not only the health of people with A on substances and/or this kind of behavior, but also third persons who become involved in these risky behaviors (this is particularly evident when driving vehicles or during work activities, for example).

The recognition of these concepts implies that all care systems are oriented towards relating with people who occasionally or cyclically use (in the absence of A) substances and are involved in this behavior. To date, it is clear that subjects with health risk behaviors are in the majority, and they would need early intervention to prevent the risks connected with the use of substances or behaviors that put the state of the individual, his/her family, and social well-being at risk. It would, therefore, be reductive only to take action when a state of addiction arises, or following a diagnosis of organic or psychological pathology, or when the social consequences arise after the legal aspects have to be faced up to.

These systems will have to be oriented, not towards the prevention of addiction (as an addiction), but to promoting more attention to the use/consumption of substances and behaviors, and to working to prevent and modify, as the WHO also indicates as an objective, damage to social relations. We should go beyond the care and recovery of the person and his/her family and beyond the "social control" of the phenomenon.

From this, it emerges that the need to integrate policies and interventions (as well as structures) related to the problems deriving from the use of legal and illegal psychotropic substances, alcohol, smoking, prescribed and non-prescribed drugs, and compulsive behaviors is becoming increasingly essential. The global and integrated approach to all these forms of A involves a new strategy and organization that are oriented towards facing all the various forms of A (in terms of prevention, health promotion, therapy, and rehabilitation).

In recent years, we have seen how the approach based on both punitive/constrictive or compassionate therapeutic techniques, harm reduction, therapeutic and recovery communities, and recurrent "drug" wars with the terrible stigma of "addiction" has not led to a visible decrease in the prevalence of "addiction" or to a solid intellectual consensus on the nature or cause of the "addiction" itself.

In the health field, a new vision of "ecological public health attentive to the context and the role of social, economic and environmental determinants" has appeared.[10]

The protection of health implies the adoption of a global, multi-sectoral, and multilevel approach that is able to grasp the specific emerging needs in the context of complex intersectoral dynamics (health, work, housing policies, education, the environment, etc.).

If we are exclusively interested in the individual, without changing the social, environmental, and economic determinants that are directly or indirectly involved, we will not achieve the desired effects and this, on the contrary, may increase the inter-individual and family differences in their states of health and well-being.

The implementation of intervention policies has to involve active parties and stakeholders. Their participation in the development of specific intervention policies can provide valuable help and support.

It is, therefore, essential to change the approach of the departments of addiction, which will now be renamed the Departments of A and lifestyle, starting from the availability of specialized organizations in this sector (separate organizations from those dedicated to psychiatry).

Therefore, these guidelines are intended to be general methodological indications for operators in this sector, both in terms of programming and organizing services.[11]

Proposed organization

Modern departments must be able to handle most existing As. Very often, in fact, people simultaneously present various As and require a global and synergistic response. The approach must, therefore, be oriented towards detecting and treating all forms of A through early identification and

diagnosis, and integrated treatments, multi-professional, and multi-specialist approaches.[11]

To date, the main A to which we should be able to give specialized responses in the departments of addiction (DAs) or DA and lifestyles (DAS) come from: heroin, cocaine, THC, alcohol, tobacco, prescribed and non-prescribed drugs (painkillers, diuretics, psychotropics) and addictive behaviors (eating disorders, gambling/betting, sex, shopping, extreme sports, accumulation of goods, etc.).

In recent years, the A phenomenon has become increasingly complex and therefore requires, in addition to specific specializations, an organization that is more suited to the various forms of A (overcoming the concept of dependence, abstinence, and sobriety), but also the need to produce uniform responses both for drug use and for the use of alcohol, tobacco, prescribed and non-prescribed drugs, and addictive behavior.[12]

The current organization can no longer give complete and adequate answers to the needs of society, citizens, and their families. Sometimes, this has generated answers that are not always well coordinated, to which they provide the structures of both the first and second, third and fourth sectors of well-being.

The latter, in particular, the third and fourth sectors of well-being, must be included in an organization that allows them to be better oriented, used, evaluated, and integrated both from the point of view of policy, objectives, and then operations.

The need has arisen to create and support structured, stable, autonomous departmental structures with specific and precise identities. There is also a need for the better use of human, financial, and technological resources to ensure homogenous interventions everywhere, as well as the ability to guarantee continuity of care, the homogeneous distribution of ELA (essential levels of assistance), adequate treatments, and, at the same time, a good safety level for these therapies. The current complex system sometimes overcomes the heterogeneity of the interventions and treatments with certain inefficiencies that can easily be overcome and that depend, above all, on the lack of coordination and concrete organization.

