

# Addictions and psychiatric disorders in patients followed at the Doctor Joseph Guislain Neuropsychiatric Centre in Lubumbashi, series of 112 cases and review of the literature

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## SUMMARY

The impact of addictions and their consequences has become a mental health and, beyond that, a public health problem throughout the world and developing countries are no exception. It is even more worrying because it is exacerbated by the increase in poverty, youth unemployment and the attraction of the consumption habits of rich countries. It therefore seemed appropriate to carry out this preliminary study to take stock of the situation in hospitals before extending our analysis to the general population and suggesting ways of dealing with the problem of the interaction between addiction and psychiatric pathology. The results of this study highlight this intertwining of addiction and mental pathology based on recent neurobiological knowledge that classifies addictions as a mental pathology and not as a lifestyle choice or vice. Moreover, the notion of a dual pathology suggests the imperative need for multidisciplinary management of addictions, which are everyone's business, given that their neurobiological and environmental underpinnings are common to many of us, and that the desire and difficulty of abstinence and its maintenance are deeply human.

**Keywords:** Addiction; Psychoactive substances; Psychiatric disorders and Withdrawal

## INTRODUCTION

The term addiction is of Latin etymology, ad-dicere "to say to". In Roman civilization, slaves had no proper name and were said to their Pater familias. The term addiction expresses an absence of independence and freedom, and therefore slavery. It is therefore the process by which a behavior that can both produce pleasure and ward off or alleviate a feeling of internal discomfort is employed in a way characterized by the repeated impossibility of controlling this behaviour and its continuation despite the knowledge of its negative consequences [1].

The term "addiction" is not used as a diagnostic term in the DSM-5, nor in the ICD- 1016. In many countries, it is common practice, including among clinicians, to use the term addiction to describe serious problems related to repeated compulsive substance use, but the term is not included in official terminologies due to its uncertain definition and negative connotation.

Addictive behaviours involve substances (tobacco, alcohol), behaviours (shopping, sex, food, work) and objects (internet). Throughout this article we will focus more on substance-related addictive behaviours while briefly presenting other causes.

### A distinction must be made between:

- What falls under addictive behaviours
- The complications of addictive behaviour (somatic, psychiatric, social)
- Co-morbidities in cases of harmful use and/or dependence

Addictive behaviours evolve according to the way they are consumed, from simple use to abuse to dependence [2].

**Use:** Consumption of psychoactive substances that does not lead to somatic complications or harm and is not a pathological problem

**Abuse (DSM) or harmful use (ICD) of psychoactive substances:** Repeated consumption leading to damage in the somatic, psycho-affective or social domains (either for the subject himself or herself, or for his or her own environment or distant environment)

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**Dependence:** The impossibility of abstaining from consumption (Existence of a tolerance, Existence of a withdrawal syndrome)

In the general population there is a strong association between psychiatric disorders and addictive disorders, mainly for states of DEPENDENCE (mood disorders, anxiety disorders, post-traumatic disorders, personality disorders [2].

The existence in the same subject of an addictive disorder and another psychopathological disorder is commonly referred to as "Dual Pathology". It is linked to neurobiological and environmental phenomena associated with addictive behaviours with or without substances.

It should be noted that this use is more frequent in patients with behavioral disorders, either because the use preceded the disorders, as is the case for most users, or because the use is a co-morbidity of the psychiatric disorder.

The demand for care and treatment is all the lower as the number of disorders increases or worsens: the higher the number of psychiatric disorders and the more severe the symptoms, the less care is sought. We must also take into account the association between the risk factor of desocialization and criminal acts (rape, etc.) or somatic disorders (HIV).

The consumption of alcohol, tobacco, illicit substances (cannabis, heroin, cocaine, synthetic products) , as well as deviant behaviours such as excessive gambling, eating disorders and compulsive shopping, represent major mental health problems in particular and public health problems in general, both in terms of the number of people they affect and the social, health, environmental and legal problems they cause.

Approximately 207,400 deaths related to illicit drug use are estimated to have occurred worldwide in 2014, more than a third of which are related to overdoses [3].

A study carried out in the French population in June 2013 showed that alcohol was the substance most frequently experimented with by students, ahead of tobacco and cannabis with 91.3%, 65.2% and 42.8% respectively. Tobacco was used daily by 18.4% of students [4].

Alcohol and tobacco consumption, as well as the initiation of cannabis at an early age, can cause a lot of health and social damage in the short and long term. It is therefore a real mental health problem both for normal people and for patients with psychiatric conditions.

