Journal of Clinical Cases

Open Access

Validation of Internal Consistency of the Assist Scale in the Clinical Population of the Fray Bernardino Álvarez Psychiatric Hospital, Mexico.

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Type of Article: Research Article
Received: January 12, 2022;
Accepted: January 16, 2022;
Published Date: February 26, 2022

SUMMARY
The Alcohol, Smoking and Substance Involvement Screening Test V3.0 (ASSIST) is used as a sorting tool for the detection of drug users in need of a light intervention. The need in Psychiatry of valid instruments to facilitate the correct diagnosis in patients with addictions plus other comorbid psychiatric pathologies originated this research project, with the goal of validating the internal consistency of the ASSIST V3.0 test in the clinic population of the Fray Bernardino Álvarez Psychiatric Hospital. Objective: Obtain the concurrent validity using internal consistency measurements of the ASSIST V3.0 in an adult clinical population with psychiatric comorbidities. Method: The evaluation of a nonprobabilistic sample of 50 inpatients in the "Fray Bernardino Álvarez" Psychiatric Hospital. The reliability was calculated using the Cronbach alfa procedure for measurements of internal data consistency. Results: A construct validation was performed using the Cronbach alfa procedure and a value higher than 0.84 was obtained. To validate the domains an analysis of reliability and factorization was performed.

Conclusions: The link between substance abuse and mental illness is the object of several in-depth studies that take into account the dual-pathology nature of the situation. This dual aspect makes essential an adequate detection and the corresponding treatment of the mental disorder in conjunction with the mental effects derived from substance consumption. With evidence of the validity of the ASSIST V3.0 in the psychiatric clinical population, we will have made available a highly useful tool for the prompt detection of drugs consumption.

KEYWORDS:
ASSIST, VALIDATION, CLINIC POPULATION, CRONBACH'S ALFA

INTRODUCTION

In the 2014 U.N. report concerning the consumption of alcohol, tobaccos and illicit drugs, it was reported that the consumption of the substances causes a significant loss of functionality, productivity and health in the world's human population, calculated as a mortality rate of 40 deaths per million inhabitants in the 15 to 64 years population. It's estimated that from 3.5 to 7% of the 15 to 64 years age have consumed an illicit substance in a period of 1 year. The most frequently used substances are cannabis, opiates, cocaine, amphetamines and solvents. The above report affirms that the abuse of these substances constitutes one of the 20 leading causes of death, disability and the emergence of many social, financial and legal problems along with growing conflicts in interpersonal and familiar relationships.

In Mexico, the intake of illicit substances by the adult population is a growing phenomenon, giving rise to an increase of the risks and of the negative consequences for the user and for society in general. We are seeing an increment in mental diseases linked to the increment of substance abuse. Up to 50% of the persons having a mental health problem also suffer a substance abuse problem. Between 60 and 80% of persons with a substance addiction condition are also diagnosed as having an additional psychiatric problem. The additional mental problem may precipitate the addiction or is a consequence of the addiction.
It's known that the prevalence of substance abuse among schizophrenic patients is 47% against 16% for the general population. Substance abuse is associated with an increase of morbidity in these patients along with a frequent exacerbation of their symptoms, increased need for hospitalization, in a poor response of their treatment and even in the increased possibility of suicide.

Today, the estimate of the prevalence of substance abuse in patients with major depression is higher than 20%. On the other hand, the presence of drug abuse increases fivefold the risk of suffering depression.

There are several clinimetric tools to evaluate the use of substances, nevertheless these tools have several limitations which have been outlined by McPherson, Hersh, Babor and Kadden . Several tools, such as the Addiction Severity Index (ASI) and the Composite International Diagnostic Interview (CIDI) in conjunction with the Substance Abuse Module (SAM) known as CIDI-SAM go into great detail; their managing requires a lot of time and become impractical to use in primary attention. The Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) was developed by a group of international researchers and Doctors specialized in addictions selected by the World Health Organization [1].

The ASSIST questionnaire gives the risk score for each substance that the user having consumed. The final score gives the risk classification of the user for each substance as low, medium or high, and for each case selects the most adequate intervention needed.

The ASSIST questionnaire provides information on the lifelong drug consumptions as well as the consumption and problems in the last 3 months. Besides, the questionnaire enables the identification of several problems associated with drug consumption such as acute intoxication, regular use, dependent or "high risk" consumption and behaviors associated with I.V. drug injections.

Through the validation of this test we tried to obtain a clinimetric tool for the detection and evaluation of substance consumption in adult patients with psychiatric comorbidities. This tool is more practical than the existing tools, and capable of detecting the use of any psychoactive substance, not only tobacco and alcohol, is applicable in primary attention cases and is easily linkable to the corresponding intervention for the treatment of substance abuse.

THEORETICAL FRAME

About the 2014 U.N. report concerning the activities of drugs consumption and crimes, the reported worldwide mortality rate of 40 deaths per million in the 15 to 64 years age bracket continues to increase and the existing health services and programs are insufficient[2].

Mexico is at the forefront in the psychiatric diagnosis of substance use. Since 1980, six national epidemiological surveys have been conducted to identify, evaluate and carry out prevention and care programs for people with substance abuse issues. The first three surveys registered urban data, the remaining comprised rural and urban data. These studies managed to obtain data on the evolution of the problem both in urban and rural areas, and at regional and state levels[3].