The creation of closely integrated departments could also lead to the overcoming of the long-standing diatribe between public and private structures that still exists today and which in reality has no sense of being. This fact could also help in finding solutions in this organizational structure to give equal dignity to all operating structures on the territory but in a contemporary context of equal responsibility (obviously each structure according to its skills and its institutional roles). The department would therefore create structural and functional conditions that are almost "obligatory" in order to be able to plan together the necessary interventions that are based on the identified needs in the territory which they are responsible for.

The organizational model of the DAs takes into account guidelines, also expressed also at a European level, that are aimed at creating and maintaining a specific management area for this sector within healthcare companies and among the healthcare companies from the same region. This is due to the fact that it is a specific pathology that requires not only a technical-scientific discipline sui generis, but also an organization that is just as specific.

Incorporating the DAs into the Mental Health Departments (MHDs) is therefore to be avoided, as a clear strategic and organizational error. The collaboration and a synergy with MHDs will in any case be sought but focusing on an increasingly specialized development of the "A activities" due to the high complexity of the subject from a diagnostic, therapeutic, rehabilitative point of view, and also due to burdensome responsibilities deriving to the related medicolegal aspects, both from the point of view of the toxicological findings, and of the activities in prison, both in the courts.

The experience of merging the DAs and MHDs up to now has demonstrated, not only the extreme difficulty of this organizational choice, but also the significant problems that have arisen both in the motivation and disorientation of the members of staff, but above all in the loss of skilled specialists who were only recently acquired.

The clear recommendation, therefore, is to follow up with organizational forms of DA which

will provide a precise autonomy and therefore responsibility for the actions taken with their own technical, scientific, and operational identity.

The DAs must be considered a central and specialized node of the sector's territorial network in order to be able to carry out the coordination functions between all the various components that interact in various ways in the promotion and activation of interventions concerning A. The department, therefore, must represent the intra and extra company (or inter-company) reference point for the development and maintenance of both general intervention programs (area plans, specific programs, etc.) and projects, especially in the preventive area aimed at parents, adolescents, and young substance users. The department, therefore, will become a competent territorial reference resource for both the social and health aspects related to drug problems, and with the aim of integrating with the law enforcement activities of the competent authorities in order to be able to integrate and balance the policies of demand reduction and offers.

The department will have to seek further integration with schools and with civil society and its associations in order to implement as much as possible community and environmental interventions, involving all the sectors of the society and citizens first, especially the younger age groups. The main sectors will be media and preventive and dissuasive communication in the area of addictions with permanent communication programs, in particular against the use of all drugs, alcohol, smoking, pathological gambling, and the abuse of non-prescribed drugs.

In light of the above, the territorial addiction unit (SerT/SerD), the therapeutic communities, and the other departments cannot operate separately and in non-unitary organizational contexts, with therapeutic and rehabilitation processes that do not take into account the evidence of neuroscience. They risk being, on the one hand, real generators of chronicity where sometimes people are kept in a state of "quiet despair" and, on the other hand, almost totally inadequate, for both their improper and obsolete diagnostic modalities, therapeutic offers, and new needs for care and rehabilitation. For our part, therefore, the solution can be seen through the activation of a training and organizational path based on neuroscience, on which new strategies and new ways of being, organizing, and operating are to be built within an innovative and well-structured DA.

The general purpose of the department is to develop a series of concerted and coordinated actions in the area of close socio-health integration of addictions to psychoactive substances and addictive behaviors, with the aim of pursuing the objectives of the regional and company's social-health policy.

The inclusion of some services (eating disorders, counseling, penitentiary medicine) can lead to a hypothesis of a lack of homogeneity.

In reality, contemporary social observation and epidemiological evidence indicate the opposite.

The reasons are as follows: the current organizational structure has enabled it to cope with large numbers of patients. Despite the excellent responses, there is a need to intercept a larger number of users at an early stage to improve their quality of life and reduce costs.

In fact, it is known that some diseases related to the consumption of alcohol and/or substances are only diagnosed after several months of delay. This often happens due to an excessive fragmentation of the medical activity: some patients undergo medical measures more than once, while other patients never. Therefore, a closer integration is necessary between the various structures that deal with dependencies and the creation of paths that facilitate entry into services.