According to the United Nations Office on Drugs and Crime (UNODC), it is estimated that one in 20 adults used at least one drug in 2014. This represents 250 million people aged 15-64. The scale of the global problem becomes more apparent when one considers that more than one in ten drug users are problematic users, suffering from drug use disorders or addiction [5].

From a neurobiological point of view, studies have shown that addictive behaviours can have irreversible consequences on the development of young people's brains,

which go through different stages of maturation between the ages of 15 and 25. This maturation process is weakened by the use of psychoactive substances which can lead to brain disorders resulting in psychiatric pathologies [6].

The use of certain psychoactive substances (PAS) is widespread among adolescents and young adults, in particular alcohol, tobacco and cannabis, which are among the most common substances of abuse in many countries of the world.

The use of psychoactive substances (PAS) has particularly harmful effects on adolescents and young adults. It remains high in Europe, particularly in France, and in Anglo-Saxon countries, but an increasing trend in developing countries like ours has been noted [6].

In Ghana, cannabis abuse is estimated to be over 13% among people aged 15-65 years (3.8% worldwide) [7].

Moreover, co-morbidity between addictive disorders and psychiatric disorders is also more frequent than the simple co-occurrence of independent disorders would suggest. The hypothesis of self-medication of psychiatric symptoms by the use of psychoactive products has been put forward.

The other hypothesis is that there are common vulnerability factors between the use of APS and psychiatric disorders. This concerns schizophrenic patients, but also those with mood disorders or personality disorders. Multiple concordant studies find a higher prevalence of smoking in schizophrenic patients, but a greater dependence on nicotine. Schizophrenic patients evaluated in a Norwegian study showed a much higher lifetime use of all illicit substances than the general population. This was also the case for patients enrolled in the CATIE study, an American study of the effectiveness of different pharmacological treatments for schizophrenia. The prevalence of abuse and dependence on at least one substance among them was 36%. The type of substance used was mainly alcohol (87%), followed by cannabis (44%) and cocaine (36%) [3].

This association between the use of APSs and psychiatric disorders is bidirectional: use predicts the presence of a psychiatric disorder and conversely, the presence of a psychiatric pathology increases the risk of a transition to APS dependence.

The lack of treatment centres equipped with anti-addiction drugs explains the absence of epidemiological data linking addictive behaviour and psychiatric disorders in our environment. Most of the studies carried out often only analyse the prevalence of the substances consumed without establishing a link with psychiatric pathology.

Moreover, this implication is twofold, particularly for our country, DR Congo, where the majority of the population is young (adolescents and young adults); moreover, the initiation of the consumption of APS begins in adolescence, as do most psychiatric disorders, including schizophrenia, mood disorders, anxiety disorders, etc., generally between the ages of 15 and 25. This is why our country is particularly interested in the coexistence of

psychiatric disorders and the use of APS. This correlation has an enormous direct and indirect cost on the economy of the families and the national economy; thus, it seems relevant to us to approach this subject starting from the determination of the characteristics of the consumption of psychoactive substances in the patients followed at the Neuropsychiatric Centre Dr Joseph Guislain.

### Our research has raised questions in our environment, namely

- What is the rate of SPA use among patients in our study setting?
- What are the motivations for this consumption?
- What are the main pathologies related to the use of APS in the patients followed up?

The general objective is to characterise the nature of the link between psychiatric disorders and addictive behaviours in order to improve screening and treatment.

In order to do this, we have endeavored to determine the socio-demographic characteristics of the patients followed and consuming APS; the degree of consumption or dependence; the motivations for the consumption of APS in order to understand the links between psychiatric pathology and consumption in their chronology and their intricacy, and finally, if possible, to analyse the link between the consumption of APS and psychiatric pathologies.

## METHODOLOGY

We conducted a descriptive cross-sectional study at the Dr. Joseph Guislain Neuropsychiatric Centre (DJNPC) in Lubumbashi, DRC, over a period from 1 June 2022 to 31 July 2022. This study involved 111 patients who were hospitalized and followed up at the CNJG for addiction. Our sampling was stratified simple random. We included in the study the medical records of patients with a diagnosis of addiction who were aged 12 years or older.

