

A new service for adolescents and the beginnings of Use of Substances and Behavioral Addictions – “Diagnostic Therapeutic Assistance Path – PDTA – on Fragility related to Addiction: Minor, Young Adults and Families”: results and prospects.

Berivi S., Aliasi P., Balbi A., Boro C., Carabini P., Cherli M., Del Prete D., Iafrate E., Grassi A., La Spina G., Mancini T., Pavoni L., Piermaria C., Pozzi D., Russello C. (1)



LIRPA

journal

Rivista Scientifica di Ricerche in Psicologia Analitica
Copyright 2018 - Anno 1,n.1 ,luglio 2018

Direttore Responsabile :Antonio Grassi
Reg. Trib. Roma n. 51 - 15/03/2018
E-mail:lirpajournal@gmail.com

Un nuovo servizio per gli adolescenti e gli esordi di Uso di Sostanze e di Dipendenze Comportamentali – “Percorso Diagnostico Terapeutico Assistenziale – PDTA – Fragilità Minori, Giovani Adulti e Famiglie”: risultati e prospettive

di Berivi S., Aliasi P., Balbi A., Boro C., Carabini P., Cherli M., Del Prete D., Iafrate E., Grassi A., La Spina G., Mancini T., Pavoni L., Piermaria C., Pozzi D., Russello C.

Abstract:

The latest data from the European Monitoring Center for Drugs and Drug Addiction (2018) shows that cannabinoids are the most widely used drugs in Europe by young adults aged 15 to 34, followed by cocaine, while heroin, today, is increasingly produced and consumed, a result that is also observed for behavioral addiction. From the comparison with European data, Italian data confirms the primacy of cannabis use among young adults. Considering the extent of the phenomenon and the impact on health of the youth community, the Health and Addiction Unit of the Roma 3 Local Health Authority has activated the PDTA “Diagnostic Therapeutic Assistance Path – PDTA – on Fragility related to Addiction: Minor and Young Adult patients – 13/22 years – with psychopathological and psychiatric problems related to addiction, from substance and / or behavior, and their families” with the aim to increase the range of young users aged 13 to 22 who apply to the National Health Service for diagnosis and treatment; to lower the age of entry to the Services with respect to the age of onset that, in Italy, is about 6 years and to check the methodology used towards the value of the dropout. In the first 18 months of activity, 89 patients are assigned to the diagnostic process, structured according to a precise standard methodology, of which only 8 were dropouts. It is important to underline that the data emerged from the sample belonging to the PDTA puts in an average of 3-year gap between debut and request for help to a specialist service, with a considerable decrease compared to the national average of 6 years. Reaching the young as early as possible who begin using substances means being able to start the dedicated intervention as soon as possible and potentially reduce the time of use. The service also allows for secondary preventive interventions aimed at avoiding the transition from the use of THC to other substances of abuse. The objectives set by the PDTA have been achieved and the validity and efficacy of the procedures and methodologies used are now confirmed.

Parole chiave:PDTA; Minor; Young adults; Cannabinoids; Addiction; THC; ASL ROMA 3.

*_

Introduction

The latest data dating back to 2017 contained in the annual report of the European Monitoring Center for Drugs and Drug Addiction confirms that cannabinoids are the most widely used drug in Europe by young adults aged 15 to 34 with 17.2 million individuals, while in 2nd place there is cocaine with 2.3 million individuals of the same age group, while heroin, which has undergone a significant slowdown in recent years, today records an increase in production and a rise in consumption. The transnational study ESPAD (European Survey Project on Alcohol and Other Drugs), which currently studies about 35 countries, is also conducted annually in Italy by the Institute of Clinical Physiology of the National Research Council (IFC-CNR), ESPAD@Italia, and which monitors the prevalence and incidence of substance use among the student population in our country, has said that 34% of students aged 15 to 19 have used at least once an illegal psychoactive substance in their lifetime, that the 27% did so during the last year (recent use) and the 17% in the last month of the survey

(current use). Added to this is the use of psychotropic drugs not prescribed by the doctor (benzodiazepines, codeine, stimulants, anorectics, etc.) carried out by 18% at least once in life and 10% in the last year. The current users are at least 6% while 2% take them frequently, with an imbalance for women for anorectic stimulants (ESPAD, 2015; Presidency of the Council of Ministers, 2016) and for men for codeine. The latest European report also reports the presence of 670 new substances including a worrying increase in synthetic cannabinoids and fentanyl, the “housewives heroin” but also of young people, especially those belonging to the weakest socially group of people.

The previous study of 2016 also warned that young consumers can even serve as a “guinea pig” for the unscrupulous market for new substances (EMCDDA, 2016). In this regard it should be noted that Italy is the 1st European country of cannabis consumption for young people aged 15 to 16 with a 19% (ib.).

The confirmation of this situation, which is anything but reassuring, is given by the analysis of the waste water, carried out by the Mario Negri institute, which designed a “map” of the diffusion of the substances: Rome leader for all drugs, Naples excels for cocaine, Merano for cannabis, Perugia for heroin and amphetamines, together with Milan (Tartamella, 2016). It is also emphasized that, as far as the use of cannabis is concerned, our Lazio Region in ESPAD@Italia (2015) research records values higher than the national average together with Piedmont, Emilia-Romagna, Marche and Sardinia.

The inversely proportional trend between the diffusion of the use of psychoactive substances and their increasingly harmful use for the health status of young consumers is also confirmed by the FUS-Frequency of Use Score indicators and the PDS-Poly Drug Score which define the first the global frequency of the consumption of substances and the second the measure of the global damage that the assumption causes to the state of health (frequent user and/or multiple abuse). Although these indicators have fluctuating trends, they nevertheless show a growth trend in problematic use (ESPAD, 2015).

If the incidence of the use of psychotropic substances seems, in its oscillations, to be stationary, we find the “game fever” decidedly increasing. The game has been growing steadily since 2007. From 2014 to 2015 the percentage has in fact risen from 39% to 42%. Even 38% of schooled children (15/17 years), or about 550,000 Italian students, report having gambled in 2015 against 35% in 2014. In 2017 the figure rose to 44% (Cerrai, Resce, & Molinaro, 2017). As for online gaming, 8% of students admit to having played in 2015 with a strong gender difference, 14% males and 2% females (Molinaro, 2016).

It also seems important to note on the sidelines of the above picture that the aforementioned searches, carried out among the students, do not however consider students between 20 and 22 years of age, nor minors and young adults now out of the scholastic circuit, that is all that plethora of youths who are victims of school dropouts, NEETs (Not Engaged, Employment or Training) and the population with legal problems, as regards both substances and pathological play. With respect to the latter, to which the problematic use of social media is added, and the serious Internet Addiction, see our correspondent of the Japanese Hikikomori (Ricci & Piotti, 2008; Spiniello, Piotti, & Comazzi, 2015), it is easily conceivable a severe underestimation of the affected persons both because they are not yet recognized by the psychopathological manuals in force (DSM 5, ICD 10), therefore also outside the circuits of public care institutions, both because they are inserted in an “unlimited” IT context, most often at home, which escapes visibility and quantification. This situation is already subject to change since in recent times the WHO has recognized Internet Addiction.