The creation of the department of addictions has a rationale according to the following considerations:

- the neuro-physio-pathological mechanisms of the various addictions are common (eating disorders, alcohol, smoking, and substances);
- internal and/or psychiatric comorbidities are common;
- adverse and/or anticraving therapeutic activity is partly common (must be reduced);
- detoxifying, reintegrative, and supportive medical therapy is common;
- integrated and personalized multidisciplinary activities follow the same paths;

• increasing numbers of patients have more than one addiction (*e.g.*, smoking is present in 80% of other addictions, alcohol use is present in up to 60% of eating disorders);

• activities of self-mutual mutual aid (to be implemented);

• health prevention and promotion programs must have a common direction.

In particular, the following clarifications have been added:

• SerT/SerD: alcohol activity, substances and behaviors of the first level. Multidisciplinary competencies including psychological and psychiatric activities;

• alcohology structure and pathological addictions: II level internist activity with hospital-territory border skills (territory hospital integration). Reduction of ordinary admissions, first aid and cost reduction;

• structure of eating disorders: homogeneous within the department for the following scientific and assistance reasons: bulimia and "binge eating disorder" are to all intents and purposes addictions (existence of "overeaters anonymous"); anorexia nervosa: acquired scientific evidence includes this condition within the sphere of "addictions":[2] "compulsive behavioral nature is the main key to the maintenance of eating disorders"; significant increase in the association of eating behavior disorders with other addictions (in particular drunkoressia); II level internist aspects with the need to interact with the internal structure of alcohol and addiction disorders; need to interact with infantile neuropsychiatry;

• child neuropsychiatry: necessary for the continual increase in the "adolescence, polydependence and psycho-pathological aspects" phenomenon. Interaction with the DA services and with the advisory center;

• consultory: necessary interaction with the DA services for the "adolescence, polydependence and psycho-pathological aspects" emergency, and, moreover, for preventive reasons and health promotion. The latter activity also includes the prevention of the relationship between the "use of alcohol and/or substances, sexually transmitted diseases, unwanted pregnancies, and violence";

• prison facilities: necessary for clinical and legal interactions;

• alcohological center: organizational, scientific, and cultural coordination functions with company and extra-company structures. Furthermore, prevention and health promotion functions (alcohol and/or substances);

• tobaccology structure: scientific evidence demonstrates tobaccological treatment for patients suffering from addiction after a reasonable period of abstention. This involves a significant reduction in relapses.

Neuroscience

Neuroscience today represents a field of research and knowledge about changes in the states of consciousness that take place during rewarding experiences, even when it comes to relieving pain or an existential difficulty. The use of psychoactive substances (legal or illegal, prescribed or non-prescribed) is a paradigmatic aspect found in many other habits that are crystallized by gratification. Phenomenological neuroscience moves in compliance with the science of the complexity of the mind-body-environment relationship.

The brain provides us, even though existential dysfunction, with a key to understanding the functioning of the incorporated mind (embolie mind). On the basis of this perspective, the concepts of craving and addiction must be subtracted from pathological identification and traced back to the physiological processes of the functioning of the incorporated and ecological mind.

Craving and addiction are not things that can be placed in a receptor system or in a specific region of the brain but are processes that belong to the physiological adaptation of the body to the environment.

The study of neuroscience has allowed us to understand how gratifying habits are accompanied by precise structuring of the neurobiological architecture and body balance, establishing automatisms that are more intense as the reiteration of behavior is more frequent and the perceived gratification is more significant and rapid.

Before this research, the gratifying habits were ascribed to the area of "personal willpower

and the individual commitment o f morals" to change, without understanding the neurobiological basis of these aspects.

In the same way, we could clearly define the damage to the social reasoning and decision-making processes following the addiction phenomenon.

Various neuroimaging studies have also shown that the dysfunctions of voluntary control are related to alterations in the prefrontal area, thus opening a new way of interpreting these pathologies, of diagnosing them and, probably, of treating them.[13-18] The identification of areas of disturbance of the functions does not coincide with a precise localization of the functions that are articulated in a complex interweaving of networks of evolutionary connections that are made possible by cerebral plasticity.

Understanding the psycho-neurobiological mechanisms that underlie established habits (addiction) is the first step necessary towards their correct classification and care project. Another great advantage of this innovative approach, in fact, is the possibility of better monitoring at the structural and functional levels of the brain (and not just behavioral), the evolution and results of treatments, focusing and encouraging the learning of new habits and lifestyles with related cultural matrices that, through cerebral plasticity, will also make new cerebellar architectures possible, achievable after long-term learning in the environment.

