In this study a research about co morbidity of personality disorders in homeless people is carried out. The aim of the study was to analyze whether co morbidity between disorders exists. A cross-sectional ex post facto study with a sample of 91 patients who completed a semi-structured interview and the MCMI II during the course of the treatment was conducted. The results show how in 40.6% of the sample, two or more personality disorders coexist at the same time, with a mean of 2.06 PD per person. Furthermore, personality disorders in Group B: anti-social, borderline, histrionic and narcissistic, are the ones which present a higher co-morbidity index. On the contrary, personality disorders in Group C: compulsive, avoidant or dependent, although they have a greater presence, they hardly present co-morbidity with others. Finally, the implication this study has on clinical practice and further research lines are discussed.

Key Words: Co-morbidity, personality disorders, homeless, MCMI II, treatment.

En este estudio se lleva a cabo una investigación sobre co morbidad en los trastornos de personalidad en personas sin hogar. El objetivo del estudio era analizar si existe co morbidad entre trastornos. Para ello, se lleva a cabo un estudio ex post facto, de carácter transversal, con una muestra de 91 pacientes, que cumplimentaron una entrevista semiestructurada y el MCMI II, en el transcurso de su tratamiento. Los resultados muestran como en un 40.66% de la muestra, coexisten 2 o más trastornos de personalidad a un tiempo, con una media de 2.06 TP por persona. Además, los trastornos de personalidad del grupo B: antisocial, límite, histriónico y narcisista, son los que un mayor índice de co morbidad presentan. Por el contrario, trastornos de personalidad del grupo C: obsesivo-compulsivo, por evitación o por dependencia, a pesar de tener mayor presencia, apenas presentan co morbidad con otros. Por último, se comentan la implicación que tiene este estudio en la práctica clínica y líneas futuras de investigación.

Palabras Clave: Co morbidad, trastorno de personalidad, persona sin hogar, MCMI II, tratamiento.
Personality disorders (PD) are defined as “a permanent behavior and internal experience pattern which notably deviates from the following areas: “cognition, affection, interpersonal operating and impulse control” (American Psychiatric Association, 2000). Furthermore they have some basic features a) it is deep-rooted and it is inflexible by nature, b) it is upset, specially in interpersonal contexts d) it worsens significantly the ability of the person to operate and e) produces discomfort in the person´s environment” (Caballo, 2004).

For these reasons and due to the difficulty of its approach (Millon, 1998), mental health professionals refer to them as the great challenge of the 21st century (Gunderson & Gabbard, 2000); week pharmacological results and a great rate of withdrawal of the treatment of people with this pathology must be added. (Fernández Montalvo, López Goñi, Landa, Illescas, Lorea & Zarzuela, 2004).

The therapies used for this personality disorders, with difficulty belong to what is called Clinical Guidelines, as efficient or likely efficient treatments. (Bados, García & Fusté, 2002; Quiroga & Errasti, 2001). These results are often restricted to likely efficient techniques in some of the disorders, dialectics behavioral therapy (Linehan, 1993a, 1993b) in the borderline personality disorder, cognitive therapy (Beck and Freeman, 1995) or classic behavioral techniques, which rely on empirical support (Quiroga & Errasti, 2001). In other cases, there are many other diverse treatments for personality disorders (Caballo, 2004; Gunderson y Gabbard, 2000), as the Case Studies: a unique or few cases in which new treatment variables are probed, as the one starring Kush (1995) about suicidal behaviors treated with extinction techniques.

Recently, studies about mental disorders (Hayward & Moran, 2007; Statistical National Institute 2004), personality disorders in general population (Echeburúa and Corral, 1999) or about people with addiction treatments have been conducted (Fernández-Montalvo & Landa, 2003; Pedrero, 2006; Navas & Muñoz, 2006; Rubio & Pérez, 2003). But the presence of these factors in homeless people (HP) is something which it had been observed but it has not been studied or objectify until recently. (Caballo, 2004).

The data collected in the current study have been obtained by means of individual conventional interviews with homeless people in a placement process and the MMI II. All the participants signed an informed consent for participating in the study. The MMII was applied. (Fernández-Montalvo et al., 2004; Pedrero, 2006).

Method

Participants
The sample consists of homeless people (N=91), all of them male, aged between 22 y 52 years (M=37,86), who developed a process of placement in the centre. The 91 subjects of the study were chosen from 114 people, who went through a placement process for homeless people, depending on the following criteria: a) fulfill the criterion of homeless people; b) to have stayed two or more months at the centre; c) voluntary participation in the study; y d) to remain the necessary time to fulfill it.

