Family typology and deterioration related to opioids use, in a methadone treatment patients group

In this article the familiar functioning of subjects addict to opioids included in a maintenance programme with methadone will be analized, trying to identify whether belonging to one type of family (family typology) or another according to Olson’s Familiar Functioning Model, is related to the level of deterioration or severity of addiction of the different areas associated to consumption. The sample is composed by 69 subjects (N=69) users of the Servicio de Atención a las Drogodependencias (SAD) in Centro de Servicios Sociales Comunitarios del Ayuntamiento de Alcalá de Guadaíra (Seville). In order to evaluate the functioning and the family typology of these subjects the Escala de Cohesión y Adaptación Familiar –CAF–1, Spanish version of FACES III was used2. In order to evaluate the level of deterioration, the Spanish version3 of the 5th edition of the personal, clinical semistructured interview Addiction Severity Index–ASI4 was applied. The results indicate that the subjects included in balanced families present more addiction severity in two dimensions of the ASI: Alcohol and Employment/Support and are, moreover, the ones that take greater doses of methadone.

Keywords:
Family functioning, family typology, addiction severity, opioids addicts, methadone, Descriptive study by means of survey.

INTRODUCTION

Authors of different disciplines and from different theoretical orientations have concluded in their research that it cannot be considered that only one factor would be responsible for drug dependency. Martínez-Pampliega, Iraurgi, Muñoz-Eguileta, Galíndez, Cosgaya and Nolte (2004) gathered the principal factors in three settings that were related with substance consumption: individual, relational and social-environmental. Thus, the incidence and severity of an addiction would be determined by the interaction between these three scenarios. For Gonzalez-Saiz, Salvador, Martínez, López, Ruz and Guerra5, the research work on addictions must be carried out from a multidimensional perspective and contemplating the above-mentioned settings. Along this line, Meulenbeek6 found that treatment had been indicated in one third of the patients with heroin addiction due to abuse as well as because of other associated areas such as: work, legal status, social and psychological functioning.
McLellan, Randall, Joseph and Alterman7 concluded in an interesting work that psychiatric disease, unemployment and impoverished family relationships are more predictive of treatment dropout than simple demographic variables or consumption patterns. Iraurgi, Sanz and Martinez-Pampliega8 found a relationship between the severity of the addiction (EuroPASSI) and family functioning. Use of drugs is linked to greater family stress, lower family satisfaction and worse communication and resources.

The role of the family

Different authors have given importance to the role that the family may have in genesis, maintenance and severity of the drug addiction of a child, as well as its potentiality as a resource for their treatment8.

a) Unresolved difficulties in the family of origin

Some research works report unresolved difficulties by the parents, such as conflicts with their own family of origin, traumatic events, poorly elaborated grief, drug consumption and problems with the significant other. Coleman, Kaplan and Downing9 described heroin addiction as a coping method learned in the family, a form of "spiritual vaccine" before death, separation and losses during a lifetime. Many of the parents of young heroin addicts of their study had suffered experiences of death and separation without achieving adequate elaboration of them during their childhood and adolescence. These experiences were repeated in many cases in the drug addict children. In addition, Friedman, Utada and Morrissey10 found a positive correlation between the problems in family members and development of drug dependencies in the children. Nonetheless, strangely, the subjects interviewed rarely could establish a cause-effect connection between severity of their disorder and the problems experienced in the family nucleus. According to Secades-Villa and Fernández-Hermida12, use of drugs by the parents is especially important in the genesis of the drug addiction. Along this line, Muñoz-Rivas and Graña13 stated that the alcohol consumption by the father was an important familial risk factor and Friedman, Terras and Glassman14 observed significant relationships between alcohol consumption in the children and severe consumption in the mother. Sanz et al.15 found that a greater degree of marital conflict perceived by the children would be associated to drug consumption. These authors consider that matrimonial conflict could increase the intensity and frequency of dysfunctional relationships in the family or could have a negative affect on the control of the child's behavior and consequently on family functioning. In this scenario, and in agreement with Haley16, the consumption would act as a regulator of the parents.

