

# Opiate dependence users profile. A decade review

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## Perfil del paciente consumidor de opiáceos. Revisión de una década

### Summary

**Introduction.** Substance dependence, especially heroin dependence, has become one of the most prevalent psychiatric diseases during recent years. In spite of the numerous related publications, very few articles offer a heroin users profile based on an extensive sample and a broad range of variables of opiate dependent patients in Spain, thus limiting the possibility of generalizing the different findings published.

**Objective.** Present a description of an opiate dependence user profile, based on the analysis of a broad range of variables in an extensive population sample.

**Methodology.** An observational, retrospective study, with treatment group ( $n = 1177$ ) and no control group was established. Descriptive and survival techniques were used to analyse different variables (sociodemographic data, medical and psychiatric history, drug consumption record, risk behavior in regards to HIV infection, previous dehabituations, legal situation, treatment carried out for addiction, etc.).

**Results.** We describe a heroine dependent user pattern that coincides in the different variables with the data offered by previous reviews in Spain.

**Conclusions.** The profile defined can be considered as representative of opiate users in Spain, and it may be used as a reference for future articles.

**Key words:** Profile. Opiate. Dependence. Review. Variables. Heroine user.

### Resumen

**Introducción.** La dependencia de sustancias, entre ellas especialmente la de heroína, se ha convertido en los últimos años en una de las patologías psiquiátricas de mayor prevalencia. A pesar del alto número de publicaciones relacionadas, no existen demasiados trabajos que ofrezcan un perfil completo y basado en un amplio tamaño muestral del paciente dependiente de opiáceos en España, limitando la posibilidad de generalizar los diferentes hallazgos publicados.

**Objetivo.** Presentar una descripción pormenorizada del paciente adicto a sustancias opiáceas, basada en una amplia población muestral, y atendiendo a un extenso y diversificado tipo de variables descriptoras.

**Metodología.** Se plantea un estudio observacional retrospectivo, con diseño de un grupo de tratamiento sin grupo control ( $n = 1177$ ). Se analizan mediante técnicas descriptivas y de supervivencia las diferentes variables contempladas (sociodemográficas, de antecedentes médicos y psiquiátricos, historia adictiva a sustancias y deshabituaciones previas, situación legal, etc.).

**Resultados.** Se describe un patrón de dependiente de opiáceos que coincide en las diferentes variables con los datos recogidos en otros trabajos del entorno.

**Conclusiones.** El perfil del sujeto descrito puede considerarse representativo de la población de adictos a opiáceos atendidos en España, pudiendo servir de referencia para futuras publicaciones.

**Palabras clave:** Perfil. Opiáceos. Dependencia. Revisión. Variables. Usuario de heroína.

## INTRODUCTION

Substance dependence, among them that of heroine, has become one of the psychiatric diseases having the greatest prevalence in recent years. Several studies carried out in Western populations estimate this parameter

for opiate dependence at 0.3-1.5%<sup>1-6</sup>. It also seems to be concluded from the publications that this prevalence has tended to behave in a stable ways in recent years<sup>7,8</sup>. A yearly prevalence of 0.14 %, with approximately 8 million opiate dependent subjects is calculated in the world<sup>9</sup>. In regards to Europe, the value for the dependent population is close to 1.5 million (0.27%, and 0.4 % have problems with it, even when they do not fulfill dependence criteria)<sup>10</sup>. In Spain, opiate consumption expanded during the decade of the 80's, calculating a prevalence for opiate dependence in 1999 of 0.1 % (and 0.4% if those who have tried the substance at some time are considered)<sup>8</sup>.

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However, the impact of opiate addiction, far from being limited to the high prevalence of the diagnosis, expands to different areas of interest: mortality, morbidity, health care costs, criminality, etc. Thus, for example, the social cost of opiate consumption increased during 1992 to 97.7 billion dollars in the United States alone<sup>11</sup>. In relationship to the National Observatory on Drugs, its report for the year 2001<sup>8</sup> indicates the high mortality that is directly or indirectly caused in Spain by substance consumption (HIV epidemic among addicts, acute reactions to the administration of heroine, suicides, traffic accidents, etc.).

These and other considerations explain the efforts taken in recent years by several clinical and investigator groups to study the addictive disease to opiates in its different aspects, giving rise to a large number of publications.

The interest of these publications is based on the possibility of generalizing and extrapolating the results obtained to heroin addicts. The profile of the addict should thus be representative of at least the population studied. In Spain, most of the studies presented are based on small patient samples, or only partially describe the profile of the drug addict. In the present study, data based on a relatively large sample population (1,177 patients) are offered and they describe different aspects of the opiate addict patient. This study thus aims to offer a wide profile of the opiate dependent subject, based on a sample that is representative of the Spanish population.