Instruments
Initial Evaluation Interview. An individual organized interview was conducted to make the diagnosis. In this interview the most significant data were collected: age, marital status, degree of studies, age of initiation of the passer-by situation, reason for the initiation, alcohol and drug-taking, previous psychological treatment, etc.

Millon’s Multiaxial Clinical Inventory (MCMI II) (Millon, 1997): the questionnaire consists of 175 questions, with a true-false structure, which is answered in 25-30 minutes. The results provides us with 10 basic personality scales: schizoid, phobia or avoidant, dependent, histrionic, narcissistic, antisocial, aggressive/sadistic, compulsive, passive-aggressive and self-destructive; three pathological personality scales: schizotypal, borderline and paranoid; six clinical syndromes with moderate severity: anxiety, somatoform disorder, hypomania, depressive/neurotic, drug dependence and alcohol dependence, three clinical syndromes with high severity: thought disorder, major depression and delusional disorder, and four reliability and validity scales: validity, sincerity, desirability and disturbance.

Procedure
The data collected in the current study have been obtained by means of individual conventional interviews with homeless people in a placement process and the MMI II. All the participants signed an informed consent for participating in the study. The MMII was applied and corrected by the clinical psychologist of the centre. indicates a suspicion of the presence and severity of the
score at the MCMI II base-rate (B-R) was higher than 84, according to the most conservatory Wetzler (1990) criteria was considered in the study. Furthermore, more than two months of stay in the centre were awaited, time considered essential to measure the adhesion to treatment and achieve sincerity and reliability in the interviews and administered tests.

**Statistical Treatment**

For data statistical analysis, the SPSS statistical package version 13.0 was used. A descriptive analysis for each one of the variables (maximum, minimum, mean and standard deviation) was conducted. A significance level of 5% was used in every case and differences with a p<0.05 value have been considered significant. Cross-variables analysis and bilateral level correlations were conducted.

**Results**

Next, the results obtained in the several studied variables are presented:

**Socio-demographic variables**

Socio-demographic features are described in Table 1. As we observe the mean age of the subjects in the study is 37.86 years, with a range between 22 and 52 years. There are not women as it is a centre exclusively for men. 59.3% are single, although they have had previous couples, and moreover 37.4% are separated or divorced.

<table>
<thead>
<tr>
<th>Variables</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AGE</strong></td>
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</tr>
<tr>
<td>Mean</td>
<td>37.86</td>
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<tr>
<td>Range</td>
<td>(22-52)</td>
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<tr>
<td>&lt;30 years</td>
<td>19</td>
<td>(20.9%)</td>
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<tr>
<td>30-39 years</td>
<td>33</td>
<td>(36.3%)</td>
</tr>
<tr>
<td>40-49 years</td>
<td>32</td>
<td>(35.2%)</td>
</tr>
<tr>
<td>&gt;50 years</td>
<td>7</td>
<td>(7.7%)</td>
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<tr>
<td><strong>MARITAL STATUS</strong></td>
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<tr>
<td>Married</td>
<td>3</td>
<td>(3.3%)</td>
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<tr>
<td>Single</td>
<td>54</td>
<td>(59.3%)</td>
</tr>
<tr>
<td>Separated/divorced</td>
<td>34</td>
<td>(37.4%)</td>
</tr>
</tbody>
</table>

**Variables related to the previous history**

As regards to the age when the homeless situation started, 38.5% began before the age of 20, 33% between the age of 20 and 29, 26.4% between the age of 30 and 39 and only 2.2% (2 cases) began after the age of 40. The main causes which raw them to the street are expressed as percentages, addictions (27.5%), problems with the origin family (26.4%), divorce (14.3%) and labor, psychological problems and other causes to a lesser extent.

**Personality variables**

Results obtained from the administration of MCMI II show that the number of people with a significant score (TB>84) is 58, which means 63.74% of the sample, with one or more personality disorders; moreover, in 37 people (40.66% of the sample) 2 or more personality disorders coexist at the same time, with a mean of 2.06 TP per person.

From a categorical perspective, the more prevalent disorders are anti-social (26.4%), compulsive (22.0%), dependent (19.8%) y schizoid (18.7%). From a quantitative perspective the higher scores were obtained in anti-social ($M = 65.71, SD = 28.023$), compulsive ($M = 65.05, SD = 26.384$) and paranoid ($M = 62.10, SD = 22.730$).

We have to point out that there were subjects whose test showed they might present one or more subscales with high scores.
Data were compared with other studies such as the one showed by Echeburúa & Corral (1999) which contributes with normal population data and clinical samples (Table 4). Remember that the most conservatory Wetzler (1990) criteria were used. Only in the pathological personality disorders: paranoid and borderline, scores from the subjects in the study are expressed as values from other clinical samples; in the other pathological personality scale and in the 10 basic scales, scores obtained are higher than in other studies.