We collected the data using a pre-designed form, which contained our study variables. For each patient we collected:

- Socio-demographic data (age, gender, marital status, type of housing, education level, occupation) sources of income, family economic level, legal problems)

- Data related to addictive behaviours (substance used, age of onset, mode of use, withdrawal attempts, symptoms experienced during withdrawal)
- Data related to the dual pathology (psychiatric diagnosis, age of first episode, family history, management, evolution)

We collected the data anonymously, in order to preserve patient confidentiality.

The data were entered and analysed in Excel 2019 and Epi info 7.2 and the results generated were presented in tables and + ures using Word 2019.

## RESULTS

### Socio-demographic data

**Age:** The histogram shows that the most represented age group was 18 to 45 years old. Median: 32 years; Mode: 35 years; Standard deviation: 11.22 years; Quartile 1: 26 years; Quartile 2: 32 years; Quartile 3: 38.5 years **Fig. 1.**

**Sex:** We can see from this figure that the male sex was the most represented with 80% of cases and a sex ratio of 4 men to 1 woman **Fig. 2.**

**Marital status:** According to this table, Single was the most represented marital status with 66.67%, followed by Married with 18.92%; Divorced: 9.01% and Widowed was the least present with 5.41% **Tab. 1.**

**Level of education:** This graph illustrates that the most frequent level of education was Secondary with 60% followed by Higher 25% and Primary 15% **Fig. 3.**

**Economic level Family:** Most of the patients had a medium income level 53.15%, followed by low income patients 35.14% and high income patients came last 11.71% **Tab. 2.**

**Source of income:** We find that among the inpatients, 68% had other people as their source of income; only 32% had themselves as their source of income **Fig. 4.**

**Profession:** This table shows that Military was the most frequent occupation with 28.83%, followed by Unemployed with 27.93%; Student with 6.31%; Biker and Teacher were represented at 4.50%; Engineer and State Agent represented 3.60%. And the rest were other professions with 20.73% **Tab. 3.**

Fig. 1. Age groups.

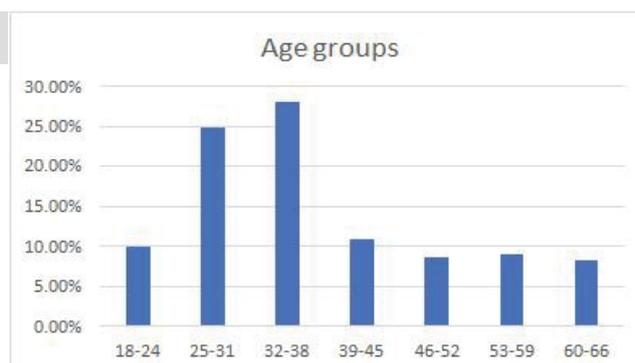
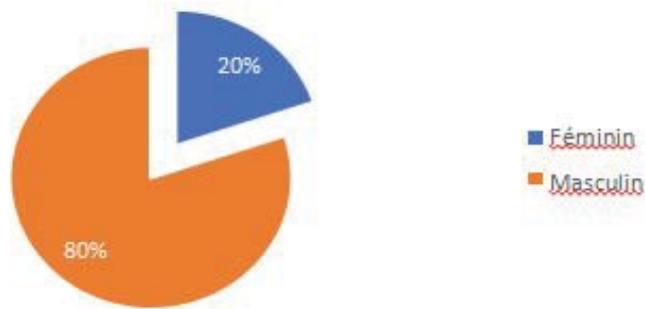


Fig. 2. Distribution by sex.

Distribution by Sex

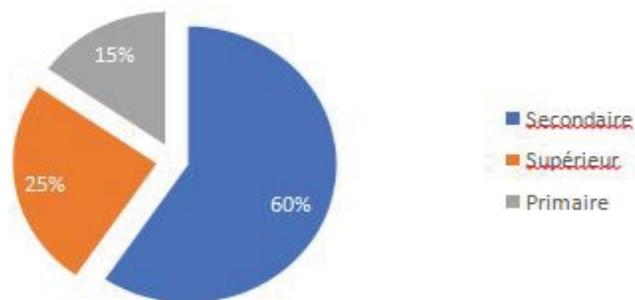


Tab. 1. Marital status.

Civil Status	Workforce	Percentage
Single	74	66,67%
Married	21	18,92%
Divorced	10	9,01%
Widower	6	5,41%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

Fig. 3. Distribution by level of education.

Distribution by level of education



Tab. 2. Economic level family.

Economic level	Workforce	Percentage
Medium	59	53,15%
Low	39	35,14%
High	13	11,71%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

Fig. 4. Distribution by income sources.