To understand how necessary and useful it is to change our perspective of intervention on the basis of the new countless pieces of evidence, it is sufficient to consider the fallout that these could have on prevention policies aimed at adolescents (relative to the use of substances or alcohol) arising from studies on brain maturation and development, as can be seen today with functional magnetic resonance techniques. In fact, from these studies we can highlight how important psychic, executive, and social functions such as "working memory", the inhibitory control of behavior, the ability to judge, and "social cognition" are. They are certainly related to the cortical structures and their degree and mode of physiological functioning, detecting, and highlighting different and heterogeneous forms of expression but, above all, the concrete possibility, real and now well documented, that these forms of psychic expression can be strongly structured, even permanently, in their natural and physiological maturation path from gratifying and harmful habits, especially if at a young age.[19, 20]

Regarding the aspects related to the care and therapy of habits, these new frontiers of knowledge are opening up even more interesting perspectives.

The increasingly precise knowledge of dysfunctional areas in relation to environmental and cultural factors and to the relational biographies of each subject, allows us to modulate the cures, treatment strategies, and prevention in a continuum of learning new habits shared in the community context, taking the evolutionary potentialities and overcoming the impedimental aspects that exist in the experiential dimension of each one (what is inappropriately defined fragility).

Integration concept

No complex healthcare organization can avoid being integrated with the various internal and external operational components as much as possible. This integration, in the case of A, involves a network of public services and private social and voluntary structures.

Obviously, the roles and tasks must be diversified according to the levels of responsibility that exist.[11]

Concept of continuity of care

In defining a departmental organization, it is necessary to focus in particular on the study and definition of the organizational interdependencies between the various units belonging to and part of the "socio-health productive chain" that we remember as being oriented and aimed at the prevention, care, and rehabilitation of a problem that may be characterized by lots of relapses[11, 21] Ensuring continuity of care is therefore a crucial and inalienable element.

The continuity of care concerns both the continuation of therapeutic-rehabilitative actions over time, but also the possibility that a patient

leaving an operating unit or a protected environment will immediately find support in another operating unit in a lower threshold department. A typical example is a person who leaves prison and continues his journey at the SerT/SerD, or at the therapeutic community, or with the support of roadside prevention units. The basic principle is to adapt the therapeutic offers to the changes taking place in the person, but above all to maintain constant contact with him/her, while never forgetting to encourage him/her to continue to more advanced phases of advanced change about the administration of narcotic substances.[11]

Care progression

Another important concept to be based on the definition and structuring of the DAs is that continuity of care should include interventions that are structured in an incremental and logical manner in order to achieve, with gradual but continuous steps, the complete recovery of the patient and his/her total release from substances and drugs through social and work reintegration.[11] Therefore, the continuity of intervention at increasing and incremental thresholds is related to the characteristics of the patient, to his/her potential and to his/her expectations that must always, however, be reinforced upwards (positive reinforcement) and not downwards.

Incremental logic determines the need to have suitable and differentiated environments to avoid flattening the interventions towards a form of "minimum union" and to mix people with different motivations and commitments, and with very different characteristics (for example, age) in the rehabilitation process.[11]

Flexibility

Like all the organizational structures dedicated to a phenomenon in constant evolution and remodeling, it is necessary that every department immediately takes into account the need to have flexible and easily adaptable arrangements over time. Just think about the speed with which we have witnessed the development of the supply of substances on the Internet, the strong poly-drugs interwoven with illegal drugs, alcohol, anabolics, anorectics, etc., the vast expansion of pathological gambling, new forms of alcohol dependence, the need to satisfy requests for drug testing for workers with at-risk jobs, or for investigations by law enforcement agencies, etc.[11]

In addition to the need to take this variability into account, it is advisable to be aware of the fact that besides the "historical" users, very present in the Departments and with a chronic disease trend, we are adding a number of other users who have to find different and necessarily differentiated answers from the classical ones dedicated in the last 15 years to subjects who mostly use heroin.[11]

While the part of organization concerning processes and procedures lies in the sphere of the competence and decisions of the operators, the definition of the organizational and hierarchical structure, the organic endowment and the definition of the necessary resources are not the same. This important part lies in the decision-making spheres of the general directors and regional programmers who, unfortunately, very often do not understand the complexity of the problem related to drug addiction, certainly not for bad faith or superficiality, but because of the highly specialized character that this issue has and which is often not understood and is therefore underestimated. The consequence of this is that companies and regions often tend to simplify and reduce the organization dedicated to the care of addictions, generating, at times, under-sized organizations both quantitatively and qualitatively, thus putting operators in very difficult and harsh conditions.[11]

Each operative unit should be equipped with "branches" for interaction with their community and to provide adequate answers to possible clinical situations.