Although percentages varied, the present disorders were similar to the ones found in previous studies (Bricolo, Gomma, Bertani & Serpelloni, 2002; Fernández-Montalvo et al., 2003, 2004): anti-social: 35,1%; dependent: 29,9%; narcissistic: 28,6%; y compulsive: 28,6%.

Table 4.
Comparison of data with Echeburúa and Corral (1999)

<table>
<thead>
<tr>
<th>Personality disorders</th>
<th>Normal Population*</th>
<th>Clinical Samples*</th>
<th>Study</th>
</tr>
</thead>
<tbody>
<tr>
<td>T. paranoid</td>
<td>0,5%-2,5%</td>
<td>10%-30%</td>
<td>13,2 %</td>
</tr>
<tr>
<td>T. schizoid</td>
<td>0,5%-4,5%</td>
<td>1,4%-16%</td>
<td>18,7 %</td>
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<tr>
<td>T. schizotypical</td>
<td>3%-5%</td>
<td>2%-20%</td>
<td>15,4 %</td>
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<tr>
<td>T. histrionic</td>
<td>2%-3%</td>
<td>2%-15%</td>
<td>7,7 %</td>
</tr>
<tr>
<td>T. narcissistic</td>
<td>&lt;1 %</td>
<td>2%-16%</td>
<td>8,8 %</td>
</tr>
<tr>
<td>T. anti-social</td>
<td>1%-3%</td>
<td>3%-30%</td>
<td>26,4 %</td>
</tr>
<tr>
<td>T. borderline</td>
<td>2%-3%</td>
<td>10%-40%</td>
<td>9,9 %</td>
</tr>
<tr>
<td>T. avoidant</td>
<td>0,5%-1%</td>
<td>10%</td>
<td>13,2 %</td>
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<tr>
<td>T. dependent</td>
<td>15%</td>
<td>2%-22%</td>
<td>19,8 %</td>
</tr>
<tr>
<td>T. obsessive-compulsive</td>
<td>1 %</td>
<td>3%-10%</td>
<td>22,0 %</td>
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## Table 5.
*Correlation between personality disorders*

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<td>Schizoid</td>
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<td>Histrionic</td>
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<td>Narcissistic</td>
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<td>Anti-social</td>
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<td>Aggressive</td>
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<td>Compulsive</td>
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<td>Passive</td>
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<td>Self-destructive</td>
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<tr>
<td>Schizotypical</td>
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<td>Borderline</td>
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<tr>
<td>Paranoid</td>
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** p<0.01    * p<0.05
In Table 5, co-morbidity between personality disorders in homeless people who participated in the study are observed. To seek for the correlation, Pearson correlation index when p<0.01 was analyzed. It can be appreciated how disorders such as the aggressive correlate with other five more PD: phobic (0.398), narcissistic (0.398), antisocial (0.623), passive (0.563) and self-destructive (0.468), whereas other such as the dependent or compulsive do not correlate with anyone else. Only if we seek for p<0.05, the dependent disorder will correlate with others such as the anti-social (0.242), aggressive (0.226) or passive (0.23).

Discussion and Conclusions
A high presence of personality disorders in homeless people was observed in the study (63.74%), with 40.66% presenting co-morbidity (two or more disorders at the same time) far above from the epidemiological data found in the general population (American Psychiatric Association, 2000; National Statistics Institute, 2004), expected result due to being homeless people, a high risk subpopulation. Specifically, high prevalence is found in anti-social (26.4%), compulsive (22%), dependent (19.8%) and schizoid (18.7%). On one hand, this finding is consistent with the role played by the lack of social skills in the development and maintenance of the homeless situation (Cabrera, 1998); and on the other hand with the alcohol-taking (Ball, Cobb-Richardson, Connolly, Bujosa, & O’Neall, T, 2005).

Disorders such as anti-social, aggressive, self-destructive and paranoid were also found to present high levels of co-morbidity with others. This does not surprise in the case of the anti-social PD, which appears in 26.4% of the subjects in the study; in terms of frequency is more probable to achieve a higher correlation. The case of the self-destructive PD is more surprising, it only appears in 8.8% of the subjects, reaching a high level of correlation with the rest of PD. On the other hand, we find that PD such as schizoid, dependent or compulsive, scarcely correlates with others. It is another significant data, because it appears in 22.0% of the sample, that is, one out of five subjects presents scores which indicate pathology in this personality scale. Despite this, it scarcely correlates with dependent PD and with anti-social and paranoid PD (p<0.05).