The National Addictions Survey of Addictions reported in 2011 that the prevalence of consumption of any drug ever in the individual's lifetime at the national level grew significantly between 2002 and 2011, from 5.0% to 7.8%, and the consumption of illegal drugs increased from 4.1% to 7.2%. In this survey, consumption by sex reported that in men the consumption of any drug went from 8.6% to 13% and illegal drugs from 8.0% to 12.5% and in women, the first increased from 2.1% to 3.0% and the second from 1.0% to 2.3%. it was reported that marijuana (6.5%) and cocaine (3.6%) continue to be the preferred drugs.

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Despite the knowledge of the above figures, the consumption of psychoactive substances aroused little interest among medical professionals. The consideration of addictive behaviors as a "vice" or as a "lack of willpower" defined until recently not only the "popular idea" but the socio-sanitary and therapeutic resources to treat this population. However, the discovery, in the 70s of the opioid system (receptors, endogenous ligands, etc.) and later, in the 80s and 90s, the knowledge of the cannabinoid system, supposed a catharsis in both basic and clinical research. Patients diagnosed with substance abuse stopped being "vicious" and started being sick. The fact that human beings had receptors for exogenous drugs could not be explained by the theory of Darwinian evolution, neither was an explanation on how the use or abuse of drugs by generations could produce such mutations in the human genetic load as to cause the appearance of systems so complex in the present generations. The simplest explanation, and in science usually the most accurate explanation is the simplest, is that these systems had always existed and have a reason to be. Now the research in this field is based on knowing what are the reasons for being and existing of these systems and their relationship with other systems of neurotransmission and therefore neurodevelopment.

For years it had been thought that the social and psychological mechanisms were the culprits fueling the addiction, so the treatments were based on detoxifying the patients and/or sending them to a therapeutic community. But this method did not work in its entirety and it produced a high number of relapses. In recent years the medical community has questioned whether there is "something else" to explain the chronic and recurrent evolution in these patients. Now we refer to a disorder by addiction or substance use as being a dual pathology condition.

The term "dual pathology" refers to the concurrence in the same individual of at least one substance use disorder plus another psychiatric disorder. Dual pathology patients are frequent, and from the clinical and social perspective these patients are more vulnerable than those presenting a single psychiatric diagnosis. Dual patients go to the emergency services more frequently, they require more psychiatric hospitalizations, and they show more risky behaviors and a higher comorbidity of infectious-contagious diseases such as infections by the HIV or hepatitis C viruses. They also present significant social marginalization and more violent and criminal behaviors.

This clinical and social severity is important because dual pathology is not an isolated condition but has an important epidemiological presence. The studies carried out in the general population such as those carried out in clinical samplings indicate that the prevalence of the concurrence of disorders due to substance use and other psychiatric disorders is high, being between 15 and 80%.

The reliable and valid identification of a diagnosis of psychiatric comorbidity in subjects who are consuming psychoactive substances is complex, not only from the clinical point of view, but also at the epidemiological level because of the difficulty presented by the terminological definition, the evaluation methodology, the reciprocal influence of the disorders and the concomitant consumption of other substances; the different composition and training of the teams, the difficult verification of psychic disorders prior to the consumption of substances, the establishment of inclusion and exclusion criteria in the studies and the often biased sampling .

In this sense, psychiatry has evolved with respect to diagnostic concepts and criteria between drug use and the presence of other concomitant psychiatric symptoms. Thus, from the Feighner criteria in 1972 to the criteria of the DSM-IV-TR and the ICD-10, important changes have been made in the diagnostic criteria. The criteria of the DSM-IV: Transportation between categories: "primary disorders" ("special disorders") abstinence from a substance) or "substance-induced disorders" (with specific symptoms of substance withdrawal), for being able to facilitate a more precise diagnosis. The second hypothesis refers to the frequency of substance use which, through neuroadaptive mechanisms, causes neurobiological changes that predispose to the development of mental illness. So, the nature of the relationship between psychiatric disorders and consumption disorders is complex and may vary depending on each particular disorder.

In the DSM-IV-TR, substance-related disorders are divided into two groups: substance use disorders (dependence and abuse) and substance-induced disorders (intoxication, withdrawal, substance-induced delirium, persistent dementia induced by substances, substance-induced amnesia, substance-induced psychotic disorder, substance-induced sexual dysfunction, and substance-induced sleep disorder). ICD-10 supplements this information by adding the diagnosis of harmful use in addition to those already mentioned.

Substance dependence is defined as a group of cognitive, behavioral and physiological symptoms that, if present, indicates that the individual continues to consume the substance despite the appearance of significant problems that directly affect its overall functionality. There is also a repetitive pattern of self-administration that will lead to tolerance and abstinence.

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Currently there are two main hypotheses that explain the comorbidity between substance use and another mental illness, the first one refers to the fact that addictions and mental illnesses are different symptomatic expressions that share pre-existing neurobiological alterations. The second hypothesis refers to the frequency of substance use that, through neuroadaptive mechanisms, causes neurobiological changes that predispose toward the development of mental illness. So, the nature of the relationship between psychiatric disorders and substance consumption disorders is complex and may vary depending on each specific disorder.
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Tolerance is the need for the individual to increase the amount of substances gradually to achieve the desired effect, it can also be defined as the inability to achieve the desired intoxication with the continuous use of the same dose16 – 19. Abstinence is a change of maladaptive behavior with the presence of cognitive and physiological alterations, which occur when the concentration in the blood or tissues of a substance decreases in an individual who has maintained a prolonged consumption of large quantities of this substance16 – 19.