b) Parental styles or supervision-discipline

Garvey7, Secades-Villa and Fernández-Hermida12 have stressed the importance of the educational styles and parenting styles and permissive attitude towards drugs in the development of drug dependencies. Harbin and Maziar18 described the father of the drug addict as absent an emotionally distant from the child and the mother as indulgent and overprotective, with the tendency to become involved as a confidant or accomplice in the addictions of their children. In the words of Kaufman and Kaufman19, the mother would be overinvolved and indulgent and at times symbiotic. In agreement with these authors, Anderson and Eisemann20 affirmed significant relationships between drug consumption and parenting style of rearing the child characterized by rejection and overprotection. Alexander and Dibbs21 and Selvini22 observed that the parents of addicts frequently made attempts to control the addictive behavior of their children, but with fruitless results, since they were not usually accompanied by the necessary parental support to achieve independence and adult responsibility. Furthermore, they described the relationship with the addict child as of extreme indulgence by both parents and the tendency to perceive the child as a failure based on conventional values. This perception provides a very fragile basis to support the differentiation attempts because it does not transmit acceptance and tolerance as well as control and strictness that are essential to achieve autonomy. Stanton and Todd23, 24 use the concept of "pseudoindividualization" to define this situation of the drug dependent. By using drugs together with positive attitudes towards the transgression, the child appears to want to give testimony that he/she has definitively dissolved the ties with their youth, becoming emancipated from their parents. These conquests are shown to be imaginary, since the addiction to the drug's links the child with the family, making him/her increasingly more dependent materially and affectively.

c) Affective relationships and communication

Garvey7 observed that family harmony and cohesiveness affected coping with alcohol and drug consumption in the children. Along the same line, Mc Ardle et al.25 found that living with both parents was a less sturdy barrier for the consumption of substances than qualitative aspects of the family life, especially attachment to the mother. These authors and others (Alexander and Dibb;21; Charvoz, Bodenmann and Hermann,26; López-Torrecillas, Bulas, León and Ramírez,27 describe problems in the communication in families with consuming children. In the 1980’s, Olson et al.2, 28-30 developed a theoretical model of family functioning that was highly valued for its potentiality in the evaluation and investigation with families. The model, called Circumplex, explains family functioning based on three fundamental dimensions: cohesion, defined as emotional bonds that members of
MATERIAL AND METHODS

Participants

The sample is made up of 69 subjects (N=69), opiate addicts and enrolled in a methadone program in the Drug Dependent Care Service (DDCS) of the Centro de Servicios Sociales Comunitarios (Community Social Services Center) of the City Government of Alcalá de Guadaíra (Seville). A total of 87% (n= 60) of the subjects were men while 13% (n=9) were women. Mean age was 37.41 years (R=38). Regarding study level, 52.2% of the subjects had completed their primary studies and 27.5% had finished the equivalent of the first stage of the ESO (compulsory secondary school) (the Education system in which the subjects of our study had been included was regulated by the Organic Law of Education, prior to the current General Organic Law of Education System). In relationship with work setting, 53.6% were unemployed, 18.8% had stable work and 13% were pensioners.

Instruments

The instruments used in this research were the following:

CAF: Family Adaptability and Cohesion Evaluation Scales

To evaluate family functioning and typology, the Family Adaptability and Cohesion Evaluation Scales –CAF–, Spanish version of FACES III\(^2\) was used. The CAF is a 20-item Likert type self-evaluate questionnaire that evaluates two dimensions: Cohesion and Family Adaptation. Reliability for the cohesion is 0.78 and for the adaptability is 0.70. (Figure 2)

According to Olson\(^3\), the most balanced families, those having the greatest behavior repertoire and the most capacity to adapt to the changes, are more capable of change, have central levels of cohesion and adaptability and are considered the most functional for individual and familial development. Meanwhile, the extreme types (highest or lowest levels of adaptability and cohesion) are the most dysfunctional.

It is aimed in this work, on the one hand, to evaluate by means of the Circumflex Model family function of subjects addicted to opiates who at the time of performing the study are in a methadone treatment program and also to identify if belonging to one family type or another (familial typology) according to the Olson Model of Family Functioning is related with the level of deterioration or severity of the addiction of the different areas associated to consumption.

