# *Female depression and substance dependence in the Mexico City penitentiary system**

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**Summary**

The prevalence of mental disorders in people deprived of freedom has been estimated at between 10 and 15%. Acute or chronic mental illnesses provoke a major breakdown and maladjustment to prison conditions. The more frequent diagnose of mental disorders have been substance consumption, major depression, bipolar disorder, post-traumatic stress disorder and psychotic disorders.

**Objective**

To identify the frequency of major depressive episode in women in prison in Mexico City, its frequency of association with alcohol and substance dependence, and to describe the symptomatic and socio-demographic characteristics.

**Material and method**

A transversal, non-experimental, descriptive, ex post facto field study, in two prisons of Mexico City (Centro Preventivo Femenil Oriente [Preventivo Oriente] and the Feminine Center for Social Readaptation Tepepan CERESO), in a non- probabilistic sample of 213 women, selected by convenience. The instrument was designed ex profeso. For the evaluation of the major depressive episode, the Mini International Neuropsychiatric Interview (MINI) and DSM-IV criteria were used for substance dependence. Field work lasted from August 2001 to March 2004. Interviews were carried out under previous informed consent; confidentiality and anonymity were guaranteed. In collaboration with the Center of Orientation and Classification (COC), each center elaborated a list of inmates with a history of substance abuse who met the inclusion criteria to take part in the research.

**Results**

The mean age of the interviewed population was 30.6 ± 7.9 years; 45.5% belonged to the age group between 28 to 40 years; the school attainment more frequent was elementary school (41.3%), followed by secondary school. Single women represented 48.6% of the population and 50.2% referred having, at the moment of the interview, a partner relationship. The type of offense reported with major frequency was robbery (51.6%, in different modalities: unspecific, simple, aggravated, not-aggravated, unspecific, burglary, tentative of robbery and car theft). The researched population referred that 43.7% had previously done time in some penal institution. The frequency of depressive episodes was 62% (n=132) in the interviewed population. The group between 18 to 27 years, with lower years of schooling, single mothers with children under 18 years presented the highest frequency of depression and substance abuse. Alcohol dependence and depression were more frequent in women with less than six months in prison. For depression and substance dependence, the more affected group was the one between one to four years of imprisonment. As to the length of the sentence, women with three to seven years were the most affected by the two diagnoses.

**Conclusions**

The interviewed population showed that the longer the imprisonment or the sentence, the higher the frequency of the depressive disorder. A possible explanation is that being imprisoned for a long time may have severe consequences in women's well-being due in part to the fact that in most of the cases women are abandoned by their relatives and loved ones, which intern increases their loss of social support networks.

The problem of mental disorders becomes more evident when it is estimated that only 40% of the people who have a disorder had received treatment. Nearly half of the depressed women had not received support and care for their mental health problem. In the group of women with alcohol dependence, less than a quarter had asked for help, in contrast with the group with substance dependence where half of the women had asked for help.

On the other hand, prison by itself generates depression and it is a normal reaction in the face of the new situation. There is also the erroneous belief that symptoms will fade away by themselves. In other studies it has been observed that being deprived of freedom causes the lose of emotional relationships, solitude and boredom, lack of services, heterosexual relationships, autonomy, security, a problematic cohabitation with other unpredictable prisoners, all of which cause fear and anxiety. All these deprivations may constitute serious threats to the personality and self-esteem.

**Key words:** Women, depression, substance dependence, penitentiary system.

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## RESUMEN

La prevalencia de trastornos mentales en individuos privados de su libertad se ha estimado entre 10 y 15%. Padecer una enfermedad mental aguda o crónica provoca en los sujetos un mayor desajuste e inadaptación a las condiciones de vida en la prisión. En particular, los diagnósticos de trastornos mentales más frecuentes han sido el consumo de sustancias, la depresión mayor, el trastorno bipolar, el estrés postraumático y los trastornos psicóticos.

**Objetivo**

Identificar la frecuencia del episodio depresivo mayor en mujeres en prisiones de la ciudad de México, la frecuencia de asociación del diagnóstico con la dependencia al alcohol y otras sustancias, así como la descripción de las características sintomáticas y sociodemográficas.