Substance abuse consists of maladaptive patterns manifested by overall dysfunction of the subject as it produces significant and recurrent adverse consequences directly related to the repeated use of the substance16 – 19.
Substance intoxication is the appearance of reversible signs and symptoms due to the recent ingestion of the substance, which produce alterations in the level of consciousness, cognition, perception and affective status as well as in the behavior of the individual16 – 19.

Harmful consumption is a form of psychoactive substance use that causes harm to health. This damage can be physical or mental16 – 19.
The reasons that drive the use of clinimetric instruments can be diverse, such as diagnostic aid, support of treatment threshold, communication with other professionals and the establishment of a population reference.
It is necessary to mention that clinimetric instruments are of great help in doctor-patient communication, since they facilitate the exchange of subjective symptoms to which the patient refers, making them objective and quantifiable.

In the process of clinimetric construction, the fundamental properties that are required of a measuring instrument are validity, reliability and objectivity, in other words, the standardization of content and standardization as a measurement tool, respectively3.

The validity of the content refers to the degree to which an instrument reflects a specific domain of the content of what is measured. On the other hand, reliability indicates the scientific usefulness of the instrument if it demonstrates its precision when measuring, testing its reproducibility in subsequent measurements or by different observers[4].

Objectivity refers to the degree to which the instrument is permeable to the influence of the biases and tendencies of the researchers who administer, qualify and interpret it. The objectivity of the instrument will be reinforced through standardization in its applications and in the evaluation of its results; as well as by the standardization of the training of personnel in the application of the instrument[4].

To calculate the reliability of a measurement instrument such as ASSIST, there are several procedures, all using formulas that produce reliability coefficients that can range between zero and one, where a coefficient of zero means null reliability and one represents maximum reliability. The most commonly used procedures are the following: stability measures, method of alternative or parallel forms, split halves method and measures of internal consistency, which is the procedure that will be used to validate the ASSIST, which will be explained later[4].

METHOD

The consumption of psychoactive substances, and especially their abuse, is present in a large proportion of patients having another psychiatric diagnosis and is the main comorbidity in the first psychotic episode. Consumption is greater than that found in the general population, especially in relation to the abuse of marijuana and alcohol and has been linked to a worse prognosis of the disease and a greater severity of symptoms. When treatment is provided, and consumption decreases markedly, it leaves its harmful effect on the long-term prognosis.
Although there is a history of ASSIST functioning well as a screening test for substance use in other countries in adult populations (Australia, Brazil, India, Ireland, Israel and the United Kingdom, among others) , we are not aware of the existence of research conducted in Spanish-speaking countries on an adult clinical population, which reports the psychometric characteristics of the test associated with its concurrent proof of validity with other measures and exhibiting temporal stability (reliability). Despite the relevance, no validation has been done on the results from this type of population.

- Obtain the levels of reliability and validity of the ASSIST test in adult patients with psychiatric comorbidities at the Fray Bernardino Álvarez psychiatric hospital.
- Determine if the validity obtained from ASSIST is useful if it is applied in the adult population with psychiatric comorbidities of the Fray Bernardino Álvarez Psychiatric Hospital.

Non-probabilistic sample of a minimum of 50 patients who are interned in the continuous hospitalization service at the fourth floor of the Fray Bernardino Álvarez Psychiatric Hospital.

SELECTION CRITERIA
Inclusion criteria

- Mexican adult patients, older than 18 years and younger than 60 years.
- Patients interned in the service of continuous hospitalization at the fourth floor of the Fray Bernardino Álvarez Psychiatric Hospital.
- Informed consent signed by the patient and the responsible family

member if necessary.

Exclusion criteria

- Patients with productive psychotic symptoms
- Patients with moderate or severe mental retardation
- Patients with dementia
- Patients who did not sign the informed consent form.

Elimination criteria

- Patients who did not answered all the questionnaire questions

INSTRUMENTS

In the last decade the WHO ASSIST Working Group 2002, developed the ASSIST (Alcohol, Smoking and Substance Involvement Screening Test). The ASSIST V3.0 allows the identification of the subjects that presently use or abuse alcohol, tobacco and other psychoactive drugs, or even dependency. It is made up of 8 questions: the first seven probe different aspects related to the consumption of 9 types of substances; question 8 probes intravenous use. In total there are 8 questions that probe the consumption of 9 substances.

The questions were translated into Spanish by the same team that developed the original English version . Each question refers to nine types of substances: tobacco, alcoholic beverages, cannabis, cocaine, amphetamines or methamphetamines, inhalants, sedatives or tranquillizers, hallucinogens and opioids. In each question it was clarified that: "In the case of the use of medications, only those consumed without a prescription or medical prescription, or in doses other than those indicated by the doctor, are recorded." The question about the frequency of injected drug use as an additional indicator of risk was annexed.

This scale has a fast and simple application format. The answer options for each question are: P1 ("Yes = 3" and "No = 0"); P2 ("Never = 0", "1 or 2 times = 2", "Every month = 3","Every week = 4" and "Daily or almost daily = 6"); P3 ("Never = 0", "1 or 2 times = 3", "Every month = 4", "Every week = 5" and "Daily or almost daily = 6"); P4 ("Never = 0", "1 or 2 times = 4", "Every month = 5", "Every week = 6" and "Daily or almost daily = 7)"; P5 ("Never = 0", "1 or 2 times = 5", "Every month = 6", "Every week = 7" and "Daily or almost daily = 8"); P6-8 ("No, never = 0", "Yes in the last three months = 6" and "Yes, but not in the last three months = 3"). The scores per substance are obtained by adding each response from P2 to P7 (a total of 9 involvement scores are obtained, one for each drug). The scores of question P1 and P8 should not be added (the score for cannabis can be calculated by adding P2c + P3c + P4c + P5c + P6c + P7c). The maximum score per category can be 39 points and the lowest score 0. It also offers a global engagement score .