Distribution by Income Sources



**Legal problems:** Of the patients followed up, 74.77% had never experienced any legal problems; 18.02% had experienced problems without incarceration and 7.21% with incarceration **Tab. 4.**

**Data related to addictive behavior**

**Substances consumed:** This graph shows that Alcohol was the most consumed substance with 63%; followed by

Tobacco with 20% and the combination of Alcohol and Tobacco with 17% **Fig. 5.**

**Age of onset:** This histogram shows that the most represented age group was 18 to 21 years with 40.56%; followed by 22 to 25 years with 37.73%; 14 to 17 years with 7.56%; 26 to 29 years with 5.66%; 34 to 38 years with 4.56%; the least represented was 30 to 33 years

with 3.93%. Central tendency values: Mean: 21 years; Median: 21 years; Mode: 18

years; Standard deviation: 4.01; Quartile 1: 18 years; Quartile 2: 21 years; Quartile 3:

22.5 years **Fig. 6.**

**Motivations for consumption:** The most frequent consumption motivation was relaxation and pleasure with 35.14%; followed by stress reduction with 32.43%; social conformity with 14.41%, coping with a situation with 11.71% and the least frequent was to fill boredom with 6.31% **Tab. 5.**

**Mode of consumption:** This graph shows that most patients used APS alone (69%). Group use was represented by only 31% **Fig. 7.**

**Weaning:** This table shows that Anxiety was the most experienced symptom with 23.42% followed by Nervousness with 21.62%; Convulsions with 9.91%; Trembling of the extremities, Confusion and Hallucinations

**Tab. 3. Profession.**

Profession	Workforce	Percentage
Military	32	28,83%
Unemployed	31	27,93%
Student	7	6,31%
Biker	5	4,50%
Teacher	5	4,50%
Trader	4	3,60%
Engineer	4	3,60%
State agent	3	2,70%
Lawyer	2	1,80%
Commercial agent	2	1,80%
Financial	2	1,80%
Mason	1	0,90%
Professor	1	0,90%
Mason's helper	1	0,90%
Administrative	1	0,90%
Driver	1	0,90%
Hairdresser	1	0,90%
Trainee doctor	1	0,90%
Cabin boy	1	0,90%
Painter	1	0,90%
Nurse	1	0,90%
Student	1	0,90%
Cashier	1	0,90%
Journalist	1	0,90%
Contractor	1	0,90%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

**Tab. 4. Legal problems.**

Legal problems	Workforce	Percentage
Never	83	74,77%
Yes, without incarceration	20	18,02%
Yes with incarceration	8	7,21%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

**Fig. 5. Substances consumed.**

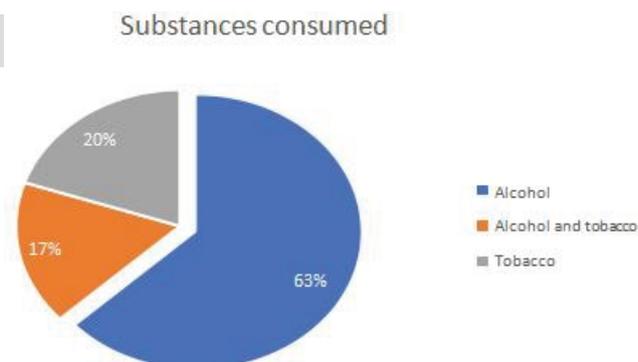
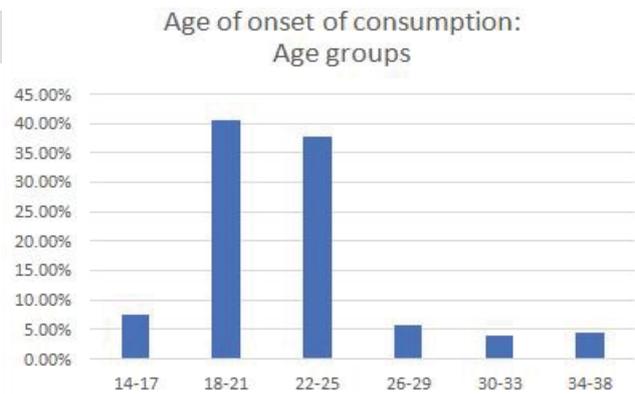