**Material y método**

Estudio de campo transversal de tipo no experimental, descriptivo, *ex post facto*, con una muestra de tipo no probabilística, seleccionada por conveniencia, de 213 mujeres de dos prisiones de mujeres de la ciudad de México: el Centro Preventivo Femenil Oriente y el Centro de Readaptación Social Femenil Tepepan.

Instrumento diseñado *ex profeso*. Para evaluar el episodio depresivo mayor, se utilizó la Mini Entrevista Neuropsiquiátrica Internacional (MINI); para evaluar la dependencia a sustancias se utilizaron los criterios del DSM-IV. El trabajo de campo se llevó a cabo de agosto de 2001 a marzo de 2004. Las entrevistas fueron realizadas previo consentimiento informado de las mujeres, a quienes se aseguraba la confidencialidad y el anonimato de su participación. Cada Centro elaboró, de acuerdo con el Centro de Orientación y Clasificación (COC), una lista de las internas con historia de consumo de sustancias que cumplieran con los criterios de inclusión de esta investigación.

**Resultados**

La edad promedio de la población entrevistada fue de 30.6 ± 7.9 años; 45.5% pertenecía al grupo de edad de entre 28 y 40 años; la escolaridad reportada con mayor frecuencia fue la primaria, con 41.3%, seguida por la secundaria. Las solteras representaban 48.6% de la población y 50.2% refirió tener, al momento de la entrevista, una relación de pareja. El tipo de delito reportado con mayor frecuencia en las entrevistas fue el robo (51.6%, en diferentes modalidades: inespecífico/simple, calificado, agravado, no especificado, a casa habitación, tentativa de robo y robo de auto). De la población investigada, 43.7% refirió una permanencia anterior en alguna institución de procuración de justicia. La frecuencia del episodio depresivo fue de 62% en la población entrevistada (n = 132). Las mujeres de entre 18 y 27 años cuya escolaridad era menor a secundaria, solteras y con hijos menores de 18 años son quienes presentaron mayor frecuencia de depresión y consumo de sustancias.

La dependencia al alcohol con depresión fue más frecuente en las mujeres con un tiempo de estancia menor a seis meses, mientras que la dependencia a sustancias psicoactivas y la depresión fue mayor en aquellas que tenían entre uno y cuatro años de estancia en prisión. Las mujeres con más largas sentencias, de entre tres y siete años, fueron las más afectadas por ambos diagnósticos.

De las mujeres deprimidas, 43.9% reportó el antecedente de reclusiones previas. Un tercio de estas mismas mujeres reportó también dependencia al alcohol, y la mitad de ellas refirió dependencia a sustancias. Cerca de 50% de las mujeres deprimidas refirió haber solicitado ayuda para la depresión dentro de la institución penitenciaria. Sólo cerca de la quinta parte solicitó ayuda para el consumo de alcohol. En cuanto al grupo de mujeres con dependencia a sustancias, la búsqueda de ayuda fue de 88.6%.

**Conclusiones**

Los trastornos mentales estudiados afectan aproximadamente a dos terceras partes de la población entrevistada. El reporte de una alta frecuencia es similar al de otros estudios, tanto en el nivel nacional como en el internacional, donde se ha estimado la elevada prevalencia general de los trastornos mentales y particular de la depresión y la dependencia a sustancias. Otro indicador de la magnitud del problema, independientemente de su frecuencia, es la presencia de siete o más síntomas en casi dos terceras partes de las mujeres para establecer el diagnóstico tanto del episodio depresivo como de la dependencia a sustancias. Lo anterior cobra relevancia por la frecuencia de la comorbilidad del trastorno depresivo, ya que cerca de una cuarta parte de las mujeres deprimidas presenta dependencia al alcohol y a sustancias.

El estudio reveló que la frecuencia del episodio depresivo se incrementa cuanto mayor es el tiempo de estancia o de sentencia. Una posible explicación es que el encierro por largo tiempo puede tener graves consecuencias en el bienestar de las mujeres, pues a causa de él, en la mayoría de los casos, las mujeres terminan abandonadas por sus familiares y otros seres queridos, lo que a su vez eleva la sensación de pérdida de apoyo social.