Something similar happens with the dependent PD in 19.8% and schizoid PD in 18.7% of the population of the study, which coincides with the reviewed literature for the research. This leads us to believe that there is a type of personality typical from homeless people who participate in the study, consequence of its own experience, but also of the events lived during the stay at the street, which makes them different from the general population and which contributes with similar data to other studies, (Oldham, Skodol & Kellman 1992; Zimmerman & Coryell, 1990), with special features such as the couple with a higher correlation is anti-social with aggressive (16.9% of the cases with PD), but with similarities such as to find together the couples narcissistic with anti-social; histrionic with aggressive; and avoidant with schizotypical, as the ones which present a higher co-morbidity.

Data correspond to previous studies in populations with similar features (Fernández-Montalvo et al., 2003, 2004; Landa, Fernández-Montalvo, López-Goñi & Lorea, 2006; Navas & Muñoz, 2006; Pedrero, 2006; Pedrero et al., 2003).

This increases the concentration of the coexistence of two or more personality disorders in certain people; if one third of the people third of the people suffer from compulsive PD and it does not coexist with others, it will be on the two thirds left of the population where this correlation between PD will be found. The coexistence of two or more personality disorders in the same person makes the process difficult, worsening the prognosis. (Dolan, Evan & Norton, 1995).

Revising the existing literature concerning personality disorders co-morbidity, we find that avoiding and borderline PD are the most co-morbid, according to DSM-
Personality disorders in homeless people

IV, followed by the histrionic and narcissistic PD. Meanwhile dependent PD and schizoid were diagnosed on their own (Zimmerman & Coryell, 1990).

Likewise in the couple analysis, those who correlate are: narcissistic with anti-social; histrionic with passive-aggressive; avoidant with schizotypal and dependent and borderline with histrionic. Furthermore, it has been checked that the number of PD correlates with the severity of the psychopathology and worsening of the operation. (Oldham et al., 1992).

As a main conclusion, according to the scores obtained in the MCMI II and the personality disorders (PD) classification carried out by the Mental Disorders Diagnosis Manual: DSM IV-TR (American Psychiatric Association, 2000), we observe that in the case of homeless people, PD from Group B (anti-social, borderline, histrionic and narcissistic), also called “theatrical, changeable or impulsive” are the ones which present a higher number of correlations with the rest of PD. On the other hand, PD in Group C (obsessive-compulsive, avoidant), called “anxious or frightful”, scarcely correlate or coexist with other PD. In an intermediate level we have PD from Group A (paranoid, schizoid and schizotypal) called “foreign or eccentric”.

This indicators suggest that for the studied sample it seems that it exists an own personality of the homeless people (Cabrera, 2000), probably previous, perhaps built up and molded during the stay on the street, perhaps due to a combination of both, increased by their own social situation (Twenge, Baumeister, DeWall, Ciarocco, & Bartels, 2007). Beginning studies around pre-morbid personality in homeless people can be an interesting framework for its approach. Another line of research involves the approach of co-morbidity between personality disorders, which makes the recovery of these people and their prognosis difficult. Treatments must be directed towards new lines of work, considering both individual and group aspects (Dixon et al., 1997 (Ball, Kearney, Wilhelm, Dewhurst-Savellis, & Barton, 2000; Davidson, 2008).

Moreover, it must be pointed out that although MCMI II is a wide test used in the clinical framework and its used is widely extended, it is considered as a self-report test (Aparicio & Sánchez, 1999), so it seems necessary to resort to, in further research, other tests which solve these circumstances (Rubio & Pérez, 2003), such as the IPDE (Loranger, 1995) specific clinical interview of personality disorders.

As a weakness of the study it must be pointed out that although the study’s great variety diagnosis is an iatrogenic phenomenon linked to all personality disorders and an obvious sign of the difficulty to classify these patients (Pailhez & Palomo, 2007), the MCMI II seems to present a tendency to over-diagnose opposite to tests such as the IPDE giving a high co-morbidity index between personality disorders (Fernández-Montalvo, Landa, López-Goñi & Lorea, 2006), which can determine the results found in the study.

However, this must not limit the MCMI II utility to determine the possible presence of personality disorders, but it can serve to plan therapeutic aims and treatments depending on the personality features of the person (López & Becoña, 2006) and achieve a decrease in the cost of the treatment, as well as an increase in its effectiveness (Rosenheck, 2000) and consider new therapeutic ways towards the work with personality disorders. (Parker & Barrett, 2000).

In any case, the results in this study show that the examined homeless people present more psychopathological symptoms tan the one found in the general population. This involves the necessity to take into account co-morbidity between personality disorders in homeless people, both in the treatment and in the development of specific intervention programs. On the other hand the size of the sample of homeless people although it is remarkable from the clinical point of view, it is relatively small from a statistical perspective. For this reason, a larger number of similar studies is required, with the aim of being able to identify the specific profile of personality disorders in homeless people.

References