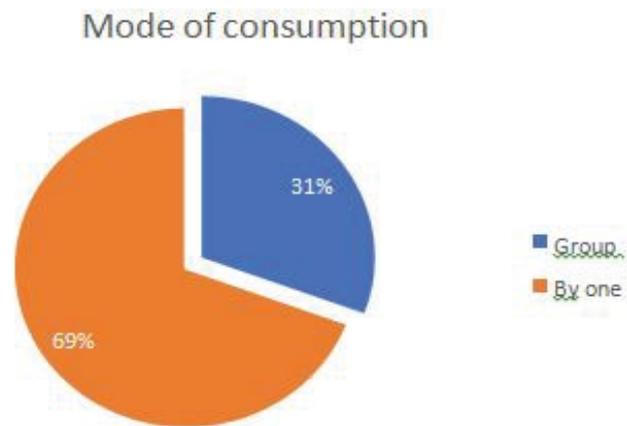
Fig. 6. Age of onset of consumption: Age groups.



Tab. 5. Motivations for consumption.

Motivations for consumption	Workforce	Percentage
Relaxation and fun	39	35,14%
Stress reduction	36	32,43%
Social compliance	16	14,41%
Coping with a situation	13	11,71%
Filling the boredom	7	6,31%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

Fig. 7. Mode of consumption.



were represented at 8.11%; Profuse sweating with 6.31%; Nightmares with 4.50%; Insomnia with 3.60%; Vomiting with 2.70%; Palpitations with 1.80%; Hyperthermia and Tachycardia with 0.90% **Fig. 8, Tab. 6.**

**Somatic complications related to the use of APS:** This table shows that weight loss was the most common somatic complication with 27.03%; followed by no complication with 24.32%; then bloody sputum with 14.41%; lower limb or generalised oedema and liver cirrhosis with 8.11%; chronic cough and digestive bleeding accounted for 7.21%. The least frequent somatic complication was recurrent anaemia with 3.60% **Tab. 7.**

### Data related to psychiatric pathology

**Psychiatric diagnosis:** Chronic psychotic disorder was the most frequent diagnosis with 52.25%, followed by mood disorder with 21.62%, acute psychotic disorder with 17.12%, personality disorder with 5.41%, anxiety disorder with 2.70% and sleep disorder with 0.90% **Tab. 8.**

**Presence of a family history:** This graph shows that most of the patients had a family history of psychiatric

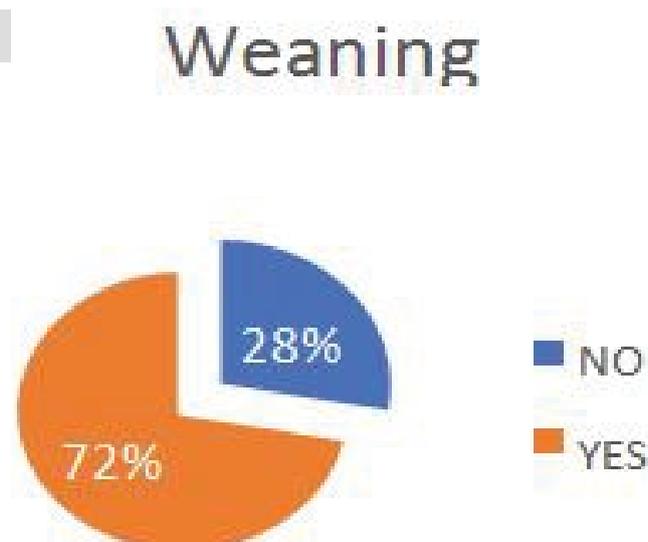
illness (69%). The absence of psychiatric history in the family was 31% **Fig. 9.**

**Age of the first episode:** This histogram shows that the most represented age group was 19 to 23 years with 36.94%; followed by 24 to 28 years with 25.23%; 14 to 17 years with 15.32%; 29 to 33 years with 9.91%; 39 to 43 years with 5.41%; 44 to 48 years with 3.60%; 34 to 38 years with 1.80%. The least represented classes were: 49 1, 80%. Central tendencies: Mean: 25 years; Median: 23 years; Mode: 18 years; Standard deviation: 8.16; Quartile 1: 21 years; Quartile 2: 23 years; Quartile 3: 28 years **Fig. 10.**

### Link between addiction and psychiatric pathology

**Substance use and psychiatric disorder:** We note from this table that most psychiatric disorders were present in patients consuming only alcohol, and were moderately present in those consuming only tobacco. The psychiatric disorders frequently found in the three types of consumption were chronic psychotic disorder (52.25%), followed by mood disorder (21.62%), chronic psychotic

Fig. 8. Weaning.