Although the consumption of THC seems relatively stable, considering that 9.8 million young Europeans aged 15 to 24 have used cannabis in the last year and that the average age of 1st consumption is 16 years while the age at which turn to services is 25, is an extremely alarming figure, both for the health implications and for the legal ones and, last but not least, for the behavioral consequences associated with the use of THC. Cannabinoid and cocaine use are currently the 2nd and 3rd groups that address services requiring treatment (ib.). In Europe, on the other hand, very few people turn to services for problems related to the consumption of new psychoactive substances (ib.).

If we consider, the consumption of substances is estimated at almost 15 million Euros, of which 40% for cocaine and 28% for cannabinoids – and that 75% of illegal activities revolve around the use of substances – 0,9% of national GDP (2017 Report). Of the 5,441 subjects who had the suspension of the trial and put to the test, 45% is a minor (ib.).

Impact of substances on community health

A separate chapter concerns the impact on the health of the youth community determined by substance and behavioral addiction. Of particular interest is the impact between the use and abuse of THC and adolescent development, considering that this substance is the most used in the world, especially among young people. This impact can be summarized as implying 3 dimensions: 1) the direct and indirect effects of psychotropic substances and dependent behaviors on the

psychological and neurological development of the adolescent brain; 2) the psychopathological and psychiatric complications resulting from the use of substances and the improper use of electronic aids; 3) the effects related to behavioral problems and those related to the violation of the law due or induced by the use of substances.

As for the 1st aspect, it is established that the development of the brain has 2 critical periods: one in childhood and one in adolescence. Precisely in this second phase we pass from the massive production of a large number of neurons, peculiar to children, to a defined phase of “neuronal remodulation” in which efficient neuronal circuits are specialized, essential for adult brain functioning (Rubino, Prini, Gabaglio, Cinquina, & Parolaro, 2011; Bellamoli, Seri, Rimondo, Serpelloni, & Schifano, 2010). This neuronal remodeling is compromised by the action of exogenous substances. Despite the research is still far from having definite definitive results on the consequences of the use of cannabinoids in adolescence, the current Literature univocally affirms however that the premature poisoning by cannabis use definitively alters some brain circuits in adulthood. Functional neuroimaging studies have shown that some structural anomalies persist despite the fact that cognitive deficits are no longer present at the phenotypic level (Padula, 2007; Schweinsburg et al., 2008; Human Brain Mapping 2016). Just as a deterioration in executive functions seems to have been demonstrated (Medina, Nagel, & Tapert, 2010; Cohen et al., 2017). All of this, without considering the gateway value of cannabis for the use of other drugs. Although the research leads to sometimes contradictory results, an epidemiological survey carried out in 17 countries of the world has provided certain evidence on the association of cannabis use with the passage to other substances of abuse, suggesting that the age of onset and prevalence of use are related to an increased risk of substance overuse (Lynskey et al., 2009). As well as other studies have shown how the use of occasional cannabis during adolescence, which also lasts into adulthood, is connected to an increased risk of subsequent excessive consumption (Degenhardt et al., 2010) and that the THC, by altering the endogenous opioid system, it can cause a hedonic elaboration that promotes the subsequent abuse of opioids (Ellgren, Spano, & Hurd, 2007).

As far as the Internet or Gambling addiction is concerned, scientific knowledge is very recent, considering that the first author who dealt with it coined the term Internet Addiction Disorder – IAD in 1995, just over 20 years ago. Subsequently other authors continued research in this field: Young, 1999, Brenner, 1997, Cantelmi & Talli, 1998, Tonioni, 2011, up to the 1st International IAD Congress held in Milan in 2014. In addition to the descriptions of addiction carried out from these authors, who follow in broad terms the criteria of the classic substance use, it seems to us precisely important to underline the work of Carretti, Craparo, & Schimmenti (2010) which speaks of “Dissociative Trance from Videoterminal”. Carretti not only captures the extremely pathological nature of this addiction, but underlines the psychological damage that can derive from it: temporary alterations of the state of consciousness, depersonalization and substitution of subjective identity with an alternative virtual identity. The picture emerges in all its gravity, especially considering the extremely low onset age of IAD children, around 13/14 years of age, the consequent extreme social isolation and the risk of ending up in a “dreamy” psychotic-like condition from which it is very difficult to re-emerge. See in this case the Italian phenomena of the Japanese Hikikomori of which we have already mentioned.

In addition to the direct or indirect damage caused by the use of technology (Bricolo & Serpelloni, 2002; Serpelloni, 2013; Müller, Sommer, Weber, & Hajak, 2004), several authors have studied the impact of the vision of violence through the Internet and the video games on adolescent behavior. The increase in aggression, desensitization and fear in life seem to be confirmed (J. Murray, 1998; J. P. Murray, 2000; Pecora, Murray, & Wartella, 2007). Data confirmed by a Review that reconsidered the work on the subject of previous years (Anderson & Bushman, 2001).

The second point concerns the correlation between cannabis use and psychotic debuts. It is useful to say that both in DSM 5 and in ICD 10 the definition of substance “accepts the fundamental criterion of the psychoactive effect and does not distinguish in relation to alleged levels of gravity inevitably linked to the common meaning of heavy or light drugs” (Mencacci, Clerici, & Janiri, 2014), classification rather more political than scientific, given the succession of laws enacted in this regard by governments that have succeeded each other over the years and that valued, or denied, this distinction. The less they are distinguishable according to the parameter of legal or illegal substances. This “enhances the potential risk factors for the Central Nervous System (CNS) that disregard the quantity, quality and type of intake being the potential “injury” for the CNS based more on the concept of biopsychosocial vulnerability than on frequency/quantity of intake or the pharmacological characteristics of the substances themselves” (Mencacci, Clerici, & Janiri, 2014). The close association between cannabis use and the development of psychotic symptoms, especially positive ones, is now a shared opinion in the scientific community, while the correlation with negative ones seems more difficult (Tomassini et al., 2013). This excluding

the presence of a sort of “amotivational syndrome”, characterized by withdrawal, apathy, scholastic and working dysfunctions, probably attributable to a subacute encephalopathy linked to chronic intoxication (Johns, 2001). Furthermore, longitudinal studies have shown that the use of cannabis “increases the risk of depression during follow-up and that this relationship is partially but not completely explained by confounding variables. Conversely, the hypothesis of self-medication did not find any support” (Caroti, Fonzi, Marconi, & Bersani, 2007), as confirmed by other studies (Phan, Obradovic, & Har, 2017). Ultimately the use of cannabis is considered a risk factor for the development of a psychotic disorder in vulnerable individuals, by history or by birth (van Os et al., 2002; Tomassini et al., 2013). In a work called Dunetin Study, the authors consider that the use of cannabis increases the risk of a psychotic onset 2 or 3 times and that, evaluating the FAP index, or the measurement of the number of cases of the disorder in the general population that could be avoided by removing even a single harmful causal factor calculated in the study of 8 for THC as far as the New Zealand population of 15 years old, removing cannabis use would result in an 8% reduction in incidence of schizophrenia in that population (Arseneault et al., 2002).

In light of these and other similar considerations, the Italian Psychiatric Society has warned the public and the politics of the risks of an enlargement of the THC market among young people, promoted by legalization campaigns, which would widen the market as it is already happened with gambling, affecting the adolescent age group, the most exposed and which has the most serious damage (Mencacci, Clerici, & Janiri, 2014).