Based on the above, the ASSIST determines a risk score per substance that can be categorized into three risk levels: "low", "moderate" and "high", and which in turn determines the most appropriate intervention according to the level of use. The cutoff points are: 0 to 3 points (No intervention); 4 to 26 points (Brief Intervention) and 27 points or more (Intensive Treatment). So far there is no knowledge of other studies that indicate different cutoffs.

The latest version of ASSIST in Spanish V3.0 emerged in 2008; the literature reports two previous versions created between 1998 and 2002, quantitative data on its concurrent validity and test-retest reliability are reported in adult populations recruited in specialized treatment centers and primary health care clinics; with intraclass correlation coefficients with other measures for problem drug use such as the MINI-Plus ($r = 0.76$, $p < 0.01$) and Addiction Severity Index ($r = 0.84$, $p < 0.01$) and kappa values in a range of 0.40 a 0.78 in relation to the temporal stability of the test (test-retest) .

PROCEDURE

Once the protocol was accepted, the patients in continuous hospitalization of the fourth floor of the "Fray Bernardino Álvarez" psychiatric hospital were evaluated. The inclusion criteria were fully explained to those who met the characteristics of the study and, after signing the informed consent form by the patient or the family member responsible for the patient, the ASSIST was applied. The ASSITS test was applied in a 15-minute session. The results were appended to the file in cases where the instrument provided relevant information for the treatment of the patient

STATISTICAL ANALYSIS

For statistical analysis, the SPSS 20 was used for the calculation of the data statistical correlation and its internal validity. Data reliability was calculated using the Cronbach alpha internal consistency calculation procedure. This is a method of calculation that requires a single administration of the measuring instrument.

RESULTS

The measurement instrument is a scale used to determine the need for therapeutic intervention in people with addictions. It measures using a logical magnitude having multiple dimensions because it analyzes for each type of drug its consumption, the frequency of use and the problems derived from its consumption. It determines the risk of consumption as low, moderate and high degrees indicative of the need for intervention with the substance consumer.

For the ASSIST instrument, a construct validation was performed through the calculation of Cronbach's alpha, having reached a value considered "very good" since it is higher than .84. While validating the domains, a reliability and factorization analysis was carried out, and we found that only two domains, 1 and 6 are valid and significant, while for the rest of the domains measured by the instrument, the variances and covariances made the data processing mathematically weak to process its validity, as established by the statistical program. For this reason, it could not be determined if the domains measured by the items that constitute questions 2, 3, 4 and 5 are valid.

To resolve this statistical weakness, the replication of the instrument must first be made using a larger sample and, if confirmatory factorization is again impossible to calculate, the need to shorten the inventory to only significant dimensions must be assessed, although in theoretical terms, the construct is statistically sufficient. This precaution should be considered because the application has been made in inpatients of a psychiatric institution who have mental disorders due to the consumption of substances, so the items corresponding to the questions 2, 3, 4 and 5 did not present variances because they all presented a problem specified in the following analysis of results obtained for the sample studied.

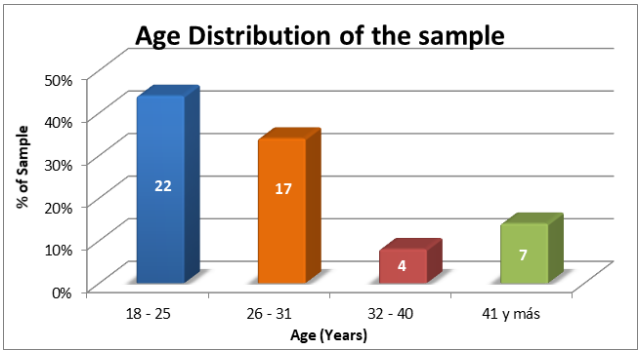

Image 1 – Age Distribution of the Sample

As shown in image 1, the sample consisted of 50 subjects, 5 women and 45 men, with an average age of 28 years (SD ± 8.44), see image 1. Women were younger than men, being in their 20's. The Mode for this group was 22 years (14%).

56% had a psychiatric diagnosis of F20.0, followed by patients diagnosed with F60.3 (10%) and F25.0 (8%), see image 2 and table 1.