Por otro lado, la prisión por sí misma genera depresión y ésta puede verse como una reacción normal frente a una nueva forma de vida, por lo que con frecuencia se llega a creer erróneamente que la sintomatología remitirá por sí sola. En otros estudios se ha observado que la privación de la libertad causa la pérdida de relaciones emocionales, soledad y aburrimiento, falta de servicios, falta de relaciones heterosexuales, autonomía y seguridad. La permanencia en prisión provoca también una convivencia problemática con otras prisioneras impredecibles, lo que genera miedo y ansiedad. Todas estas carencias pueden constituir una amenaza seria a la personalidad y la autoestima.

La alta frecuencia de mujeres deprimidas y su comorbilidad con sustancias sugiere la necesidad de desarrollar una intervención para su detección oportuna, además de un adecuado manejo terapéutico en salud mental que considere las características especiales de esta población.



**Palabras clave**: Mujer, depresión, dependencia a sustancias, sistema penitenciario.


## INTRODUCTION

The fact that the prison population is so overwhelmingly formed by males means that female inmates are hardly reflected in the guidelines for those that are obliged not only to look after female prisoners but also to facilitate treatment for their future re-insertion into society. Women's status in the penitentiary system is subordinate to that of men, since they live in more overcrowded conditions, have lower educational attainment and experience greater problems because of their marginalized condition. Thus the penitentiary system reinforces social differences, which in turn lead to disadvantages for women, whose needs are relegated in prisons just as they are in other social spheres (3, 5, 21).

Very little research has been undertaken in prisons on the problems that incarceration may cause, with

interest focusing on long-term damage, in addition to the fact that most studies have focused on the male population (33).

Various studies have estimated a high prevalence of mental disorders in prison, with rates of 10% to 15% among prisoners. Moreover, most of these mental disorders tend to be severe. Illness, whether acute or chronic, exacerbates problems of adjustment and adaptation to prison conditions. This increase in the frequency of mental illness has been particularly reflected in diagnoses such as substance use, major depression, bipolar disorder, post-traumatic stress and psychotic disorders (8, 12, 30, 37).

A greater prevalence of depression has been reported in Mexico than for other countries, since it has been estimated at between 27% and 57% (16, 21). International literature on major depression in female inmates has estimated a prevalence of major depression of 13% to 24%, three times higher than that for men (7, 25, 47, 48).

The high prevalence of depression is a problem, particularly so if one considers that it has been estimated that only 40% of those suffering from depression receive treatment and care for the disease. This situation is exacerbated by the fact that prisons are thought to generate depression, meaning that it is regarded as a normal reaction to imprisonment, and it is also believed that its symptoms will be reduced by themselves.

An important aspect that female inmates may experience and which has partly been used to explain the presence of depression is the separation from or loss of various bonds, such as those with their offspring. This situation of loss may also occur as a result of the break-up of a marriage due to imprisonment, in addition to the fact that female inmates have less contact with relatives and friends. Moreover, women suffer particularly as a result of problems associated with the family and their outside contacts, who often lose interest in continuing the relationship, as a result of which female inmates are usually abandoned by their partners and/or families, which is a major risk factor (19, 28, 35, 40, 44).

As for substance abuse, alcohol abuse is five to eight times more frequent among female inmates than the general population, while drug abuse is up to ten times higher (10, 25, 48). Epidemiological studies of female inmates or detainees show a prevalence between 30% and 52% for drug consumption and 17% to 24% for alcohol consumption (25, 48). Other findings show that up to 55% of female inmates consume alcohol (20).

In Mexico, substance abuse among female inmates is a serious problem which has not been dealt with adequately, nor are there any suitable programs for dealing with it. The prevalence of this problem is high, as shown by a study of female inmates in Mexico City, which reports the presence of drug use disorders among 33% of the population and 37% for alcohol-related disorders (4).