For the last third point, it is worth noting that a comparison made by the Department of Anti-Drug Policies of the Presidency of the Council of Ministers with the data of the Social Services of Juvenile Justice shows that the total of 7,752 subjects taken in charge, offenses relating to violations pursuant to art. 73 of Presidential Decree 309/90 is 5.131, or about 66%. The data reported by the Department of Juvenile Justice and Community Justice in 2015 indicate that the subjects taken in charge with criminal charges for violation of the provisions on drugs are 3,647 units of which 2,449 already in charge and 1,198 new ones. Furthermore, it should be noted that in 2016 there was an increase of 1,886 offenses against 1,165 for minors of 18 years, 62% more. An element underlined by the Annual Report to the Parliament is that in the case of minors, whose toxicological framework cannot naturally be assimilated to that of the adult, nevertheless it is characterized precisely by the young person’s lack of perception of his state of addiction or toxicophilia. On the other hand, the earliness of the age range of use, comorbidity with behavioral problems due to hyperactivity and/or oppositional disorder and the presence of personality disorder traits such as the antisocial or the borderline, in correspondence with traumatic events or of particular emotional gravity, above all in the family field, would make essential just the specialized treatment for the onset from use of substances finalized to the remission by the Public outpatient clinic for pathological addictions (SerD) in order then to make tractable also the other individual and relational psychic components.

Reference Legislation

As for the legislation, the mention to minors is already contained in the Presidential Decree 309/90 both in the sanctioning part, which foresees an aggravation of the penalty in case the minors are involved in the sale and use, also the possibility, as already foreseen in the counseling, that the minors themselves can, on their own or with their families, turn to the SerT (Public outpatient clinic for drug addiction) for help.

In the Lazio Region, in December 2014, the Lazio Regional Administration’s n.U00451 was approved which denounces the fragmentation of diagnostic and treatment pathways with results in greater number of drop out and hoping for greater integration with the services acknowledged “of the increase in disorders related to the use of substances in adolescence with a consequent increase in requests for health interventions, for advice or for emergency, both in the territorial area and in the hospital” (Lazio Region, Decree of the Commissioner to Acta n. U00451 of 12 December 2014). Afterwards, the DCA of the Lazio Region n. U00383 of 4 August 2015 which has provided for the regulation of assistance to the minor subject to judicial authority measures. In particular, the guidelines “... opt for a key to interpret antisocial and deviant behavior as a possible expression of a bio-psycho-social disadvantage, the result of a deficit of various factors that could have instead guaranteed a state of health rather than dysfunctions identifiable on a purely subjective level” (Lazio Region, Decree of the Commissioner to Acta No. U00383 of 4 August 2015). In it is clearly stated that in the event that in the minor when entering the CPA (First Reception Center) symptoms related to a possible use of substances are identified and/or in the case in which the minor declares himself consumer, it will be the SerD of Rome 3 (formerly D) to take charge of it for an assessment and for subsequent interventions that may be either taking charge for a program or sending to the competent SerDs for the area of residence (Lazio Region, Decree of the Commissioner for Acta No. U00451 of 22 December 2014) or, again, the

acceptance by the TSMREE (Public Outpatient Department for Mental Health and Rehabilitation of the Developmental Age) in the event that there is no problem relating to substances or dependent behavior.

As regards the presence of specific guidelines, the use of substances among children and young people has been addressed in a peculiar way with the first guidelines on the use of cocaine in 2009 (Presidency of the Council of Ministers, 2009). In particular, the document was given much emphasis on Early Detection, a term already used for the early identification of tumors, see the “Early Detection Research Network”. In other words, the importance of early diagnosis and treatment of addictions was recognized as for the organic diseases.

In November 2011, the Presidency of the Council of Ministers, Department of Anti-Drug Policies, takes up precisely the problem of early diagnosis and publishes the guidelines for the “Diagnosis and early intervention of the use of substances in minors through motivational counseling, drug testing and educational support to family: methods and rational”, that intend to respond above all to the extreme delay with which people with drug addiction arrive at care services compared to the moment in which they started, a clear fact emerged from epidemiological research. Already a clear concept in the psychiatric field, where an important campaign of the US Government, called “Learn The Signs Act Early”, leads for years projects for the early identification of some important psychiatric diseases in developmental age.

The PDTA FRAGILITY Minors, Young Adults and Families

For the reasons stated above, the ASL Roma 3 promulgated on July 12th 2017 the Resolution n. 443 of 12/06/2017 which established the PDTA (Legislative Decree 229/99) “**Diagnostic Therapeutic Assistance Path – PDTA – on Fragility related to Addiction: Minor and Young Adult patients – 13/22 years – with psychopathological and psychiatric problems linked to addiction, from substance and/or behavior, and their families**”, proposed by the UOC (Complex Operating Unit) Health and Addictions.

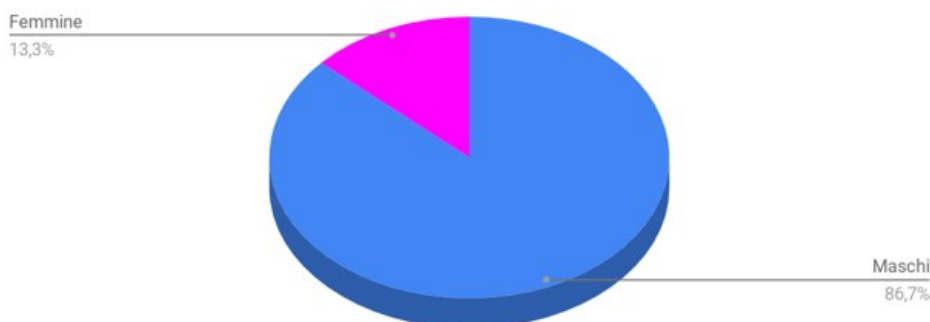
The general objectives of the PDTA are:

- 1) Increase the range of young users aged 13 to 22 who apply to the National Health Service for diagnosis and treatment;
- 2) Lower the age of entry to the Services with respect to the age of onset that, in Italy, is about 6 years (Presidency of the Council of Ministers, 2017);
- 3) Check the methodology used towards the value of the dropout.

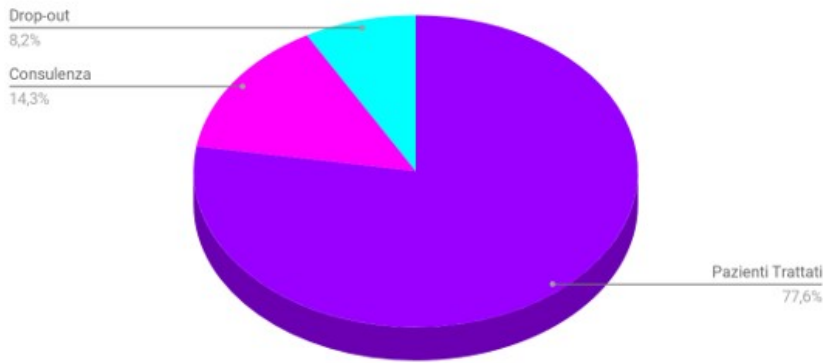
Summarizing, the PDTA operational tools are: **EARLY DIAGNOSIS** – Early Detection, the treatment for **DISASSUEFACTION** and psychological and cognitive **REHABILITATION**, psychodynamic-oriented **PSYCHOTHERAPY**, aimed at researching the deep motivations of the dependent behavior and the **EDUCATIONAL AND SOCIAL ACCOMPANIMENT OF THE FAMILY for understanding and strengthening parenting skills and CARE OF RELATIONAL DISFUNCTIONALITIES**.