Aims

Without prejudice to the technical-functional autonomy of the operating units that are part of the DAs, the department promotes the pursuit of the following main objectives:

- implement the strategic direction and coordinate the operational units going towards common objectives; to define and implement "evidence-based" operating procedures, agreed and

applied by all, in order to make all the different types of intervention in the territory homogeneous and coordinated;

• coordinate and ensure the adoption of uniform standards for the collection, storage, processing, interpretation, dissemination, and transmission of data to regional and central administrations; promote alignment with company and regional indications;

• check and verify the quality of the assistance provided and the development of the agreed joint programs, study and propose solutions to optimize the procedures, with particular regard to the reduction in waiting times for entry into treatment, improper treatments, and a reduction in failure rates in order to take charge, in collaboration with all the various structures involved in assisting people with addiction;

• identify operational solutions for optimizing user access to the network of public and private social services (Ser.D, hospital departments, communities, social cooperatives); to encourage the humanization of relationships between health structures, patients, and their families; promote the updating and training of operators on the basis of the indications of the various operating units;

• guarantee connections in the implementation of programming in the area of addiction between healthcare companies, private schools, local authorities, therapeutic communities, and voluntary workers; encourage self-help associations.

Levels of intervention

Basic level

Generally, most patients are not identified. In the alcohol sector it is known that a percentage not higher than 15-20% is identified.[22] Tools such as early identification and short intervention are also rarely used.

At this level, the actors are general practitioners, family pediatricians, competent and occupational physicians, sports doctors, local medical commissions for guidance, and self-help associations.

Medium level

Care and rehabilitation activities.

All duly integrated territorial services play this role. Presence of moments of multidisciplinary comparison between the various structures.

Basic clinical-laboratory activity. Psychosocial activity and integration with the mental health sector.

Inclusion in residential/semi-residential structures or in therapeutic communities with specificity.

Complex level at the hospital

Complex levels at the hospital are the following:

• treatment of complex cases is not possible in the environment:

  • severe clinical comorbidity;

  • moderate or severe risk of withdrawal symptoms;

  • management of complex anticraving therapies (pending inclusion on a transplant list or awaiting antiviral therapy);

  • psychiatric comorbidity;

  • codependences;

• detoxification when it is not possible to carry it out at a territorial level:

  • comorbidities also associated with acute (hepato-gastroenterological, metabolic, cardiovascular, neurological ...);

  • failure of previous cessation/detoxification treatments not at the hospital;

  • withdrawal symptoms that are difficult to control;

  • lacking nutritional status;

  • a history of previous abstinence complications;

• subpathways:

  • detoxification course in patients with advanced liver disease and for liver transplantation;

  • detoxification course in patients with associated oncological pathology;

  • detoxification course in a patient with polydependence;

  • mixed forms.

Differentiation by gender and age

In defining the organization of DAs, the need to differentiate environments and care interventions

based on the sex and age of the patients should be seriously considered.

With regard to the differentiation based on gender (gender oriented), there is an ever-increasing need to take into account the specific needs of the female gender within the operational units of the DAs by structuring various paths and means of access that are different from those of male patients, as well as the related health problems (gynecological aspects, pregnancy and maternity, child management, sexual violence, eating disorders, increased risk of sexual infections, etc.) and socio-behavioral aspects (prostitution, exploitation, etc.) that may be present in females.

Specific programs will then be activated for females by making specialized offers that are accessible in places and at times different from those made for the male patients.

Further important problems to be addressed are the access and presence (always greater) of underage patients at the services. The departments need to avoid as much as possible any contact between these young patients and, in particular, elderly patients with chronic illnesses. This aspect should be considered not only because of the need for no close contact between minor patients and adult patients with structured dependency, but also for the fact that it is necessary to define differentiated diagnostic and care pathways that in the case of minors can and must involve their families.

The need to differentiate treatment environments should therefore be considered, and in this case, it was not possible due to scarce logistical resources, but they were differentiated according to the times they could access the structure. In fact, for underage patients who normally attend school in the morning, afternoon access is indicated, when normally patients with chronic diseases do not attend.

As for the environments where the dependencies departments will be asked to activate their prevention interventions, it will be essential to provide them for schools, entertainment environments, associations, youth clubs, sports associations, parishes, circumscriptions, and other gatherings.[11]

Reintegration activities

It is essential that the department has a strong territorial integration both for preventive activities, but especially for rehabilitative and social and work reintegration. In this regard, it will be useful to evaluate the establishment of a specific permanent territorial work group that will give the opportunity of promoting and supporting these activities.[11]

Prevention

Prevention consist of several aspects:

• permanent and recurring information/communication for the younger generations taking over drug risk. Recommended "peer education" technique. The information must be precise and strictly based on scientific and non-moralist evidence. Prevention activities should also be carried out through simultaneous, systematic, and periodically updated information over time. The environments are frequented by young people (schools, sports environments, places of entertainment) in order to develop early on a clear perception of the risks and dangers related to the use of drugs, but simultaneously of alcohol and tobacco.