Both disorders, i.e. depression and substance abuse, may coexist in an individual, an association that in recent years has been called "dual pathology". The literature on the co-morbidity of mental disorders with substance abuse is inconclusive, because it shows wide variations in co-morbidity rates found in the various studies (41). The evidence shows a high prevalence of substance abuse and other psychiatric disorders. As a group, those with this dual pathology have a worse prognosis than those suffering only from one or the other (11).

To date, there are no data or reports on this association among female inmates. In general terms, the data report that 46% of women admitted to treatment centers due to substance abuse have a dual diagnosis, and this true for population that attend these centers.

The aim of this article is to identify the frequency of major depression episodes among female inmates in Mexico City and its frequency of association with alcohol and substance dependence, and to provide a description of its socio-demographic and symptomatic characteristics.

## MATERIAL AND METHOD

### Type of study

A cross-sectional, non-experimental, descriptive, ex post facto study was carried out at two women's prisons in Mexico City: the Centro Preventivo Femenil Oriente (Preventivo Oriente) located in the east of Mexico City, within the *delegación* or borough of Iztapalapa, which has the highest crime rate in the city, and the Centro de Readaptación Social Femenil Tepepan (CERESO Tepepan), located in the south of the city, surrounded by a residential zone. The former contains women who have been suspected, tried and sentenced, while the second contains women that have been sentenced and women who also have psychiatric problems.

*Description of sample*

A non-probabilistic sample of 213 women was selected for reasons of convenience.

*Criteria for inclusion:* Female inmates, current or sometime users of alcohol, tobacco and drugs, aged between 18 and 65, who could read and write.

*Criteria for exclusion:* Having a psychiatric disorder or physical disability that prevented them from engaging in the interview.

*Instrument*

A specially designed instrument was used, consisting of a 62-page semi-structured interview covering

various areas of the lives of the women interviewed.* Major depressive episodes were evaluated using the Mini International Neuro-Psychiatric Interview (MINI), a short, structured interview that explores the main psychiatric disorders of adults. It can be applied by non-specialized interviewers and is currently being used in the clinical area of the National Institute of Psychiatry (13).

The MINI format includes a list of symptoms compatible with the symptomatic criteria of the DSM-IV and CIE-10. Thus the diagnostic algorithm for major depressive episode is consistent with the international classification and is integrated into the structure of the instrument. The diagnosis is established during the interview and the questions are dichotomoush "Yes" or "No" answers. The symptoms explored for major depressive episode are given in Appendix 1. Various studies have been carried out in which the Compound International Diagnostic Interview (CIDI) was used as the gold standard for European studies. Moreover, given its availability and its validity in various languages and places, as well as studies in America, the Structured Clinical Interview was used for the DSM-III-R/IV-Patient (SCID-P) as the gold standard. Suitably high indices of inter-interviewer and test-retest reliability were obtained (2, 32, 44, 45).

The presence of substance and/or alcohol dependence was evaluated using a list of diagnostic criteria from the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) ( (1).

Field work was carried out from August 2001 to March 2004 as a result of an agreement with the Head Offices of Prevention and Social Re-adaptation of the Federal District, through which the mental health team comprising previously trained psychiatrists, psychologists, and anthropologists was granted access. Access was only permitted twice a week and not on holidays.

In accordance with the Center for Orientation and Classification (COC), each center drew up a list of female inmates with a history of substance use who met the criteria for inclusion and were invited to participate in the research. It is worth mentioning that the researchers' presence encouraged some of the women to request information and volunteer to participate.

The interviews were carried out after the women had given their informed consent and been made fully aware of the research objectives. They also signed an agreement in the presence of two witnesses ensuring the confidentiality and anonymity of their participation, as well as the use of the information they shared. All interviews were given face-to-face, and took on average two hours, although on some occasions up to four two-hour sessions were required. The women were allowed to abandon the study whenever they wished.

## RESULTS

A total of 213 interviews were applied to female inmates at the Tepepan Social Readaptation Center (n=80) and the Preventivo Femenil Oriente (n=133). The mean age was 30.6 ± 7.9 years and 45.5% of the population interviewed belonged to the 28 to 40 years age group. The most commonly reported level of educational attainment was elementary school (41.3%) followed by secondary school. Single women accounted for 48.6% of the population, and 50.2% reported having a partner at the time of the interview. A total of 50.7% of the women reported having children under the age of 18 and 15.5% said they had no children (table 1).