This study aims to provide a description of the opiate addict profile in its different areas.

## METHODOLOGY

### Data gathering

The structured clinical history protocol of Baca-García et al.<sup>12</sup> was used in the data gathering process. This was developed in the Drug Addict Unit of the Hospital Ramón y Cajal. The structured clinical history makes it possible to gather coded information, in an objective, precise and planned way, that would be used both on the health care level as well as investigator one<sup>13-15</sup>.

The structured protocol of clinical data gathering is subdivided into several sections, that gather sociodemographic data, medical and psychiatric background, history of substance consumption, risk behaviors in relationship with HIV infection, previous attempts at dehabilitation, legal situation, treatment done for the addiction, and information related with the onset and end of treatment<sup>16</sup>. The characteristics of the study population and the constant process of adaptation of the protocol to the novelties which have been occurring over the years in the drug addict field lead to the fact that not all the variables available are complete for all the patients.

Informed consent was obtained for all the subjects participating in the study, guaranteeing them the confidentiality of the data.

This information was stored in an Access database and processed with the aid of the SPSS 8.0 statistical program.

### Statistical analysis

To achieve its objective, an observational, retrospective study was designed with a design of a treatment group with no control group (case series, anterograde directionality and mixed temporality according to the Kramer and Boivin<sup>17</sup> classification. All those subjects diagnosed of opiate dependence disorder (F 11.2)<sup>18</sup> who consecutively were hospitalized voluntarily in the Naltrexone program of the Hospital Ramon and Cajal of Madrid during the decade of 1991-2000 form a part of the study population. The sample was made up of 1,177 patients.

As exclusion criteria, the presence of pregnancy, breastfeeding or any of the formal contraindications to the drug listed in the corresponding section, especially sensitivity to it, presence of acute hepatitis (evaluating their inclusion after this is resolved), and transaminase levels greater than three times those accepted as normal (GPT or GOT > than 120 IU/l) if the subject has hepatic failure (without this symptom, treatment is prescribed with frequent analytic follow-up) have been established.

Treatment onset in the study is considered to occur in the case of the patient who has not previously followed treatment in the Drug Addict Clinic of the Hospital Ramón y Cajal and who takes the first complete dose (50 mg) of naltrexone, after deintoxification of any type and in any place. Re-onset is understood to be that subject who, having had some previous treatment in the Drug Addict Clinic, and who has spent at least one month since the last relapse or abandonment, begins treatment again<sup>16</sup>.

### Statistical techniques

To achieve the objective established, descriptive techniques of the sample were used, using parameters established for this objective, such as arithmetic mean, and standard deviation in quantitative variables and relative and absolute frequencies in qualitative variables. The information corresponding to treatment retention is given as survival probability of the subject in the therapy at least until a certain moment in time<sup>19-21</sup>.

## RESULTS

From 1991-2000, 1,177 patients were seen consecutively in the Drug Addict Unit of the Hospital Ramón y Cajal. This means a total of 1726 treatments between onset (1,177) and later re-onset (549) (table 1). These admissions in the program follow the distribution offered in table 2, based on the year of onset.

Most of the users (n = 1177) (mean age: 27.6 years; sd: 5.27) were male (83.7%), caucasian (99%). Their civil state was predominantly single (71.4%), mostly living

**TABLE 1. Onset and re-onset of treatments**

<i>No. of treatments</i>	<i>n</i>	<i>%</i>
1	1,177	68.2
2	367	21.3
3	134	7.8
4	42	2.4
5	6	0.3
Total	1,726	100.0

with their origin family (76.6%), although with a high percentage of family conflictivity caused by the consumption (47%) (table 3).

In the family nucleus, it stands out that 13.9% of the subjects had some brother in the family who was an active consumer and that psychiatric disease could be found in the fathers (19.1 %) (alcoholism, mostly), as well as in the mothers (6.7%) (generally affective disorder reactive to the consumption situation of the patient) of the subjects studied.

A total of 33.9% of the sample reported having the support of a non-consuming partner. Most of them declared that they had no help from a group of non-consuming friends (58.9%), even when 41.1% moved within a non-consuming social network.

In regards to the academic education obtained, most reported having studied primary education (45.5%). A total of 46 % of the users were workers and 39.8 % employees. Almost half (49.7%) of the patients' work situation was that of unemployed with no unemployment pay.