Description of the subjects involved in the PDTA in the period between the 1st July 2017/31st December 2018

In the first 18 months of activity the number of patients referred to our service was equal to 98 (85 males and 13 females). Of these, 76 subjects performed diagnostic treatment, 14 subjects performed a consultation, while only 8 were dropouts.



Graphic 1. Sex of the patients, belonging to the PDTA in the first 18 months of activity



Graphic 2. Treated patients, counseling, dropout.

The clinical sample was composed of 81 total subjects. Subjects belonging to the consultancies (N = 13) were excluded, except for those patients who after consultation were taken in charge by our service, those with incomplete data (N = 14) and drop-outs (N = 7).

The 90.1% (N = 73) of the subjects were male, while 9.9% (N = 8) were female. The age at entry to the service was on average 18 years ($\sigma = 17.51$) and ranged from a minimum of 13 years to a maximum of 22 years.

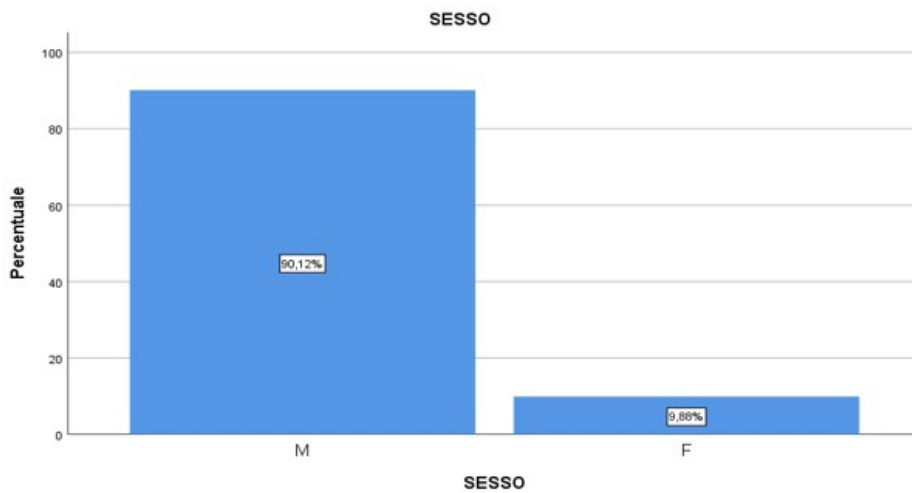


Fig.1 Sex of the subjects

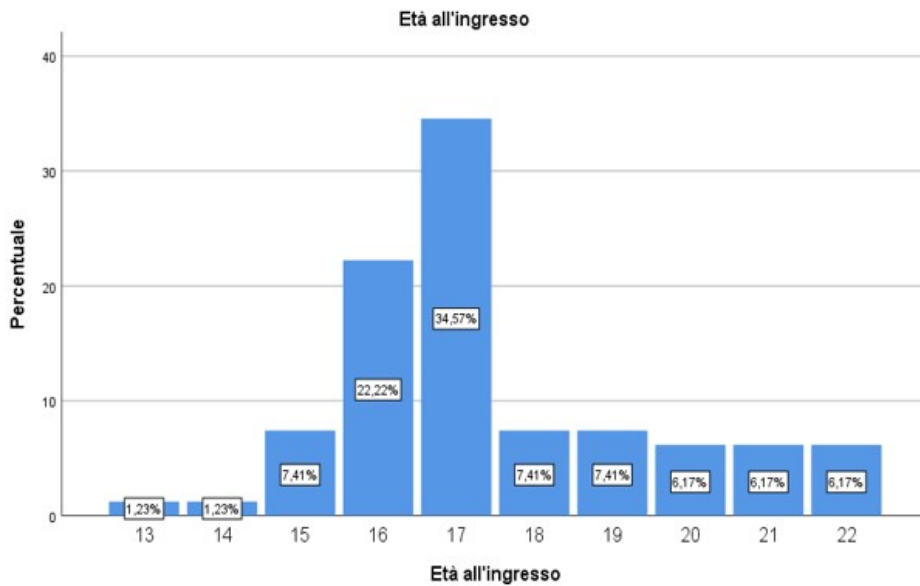


Fig. 2 Frequency analysis of the age of access to the service.

Età all'ingresso		Percentuale		
		Frequenza	Percentuale	valida
Valido	13	1	1,2	1,2
	14	1	1,2	1,2
	15	6	7,4	7,4
	16	18	22,2	22,2
	17	28	34,6	34,6
	18	6	7,4	7,4
	19	6	7,4	7,4
	20	5	6,2	6,2
	21	5	6,2	6,2
	22	5	6,2	6,2
	Totale	81	100,0	100,0

Table 1 – Frequency analysis of the age of access to the service.

The age of first intake of the substance was on average 14 years ($\sigma = 14.41$) and ranged from a minimum of 11 years to a maximum of 20 years. It was therefore observed that on average they spent **3 years** from the first assumption of the substance at the entrance to the service.

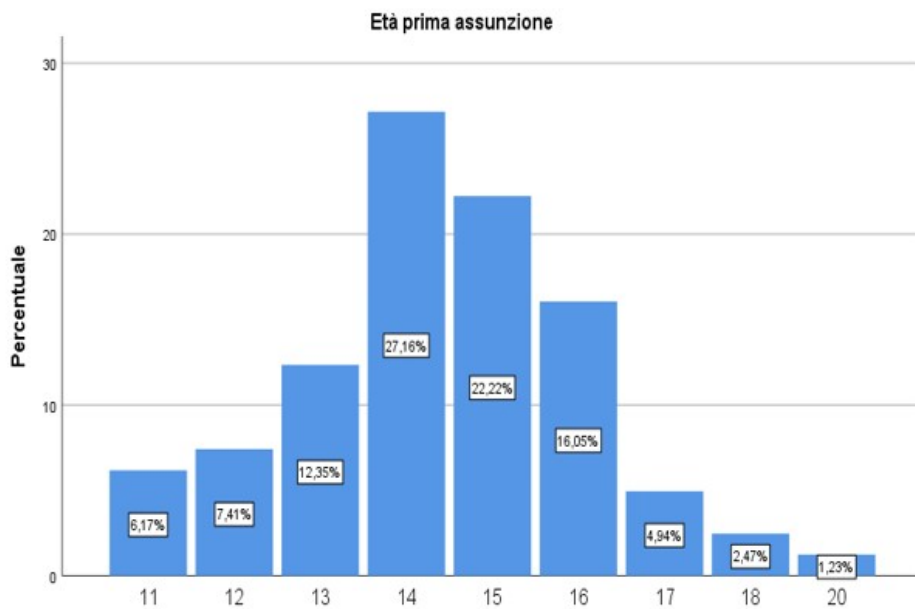


Fig. 3 Frequency analysis of age of first use of the substance.