The most commonly reported crime among the interviewees was theft (51.6%) in different forms: unspecific/simple, qualified, aggravated, non-specified, burglary, attempted robbery and car theft, followed by damage to health (23.5%). These were followed by homicide (8.5%), illegal deprivation of freedom (3.8%), corruption of minors (2.8%), injuries and prostitution (1.4%), extortion, damage to private property and fraud (0.9%), and organized crime, infanticide, and illegal possession of drugs (0.5%). Only 2.8% declined to mention the crime they had committed. Of the population researched, 43.7% reported having done time in a correctional facility before.

**TABLE I. Demographic variables of women in prison**

| *Demographic variables* | *Total n = 213* |
|---|---|
| Age group | |
| 18 - 27 | 39.0 |
| 28 - 40 | 45.5 |
| 41 - 62 | 15.5 |
| Education | |
| Without education | 4.2 |
| 6 years or less | 41.3 |
| Secondary | 36.2 |
| Preparatory or technical | 16.4 |
| University incomplete | 0.5 |
| University | 1.4 |
| Civil status | |
| Unmarried | 48.6 |
| Married | 9.4 |
| Common Law | 21.6 |
| Widow | 4.7 |
| Divorced | 3.3 |
| Married-separated | 9.9 |
| Never married | 2.3 |
| Partner relationship | |
| Yes | 50.2 |
| Children | |
| No children | 15.5 |
| Younger than 18 years | 50.7 |
| Older than 18 years | 15.5 |
| Both | 18.3 |

* ROMERO M. Adicciones en mujeres y su relación con otros problemaS de salud mental. Propuesta de un programa de reducción del daño. Proyecto CONACYT 34318-H, 2002.

According to the criteria used in the MINI, nearly two thirds of the population interviewed (62.0%) were experiencing a major depressive episode, while alcohol dependence was reported in 19.7% of the population interviewed and substance dependence in 74.2%. Among the depressed population (n=132), the frequency of alcohol dependence was 23.5% (n=31), as opposed to 78.0% (n=101) for substance dependence.

One important aspect is the fact that the instrument considers nine symptoms in the exploration of depressive episodes among the population of depressed women; the average number of symptoms reported is 7.3 ± 1.3. Although the instrument does not define the severity of the episode, it is important to note that the average number of symptoms present in the population affected suggests a high likelihood of the severity of the disease. The exploration of dependence showed that the alcohol-dependent population reported an average of 7.6 ± 1.1 symptoms, while the substance-dependent population reported 7.2 ± 1.3 symptoms.

Table II shows the different socio-demographic variables among the depressed population. Most of the women were aged 28 to 40 (47.7%), and when analyzed by coexisting dependencies, the group aged 18 to 27 had the highest frequencies, which were statistically significant with respect to the other groups.

Educational attainment tended to be low, with only 13% reporting having completed senior high school or technical college. An elementary school group of women showed the highest frequencies of depression. This condition is similar in the presence of dependence to alcohol and substance.

In all the groups, single women displayed the highest frequency of depression, followed by women that reported living with their partners. An important aspect of the interview is that regardless of the report on their marital status, 80% of the women experiencing both depression and dependence mentioned having a partner.

Women with children under 18 reported a higher frequency of depression, both in the total sample and in combination with some form of dependence. It is worth noting that children under the age of 18 were often looked after by their maternal grandparents (54.4%), by the father (32.4%), followed by the paternal grandparents (17.6%), a sister (16.2%) or another relative (11.8%). Only low percentages are looked after at institutions (2.9%) or by non-relatives (1.5%) or take care of themselves (1.5%).

As for the length of time spent in prison (table III), most of the depressed population belonged to the group that had spent between one and four years in prison. Findings were similar when we explored women with substance dependence, and this difference is statistically significant in comparison with other groups. Conversely, the alcohol-dependent women group that had been in prison less than six months, were more frequently depressed and this was statistically significant in comparison with the rest of the groups for this association.