Most of the subjects, as was to be expected, were active in opiate consumption on their first visit (98.6%). A total of 44.5% of the sample had previously used the intravenous route, although 62.5 % of the population study preferred the smoked/inhaled route in the last 6 months. The mean dose of heroin per day was 0.65 mg. (sd: 0.59). Heroin consumption was initiated at approximately 20.07 years (sd: 4.58). A total of 63.2% of the subjects also consumed cocaine (0.65 mg/d) in the 6 months prior to the interview, almost half of those surveyed did so intravenously together with heroin (49.8%). They began with it

at 19.72 years (sd: 4.78). Consumption of other opiates, when done, is generally in substitution of heroin (37.5%). Use of methadone hardly exists among the sample studied. A total of 44.9% of the patients interviewed used cannabis (a mean of 24.4 joints per week) and they began their consumption at 15.63 years; only 11.2 % of the sample used stimulants; 62% consumed alcohol (60.8% of those who drank it did so daily, and 40.4 % drank high percentage alcoholic drinks); 56.7 % of the users declared they had taken benzodiazepines in the last 6 months.

On the first visit, almost half of those interviewed admitted legal incidences (48.1%): theft without violence (43.3%), theft with violence (21.4%), substance possession or drug dealing (31.2%), traffic accident under the effects of a substance (3.1%), murder (0.6%). Of those with legal implications, 41.7% were pending trial, and 5.4% in situation of parole.

Most of the subjects interviewed declared they had a negative HIV condition (60.5%). A total of 28.7% declared they were infected by the virus (AIDS carriers or patients), while 10.8% did not know their condition. Studying the risk behaviors for HIV transmission, 23.6% report having shared syringes at some time; 42.6 % have re-used them; 40.5 % also use a condom; heterosexual tendency being the most frequent among those surveyed (93.8%).

A total of 11.3% of the users reported, on admission, having a previous diagnosis of psychiatric disease other than substance use that had required specialized care. Of these, 43.75 % were diagnosed of affective disorders; 11.45% of psychotic disorders; 6.25% of neurotic disorders; 34.37 % of personality disorders; and 4.16 % of other psychiatric disorders (anorexia, etc.).

In regards to the onset and development of the program, most of the subjects came to the Naltrexone Clinic recommended by acquaintances (72.8%). In 75.9% of the patients, family involvement in the therapy can be considered high or middle high. The mother (47.9%) is the person who got most involved in it. Only 24.4% of the subjects who initiated therapy finished it with medical discharge, abandonment of it (70.6%) being the most frequent cause of treatment termination. A total of 74.7 % of the population interviewed had made some previous attempt to become dehabituated, with a mean of 2.91 previous attempts (sd: 2.11) and a mean of 13.53 months of abstinence (sd: 17.85).

In regards to retention in treatment, measured as probability of survival in the same year of initiating therapy, 26.95% (41.21% at 6 months) was found. If only the probability of survival for those who initiate their first treatment is considered, this is 29.57% (44.35% at 6 months). This means that a subject who begins the first treatment in the Naltrexone Clinic had a 29.57% probability of continuing in it after one year (figs 1 and 2).

## DISCUSSION

The user profile must be representative of the population in order to be able to generalize and extrapolate

**TABLE 2. Distribution of the patients per year of admission in the clinic (first treatments)**

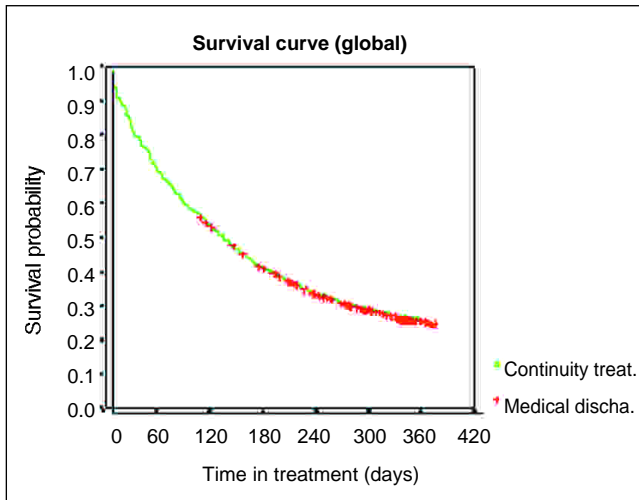
<i>Year</i>	<i>n</i>	<i>%</i>
1991	244	20.7
1992	229	19.5
1993	164	13.9
1995	136	11.6
1996	107	9.1
1997	54	4.6
1998	32	2.7
1999	30	2.5
2000	9	0.8
Total	1,177	100.0