• selective prevention through educational support for families who have children with early behavioral disorders and conditions which make them vulnerable to addiction. These conditions should be subject to early detection and addressed with appropriate forms of educational support and, where necessary, specialists;

• early detection for early intervention: "early detection for early intervention" of substance-use behavior, for alcohol, tobacco, and drugs;

• environmental prevention. In addition, a clear and coherent social antidrug communication will be carried out in order to maintain high "social disapproval" towards the use of substances, both legal and illegal. In fact, it has been scientifically demonstrated that a high level of disapproval of drug use during adolescence leads to a lower probability of use later on.[23] Attitudes of tolerance and complicity towards the use, even occasionally, of any drug or alcohol abuse will therefore be avoided.[11]

Specific insights

Young people, polydependence and psychopathological aspects

In the first psychotic episode 40-70% of subjects meet the criteria of a SUDs/AUDs, excluding tobacco dependence.[24-26]

Substances can not only be the cause of a psychotic onset, but they can also disrupt a psychotic picture or interfere with drug therapy.

The pharmacodynamic profiles of many substances are able to provoke the phenomenology of the main psychotic symptoms in a way that can be superimposed onto those presented by psychotic subjects without a history of SUDs.

The substances operate chemical alterations in the subcortical sites, producing alterations in the working memory. This can induce psychotic symptoms. The toxicogenic hypothesis is one of the possible explanations of the persistence of symptoms over time, even after the four weeks sometimes deemed sufficient to discriminate an autonomous psychotic event or one induced by SUDs and/or AUDs.

Leonardi raises[27] the question of whether there is a psychiatric disorder that characterizes polydependent adolescents. There is no specific one. It is appropriate to refer to the prevalence of some disorders that most frequently accompany the use of drugs with an exciting or depressive action. More frequent cyclothymic or dysthymic disorders appear that do not correlate with a precise pattern of use, while, according to Leonardi, class I bipolar disorders appear to be associated with polydrugs characterized by a significant consumption of exciters. Psychopathological frameworks are also modulated by the concentration of the substance(s).

To date, mainly polydependent patients are treated as monodependents.

Alcohology

Alcohol certainly represents the predominant activity of the services.

Law 125/2001 "Framework Law on Alcohol and Related Alcohol Problems", set up for the first time in Italy as an intervention against the main alcohol-related issues.

Epidemiology, related pathologies, and social implications require the presence of dedicated teams within the services and in close correlation with the hospital area.

It should be noted that 20% of hospital admissions are directly/indirectly related to AUDs and, moreover, the latter represent the first factor of hepatological and transplantation activity.[28-32]

Alcohology and psycho-social therapy

Over the last thirty years, alcoholism has assumed an increasingly important role among the scientific disciplines that deal with problems related to the use of psychoactive substances, overcoming the concepts of vice, disease, and, today, also of abuse and dependence, and developing an ever broader approach, capable of looking at the complexity of the phenomenon and the multiplicity of factors involved in it, from the individual ones, to the cultural, social, economic, commercial, ethical, and spiritual ones.

In this sense, alcoholism is a discipline, even and above all, characterized by sensitivity, in the sense that it implies an attention:

- medical-health (internal medicine, toxicological, medico-legal, and neuro-psychiatric);
- psychological (individual, family, group);
- educational (individual and group motivational counselling);
- social (individual and family);
- local community.

This makes Alcohology an experience of absolute value that must be made available to the entire National Health System.

The anthroposophical and social model of Vladimir Hudolin, which lays the foundations of the population approach of the WHO, in social psychiatry, in the systemic family approach, in cybernetics, in the ecology of the mind, tending to depsychiatrization of alcohol-related problems, is reported in alcohology. and the involvement and activation of the person and the family as protagonists of change.

We do not talk about addiction, we do not talk about illness, we consider alcohol-related problems as lifestyles, behaviors linked to different internal factors and external to man, which cause physical, psychological, and social discomforts

under the influence of the health and general culture of the community.

According to the systemic view, one looks at the complexity of the phenomena, read within the context, of the relationships and the connections that exist between the elements that compose them. The alcohol-related problems then find meaning within the family systems that constitute subsystems of the community, a community – ours – that minimizes the risks related to alcohol, celebrates its consumption and blames the excesses without recognizing that they are, instead, the extreme of a continuum of which we are all part, in which there are no well-defined categories but nuanced boundaries.