**TABLE II. Demographic variables in depressed women by type of dependence**

| *Demographic variables* | *Alcohol dependence n = 31* | *Substances dependence n = 103* | *Total n = 132* |
|---|---|---|---|
| Age group | | | |
| 18 - 27 | **61.3*** | **46.6**** | 38.6 |
| 28 - 40 | 32.3 | 42.7 | 47.7 |
| 41 - 62 | 6.5 | 10.7 | 13.6 |
| Education | | | |
| No schooling | — | 1.9 | 2.3 |
| 6 years or less | 48.4 | 48.5 | 47.0 |
| Secondary | 42.9 | 35.9 | 37.1 |
| Preparatory or technical | 9.7 | 13.6 | 13.6 |
| Civil state | | | |
| Unmarried | 58.1 | 55.3 | 52.3 |
| Married | 3.2 | 7.8 | 7.6 |
| Common Law | 22.6 | 22.3 | 23.5 |
| Widow | — | 2.9 | 3.8 |
| Divorced | 6.5 | 3.9 | 3.8 |
| Married-separated | 9.7 | 7.8 | 7.6 |
| Never married | — | — | 1.5 |
| Partner relationship | | | |
| No | 12.9 | 8.7 | 46.2 |
| Yes | 87.1 | 91.3 | 53.8 |
| Children | | | |
| No children | 19.4 | 15.5 | 16.7 |
| Younger than 18 years | 38.7 | 54.4 | 51.5 |
| Older than 18 years | 22.6 | 16.5 | 15.9 |
| Both | 19.4 | 13.6 | 15.9 |

* $x^2 = 8.947$, df 2, p = 0.011.
** $x^2 = 13.169$, df 2, p = 0.001.

Most of the depressed female inmates had sentences of between three and less than seven years (43.2%). A similar frequency was found among women with both types of dependence, each with significant statistical differences compared with the frequency reported for the other groups. It is worth noting that 21.5% of the women who did not know how long they had been sentenced for at the penitentiary institution experienced depressive episodes.

A total of 43.9% of depressed women reported having been previously in jail, which was also the case of 32.3% of those with alcohol dependence and 53.4% of those with substance dependence.

Half of the depressed women (51.5%) reported having sought assistance for emotional or mental problems at the penitentiary institution, and when dependency to alcohol coexists, only 28.6 % asked for help for the problem of the consumption, whereas in the presence of the dependency to substances the help search was 88.6%.

## DISCUSSION

Women in prison have to cope with difficulties such as delays in getting a sentence, bad physical conditions

**TABLE III. Legal situation variables in depressed women by type of dependence**

| Variable imprisonment | Alcohol dependence n = 31 | Substances dependence n = 103 | Total n = 132 |
|---|---|---|---|
| Time of permanence | | | |
| Under 6 months | 38.7* | 19.4 | 18.2 |
| 6 months to less 1 year | 35.5 | 19.4 | 17.4 |
| 1 to less than 4 years | 16.1 | 38.8** | 36.4 |
| 4 or more years | 9.7 | 22.3 | 28.0 |
| Time of sentence | | | |
| Lees than 1 year | 9.7 | 5.8 | 4.5 |
| 1 to less 3 years | 6.5 | 6.8 | 6.8 |
| 3 to less 7 years | 32.3† | 47.6†† | 43.2 |
| 7 or more years | 19.4 | 26.2 | 32.6 |
| It does not know | | | 12.9 |
| Criminal antecedents | | | |
| Yes | 32.3 | 53.4 | 43.9 |

*$x^2$ = 26.404, df 3, p = 0.000.**$x^2$ = 7.685, df 3, p = 0.053.
†$x^2$ = 17.463, df 3, p = 0.002.††$x^2$ = 9.794, df 3, p = 0.044.

in the prisons, low psychological attention and unfair paid work. All the above is reflected in the lack of specific institutions for women that could be explained by the low representativeness in the total number of inmates in the whole penitentiary population at national level.

Besides of being deprived of their freedom, women do not have their essential rights and are subjected to non-hygienic conditions. To cope with these situations is a personal fight that for some is intolerable.