The starting hypothesis is that on the one hand, the families of drug addicts are located in the extreme typology according to Olson's circumflex Model, and on the other hand, that their severity is greater than in the balanced families.
**Addiction Severity Index (ASI).**

To evaluate the level of deterioration, we applied the Spanish version of González-Saiz et al., of the 5th edition of the clinical interview - Addiction Severity Index -ASI-. This interview consists in personal semi-structured interviews that are applied by a skilled evaluator for approximately 1 1/2 hours. The test-retest reliability is 0.78 and inter-raters 0.88. The ASI is multidimensional and offers valid and reliable information regarding the nature and severity of the treatment problems in the following scenarios: general medical status -GMS-, employment, alcohol use, drug use, legal situation, social and family relationships and psychiatric status.

**Procedure**

The Drug Dependent Care Service (DDCS) of the City Government of Alcalá de Guadaira gave us a list of the subjects using the service who complied with the enrollment criteria (opiate addicts within the methadone program and without psychiatric disorder). We provided an envelope addressed to each one of these users in hand to the different care facilities for the drug addict. This envelope included the Perceived Family Self-Evaluation Questionnaire (CAF) that should be returned to the DDCS technician once filled out and which was answered by 112 subjects. After, personal appointments were made in the Community Social Services Center to administer the semi-structured interview (ASI) by two trained evaluators. They were applied to 69 subjects.

**RESULTS**

An analysis was made with the box diagram for the description of the samples and to identify the relationships between the variables of our study: ASI variables, CAF variables, time in permanence in the methadone program - PMP - and dose (Table 1).

After, types of family were defined according to the Circumplex Model to which the subjects of the present study belonged (Table 2).

To evaluate the differences in each variable according to type of family, we used a Chi square analysis. Significant results were observed for the CAF variables (Cohesion -2.57; p= 0.01-, Adaptation -18.18; p=0.01- and Continuation -13.14; p= 0.01-) (Table 3).

However, when observing the results of the descriptive test of the box diagram, we found that these subsamples type 1 - Extreme and 2 - Mid-range - had very similar values to the variables Dose, Employment/Support and Alcohol. These variables were not significant in the Chi square test, however they demonstrated a clear tendency towards significance. For this reason, we believed that it would be interesting to perform a new analysis (post hoc) but, in this case, grouping the subsamples by pairs in relationship with the third one.

We grouped subsamples 1 and 2 and the resulting sample, we compared it with subsample 3 using Mann-Whitney U Test that revealed significant differences for the variable of Alcohol (0.041; p=0.05) and very close values to significance -p=0.05- in Dose (0.061) and Employment / Support (0.072). (Table 4)

The values of sample 3 (Balanced) for the variables alcohol and methadone dose were higher than for the combination of samples 1 (Extreme) and 2 (Mid-range), whereas the values for Employment/Support were lower for sample 3 (Balanced).
Table 3  
Chi squared comparing the three samples

<table>
<thead>
<tr>
<th></th>
<th>MMP</th>
<th>Doses</th>
<th>GMS</th>
<th>E/S</th>
<th>Alcohol</th>
<th>Drugs</th>
<th>Legal S</th>
<th>Fam R.</th>
<th>Psy. S.</th>
<th>Coh</th>
<th>Adapt</th>
<th>Com</th>
</tr>
</thead>
<tbody>
<tr>
<td>X²</td>
<td>0.100</td>
<td>3.730</td>
<td>0.647</td>
<td>3.237</td>
<td>4.449</td>
<td>0.471</td>
<td>1.155</td>
<td>1.074</td>
<td>0.108</td>
<td>32.567</td>
<td>18.179</td>
<td>13.139</td>
</tr>
<tr>
<td>gl</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Asymptot. Sig</td>
<td>0.951</td>
<td>0.155</td>
<td>0.723</td>
<td>0.198</td>
<td>0.108</td>
<td>0.790</td>
<td>0.561</td>
<td>0.584</td>
<td>0.947</td>
<td>0.000</td>
<td>0.000</td>
<td>0.001</td>
</tr>
</tbody>
</table>