**TABLE 3. Opiate dependent patient profile**

	<i>n</i>	%	% valid		<i>n</i>	%	% valid
<b>Gender</b>				<b>Work</b>			
Man	985	83.7	83.7	Yes, stable	189	16.1	17.1
Woman	192	16.3	16.3	Yes, not stable	175	14.9	15.8
<b>Race</b>				Unemployed with pay	121	10.3	11.0
Caucasian	1,165	99.0	99.0	Unemployed without pay	549	46.6	49.7
Gypsy	8	0.7	0.7	Incapacity	59	5.0	5.3
Arab	3	0.3	0.3	Others	12	1.0	1.1
Black	1	0.1	0.1	No information	72	6.1	
<b>Civil state</b>				<b>Profession</b>			
Single	797	67.7	71.4	Without profession	51	4.3	6.2
Married	199	16.9	17.8	Housewife	3	0.3	0.4
Separated/divorced	97	8.2	8.7	Student	12	1.0	1.5
Widow/widower	16	1.4	1.4	Unqualified worker	206	17.5	25.1
Others	8	0.7	0.7	Qualified worker	171	14.5	20.9
No information	60	5.1		Employee	326	27.7	39.8
<b>Living condition</b>				State worker	13	1.1	1.6
Origin family	836	71.0	76.6	Liberal	38	3.2	4.6
Own family	174	14.8	15.9	No information	357	30.3	
Own + origin family	32	2.7	2.9	<b>Socioeconomic level</b>			
Alone	27	2.3	2.5	High	34	2.9	8.2
Institution	5	0.4	0.5	Middle-high	115	9.8	27.8
Homeless	3	0.3	0.3	Middle	92	7.8	22.2
Others	15	1.3	1.4	Middle-low	114	9.7	27.5
No information	85	7.2		Low	59	5.0	14.3
<b>Siblings who consume drug</b>				No information	763	64.8	
Only child	21	1.8	2.2	<b>Economic dependence</b>			
Brother not consumer	694	59.0	72.3	Independent	92	7.8	41.4
Brother active consumer	133	11.3	13.9	Dependent	130	11.0	58.6
Brother inactive consumer	112	9.5	11.7	No information	955	81.1	
No information	217	18.4		<b>Schooling</b>			
<b>Background father</b>				Primary	287	24.4	26.9
No background	648	55.1	80.9	Compulsory education	485	41.2	45.5
Alcoholism	140	11.9	17.5	Secondary/pre-univ	253	21.5	23.7
Drug addiction	4	0.3	0.5	University	42	3.6	3.9
Other psychiatric diseases	9	0.8	1.1	No information	110	9.3	
No recogidos	376	31.9		<b>Social network</b>			
<b>Background mother</b>				Alone	78	6.6	14.9
No background	742	63.0	93.3	Fiends-non-consumers	230	19.5	44.0
Alcoholism	3	0.3	0.4	Friends-consumers	175	14.9	33.5
Drug addiction	1	0.1	0.1	Only partner	40	3.4	7.6
Other psychiatric diseases	49	4.2	6.2	No information	654	55.6	
No information	382	32.5		<b>Heroin consumption</b>			
<b>Stable partner</b>				No	17	1.4	1.4
No	480	40.8	50.8	Yes	1.160	98.6	98.6
Yes, not consumer	320	27.2	33.9	<b>Present heroin route</b>			
Yes, consumer	145	12.3	15.3	I. V.	431	36.6	37.5
No information	232	19.7		Inhaled/smoked	719	61.1	62.5
<b>Family conflictivity</b>				No information	27	2.3	
No	239	20.3	53.0	<b>Previous heroin route</b>			
Secondary to consumption	179	15.2	39.7	I. V.	416	35.3	44.5
Violence	19	1.6	4.2	Inhaled/smoked	518	44.0	55.5
Expulsion	14	1.2	3.1	No information	243	20.6	
No information	726	61.7		<b>Cocaine consumption</b>			
				No	385	32.7	36.8
				Yes	661	56.2	63.2
				No information	131	11.1	