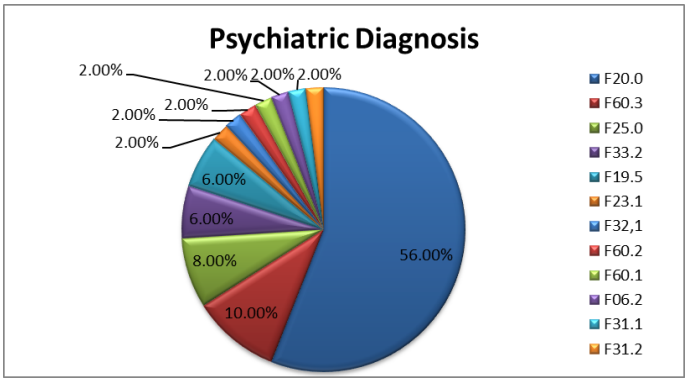

Image 2 – Distribution of the Psychiatric Diagnosis

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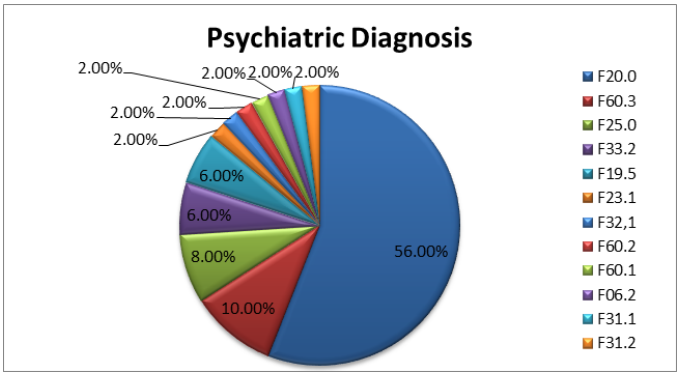

Image 2 – Distribution of the Psychiatric Diagnosis

Table 1 - Mental and Behavioral Disorders

The most frequent diagnosis was F19.1 (64%), followed by F19.5 (10%) and F12.1 (8%). See image 3.

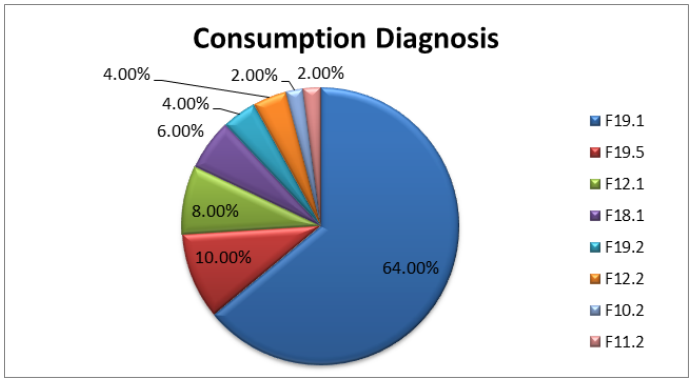

Image 3 – Distribution of Consumption Diagnosis

94% of the patients surveyed reported having consumed tobacco, alcohol 98%, cannabis 86%, cocaine 46%, amphetamines 12%, inhalants 54%, sedatives 14%, hallucinogens 18%, opiates 6 % and only one expressed having consumed another drug not considered among the ones mentioned above.

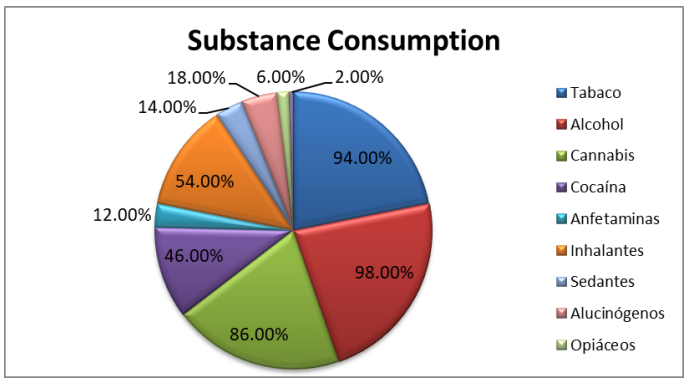

Image 4 – Distribution of Substance Consumption

The main psychiatric diagnosis of the patients to whom the test was applied was F20.0, except for opioids, which is divided in the same way in three diagnoses F60.3, F19.5 and F20.0. Similarly, in the case of the consumption of other drugs not listed, the most frequent diagnosis was of psychosis due to the consumption of multiple substances, F19.5 and represents 2% of the sample. See image 4

Regarding the frequency of consumption, 72% consume tobacco, 12% alcohol, 50% cannabis, 6% cocaine, 0% amphetamines; 18% inhalants, 2% sedatives, 0% hallucinogens and 1% opiates. See image 5.

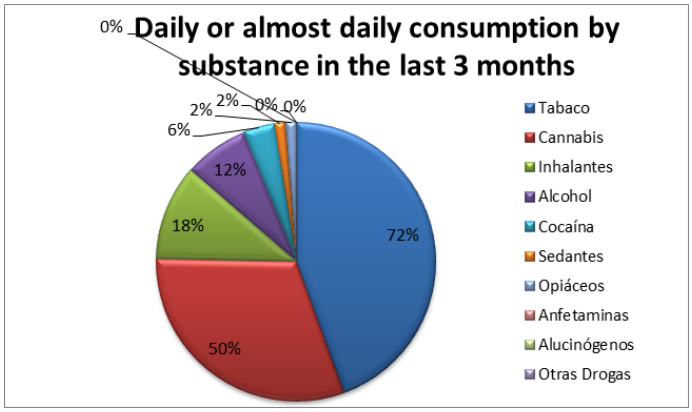

Image 5 - Daily or almost daily consumption by substance in the last 3 months

Image 6 shows alcohol is not one of the three most commonly consumed substances on a daily or almost daily basis in the last three months, its intake being more important on a monthly and weekly basis. It is notable that the daily or almost daily consumption of inhalants exceeds that of alcohol. This pattern of alcohol consumption may respond to the fact that the substance is socially accepted.