Table 4  
U- Mann Whitney comparando muestras 1+2 con 3

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>MMP</th>
<th>Doses</th>
<th>GMS</th>
<th>E/S</th>
<th>Alcohol</th>
<th>Drugs</th>
<th>Legal S</th>
<th>Fam R.</th>
<th>Psy. S.</th>
<th>Coh</th>
<th>Adapt</th>
<th>Com</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>506.50</td>
<td>512.00</td>
<td>526.00</td>
<td>400.50</td>
<td>517.00</td>
<td>406.00</td>
<td>389.00</td>
<td>549.00</td>
<td>530.00</td>
<td>459.00</td>
<td>542.500</td>
<td>166.00</td>
<td>245.00</td>
<td>307.50</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>831.50</td>
<td>837.00</td>
<td>851.00</td>
<td>1390.50</td>
<td>842.00</td>
<td>731.00</td>
<td>1379.00</td>
<td>874.00</td>
<td>855.00</td>
<td>821.00</td>
<td>867.500</td>
<td>491.00</td>
<td>570.00</td>
<td>632.50</td>
</tr>
<tr>
<td>Z</td>
<td>-0.931</td>
<td>-0.475</td>
<td>-0.300</td>
<td>-1.877</td>
<td>-0.417</td>
<td>-1.799</td>
<td>-2.048</td>
<td>-0.112</td>
<td>-0.265</td>
<td>-0.679</td>
<td>-0.095</td>
<td>-4.802</td>
<td>-3.815</td>
<td>-3.040</td>
</tr>
<tr>
<td>Asymptot. Sig (bilateral)</td>
<td>0.352</td>
<td>0.635</td>
<td>0.764</td>
<td>0.061</td>
<td>0.676</td>
<td>0.072</td>
<td>0.041</td>
<td>0.990</td>
<td>0.791</td>
<td>0.497</td>
<td>0.924</td>
<td>0.000</td>
<td>0.000</td>
<td>0.002</td>
</tr>
</tbody>
</table>

Table 5  
Mann Whitney U- test comparing samples 2 and 3

<table>
<thead>
<tr>
<th></th>
<th>Gender</th>
<th>Age</th>
<th>MMP</th>
<th>Doses</th>
<th>GMS</th>
<th>E/S</th>
<th>Alcohol</th>
<th>Drugs</th>
<th>Legal S</th>
<th>Fam R.</th>
<th>Psy. S.</th>
<th>Coh</th>
<th>Adapt</th>
<th>Com</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mann-Whitney U</td>
<td>261.50</td>
<td>268.50</td>
<td>284.50</td>
<td>201.50</td>
<td>298.50</td>
<td>217.50</td>
<td>197.50</td>
<td>280.00</td>
<td>265.50</td>
<td>251.50</td>
<td>289.00</td>
<td>140.00</td>
<td>161.50</td>
<td>205.00</td>
</tr>
<tr>
<td>Wilcoxon W</td>
<td>586.50</td>
<td>593.50</td>
<td>609.50</td>
<td>501.50</td>
<td>598.50</td>
<td>542.50</td>
<td>497.50</td>
<td>605.00</td>
<td>590.50</td>
<td>576.50</td>
<td>597.00</td>
<td>465.00</td>
<td>486.50</td>
<td>530.00</td>
</tr>
<tr>
<td>Z</td>
<td>-1.270</td>
<td>-0.631</td>
<td>-0.310</td>
<td>-1.928</td>
<td>-0.030</td>
<td>-1.650</td>
<td>-2.075</td>
<td>-0.400</td>
<td>-0.720</td>
<td>-0.978</td>
<td>-0.061</td>
<td>-3.208</td>
<td>-2.778</td>
<td>-1.912</td>
</tr>
<tr>
<td>Asymptot. Sig (bilateral)</td>
<td>0.204</td>
<td>0.528</td>
<td>0.757</td>
<td>0.047</td>
<td>0.976</td>
<td>0.099</td>
<td>0.038</td>
<td>0.689</td>
<td>0.472</td>
<td>0.328</td>
<td>0.952</td>
<td>0.001</td>
<td>0.005</td>
<td>0.056</td>
</tr>
</tbody>
</table>

Equally, we performed a post hoc analysis, grouping samples 1 and 3, and compared it with sample 2 and also with samples 2 and 3 that was compared with 1. The analyses were not significant in any of these cases.