The concept of the risk continuum was also implemented by the DSM 5, which abolished that of dependence "due to its uncertain definition and its potentially negative connotation."

Starting from these assumptions, the involvement of the family system that is a bearer of suffering but also of resources becomes indispensable in clinical work. Working through psychological (individual, couple, family) interviews on the motivation to change (the trans-theoretical model of Prochaska and Di Clemente, 1982), on family relationships, on communication, on the highlighting of the dynamic sources of suffering, allows all family members to feel part of the lifestyle change that goes beyond abstinence from alcoholic beverages.

With the family we also mean children, often excluded from treatment with the excuse, especially if they are young, who are not aware of the problem. We know well, however, – the data of the literature confirm it for us – that children clearly perceive the tensions and suffering that are experienced within a family with alcohol problems, so it is important to involve them to make them feel welcome, understood, and not alone any longer. It is important to provide children with individual and family listening spaces also based on age.

Besides working with individual family systems, it is important to work with groups that can be welcoming and informative on issues related to health, alcohol consumption, effects on the family, guidance, and work; motivational groups are more inclined to work on the three factors of the motivation to change (availability to change, inner fracture, self-efficacy).

The group becomes a protective context in which people can observe themselves, feel included in their difficulties and sufferings, escape from isolation, begin to talk to each other, and question their old roles.

The clinical work with the groups must be integrated with that of the groups present nearby as Territorial Alcohological Clubs and Alcoholics Anonymous, important immediate resources. There are two similar but different realities in the approach: the Clubs follow the ecological-social method, the Alcoholics Anonymous refer to the "disease" model following the 12-step methodology (TSM).

Twelve step methodology

Recently, Sussman *et al.*[33] showed romantic love, the path of the twelve steps (for example Alcoholics Anonymous: AA) and dependence on substances or behaviors. There is a common psychobiological mechanism with overlapping reinforcement functions.

A higher power can in some ways become a (virtuous) substitute for "addiction". Above all, the third, seventh, and eleventh step of TSM represent an aspect of superior power. The referring to a higher power, therefore, can lead to the resolution of the "addiction".

Sentimental love, the presence of a higher potency or "addiction" activates the ventral tegmental area (ATV) that is associated with the mesolimbic dopamine release. Therefore, "addiction" from romantic love is possible. On the other hand, the absence of the partner (especially in the early stages of the relationship) physiologically induces a sort of craving. Also, many substance-dependent people have a kind of "love relationship" with the substance itself. It has also been shown that prayer activates the mesolimbic region to release dopamine.

Love, superior power and "addiction" have five common points: 1) ATV activation; 2) provoke improvement of the emotional state; 3) favor a state of "addiction;" 4) in case of deprivation unleashes withdrawal syndrome; 5) other interests of life go into the background.

Participating in the twelve steps process in-

duces the following: optimal dopamine release and detachment from substance or behavior. Furthermore, evolution towards sobriety.

The effectiveness of self-help is well demonstrated. Above all, young people do not easily accept this path, so during our welcome our efforts must and must be increasingly implemented to make them understand their usefulness. 50% do not accept the frequency or leave the group. However, in cases of regular attendance, excellent results are obtained, especially in the juvenile population. The clinical relapse as previously mentioned is excellent. Doctors and health professionals must take note of these resources.[33-39]

Promotion of ethical principles

The ethical principles to be promoted are:

- every citizen of any age, gender, ethnicity, culture, or national origin has the right to live in an environment that protects him from the negative consequences of the use of alcohol, illegal substances, and so on;
- children and adolescents must be protected from an environment that may be suggestive of the use of substances and the consequences that derive from the use of substances by adults;
- the family and the network of family reactions included in the specific characteristics of the local community, which represent the most significant educational and growth contexts, both to prevent and to manage the problems deriving from the use of the substances;
- living and working environments must be protected from the consequences of the use of legal and illegal substances;
- local communities, regions, and states must protect citizens from the consequences of cultural and advertising messages that indirectly or directly encourage, stimulate, or induce the consumption of substances or the inclusion of behaviors that are usually related to their use.

The strategies to achieve them could be the following:

- active participation of citizens in the preparation and management of action plans;
- application of the principle of subsidiarity;
- cross-sectoral and inter-institutional cooperation;
- balancing between policies to reduce demand, reduce damage, and intervene with the supply system;
- promotion not only of prevention but health promotion according to the Ottawa and Shanghai card;
- definition of a system of indicators;
- cooperation at all levels with the creation of cooperation networks;
- reorientation of the service system;
- collaboration between the public and private sectors.