Età prima assunzione				
		Frequenza	Percentuale	Percentuale valida
Valido	11	5	6,2	6,2
	12	6	7,4	7,4
	13	10	12,3	12,3
	14	22	27,2	27,2
	15	18	22,2	22,2
	16	13	16,0	16,0
	17	4	4,9	4,9
	18	2	2,5	2,5
	20	1	1,2	1,2
Totale		81	100,0	100,0

Table 2 – Frequency analysis by age of first use of the substance

With regard to the level of schooling achieved by the sample, 4.9% (N = 4) of the subjects had the title of elementary school, 86.4% (N = 70) the title of lower secondary school, 8, 6% (N = 7) the title of high school.

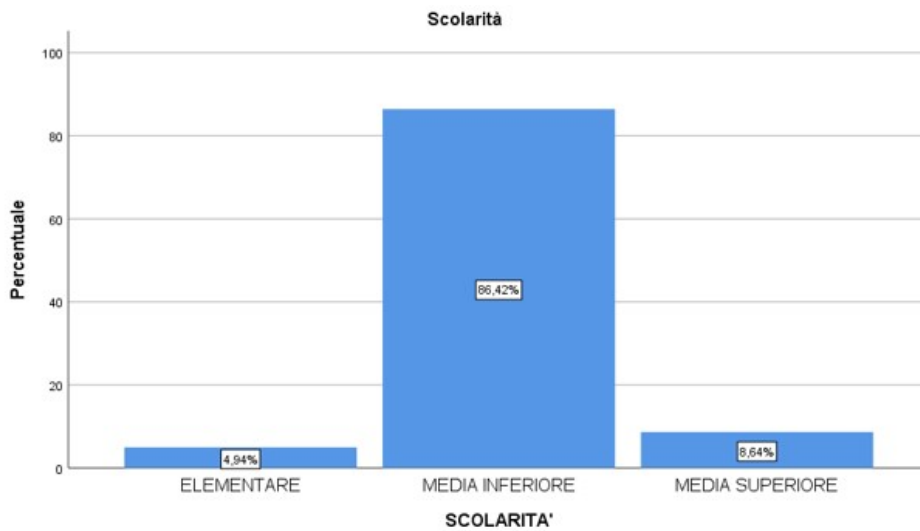


Fig. 4 Level of education of the sample

The type of cohabitation of the participants was analyzed and it emerged that 57.50% (N = 46) of subjects lived with the whole entire family composed of mother and father, 23.8% (N = 19) of subjects lived only with the mother, 12.5% (N = 10) of the subjects lived only with the father and finally 6.3% (N = 5) of the subjects resided in another housing solution, for example with a grandfather.

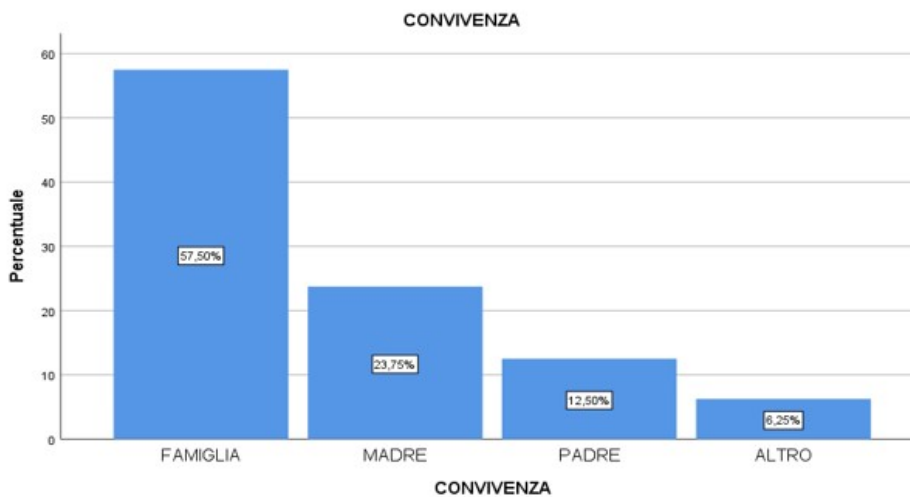


Fig. 5 Type of cohabitation

The patients differed in having arrived in the service in a different way: 25.9% (N = 21) through self-sending, one person had been sent by the CTU (Technical Office Consulting), 27.2% (N = 22) had been sent by the CGM (Juvenile Justice Center) 4.9% (N = 4) had been sent for advice and then taken over by our service, 34.6% (N = 28) by the USSM (Juvenile Social Services Office), two patients came from the DSM (Department of Mental Health), three from the TSMREE.

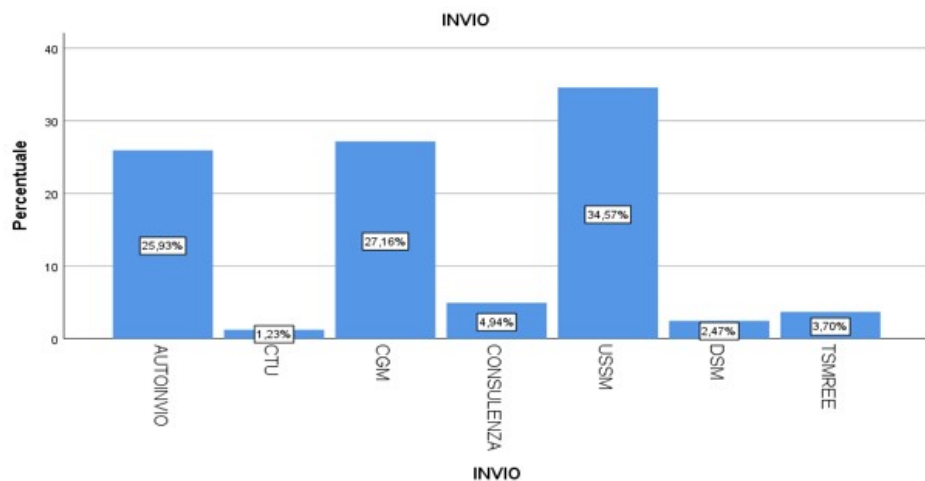


Fig. 6 Type of access to the service

Regarding the type of addiction, the 58.0% (N = 47) of the subjects had a THC dependence, 35.8% (N = 29) of the subjects presented a multiple abuse, the 3.7% (N = 3), on the other hand, had a behavioral addiction (internet addiction or gambling addiction), and finally the 2.5% (N = 2) of the patients presented a cocaine addiction.