Tab. 6. Weaning.

Symptoms experienced after weaning	Workforce	Percentage
Anxiety	26	23,42%
Nervousness	24	21,62%
Convulsions	11	9,91%
Trembling of the extremities	9	8,11%
Confusions	9	8,11%
Hallucinations	9	8,11%
Profuse sweating	7	6,31%
Nightmares	5	4,50%
Insomnia	4	3,60%
Vomiting	3	2,70%
Palpitations	2	1,80%
Hyperthermia	1	0,90%
Tachycardia	1	0,90%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

Tab. 7. Somatic complications related to the use of APS.

Somatic complications	Workforce	Percentage
Weight loss	30	27,03%
No	27	24,32%
Bloody sputum	16	14,41%
Edema of the lower limbs or generalized	9	8,11%
Cirrhosis of the liver	9	8,11%
Chronic cough	8	7,21%
Digestive bleeding	8	7,21%
Recurrent anaemia	4	3,60%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

Tab. 8. Psychiatric diagnosis.

Psychiatric diagnosis	Workforce	Percentage
Chronic psychotic disorder	58	52,25%
Mood disorder	24	21,62%
Acute psychotic disorder	19	17,12%
Personality disorder	6	5,41%
Anxiety disorder	3	2,70%
Sleep disorder	1	0,90%
<b>Grand Total</b>	<b>111</b>	<b>100,00%</b>

disorder (19.82%), acute psychotic disorder with (17.12%), personality disorder with (5.41%), anxiety disorder with (2.70%) and sleep disorder with (0.90%) **Tab. 9.**

**Age of onset of use and age of first psychiatric episode:** This graph shows the evolution of the age of onset

of the first psychiatric episode and the age of onset of use according to age groups. It can be seen that the onset of APS use was between the ages of 18 and 30, with a peak between 18 and 25. The first psychiatric episode often appeared between the ages of 18 and 40, peaking between 18 and 30 and stabilising around 40. The ages of onset of

Fig. 9. Presence of psychiatric history.

Presence of psychiatric history

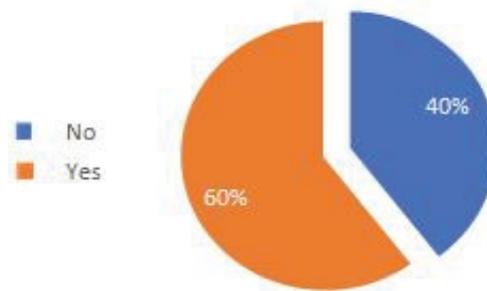
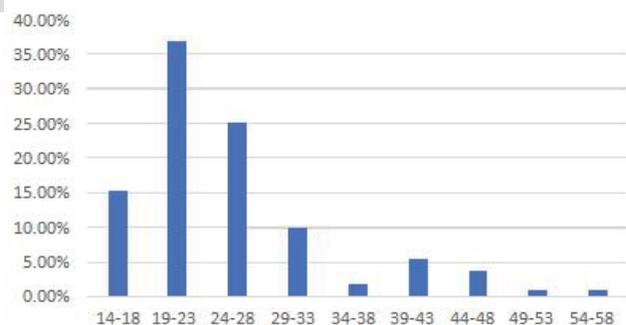


Fig. 10. Age of the first episode.

First Episode: Age groups



Tab. 9. Substance use and psychiatric disorder.

Substance Use and Psychiatric Disorder	Workforce	Percentage
<b>Alcohol</b>	70	63,06%
Chronic psychotic disorder	37	33,33%
Mood disorder	13	11,71%
Acute psychotic disorder	11	9,91%
Personality disorder	5	4,50%
Anxiety disorder	3	2,70%
Sleep disorder	1	0,90%
<b>Tobacco</b>	22	19,82%
Chronic psychotic disorder	12	10,81%
Mood disorder	7	6,31%
Acute psychotic disorder	2	1,80%
Personality disorder	1	0,90%
<b>Alcohol and Tobacco</b>	19	17,12%
Chronic psychotic disorder	9	8,11%
Acute psychotic disorder	6	5,41%
Mood disorder	4	3,60%
<b>Grand Total</b>	111	100,00%

psychiatric pathology and the onset of PSA use overlapped significantly Fig. 11.

**Duration of use and duration of psychiatric pathology:** This graph shows the evolution of the duration of psychiatric pathology and consumption Fig. 12.