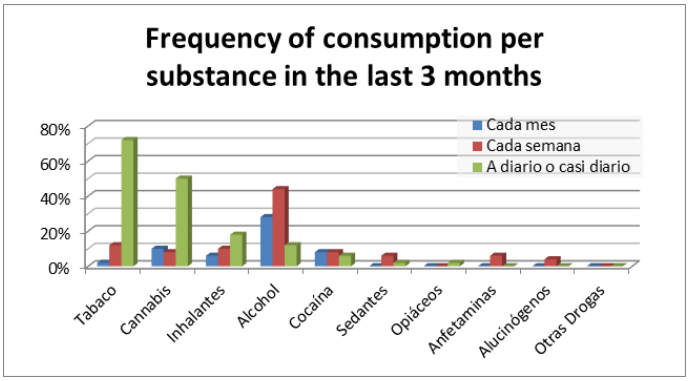

Image 6- Frequency of consumption per substance in the last 3 months

The analyzed population reports a desire to consume substances, reported in the ASSIST test, daily or almost daily as follows: 62% tobacco, cannabis 38%, 10% alcohol, cocaine 6%, amphetamines 4%, 14% wished to consume daily inhalants, 4% sedatives, hallucinogens and opiates 2%. See distribution of consumer desire in Image 7.

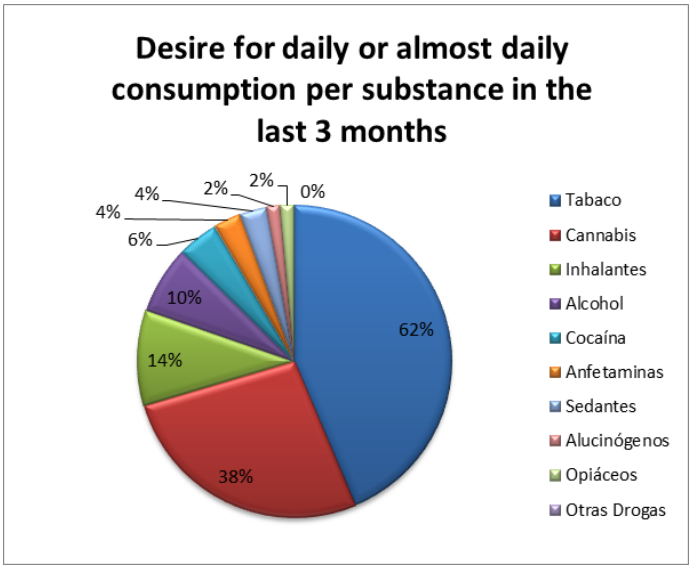

Image 7 - Desire for daily or almost daily consumption per substance in the last 3 months

As in Image 6, where the consumption of substances is shown in the last 3 months, the desire to consume alcohol daily or almost daily is low compared to tobacco, cannabis and inhalants, in this order. However, the desire, and consumption, for alcohol in the weekly frequency is the most important. This behavior of alcohol consumption is very specific and delimited. See Image 8

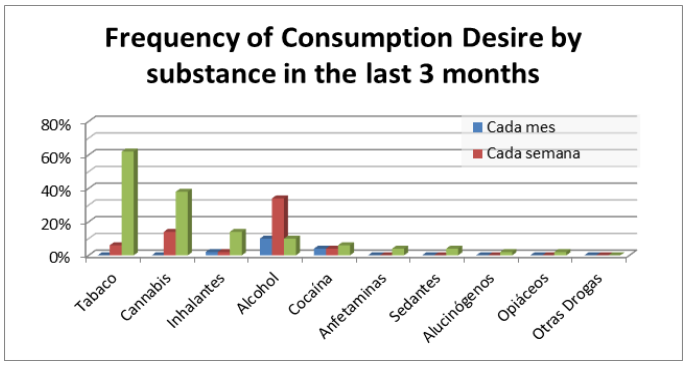

Image 8 - Frequency of Consumption Desire by substance in the last 3 months

Patients reported having several problems (social, economic, legal or health) due to substance use in the last three months: 18% of tobacco users had problems daily, for alcohol 12%, for cannabis 40%, cocaine 6%, amphetamines 4 %, inhalants 12%, sedatives 4%, hallucinogens and opiates 1%. The high incidence, reported by the surveyed patients, of recent problems due to cannabis use stands out, since it is more than double the substance that follows, tobacco, and almost 4 times more than alcohol. However, these last two substances are legal and easily accessible. Due to the socioeconomic level of the patients of Fray Bernardino Álvarez Hospital, the incidence of problems due to inhalants is at the same level as alcohol. See Image 9

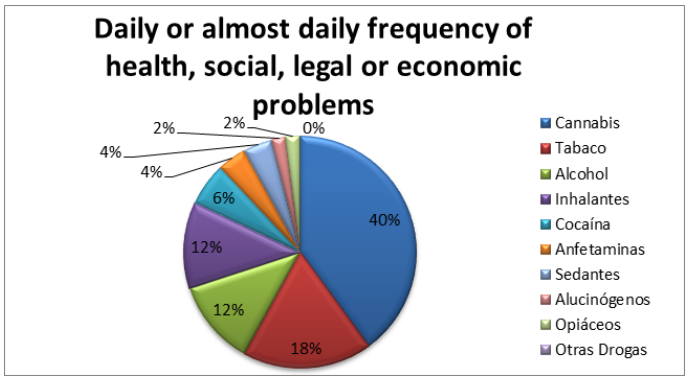

Image 9 - Daily or almost daily frequency of health, social, legal or economic problems

The sample surveyed reports that the daily consumption of substances has strong implications for health, social, legal or economic problems but not the occasional consumption. Unlike alcohol, which has the same incidence of problems, notwithstanding the frequency of consumption as shown in Image 10