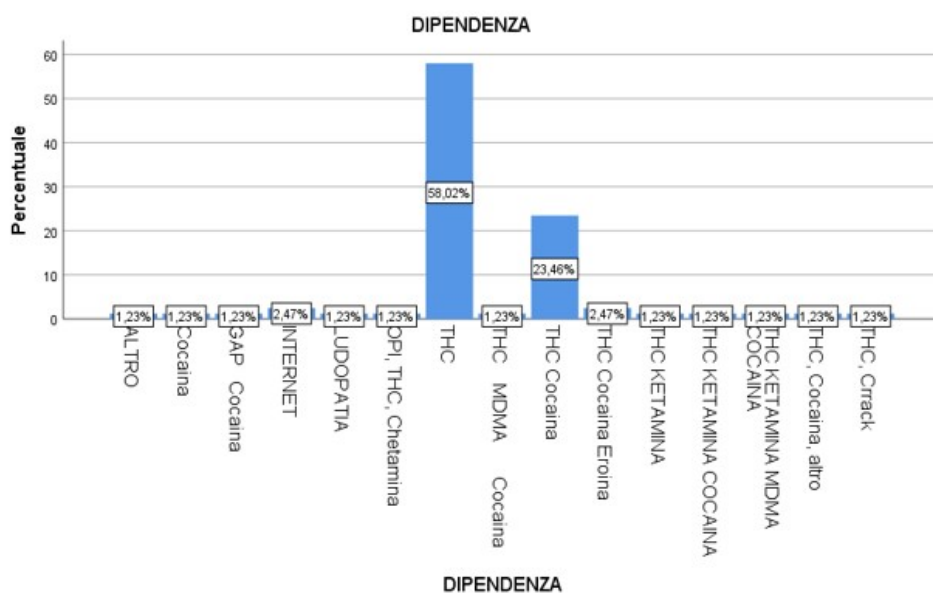


Fig. 7 Frequency analysis of presence of addiction diagnosis.

DIPENDENZA

		Frequenza	Percentuale	Percentuale valida
Valido	ALTRO	1	1,2	1,2
	Cocaina	1	1,2	1,2
	GAP Cocaina	1	1,2	1,2
	Internet	2	2,5	2,5
	GAP	1	1,2	1,2
	OPI THC Ketamina	1	1,2	1,2
	THC	47	58,0	58,0
	THC MDMA Cocaina	1	1,2	1,2
	THC Cocaina	19	23,5	23,5
	THC Cocaina Eroina	2	2,5	2,5
	THC Ketamina	1	1,2	1,2
	THC Ketamina Cocaina	1	1,2	1,2
	THC Ketamina MDMA	1	1,2	1,2
	Cocaina			
	THC Cocaina, altro	1	1,2	1,2
	THC Crack	1	1,2	1,2
	Totale	81	100,0	100,0

Table 3- Frequency analysis by type of addiction

Patients were also asked if they currently smoked tobacco and it was found that 91.01% (N = 51) responded affirmatively, while 8.09% (N = 5) responded no.

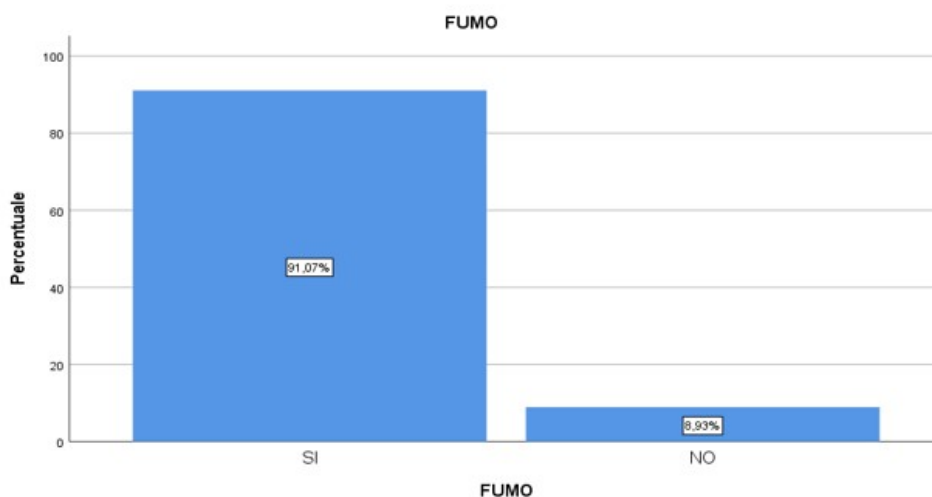


Fig.8 Percentage of tobacco consumption

There were 81 total assessments completed at our service. These data should be added to the assessments carried out at the CPA, as it would considerably increase the percentage of the pre-set result for the pilot year. Of notable importance was the small number of drop-outs that were only 8.

The services performed within the PDTA and in external consultancy were:

Medical examinations, urinary tests carried out on sight and with on site method with legal value of 1st level, psychiatric examination, psychological interview, administration of psychodiagnostic tests, individual psychotherapy, parental psychoeducational groups. Promotion of knowledge of the PDTA within the Local Health Unit and in the Territory, finally ECM (Continuing Education in Medicine) courses.

Discussion

As regards the use of substances, the 2011 Annual Report to the Parliament placed the age of onset at 14 years old with an average time of 5.5 years before the minor can turn to a diagnosis and treatment facility, with a consequent passage not monitored but very likely from a beginning to an addiction established and stabilized, rising to 6 in the latest 2017 data (Presidency of the Council of Ministers, 2017). In this, the promotion of voluntary *drug testing* activities is a very useful as well as the inclusion of parents in targeted aid paths and in the educational and social field and in the psychological field.

The constant use of substances, in fact, becomes such after a journey generally consisting of three stages: the first assumption, the transition to discontinuous use and, finally, that from sporadic use to constant use. It follows that it is very important to understand the level in which the minor and the young are placed, initial or already overt, and be able to propose "... an adequate and timely offer of early diagnosis and psychological and educational support to the parents of minors, in a specific professional healthcare context "(Rubino et al., 2011; Serpelloni et al., 2011).

It should therefore be emphasized that the concept of early diagnosis does not only concern the minor, but the entire family nucleus with its psychopathological dynamics and with its attempts at treatment which, if not addressed and channeled on clear inclusion/exclusion methods and criteria defined, can lead to a diagnostic and treatment overexposure, forcing families to pilgrimage through public facilities to often end up in the hands of private persons and/or structures with enormous costs and with possible "non-specific" interventions. This can, in our opinion, favor an iatrogenic surplus that can only worsen the situation and reduce the possibility of treatable.

As stated in the Final Document of the UNGASS Special Session, Resolution adopted by the General Assembly of 19 April 2016, reconfirming the 3 previous international conventions of global control of drugs – that is, we recall, the Single Convention on narcotics of 1961 (as amended by the Protocol of 1972), the Convention on Psychotropic Substances of 1971 and finally the Convention against the illicit trafficking of narcotic substances and psychotropic substances of 1988, as some progress has been achieved, "... the world drug problem continues to present health challenges, security and well-being of all humanity". It follows that it is a duty "to implement practical measures appropriate to the age of the subjects, tailored to the specific needs of children, young people and the most vulnerable members of society in the legislative, executive and administrative spheres, and in the social, economic, cultural and educational, including measures to provide them with opportunities for a healthy and self-sufficient life, to prevent the abuse of narcotic drugs and psychotropic substances, and prevent their involvement, use and exploitation in the production of illegal crops, manufacturing and drug trafficking , psychotropic substances and in other forms of drug-related crime, including urban crime, youth crime, and crime and gang violence, thus fulfilling the obligations of States parties to the Convention on the Rights of the Child and taking into account the Nations Guidelines United for the Prevention of Juvenile Delinquency (Riyadh Guidelines)". They are measures based on scientific evidence that properly consider interventions on minors and can represent "tailor-made" clinical operating models for the specific needs of minors and young adults, as homogeneous as possible for those working in the institutions at the service of the youth group. That is the specialized early treatment.