We believed that it was necessary to make a paired comparison of sample 1 and 2, 1 and 3 and 2 and 3. In the comparative analysis, samples 2 (Mid-range) and 3 (Balanced) were statistically significant for the variables Alcohol (0.038; p=0.05) and Dose (0.047; p=0.05) and were close to significance for the Employment/Support dimension (0.099; p=0.05). The values of sample 3 in the variables of alcohol and methadone dose were higher than in sample 2. In the case of the Employment/Support values, they were inferior to those obtained in sample 3 (Table 5).

Definitively, the subjects belonging to balanced families admitted higher consumption of alcohol than those belonging to the mid-range-extreme group and they consumed a higher dose of methadone then the subjects of the mid-range families. In addition, lower values were obtained in Employment/Support in relationship to the...
subjects belonging to mid-range-extreme families. Thus, the subjects included in balanced families had more severity for the addiction in two dimensions of the ASI: Alcohol and Employment/Support and are also those who consumed a higher dose of methadone (Table 6).

CONCLUSIONS AND DISCUSSION

The objective we pursued in the present research work was to know the type of family relationships and level of deterioration in the different areas that are affected by consumption (severity of the addiction) in opiate addicts.

We began with the hypothesis that most of the families of the subjects in our sample belonged to extreme families according to Olson's Circumplex Model, which was not confirmed. We thought that these families, that are defined as being less functional, having a more reduced behavioral repertoire and less capacity to cope with changes, would have more fragile and rigid relationship forms because they have been living with the drug addict problem for several years, with the subsequent deterioration that this would cause. On the contrary, we observed that the number of subjects who identified their families as extreme was similar (and even less) than the subjects of the mid-range families or balanced families. We were surprised by these results because if we consider that the chronic drug addiction associated problems may be numerous and also severe (diseases, delinquency, psychopathology, social withdrawal, financial problems) and that also and according to Meulenbeek the treatment had been indicated in 1/3 of the heroin-addict patients in the methadone program because of drug abuse, our thoughts had been that in relationship with the cohesion, we would find extreme families - very unattached or very attached, and in regards to adaptability, very rigid or very chaotic systems, always distanced from the mean values or, what is the same, from adequate functioning. In recent works it has been observed that there are severe communication problems in these families. It was under these suppositions that we thought that there would be problems in these families to promote independence and the attempts of differentiation of the not very skilled members, to transmit acceptance and tolerance as well as control and strictness. Also as Selvini Palazzoli, and in agreement with that stated by Garvey, we believed that the families of our study would have significant deficits in regards to necessary attitudes, parental styles, harmony and cohesion to cope with substance usage, which was also an important support to our hypotheses.

On the other hand, we believe that the functioning of the different members of these families could be very different and even contradictory in the relationship between the different subsystems and the drug addict child. In these families, it is common to observe variations in the traditional hierarchies, weakened due to coalitions between members of different generations. Thus, we have observed within one same family, very involved mothers, with affective responses and very high control, loyal and even accomplices of their drug addict children and distant, absent and unemotional fathers. These results coincide with those obtained by Harbin and Maziar. We believe that this circumstance could lead the addict subjects of our study to answer the questionnaires, rather than based on the global characteristics of the system, on their relationship with a specific member of their family, normally with the one with whom they have the closest relationship, that is, usually the mother. In other words, based on the results obtained it could be thought that our subjects answered the questionnaire keeping “in mind” the “goodness” and “generosity” of their family as a way of “loyal gratitude” or of “hidden guilt.” It would be something like believing that after having caused suffering to their own family, they should not also discredit it. It is likely that after the severe problems that a substance-dependent subject experience, the image of his/her own family would be safeguarded as more positive, in comparison with that experience outside of it as well as the idea that in spite of everything that had occurred, his/her family would continue to give support to a greater or lesser degree. As stated by Coleman et al., the parents of addicts have generally suffered very stressful life situations, of great suffering and severity similar to that of their children. This may achieve an unshakable connection of the parent-child union, as if it were a sign of family identity, and which in spite of the dissatisfaction in many cases, would be respected as a binding element in the family, a loyal union: “…perhaps they did not do some things correctly with me, but they have also suffered a great deal, they deserve, in spite of everything, my respect...”