Conclusions

The Department of A must not be absorbed by or incorporated into the Departments of Mental Health, with which, however, precise operational cooperation protocols will have to be defined and maintained, but it will have to maintain its own autonomy and independent connotation. Thus, as also defined at the European level, it is appropriate and essential that the professionalism and interventions in the field of addictions find their identity as a discipline and professional path, not therefore within the psychiatric area, but maintaining and developing their own line of work and research.

A is a discipline that brings together elements of public health, internal medicine, clinical pharmacology, neurology, and even psychiatry.

The pathology from A can find a triggering cause in a psychopathological disorder and/or determine it, but this does not mean that they can find therapeutic evidence in an area that does not specifically address these pathologies and their mental sequelae. Furthermore, the diagnostic and therapeutic know-how of A professionals is such that it cannot be improvised at any level.

Another reason for disfavor is the following: the inclusion of the DAs in those of DSMs refers purely to a problem of pathology that has to do with lifestyle, choices, and behaviors. These, over time, show their dysfunctionality and only then do related problems emerge. Of course, even those with Mental Health (MH) problems can have unhealthy lifestyles, but not unlike the general population.

The American Board of Medicine Specialties

has identified a new specialization: Addiction Medicine (AM). AM has also been included in the area of preventive medicine.

The difference between dependence and addiction needs to be explained (see text). While recognizing in the DSM-5 a classifier rather than a treatise on psychopathology, the tendency at the level of the international literature is to no longer recognize the term "addiction" but "consumption disorder". This allows for a reduction in the stigma, greater care agility, and the possibility of treating mild-moderate cases.

Not everyone, however, while respecting the descriptive criteria of the DSM-5, has abandoned the term "addiction". According to some participants, the DSM-5 no longer separates abuse from substance dependency or behavior, but establishes them in a single "use" disorder measured on a mild to severe continuum whose criteria for diagnosis, almost identical to the previous criteria, were combined into a single list of 11 symptoms and a new criterion, craving, was added. Furthermore, the concept of tolerance and abstinence remains present within the items that define the AUDs.

Moreover, for some the term "dependence" can be overcome, but not the concept: it is a dimensional aspect of the individual that has as consequence the search for very diversified and poly-associable objects.

The overcoming of the term "addiction" can be sustained, above all, if we "refer to lifestyles and to an ecological-social approach that relates individual behaviors and choices with the messages and communication settings present at the family and social level". Furthermore, reference is made to human behavior and not to mental illness.

Certainly, scientific evolution and the DSM-5 encourage overcoming old labels as addiction services. This would foster the stigma and facilitate access to services. However, the transition from drug addiction service to dependence service may already be acceptable; it is not only about the separation from MH problems, but it also concerns the modification of the definition of "dependences departments" to "department of use disorders (or A) and of the promotion of healthy lifestyles and health". This would favor the treatment of patients with mild-to-moderate problems and would give a significant boost to primary prevention and health promotion programs.

Besides, there is a strong need to implement the tools of early diagnosis and short intervention in these areas: basic medicine, hospital wards where the correlation to the consumption of alcohol and substances is often misunderstood. Non-identification involves: aggravation of the clinical picture, pharmacological interference, increases in hospitalization and costs.

Epidemiological, social, and clinical motivations impose the creation of alcohological teams dedicated to alcohol-related activities and to the identification of a regional alcohological center integrated with the hospital's activity.

It is necessary to use appropriately the pharmacological approach according to the guidelines, both for the treatment of abstinence syndrome (*e.g.*, alcohol or heroin) and the treatment of the maintenance of abstinence with anticraving drugs while trying to customize the treatment as much as possible; there are no contraindications in associating drug treatment with self-help groups and/or single motivational, cognitive behavioral, and family treatment; the anticraving drugs must be prescribed by doctors with specific skills in the field of substance use disorders which will have to scrupulously take into account possible drug interactions with other drugs while taking into consideration the high comorbidity with the organic and psychiatric diseases present in this population.[39-43]

It is essential to re-establish the concept of prevention in the light of modern acquisitions of medicine and sociology. Policies on specific population targets have proven to be illusory and misleading, while lifestyles that are risky and damaging to the health of everyone have grown exponentially. Everyone agrees about creating permanent and recurring information/communication models in the school community (peer education) with significant actions in the community.

The collaboration with self-help groups is mandatory. Group development is a quality parameter of services.

The action of self-help groups is accredited in numerous international recommendations both

on the basis of consensus and evidence in the literature. There is a broad consensus on the therapeutic significance of spiritual approaches in the treatment of substance use disorders and addictive behavior.

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