The data emerged from the sample belonging to the PDTA puts in an average of 3-year the gap between debut and request for help to a specialist service, with a considerable decrease compared to the national average of 6 years.

The clinical implications of this result are obvious. Reaching the young as early as possible who begin using substances means being able to start the dedicated intervention as soon as possible and potentially reduce the time of use.

The precociousness of intervention carried out by an ad hoc service that deals with addictions, puts the young person in contact with specialized personnel able to carry out a differential diagnosis of non-use, mild, moderate or severe dependence, to identify an individual holistic context in which the use/non-use is inserted, to intervene in specific treatment terms and, finally, to report to the territorial service concerned the cases of risk of psychotic onset from substance use

(UOSD – Simple Departmental Operative Unit- Early Interventions). Not to mention the opportunity to carry out secondary preventive interventions aimed at avoiding the transition from the use of THC to other substances of abuse.

However, this result is not entirely satisfactory. The average age of 17.51 leaves out the target of the under 16s and therefore a large share of users affected by the first use of substances, as well as all the users of Internet Addiction, adolescent Gambling Disorders and, no less seriously, of onset of alcohol consumption. In this sense, the training actions aimed at pediatricians and family physicians will have to be implemented in order to reach the smallest users with specific ECM courses, foreseen by the PDTA, in order to hypothesize a further decrease in the average age of the sample and the aforementioned difference.

Secondly, another relevant and encouraging result is the treatment of young people. As can be seen from the data, 7% dropouts are quite contained, in an age group that traditionally is instead characterized by discontinuity and unexpected interruptions. We hypothesize that an aspect that can favor continuity is represented by the fact that in our service much importance is given to the setting (Langs, 1979; Langs, 1988; Langs, 1990; Langs & Grispi, 2000), a variable of difficult control within public structures, which in our view is studded with problems linked to the safe working environment, in fact many basic fundamental rules of therapy also undergo alterations in these contexts, and it is precisely in the light of these considerations that the our service has aimed at reducing, where possible, the disturbing elements of what we could define a setting in the “noisy” public sphere to guarantee a “safe” working environment.

Third and last point to be highlighted regards the possibility of intercepting a user that is difficult to present to the Addiction Services.

Within our SerD, out of 136 accesses from July 1st 2017 to 30th of June 2018, young people under 22 were 58, the 36%. If we then compare the number of accesses to the PDTA with the number of accesses in the Lazio Region, the percentage is 33%. A significant number given that the data of the Region unites both the SerD and the Social Private, therefore the therapeutic communities. In other words, it can be hypothesized that the existence of a defined path, its location outside the SerD, the attention to diagnosis and adolescent and family treatment, the presence of specialized personnel responds to the needs of users and the sending Services.

Conclusions

As anticipated, the PDTA aims to verify the theoretical, methodological and organizational assumptions obtained through the analysis of the objectives achieved, in order to confirm or reformulate the strategies and consequently stabilize the individualized path identified.

The results seem for now to confirm the validity and effectiveness of the procedures and methodologies used.

However, the critical issues remain important: 1) to reach the child population over 16 years old; 2) extend the intervention also to Gambling Disorder and to Internet Addiction, pathologies still not present; 3) find alternative methods for NPS (New Psychoactive Substances) and people accessing the Internet market; 4) increase primary prevention projects in schools.

A working in progress that we hope can be implemented.

Bibliografia

Anderson, C. A., & Bushman, B. J. (2001). Effects of Violent Video Games on Aggressive Behavior, Aggressive Cognition, Aggressive Affect, Physiological Arousal, and Prosocial Behavior: A Meta-Analytic Review of the Scientific Literature. *Psychological Science*, 12(5), 353–359. <https://doi.org/10.1111/1467-9280.00366>

Arseneault, L., Cannon, M., Poulton, R., Murray, R., Caspi, A., & Moffitt, T. E. (2002). Cannabis use in adolescence and risk for adult psychosis: longitudinal prospective study. *BMJ: British Medical Journal*, 325(7374), 1212.

<https://doi.org/10.1136/BMJ.325.7374.1212>

Bellamoli, E., Seri, C., Rimondo, C., Serpelloni, G., & Schifano, F. (2010). Il sistema endocannabinoide e le sue funzioni. In *Neuroscienze e Dipendenze*. Dipartimento Politiche Antidroga.

Brenner, V. (1997). Psychology of Computer Use: XLVII. Parameters of Internet Use, Abuse and Addiction: The First 90 Days of the Internet Usage Survey. *Psychological Reports*, 80(3), 879–882. <https://doi.org/10.2466/pr0.1997.80.3.879>

Bricolo, F., & Serpelloni, G. (2002). ADDICTION E USO DELLA TECNOLOGIA DIGITALE: REVISIONE PRELIMINARE DELLA LETTERATURA.

Cantelmi, T., & Talli, M. (1998). Cyberspace Psychopathology Mental dislocations, avatar-mediate personalities, autistic behaviors and out of control attitudes. *Dipendenze Patologiche*.

Caroti, E., Fonzi, L., Marconi, D., & Bersani, G. (2007). Cannabis e depressione. *Rivista Di Psichiatria*.

Caretti, V., Craparo, G., & Schimmenti, A. (2010). Alcune evidenze empiriche sul costrutto di trance dissociativa da videotermine. In *Addiction* (pp. 167–182). Milano: Raffaello Cortina Editore.

Cerrai, S., Resce, G., & Molinaro, S. (2017). *Rapporto di Ricerca sulla diffusione del gioco d'azzardo fra gli italiani attraverso gli studi IPSAD® ed ESPAD®Italia. Consumi d'azzardo 2017*. CNR- Consiglio Nazionale delle Ricerche. IFC- Istituto di Fisiologia Clinica 2017

Cohen, K., Kapitány-Fövény, M., Mama, Y., Arieli, M., Rosca, P., Demetrovics, Z., & Weinstein, A. (2017). The effects of synthetic cannabinoids on executive function. *Psychopharmacology*, 234(7), 1121–1134. <https://doi.org/10.1007/s00213-017-4546-4>

Degenhardt, L., Dierker, L., Chiu, W. T., Medina-Mora, M. E., Neumark, Y., Sampson, N., Kessler, R. C. (2010). Evaluating the drug use “gateway” theory using cross-national data: Consistency and associations of the order of initiation of drug use among participants in the WHO World Mental Health Surveys. *Drug and Alcohol Dependence*, 108(1–2), 84–97. <https://doi.org/10.1016/j.drugalcdep.2009.12.001>

Ellgren, M., Spano, S. M., & Hurd, Y. L. (2007). Adolescent Cannabis Exposure Alters Opiate Intake and Opioid Limbic Neuronal Populations in Adult Rats. *Neuropsychopharmacology*, 32(3), 607–615. <https://doi.org/10.1038/sj.npp.1301127>

EMCDDA, European Monitoring Centre for Drugs and Drug Addiction (2018). *Relazione Europea sulla droga: tendenze e sviluppi*, Ufficio delle pubblicazioni dell'Unione europea, Lussemburgo.