<table>
<thead>
<tr>
<th>Table 6</th>
<th>Significant results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol</td>
<td>There are significant differences when we compare the sample 1-2 (extreme families and mid-range families) with sample 3 (balanced families) and when we compare sample 2 (mid-range families) with sample 3 (balanced families).</td>
</tr>
<tr>
<td>Dose</td>
<td>Statistically significant when we compare the sample 2 (mid-range families) with sample 3 (balanced families).</td>
</tr>
<tr>
<td>Employment/Support</td>
<td>Tendency to significance, when we compare families 1+2 with families 3; and when we compare families 2 with 3.</td>
</tr>
<tr>
<td>CAF variables</td>
<td>Significant differences in all the analysis</td>
</tr>
</tbody>
</table>
This form of relationship may also be something learned based on the perception of the ambivalent child upbringing parental styles of rejection-overprotection described by Anderson and Eisseman with heroin addict patients. As the subject who has perceived overlapping attitudes of rejections and overprotection from their parents, it is possible that he/she would maintain attitudes regarding their families of the same type. Although the subject “reproaches” or “blames” his/her family, externally “the subject protects” them. This same effect has also been detected in other problems, as in some studies on schizophrenia and psychosis.

Perhaps, a clinical evaluator would classify the families of the subjects with different criteria. However, as stated by Olson: the type of family system is less important than that which the members feel about the family class they have.

In relationship to our second hypotheses, that the addiction of the subjects belonging to balanced families would be not as severe, this was not confirmed. It has been observed that subjects belonging to balanced families consume more alcohol than the addicts of the mid-range and extreme family. We had supposed that families with a better behavioral repertoire, higher levels of communication and more flexibility, would have obtained better results in the variables regarding the severity of the addiction. These results are repeated for the same variable when the comparison is established between the samples of the mid-range and balanced families. Equally, the difference for the methadone dose variable is significant in the sense that it is superior in the subjects of balanced families than in those of the mid-range families. On the other hand, the subjects forming a part of the category of balanced families obtained lower values on Employment/Support than those belonging to the other two samples, although this was not significant. Thus, the sample of subjects that we hypothesized a priori would obtain lower scores regarding the addiction severity (balanced families) had just the contrary, in the sense that the severity in the addiction, in terms of greater consumption of substances and economic dependence and of the family, was greater. These results contradict those obtained by Iraurgi Castillo et al. with addictive subjects not included in methadone programs. We believe that it is important to stress that it is precisely in the dimensions directly linked to substances, alcohol and methadone dose, where the differences are found. It may be that these subjects, since they consume more alcohol and receive a higher dose of methadone, would be more “disconnected” from the family reality or that they would have a more positive perception of their derived nucleus of living conditions,” possibly from the feeling of guilt generated by the substance consumption. It is also possible that the drug addicts of our investigation had not established a cause-effect link between the severity of their disorder and the problems experienced in their family. In this way, the answer to the questionnaires would be based on a positive perception of their family, identifying it as functionally more adequate (balanced) then it really was, an idea that was already suggested by Ben Yehuda and Schindell in a study conducted in 1981 with patients in a methadone program. We believe that the results would have been different if the subjects of our sample had not consumed methadone. This is an aspect that we consider to be of great interest and that could be the subject of future lines of investigation.

We must not forget that it would be necessary to go deeper into the differences in the drug consumption based on gender of the subjects and their relationships with the family system, above all considering the limited number of women of this sample. Furthermore, as some studies have demonstrated, it is of great importance to consider the specific situation of many battered women who live within family contexts where the addiction of their husbands is an important risk factor.

Equally, we consider that it would enrich future studies to have information regarding the attitude of the subjects in regards to the family based on whether drugs are consumed in the family or not and specifically to know if either of the parents had or have problems with substance abuse, and to know the perception of the drug addict children regarding the relationships of their parents and attempting to discover how this variable affects severity.

ACKNOWLEDGEMENTS

The authors thanks to Servicio de Atención al Drogodependiente del Centro de Servicios Sociales del Ayuntamiento de Alcalá de Guadaíra (Sevilla) for their support through the Collaboration Agreements with the Universidad de Sevilla and its confidence with this research project.

REFERENCES

5. Gonzalez-Saiz F, Salvador Carulla L, Martínez Delgado JM, López Cárdenas A, Ruiz Franci I, Guerra Díaz D. El Addiction Severity