Literature that has deserved attention to describe these situations with frequency does not take in consideration the anxiety level experienced by some prisoners, that make efforts to maintain anxiety and stress under control (9, 29, 33).

It can be worsened by considering that most of the population has a low level of education, being not greater that secondary school studies, half of them reported being single and in the same frequency had children under 18 years. This aspect is quite relevant because separation of children is seen as the loss of an important attachment that can be severe in the adaptation to the new environment of punishment, besides women with frequency ignore who is taking care of their children. All these situations can be considered as precipitating factors of mental disorders (14, 16, 19, 23).

Some of these disorders can be observed like isolation inside the prison, lack of socialization activities and not being able of doing the duties that have been requested for the authorities, in consequence this situation can carry on more problems inside the penitentiary institution like punishments. Psychological symptoms provoke a will paralysis, pessimism, despair, and diminished activity. Women also avoid being engaged with any activity or goal even when it is an entertaining one, and for many depressed women in prison it can increase the isolation.

The present study allow us to build a general overview of the magnitude of the major depressive disorder and dependence to substance abuse in women in prison, pointing out that two thirds of the interviewed women are affected by these disorders. This frequency is similar to that reported in other studies at national and international level where prevalence has been estimated as high for mental disorders in general and in particular for depression and substance abuse (4, 7, 10, 12, 16, 20, 21, 25, 37, 46, 47).

There is evidence that mental disturbance in general shows a severe intensity, despite the fact that in the present study intensity or severity of the depressive episode was not measured. One good indicator that give us an aggregated vision is the presence of seven or more symptoms in almost two thirds of the women (8, 22, 29, 46).

The former gets a great relevance due to the frequency of the comorbidity of the depressive disorder, due to almost a quarter of the depressed women also presented alcohol dependence, while for substance abuse dependence more than three quarters are affected by this association.

Demographic characteristics in the affected populations for the depressive disorder and in comorbidity showed a mayor frequency only for the depressive disorder group of 28 to 40 years, but in the presence of dependence to either alcohol or drugs the most affected group is the one from 18 to 27 years.

Women with less years of school, below secondary school, showed the greater frequency either of the depressive disorder only or with comorbidity, being single and the fact that almost half of the women reported not having a partner relationship are demographic aspects that in general are similar to those reported in other national and international studies with relation to women in prison affected by a major depressive disorder (5, 7, 16, 21, 25, 29, 37, 47).

The interviewed population showed that the longer the permanence or the sentence, the higher the frequency of the depressive disorder. A possible explanation goes in the sense that being imprisoned for a long time may have severe consequences in the well-being of the women, due to that in most of the cases, the women's abandon by their relatives, losing many of them their husband or relation with their loved ones, increases the lose of social support. The same occurs with friendships (4, 15, 28, 35, 43).

The problem of mental disorders becomes more evident when it is estimated that only close to 40% of the people who have a disorder receive treatment. Nearly half of the depressed women has not received attention for their mental health problem. In the group of women with alcohol dependence less than a quarter

has asked for help, in contrast with the group with substance dependence where two quarters of the women have asked for help (24, 31).

Like wise, prison itself generates depression and this condition is a normal reaction in front of the new situation with the wrong belief that the symptomatology will be limited by itself. In other studies it has been observed that being deprived of freedom results in the lose of emotional relationships, solitude and boredom, lack of services, of heterosexual relationships, of autonomy, of security, a problematic cohabitation with other unpredictable prisoners which causes fear and anxiety. All these deprivations can constitute a serious aggression to the personality and to self esteem by themselves but do not justify the lack of attention to this population (9, 17, 24, 30, 46, 50).

Most of the depressed patients tend to look their personal world with exorbitant demands, full of obstacles for achieving their goals or simply see their future in a completely negative way. They look at their future with constant difficulties, deprivation and frustration (6, 18).

In general population, where there is a depressive episode and substance abuse, the latter more common are alcohol, opiates and stimulants dependence (42). While in the women in prison it was only reported that they use drugs with more frequency and hard drugs (31).

Associations with these specific dependencies are those that have been more studied in particular with the major depressive disorder (49). One possible explanation is the self medication hypothesis that is with frequency mentioned (26, 34).