**TABLE 3. Opiate dependent patient profile (cont)**

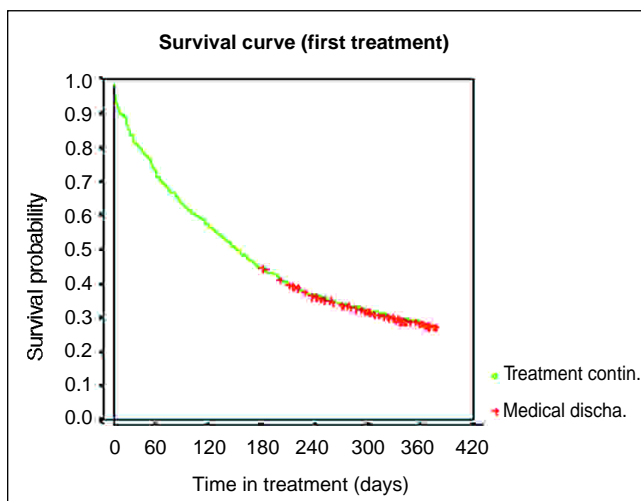
	<i>n</i>	%	% valid		<i>n</i>	%	% valid
<b>Present cocaine route</b>				<b>AIDS</b>	269	22.9	26.6
IV + IV heroin	316	26.8	49.8	Unknown	109	9.3	10.8
IV + smoked heroin	41	3.5	6.5	No information	167	14.2	
Inhaled/smoked	277	23.5	43.7	<b>Referral</b>			
No information	543	46.1		Known	228	19.4	72.8
<b>Methadone consumption</b>				Infectious service	13	1.1	4.2
No	325	26.7	91.8	Other hospital services	9	0.8	2.9
Yes	29	2.5	8.2	Emergency service	8	0.7	2.6
No information	823	69.9		Others	55	4.7	17.6
<b>Opiate consumption</b>				Total	313	26.6	100.0
No	286	24.3	59.0	No information	864	73.4	
Heroin substitute	182	15.5	37.5		1,177	100.0	
Heroin group	17	1.4	3.5	<b>Responsible person</b>			
No information	692	58.8		None	9	0.8	6.2
<b>Cannabis consumption</b>				Mother	70	5.9	47.9
No	516	43.8	55.1	Father	18	1.5	12.3
Yes	421	35.8	44.9	Brother	17	1.4	11.6
No information	240	20.4		Non-consuming partner	31	2.6	21.2
<b>Alcohol consumption</b>				Consuming partner	1	0.1	0.7
No	287	24.4	38.0	No information	1.031	87.6	
Yes, prior to opiates	99	8.4	13.1	<b>Share syringes</b>			
Yes	369	31.4	48.9	Never	165	14.0	76.4
No information	422	35.9		Sometimes before	39	3.3	18.1
<b>Type of drink</b>				Always before	8	0.7	3.7
Beer/wine	177	15.0	59.6	Cont. sharing	4	0.3	1.9
High percentage	120	10.2	40.4	No information	961	81.6	
No information	880	74.8		<b>Reuse syringes</b>			
<b>Frequency</b>				Never	119	10.1	57.5
Daily	209	17.8	60.8	Sometimes	68	5.8	32.9
3 times a week	21	1.8	6.1	Always	20	1.7	9.7
Week end	114	9.7	33.1	No information	970	82.4	
No information	833	70.8		<b>Sexual tendency</b>			
<b>BZD consumption</b>				Homosexual	8	0.7	3.8
No	266	22.6	43.3	Heterosexual	196	16.7	93.8
Yes	349	29.7	56.7	Bisexual	5	0.4	2.4
No information	562	47.7		No information	968	82.2	
<b>Legal incidences</b>				<b>Use of condom</b>			
No	523	44.4	51.9	Never	61	5.2	29.8
Fines	34	2.9	3.4	Before no, now yes	20	1.7	9.8
Arrests	215	18.3	21.4	Sometimes	41	3.5	20.0
Convictions	235	20.0	23.3	Always	83	7.1	40.5
No information	170	14.4		No information	972	82.6	
<b>Legal situation</b>				<b>Family involvement</b>			
Whitout trial	264	22.4	52.9	High (always comes)	588	50.0	55.0
Pending trial	208	17.7	41.7	Middle-high	224	19.0	20.9
Parole	27	2.3	5.4	Middle	125	10.6	11.7
No information	678	57.6		Middle-low	73	6.2	6.8
<b>Psychiatric diseases</b>				Low (alone)	60	5.1	5.6
No	730	62.0	88.7	No information	107	9.1	
Yes, without admission	58	4.9	7.0	<b>Reason for discharge</b>			
Yes, with admission	35	3.0	4.3	Medical discharge	287	24.4	24.4
No information	354	30.1		Abandonment	830	70.5	70.5
<b>Situación HIV</b>				Pregnancy	9	0.8	0.8
Negative	611	51.9	60.5	Prison	9	0.8	0.8
Carrier	21	1.8	2.1	Treatment transfer	33	2.8	2.8
				Death	4	0.3	0.3
				Other	5	0.4	0.4



**Figure 1.** Survival curve. All of treatments.

the results obtained of one study to the heroin addict group. A series of difficulties for the extrapolation of results should be considered in this situation.