## DISCUSSION

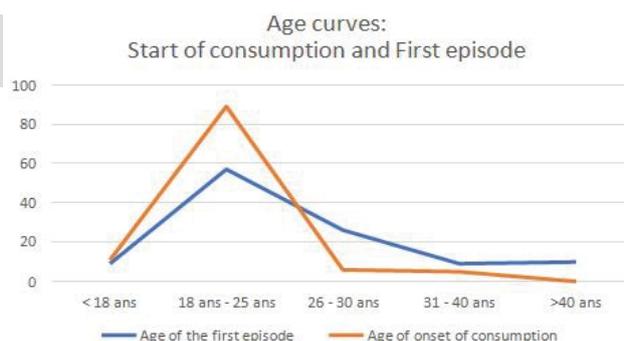
It seems to us that patients hospitalised for mental health problems related to the use of psychoactive substances had particular socio-demographic and addiction characteristics. In particular, they had more difficulty in stopping using these substances and seemed less interested in the activities offered during their hospitalization.

## Characteristics of addiction

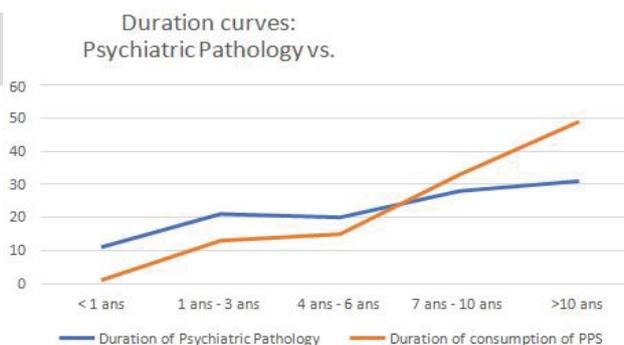
Thus, our results show a predominantly male sample with an average age of 21 years, which is in line with the data in the literature [8]. The patients are characterized by average precariousness. Alcohol use is high.

It is true that the inactivity of these patients is a factor in addiction, but alcoholisation can also be a consequence of inactivity. In fact, 10 to 20% of accidents at work are linked to alcohol consumption and many patients with an alcohol-related disorder are on disability (road accident, depression, chronic pathologies) [8]. Similarly, people who are unemployed are 2.4 times more likely to be binge drinkers than those who are employed and 2.7 times more likely to be alcohol dependent [9].

**Fig. 11.** Age of onset of use and age of first psychiatric episode.



**Fig. 12.** Duration of use and duration of psychiatric pathology.



Only one third of the sample had pursued higher education - a lower score than that reported in a French study which reported 43.6% of 30-34 year olds having successfully completed higher education [6].

Young people aged 14 to 17 who left school early or had a chaotic school career that led them to short or vocational courses are almost twice as likely to use APS regularly as young people still in mainstream education [10]. More than one patient in two has already had to deal with the law, mainly for traffic offences.

The preliminary results of our study allow us to better analyse the factors associated with the excessive use of APS: being a middle-aged, inactive, single man, with little education and a history of trouble with the law seems to be the most at risk of using APS and becoming an addict. It can therefore help us to target at-risk populations before implementing policies to improve health status and reduce avoidable mortality.

Our work also highlights two facts: the main motivation for consumption is relaxation and pleasure and the other motive is conformity with the social group.

One proposal would be, for example, to systematically introduce a specific interview at the beginning of a general medical consultation, taking into account the DSM-V criteria and the above characteristics.

Analysis of data on the use of alcohol and tobacco products also shows that consumption begins in adolescence at around 14 and a half years of age, in line with the data in the literature (80% of 17 year olds have already consumed alcohol in the last 30 days) [9].

Our patients have undertaken an average of one withdrawal in their lives, stopping their consumption for a maximum of one and a half years. According to the

literature, recidivism is frequent in alcohol-dependent patients.

The large number of withdrawals and the short periods of abstinence can be explained by the fact that a certain number of patients were hospitalised at the request of their families, or that some were facing difficult family and social situations (homelessness, somatic symptoms (weight loss, decompensated liver disease, generalized oedema of the lower limbs, bloody sputum, psychiatric manifestations (anxiety, nervousness, convulsions, etc.).

### Characteristics of dual pathology

The link between addictions and psychiatric pathologies is both close and complex: addiction is a determinant of exposure to dual pathologies before the age of 26. In this young population, the use of APS was for relaxation, pleasure and societal conformity. After the age of 26, the use of APS has a therapeutic motivation to reduce stress and to cope with difficult situations. Addiction and psychiatric pathology seem to feed on each other and vice versa regardless of the precession of one on the other.