Self-medication allows us to explain most cases, if we consider the widespread version of this hypothesis: an attempt to relief the symptoms of the depression, regardless of its origin. Alcohol, opiates and stimulant patients self- medicate their symptoms (27).

The risk of developing a major mental disorder for substance abuse (MDSA) is not greater in persons with depression than in general population (36, 50). It has not been demonstrated whether a patient with affective disorder follows a specific pattern of substance consumption (38). Identifying a fixed consumption pattern may be difficult when the person takes the substance to correct her/his affective oscillations (27).

Mentioned above is more relevant if we consider that treatment programs for substance abuse were designed originally for men, which makes them inadequate for women treatment (31).

Another problem to the depressive condition is the presence of irritability like an involved symptom. In prison, the environment may represent a bigger problem due to constant conflicts with other inmates or authorities, which in turn bring about punishments or even increased sentences.

The described conditions can support the presence of substance abuse with the depression like a way of self-medication of the present affective symptoms, but it may be too that there is not a link among them and evolve independently one from another (39).

In front of this panorama emerges the need to make an adequate evaluation of the women entering these institutions and not only of general medical conditions like their health status. It is indispensable to develop an attention program and the evaluation of emotional or mental status for those women who have recently entered, with prolonged permanence, and in the follow up to evaluate their degree of adaptation to the environment.

If the mentioned above is obtained it could avoid the evolution of the illness to more severe situations. It is known that depression follows a recurrent pattern and its course could be chronic. The illness can oscillate between mild, moderate, and severe states that may include suicidal behaviors, a condition that can be increased by substance abuse. Therefore, pharmacologic treatment is necessary, either to improve the mood state or to mitigate anxiety, considering the necessary care for the anxiety prescription due to the potential abuse of this type of substances, mainly in the abstinence phenomena to diminish the suffering.

It is worth mentioning that a mental health staff formed by nurses, psychologists and psychiatrist is indispensable for the interdisciplinary attention of mental disorders, and at the same time it has to be sensitive to the condition of women in prison and without a stereotyped vision of the delinquent women.

There is much to be done because the spaces where women stay are not adequate due to the penitentiary infrastructure was thought more in men condition. It also illustrates the existing failure related to attention and research about the effect of the life in prison.

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# Anexo 1. Episodio depresivo mayor

| | | | | |
|---|---|---|---|---|
| A1. | En las últimas dos semanas, ¿te has sentido deprimida o decaída la mayor parte del día, casi todos los días? | NO | SI | 1 |
| A2. | ¿En las últimas dos semanas, has perdido el interés en la mayoría de las cosas o has disfrutado menos de las cosas que usualmente te agradaban? | NO | SI | 2 |
| **¿Codificó SI en A1 o en A2?** | | NO **Pase a A4** | SI **Pase a A3** | |
| **A3** | En las últimas dos semanas, cuando te sentías deprimida o sin interés en las cosas: | | | |
| a. | ¿Disminuyó o aumentó tu apetito casi todos los días? ¿Perdiste o ganaste peso sin intentarlo? (Ejemplo variaciones de + - 5 de tu peso corporal o + - 3.5 Kg.) | NO | SI | 3 |
| b. | ¿Tenías dificultad para dormir casi todas las noches? (dificultad para quedarte dormida, te despertabas a media noche, te despertabas temprano en la mañana o dormías excesivamente) | NO | SI | 4 |
| c. | ¿Casi todos los días, hablabas o te movías más lento de lo usual, o estabas inquieta o tenías dificultad para permanecer tranquila? | NO | SI | 5 |
| d. | ¿Casi todos los días, te sentías la mayor parte del tiempo fatigada o sin energía? | NO | SI | 6 |
| e. | ¿Casi todos los días, te sentías culpable o inútil? | NO | SI | 7 |
| f. | ¿Casi todos los días, tenías dificultad para concentrarte o tomar decisiones? | NO | SI | 8 |
| g. | ¿En varias ocasiones, deseaste hacerte daño, te sentiste suicida o deseaste estar muerta? | NO | SI | 9 |