EMCDDA, European Monitoring Centre for Drugs and Drug Addiction (2016). *Relazione Europea sulla droga*. Retrieved from www.emcdda.europa.eu

ESPAD. (2015). Studio sui comportamenti d'uso di alcool, tabacco e sostanze illegali negli studenti italiani di età compresa fra 15 e 19 anni. Retrieved from www.epid.ifc.cnr.it

Johns, A. (2001). Psychiatric effects of cannabis. *The British Journal of Psychiatry: The Journal of Mental Science*, 178, 116–22. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/11157424>

Langs, R. (1979). *The therapeutic environment*. J Aronson.

Langs, R. (1988). *A primer of psychotherapy*. Gardner Press.

Langs, R. (1990). *Guida alla psicoterapia: un'introduzione all'approccio comunicativo*. Bollati Boringhieri.

Langs, R., & Grispini, A. (2000). *Le regole di base della psicoterapia e del counselling*. Fioriti.

Linee guida delle Nazioni Unite sulla Prevenzione della delinquenza minorile (c.d. Regole di Riyadh).

- Lynskey, M. T., Heath, A. C., Buchholz, K. K., Slutske, W. S., Madden, P. A. F., Nelson, E. C., Martin, N. G. (2009). Escalation of drug use in early-onset cannabis users vs co-twin controls. *JAMA*, 289(4), 427–33. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/12533121>
- Medina, K. L., Nagel, B. J., & Tapert, S. F. (2010). Abnormal cerebellar morphometry in abstinent adolescent marijuana users. *Psychiatry Research: Neuroimaging*, 182(2), 152–159. <https://doi.org/10.1016/j.psychresns.2009.12.004>
- Mencacci, C., Clerici, M., & Janiri, L. (2014). Memoria sui disturbi correlati all'uso di sostanze (DCS) e indotti dall'uso di sostanze. *Società Italiana Di Psichiatria*.
- Molinaro, S. (2016). Febbre del gioco in crescita tra gli adolescenti. Comunicato stampa CNR 26/2016. https://www.stampa.cnr.it/docUfficioStampa/comunicati/italiano/2016/marzo/26_mar_2016.htm
- Müller, J. L., Sommer, M., Weber, T., & Hajak, G. (2004). Neurobiologie der Aggressionsgenese: Empirische und experimentelle Befunde zu reaktiven Formen der Gewalt. *Psychiatrische Praxis*, 31, 50–51. <https://doi.org/10.1055/s-2004-828431>
- Murray, J. (1998). Studying Television Violence: A Research Agenda for the 21st Century. In *Research Paradigms, Television, and Social Behavior* (pp. 369–410). 2455 Teller Road, Thousand Oaks California 91320 United States: SAGE Publications, Inc. <https://doi.org/10.4135/9781483328201.n12>
- Murray, J. P. (2000). Media effect. In *Encyclopedia of psychology*. Oxford University Press.
- Padula, C. B., Schweinsburg, A. D., & Tapert, S. F. (2007). Spatial working memory performance and fMRI activation interaction in abstinent adolescent marijuana users. *Psychology of Addictive Behaviors*, 21(4), 478.
- Pecora, N. O., Murray, J. P., & Wartella, E. (2007). *Children and television fifty years of research*. Lawrence Erlbaum
- Phan, O., Obradovic, I., & Har, A. (2017). [Consumption of cannabis in adolescents]. *Archives de Pédiatrie : Organe Officiel de La Société Française de Pédiatrie*, 24(1), 91–95. <https://doi.org/10.1016/j.arcped.2016.10.015>
- Presidenza del Consiglio dei Ministri. Dipartimento Politiche Antidroga (2009). Cocaina e minori. Linee di indirizzo per le attività di prevenzione e l'identificazione precoce dell'uso di sostanze
- Presidenza del Consiglio dei Ministri. Dipartimento Politiche Antidroga (2016). Relazione Annuale al Parlamento sui dati relativi allo stato delle tossicodipendenze in Italia, www.salute.gov.it/portale/news.
- Presidenza del Consiglio dei Ministri. Dipartimento Politiche Antidroga (2018). Relazione Annuale al Parlamento sullo stato delle tossicodipendenze in Italia.
- Regione Lazio, Decreto del Commissario ad Acta n. U00451 del 12 dicembre 2014
- Regione Lazio, Decreto del Commissario ad Acta n. U00451 del 22 dicembre 2014, “Approvazione Protocollo operativo sui percorsi integrati di presa in carico e cura dei minori con problematiche legate all'uso di sostanza (con o senza patologia in atto).
- Regione Lazio, Decreto del Commissario ad Acta n. U00383 del 4 agosto 2015, “Percorsi assistenziali di presa in carico sanitaria e di cura dei minori e giovani adulti con problemi psicopatologici e/o psichiatrici e/o dipendenze patologici sottoposti a procedimenti penali”
- Ricci, C., & Piotti, A. (2008). *Hikikomori: adolescenti in volontaria reclusione*. Franco Angeli.
- Rubino, T., Prini, P., Gabaglio, M., Cinquina, V., & Parolaro, D. (2011). Uso di cannabis in adolescenza come fattore di rischio per le malattie psichiatriche e la dipendenza da altre droghe. In *Cannabis e danni alla salute*. Dipartimento Politiche Antidroga.

- Schweinsburg, A. D., Nagel, B. J., Schweinsburg, B. C., Park, A., Theilmann, R. J., & Tapert, S. F. (2008). Abstinent adolescent marijuana users show altered fMRI response during spatial working memory. *Psychiatry Research: Neuroimaging*, *163*(1), 40–51. <https://doi.org/10.1016/j.psychresns.2007.04.018>
- Serpelloni, G. (2013). *Gambling*. Presidenza del Consiglio dei Ministri, Dipartimento Politiche Antidroga
- Serpelloni, G. (2011). *Cannabis e danni alla salute*. Dipartimento Politiche Antidroga.
- Serpelloni, G., Bricolo, F., & Gomma, M. (Eds.). (2010). *Elementi di neuroscienze e dipendenze: manuale per operatori dei Dipartimenti delle dipendenze*. Dipartimento delle dipendenze ULSS.
- Spiniello, R., Piotti, A., & Comazzi, D. (2015). *“Il corpo in una stanza.” Adolescenti ritirati che vivono di computer*. Franco Angeli.
- Tartamella, V. (2016). “Fogne d’oro”. *Focus*. <https://www.cinquantamila.it/storyTellerArticolo.php?storyId=0000002370712>
- Tomassini, A., Roncone, R., Verni, L., Bianchini, V., Tosone, A., Guadagni, E., ... Casacchia, M. (2013). Uso di cannabis ed esordi psicotici: dall’epidemiologia alla clinica. *Journal of Psychopathology*.
- Tonioni, F. (2011). *Quando Internet diventa una droga*. Giulio Einaudi.
- van Os, J., Bak, M., Hanssen, M., Bijl, R. V, de Graaf, R., & Verdoux, H. (2002). Cannabis Use and Psychosis: A Longitudinal Population-based Study. *American Journal of Epidemiology*, *156*(4), 319–327. <https://doi.org/10.1093/aje/kwf043>
- Young, K. S. (1999). *Internet Addiction: Symptoms, Evaluation, And Treatment*. Retrieved from <http://netaddiction.com/articles/symptoms.pdf>

_*