The cultural setting of the study population labels the sample decisively. As an example, the distinction between Anglo-Saxon and Mediterranean European populations, in questions such as family involvement, availability of other therapies, vectors of HIV transmission, etc., is clear. This fact determines characteristics in the therapeutic programs, that should be considered for the interpretation of the data. Thus, the consideration of naltrexone as a therapeutic resource that has little validity and that needs a very specific indication to be successful is relatively frequent in the Anglo-Saxon setting<sup>22-24</sup>, while its usefulness in Mediterranean European countries<sup>25-27</sup> is demonstrated with retention rates that are usually superior to the Anglo-Saxon influence groups<sup>28-31</sup>.



**Figure 2.** Survival curve. First treatments.

Even within the same cultural setting, differences could be found between the profiles offered by the different therapeutic resources. Most of the publications report profiles of patients who use only one type of therapeutic programs. This profile may not coincide with that found in another type of resources.

The sample size (generally the publications gather series of cases) and the temporal length of the study also establish limitations when permitting comparisons between the different studies.

Publications in which the comparison between the profiles must be partial can also be found since the protocol of data gathering of some of them gather a lower number of variables or focus on certain aspects of the drug dependency.

The present study, that covers a decade of treatments, makes it possible to include different consumption profiles and customs, partially marked by developments in different health care policies. In this way, there is greater heterogeneity in the sample, which conditions the pattern of the mean heroin addict. The analyses offered by other publications are generally confined to shorter periods of time, making it possible to define more homogeneous profiles. This study is hindered by the diversity of the therapeutic proposals as an enriching element of the profile, but it has a large number of subjects studied as well as an important group of variables considered.

The previous publication that has the most subjects presented in Spain comes from 1995. In it, Bedate et al.<sup>32</sup> report the mean profile of the patient who initiates with naltrexone (n = 1966): male subject (84%), with a mean age of 26.2 years, mostly single and without stable partner (55%), without permanent work (70%), living with their families (94.3%). Their addiction history is that of a heroin consumption time of approximately 61 months, with a mean dose of 417 mg/d, and preference for the smoked or inhaled route (63%) against the intravenous one. Almost half of the sample also use cocaine, alcohol and cannabis. The first one of these is also more frequently consumed by the smoked or inhaled route (approximately 70%), with a mean dose of 3.2 g/week.

In general lines, the drug addict profile explained in Bedate et al.<sup>32</sup> coincides with that coming from the data analyzed in this investigation, in which most are also male subjects (83.7%), who are young (mean age: 27.6 years), single (71.4%) and live with their family (79.5%). The school level does not surpass primary education in 72.4% of the patients and only 17.1% have a stable job. There is a somewhat higher mean consumption time, 90.6 months, with a similar mean dose of heroin (0.65 g/d). The consumption route hardly differs since the population studied in this investigation also gave preference to the smoked/inhaled route (62.5%). Cannabis, alcohol and cocaine are also consumed (in a somewhat higher percentage in both number as well as daily dose). The preferential consumption route of cocaine differs slightly, observing a greater use of the intravenous route (56.3%). In this way, it is observed that both patterns of heroin addicts present similar characteristics in the defi-



ning variables and aspects of the profile, sociodemography and history of consumption, only varying those factors most related to the situation, as can be the cocaine consumption route<sup>22,23,33,34</sup>, and its consumption, which has increased in recent years<sup>35</sup>.

In a study on 1.368 ultrafast deintoxications, Carreño et al.<sup>36</sup> offer some sociodemographic data and consumption data that are very similar to those presented in this study. A total of 82% of the patients are males, with a mean age of 26.2 years. Being single is also the most frequent civil status and unemployment is the work situation reported most (51%). The educational level is also similar to that found in the present sample, this mostly being primary education in 72% of the subjects. Although the consumption time was mildly less (a mean of 4.9 years), the route used (smoked in 69% of the cases) and the heroin dose employed are similar to those reported in this study. Coincidence in the percentage of subjects (76%) who had undergone previous treatments can also be observed, although the mean is greater in the Carreño et al. study (2002)<sup>4</sup>. Elizagárate et al.<sup>37</sup> offers data on ultrafast deintoxification treatment, although in a smaller sample (91 patients), that greatly coincide with those found in the present sample (although some characteristics are observed that can be explained partially by a greater participation of subject from the gypsy ethnic group in the study).