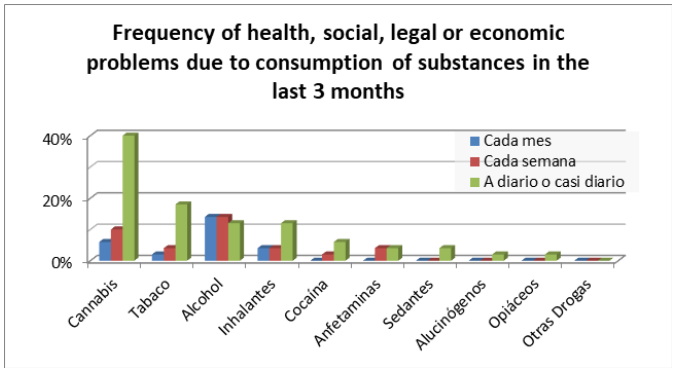

Image 10 - Frequency of health, social, legal or economic problems due to consumption of substances in the last 3 months

Question 5 of the ASSIST test questions patients about the non-compliance of adult roles due to consumption, in this respect none stopped doing their activities for consuming tobacco, however 24% of cannabis users did not do what was expected of them. In the case of alcohol, 12% stopped fulfilling their activities, for cocaine 10%, for amphetamines 2%, for inhalants 8%, sedatives 4% and hallucinogens 2%. See Image 11

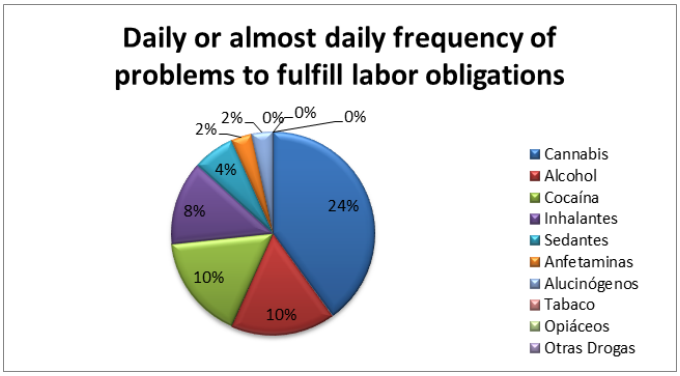

Image 11 - Daily or almost daily frequency of problems to fulfill labor obligations

Image 12 shows the concern of family members in the last three months for the patients' consumption. 28% of tobacco smokers report it, 46% of alcohol users, cannabis 52%, cocaine 18%, amphetamines 2%, inhalants 22%, sedatives 6%, hallucinogens and opiates 2%.

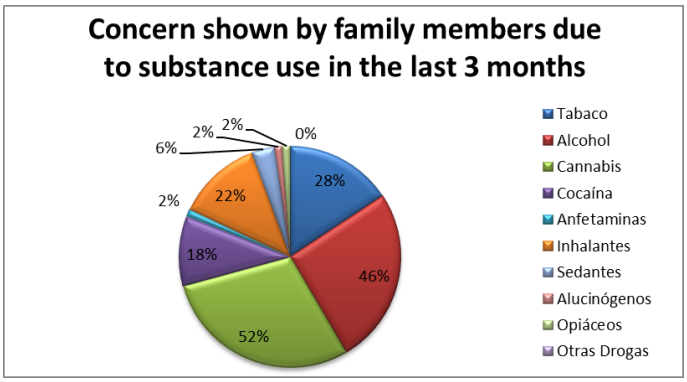

Image 12 - Concern shown by family members due to substance use in the last 3 months

Similarly, it is important to show the lack of concern shown by a family member or close person for the consumption of substances in patients. This can lead to investigate the support network that the patient has. Contrasting the results of question 6 with those of question 2 - daily or almost daily consumption in the last three months, it is observed that more than 50% of consumers of inhalants, 18% of the sample surveyed, report that a family member or close person did not show concern about the patient's consumption of the drug. Cannabis users who used it daily, 30% report no concern on the part of relatives or close people and 50% yes if they used it during the last three months. Likewise, 72% of the respondents who consume tobacco daily, 60% of this consumption does not cause concern in family members of the patient and, as shown in the previous graph only in 28% of cases it does. See image 13.

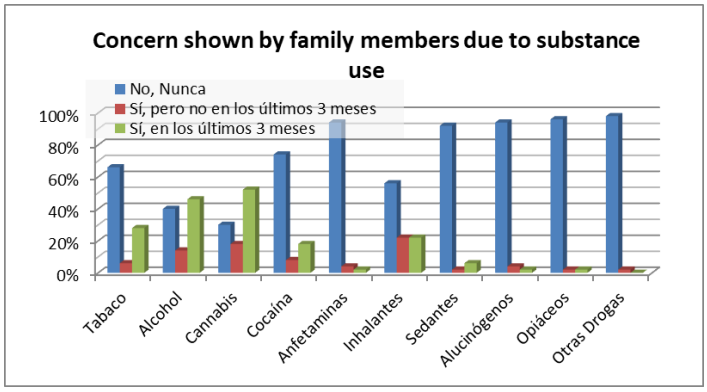

Image 13 - Concern shown by family members due to substance use

Regarding the attempt to reduce, control or abandon the use in the last three months, 26% claim to have tried for tobacco consumption, 18% of alcohol users, 38% of cannabis, 20% cocaine, amphetamines 2%, inhalants 26%, sedatives 6% and hallucinogens and opiates 2%. See Image 14.