The causal link is not fixed, and very often patients find themselves in a vicious circle. The use of APS can be explained as a strategy to manage the psycho-trauma: it is then a question of managing to forget the memories that arise without warning and to anaesthetize the emotions. In this case, consumption precedes the disorder. In other cases, people suffering from psychiatric illnesses use psychoactive substances to cope with the many symptoms they cause, particularly in the case of addiction to alcohol or psychotropic drugs, which alleviate these situations and enable them to be tolerated [11].

The psychiatric disorders encountered in our series are distributed as follows: Chronic psychotic disorder 52.25%;

Mood disorder 21.62%; Acute psychotic disorder 17.12%; Personality disorder 5.41%; Anxiety disorder 2.70% and Sleep disorder 0.90%.

Some substances are more likely to cause addiction and aggravate existing mental disorders. In our case, alcohol was correlated with all the above-mentioned disorders. Tobacco was to a lesser degree and did not seem to be correlated with anxiety and sleep disorders. The combination of alcohol and tobacco predisposed to chronic psychotic disorder, mood disorders and acute psychotic disorder. This is explained by the fact that the longer a person consumes a psychoactive substance, the more likely he or she is to develop an addiction and to suffer from mental health problems. Prolonged use of psychoactive substances can also lead to tolerance, which means that the person has to take higher and higher doses to feel the same effects. This leads to the risk of overdose and serious mental health problems or even death.

But the etiopathogenic link between APS and psychiatric pathology cannot be considered only in a linear way where one substance induces a psychiatric disorder; the link is much more complex and involves several factors.

In sum, several variables characterise the link between addiction and psychiatric pathologies, most of which have been addressed in this work, but the following factors should also be taken into account

**Co-morbidity:** This is the simultaneous presence of several mental or physical disorders. Co-morbidity is common in addiction and psychiatric disorders, such as depression and anxiety.

**Risk factors:** Certain risk factors, such as stress, anxiety and depression, can increase the risk of developing an addiction.

**Coping mechanisms:** People with psychiatric conditions may use addiction as a way of coping with difficult emotions. However, this can lead to long-term addiction.

**Treatment:** It is important to treat the addiction and psychiatric disorders simultaneously to maximize the chances of long-term recovery.

**Relapse:** People who have suffered from addiction and psychiatric disorders are at increased risk of relapse if one of the problems is not adequately treated.

**Genetic factors:** Some people have an increased risk of developing an addiction or mental illness for genetic reasons.

**Trauma history:** People who have experienced trauma, such as abuse or bereavement, are at greater risk of developing an addiction or mental illness.

**Level of social support:** People with a strong social support network are less likely to develop an addiction or a mental illness.

**Level of education and income:** People with a higher level of education and income have a lower risk of developing an addiction or a mental illness.

**Environmental factors:** Some people are more at risk of developing an addiction or mental illness because of their living environment, such as lack of family stability or work-related stress.

## CONCLUSION

Several large-scale epidemiological studies have consistently found high rates of co-morbidity between psychiatric disorders and addictive disorders. Moreover, many studies have shown the negative consequences of these co-morbid disorders in terms of physical and psychological health, but also in terms of social situation, and this at a higher level than in the general population. The co-occurrence of a severe mental disorder and an addictive pathology therefore represents a real public health issue.

There is a well-established link between addiction and certain psychiatric conditions, such as mood disorders (depression), anxiety and psychotic disorders. Addiction is often used as a form of temporary "treatment" for these disorders by patients, but it can also aggravate them in the long term.

People with psychiatric conditions are also more likely to develop an addiction because of their emotional vulnerability. It is important to treat both problems simultaneously in order to maximize the chances of long-term recovery.

The difficulties associated with the management of these co-morbid disorders make access to care more complicated and are the cause of many therapeutic failures. Despite an arbitrary institutional divide between addiction and psychiatric medical structures, the links between addiction and psychiatric disorders are so strong that their study and management require these structures to be coupled and their material and human resources to be pooled in order to address these issues in a holistic manner. Their impact on public health is such that it is necessary to insist on multidisciplinary management. This dynamic has inspired us to draw up an inventory of epidemiological, socio-demographic and etiopathogenic knowledge that will open up avenues for solutions to reduce the impact of these diseases. However, it is clear that this modest study is only a beginning.

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