In a more recent sample (n = 132) (initiated in 1991-1992) that has a greater follow-up over time (6 years), Fernández Miranda et al.<sup>38</sup> coincide in showing, a similar profile from the analysis of the methadone program users: male (88.6%), mean age of 27.9 years, single (68.7%), living with their family (about 90%), with a school level lower than elementary school graduate (69%), who is unemployed (69%), and has not been in prison (49.2%). That study also reports that a part of the population has active consuming siblings (15.2%) and consuming partner (10.6%), is infected by the HIV (38.3%) and has psychiatric background (12.2%). Furthermore, in a methadone program, Gimeno et al.<sup>39</sup> describe a sample of 197 patients. Most of the variables given (distribution of gender, family living, consumption type and route, HIV situation) are similar to those referred to in this present study. The percentage of subjects with legal backgrounds is significantly greater, this circumstance being explained, as some other differences, by the inclusion of prison population in the study mentioned. In the data analysis of a population of 60 patients, March Cerdá et al.<sup>40</sup> also present similar data in regards to mean age, gender distribution, age at onset of consumption (a little less than that presented in this study) and work situation. It is different, however, in a lower incidence of HIV infection (only 16.7% are HIV+) and lower frequency of subjects who presently use the intravenous route to administer the drug (21.7%).

Besides maintaining the similarity in the variables already mentioned in relationship with the publication of Bedate et al.<sup>32</sup>, the new data supplied by the new studies explained contribute to reinforce the coincidence of the opiate addict profile. In the sample studied (n = 1177), the percentage of addict subjects with psychiatric back-

ground is 11.3%, 13.9% have active consuming siblings, and 15.3% also have an addict partner. More than half of our sample lacks legal implications (51.9%), 28.7% are HIV infected (also considering that about 10% ignore their situation in this regards).

These and other studies<sup>41-47</sup> corroborate that the data analyzed herein belong to heroin addict subjects at least representative of the mean profile of the Spanish heroin drug dependents, and thus not only of the heroin addicts in naltrexone programs. Agreements in other variables other than those already analyzed and reported in certain publications only verify this circumstance. Thus, Landabaso et al.<sup>27</sup> show that 63% of the subjects of their sample have undergone previous dehabituations (excluding naltrexone programs) (this reaches 74.7% in the study population, although this percentage includes previous treatments with naltrexone); and the consumption history reported in 1998 by San Narciso et al.<sup>48</sup> (patients under treatment with naltrexone) coincides with the subjects reported herein (the percentage of cocaine consumers in this present study is even greater).

Studies specifically focused on psychiatric comorbidity<sup>48-51</sup> show a greater psychiatric disease rate than that found in the study population. However, it should be remembered that the item in this regards in the protocol used only gathers reported psychiatric backgrounds and thus, prior to the onset, and that no test is used in the first interview to confirm psychiatric personality traits or disease. The specific publications on the subject, on their part, evaluate and diagnose the disease of the subjects already under treatment in different ways.

In regards to treatment retention, there are few publications that use the survival technique as reference and thus they express the retention datum as probability of survival. Furthermore, they generally refer to limited time periods (6 months). Few cases report results at one year of treatment. Judson and Goldstein<sup>52</sup> indicate 64% abstinence in this time period; and Lerner et al.<sup>53</sup> 40%. Using 81 patients, Resnick et al.<sup>54</sup> report a retention of 33% at one year; D'Ippoliti et al. report that 18% of their sample remain in the program after this time period<sup>55</sup>, a lower rate than that found in this study (29.57% for the first treatments, 26.95% for the total).

Kleber y Kosten<sup>56</sup> report a retention at 6 months of 35%; Greenstein et al.<sup>30</sup>, 32%; Ling y Wesson<sup>19</sup>, 53%; and Albanese et al.<sup>57</sup>, 55%. Higher retention rates are reported by Gold et al.<sup>58</sup> (80%), and Washton et al.<sup>59</sup> (63%). In the same setting as this study, the retention rates for the same time period varied from 30% reported by Pino<sup>60</sup>, up to 61% reported by Avila et al.<sup>61</sup>; passing through rates of 37<sup>26</sup>, 45<sup>21,62</sup>; 50<sup>63</sup>; 51<sup>44</sup>; 59<sup>37</sup>. The data supplied by the largest sample size study (Bedate et al.)<sup>32</sup>, with 1966 patients and 6 months of follow-up, indicate 42% abstinence in this period<sup>32</sup>. In the sample presented, the retention rate for the same time period is 44.35% (for the first treatments) (41.21% for all the treatments), similar to that of the publications reported for this setting.