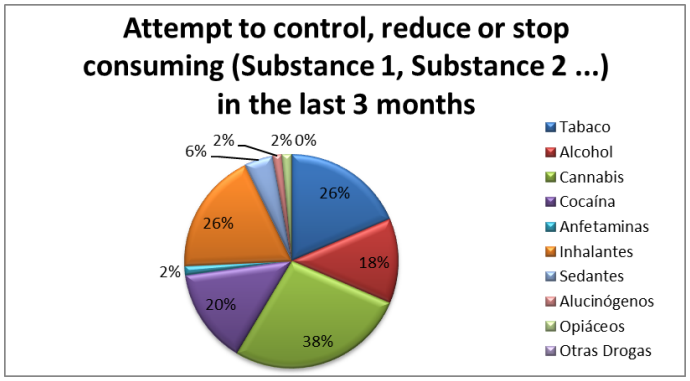

Image 14 - Attempt to control, reduce or stop consuming (Substance 1, Substance 2 ...) in the last 3 months

Image 15 shows the disinterest of the respondents to control, reduce and suspend the consumption of the substances shown. The behavior of cannabis users is different from that of other substances since they show the greatest interest to control, reduce or stop consuming but at the same time have the least interest to do so. Alcohol and tobacco have a very similar behavior in the desire to reduce consumption.

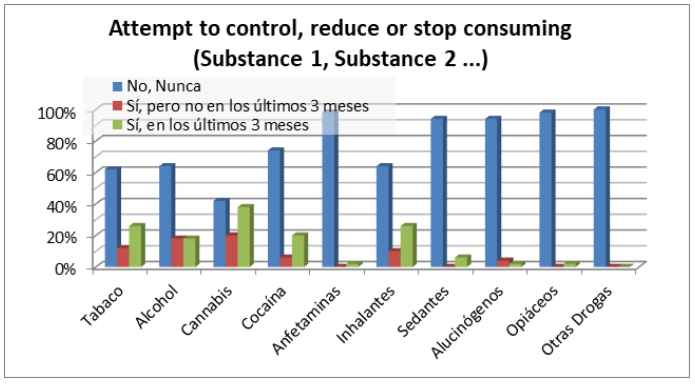

Image 15 - Attempt to control, reduce or stop consuming (Substance 1, Substance 2 ...etc.)

DISCUSSION

The aim of this study was to show the psychometric properties of the ASSIST test when applied to a sample of adult population with a psychiatric diagnosis and substance use. It should be emphasized that this instrument had not been subjected to validation of internal consistency in the clinical population, so there are no studies in this type of population with which to compare results.

In the study, an analysis of the properties of the items and their reliability was performed, finding evidence of validity based on the internal structure. The internal consistency procedure was applied by calculating the Cronbach's alpha coefficient. This coefficient informs about the relationship that exists between the different items that compose the test, in such a way that when the relation between them is high, there exist adequate values of reliability. However, Cronbach's alpha coefficient is also influenced by other sources of variation such as the number of items and the variability of people.

The ASSIST showed adequate reliability for the sample of adult patients with psychiatric comorbidities. Also, their items showed adequate discrimination indexes when obtaining a Cronbach's alpha coefficient of 0.84. Therefore, ASSIST presents an adequate reliability when applied in this type of population.

According to the results obtained in different non-clinical populations, the data are very similar, for example, the result of the Cronbach's alpha obtained in the validation study of the ASSIST scale in the Chilean open population was 0.91 , from this one may conclude the possible existence of a dual pathology, although it was not applied in a clinical population, which would require the use of other clinimetric instruments specific to psychiatric disorders of a non-addictive origin.

Regarding the items corresponding to questions 2, 3, 4 and 5 those did not present variances because all the patients who participated have some obvious dysfunctional problem for which they are hospitalized. There is enough evidence to demonstrate that other populations would also exhibit these items with very similar results.22, 27, 29

CONCLUSSIONS.

In the results of the validation for internal consistency of the ASSIST test in the clinical population of the Fray Bernardino Álvarez Psychiatric Hospital, it can be observed that among the most consumed substances are tobacco (94%), alcohol (98%), cannabis (86%) and cocaine (46%). Emphasizing that although tobacco is the substance of greatest consumption in the clinical population evaluated, it is not the one that causes the greatest dysfunction, in this category it is the consumption of cannabis that causes the greatest impact. This should make the mental health professional pay special attention to the consumption of this substance in the psychiatric clinical population and carry out further studies regarding its frequency of consumption, quantity and the impact this has on this type of population26,17.

The link between substance use and mental illness is now a subject being increasingly studied, taking it into account as a dual pathology; which is why the adequate detection and consequent treatment of mental disorders together with disorders derived from the use of substances is essential. Unfortunately, in most cases, and especially in the psychiatric population, the consumption of psychoactive substances goes unnoticed. With the evidence of the validity of ASSIST in a psychiatric clinical population, a very useful tool will become available to detect drug use in a timely manner.

The high clinical and social severity together with its high prevalence and therapeutic difficulties, justifies the interest in having reliable and efficient tools such as the ASSIST test to determine early intervention and improve the prognosis of patients in this population.

If this premise is not met, the medium and long-term consequences are, from the health point of view, a worse prognosis of the patient already diagnosed and, at the social level, an increase in the degree of mental illnesses. All this generates greater spending on health and institutional care in general.

Without the adequate detection of this population and early interventions, the number and duration of relapses of both pathologies increase, decreasing the time intervals between them. Thus, hospitalizations tend to become more frequent and longer.

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