Some of the difficulties mentioned for other studies are repeated in the present study. The confirmation of a

certain therapeutic offer and heterogeneity of the sample, partially because it includes a whole decade of follow-up, are perhaps the most important limitations of the study.

However, it can be concluded that the data defined by the prototype patient of this present study coincide with those reported in different publications that have been done on the subject in Spain and which, therefore, can be a reference sample for future investigations.

## REFERENCES

1. Regier DA, Narrow WE, Rae DS, Manderscheid RW, Locke BZ, Goodwin FK. The de facto US Mental and Addictive Disorders Service System. Epidemiologic Catchment Area Prospective 1-year prevalence rates of disorders and services. *Arch Gen Psychiatry* 1993;50:85-94.
2. Kessler RC, McGonagle KA, Zhao S, et al. Lifetime and 12-month prevalence of DSM-III-R psychiatric disorders in the United States. Results from the National Comorbidity Survey. *Arch Gen Psychiatry* 1994;51:8-19.
3. Russell JM, Newman SC, Bland RC. Drug abuse and dependence. *Act Psychiatr Scand* 1994; (Suppl 376):54-62.
4. Kaplan HI, Sadock BJ. Sinopsis de Psiquiatría, 8.<sup>a</sup> ed. Madrid: Ed. Médica Panamericana, 1999.
5. O'Connor PG, Fiellin DA. Pharmacologic treatment of heroin-dependent patients. *Ann Intern Med* 2000;133(4):54.
6. Haro G, Martínez-Raga J, Castellano M, Bolinches E, De Vicente P, Valderrama JC. Prescripción médica de heroína: ¿existe evidencia científica de su eficacia en el tratamiento de la dependencia de la misma? *Actas Esp Psiquiatr* 2001; 29(5):343-8.
7. Ochoa Mangado E. Dependencia de sustancias. En: Ochoa Mangado E, editor. Antagonistas opiáceos en las dependencias. Clínica de la Naltrexona. Col Psiquiatría 21. Dir. Prof. Saiz Ruiz J. Barcelona: Ed. Ars Medica. Psiquiatría Editores, 2001a.
8. Observatorio Nacional sobre Drogas. Informe n.º 4. Plan Nacional de Drogas. Ministerio del Interior, 2001.
9. Van der Burgh C. A review of the drug abuse situation in the world. En: Epidemiologic trends in drug abuse. NIDA 1999;135-40.
10. Hartnoll R. Drug trends in the European Union. En: Epidemiologic trends in drug abuse. NIDA 1999;49-58.
11. NIDA. Heroin, abuse and addiction. Research Report. NIDA 2000.
12. Baca-García E, García A, Ochoa E. Historia psiquiátrica estructurada en la interconsulta hospitalaria a toxicomanías/sida. *Revista Española Drogodependencias* 1999;2481:60-70.
13. Cacabelos R. Aplicaciones generales y específicas de los ordenadores. *JANO* 1988;35:87-102.
14. Escolar F, Escolar JD, Sampériz AL, Alonso JL, Rubio MT, Martínez-Berganza MT. Informatización de la historia clínica en un servicio de medicina interna. *Med Clin* 1992;99:17-20.
15. Roca J. Cómo y para qué hacer un protocolo. *Med Clin (Barc)* 1996;106:257-62.
16. Madoz-Gúrpide A. Efectividad de la naltrexona en la dependencia de opiáceos. Factores pronósticos. Tesis doctoral. Alcalá de Henares, 2002.
17. Kramer MS, Boivin JF Toward an «unconfounded» classification of epidemiologic research design. *J Chron Dis* 1987; 40(7):683-8.
18. Clasificación Internacional de las Enfermedades. Décima revisión. Trastornos mentales y del comportamiento. Descripciones clínicas y pautas para el diagnóstico. Madrid: Meditor, 1993.
19. Ling W, Wesson DR, Charuvastra C, Klett CJ. A controlled trial comparing buprenorphine and methadone maintenance in opioid dependence. *Arch Gen Psychiatry* 1996; 53(5):401-7.
20. Juez Martel P, Díez Vegas FJ. Probabilidad y estadística en medicina. Madrid: Ed. Díaz de Santos, 1996.
21. Iraurgi I, Jiménez-Lerma JM, Herrera A, Murua F, Gutiérrez M. Tasas de retención y consumo en un programa de antagonistas opiáceos. Un análisis de supervivencia. *Adicciones* 1997;9(1):7-21.
22. Kosten TR. Current pharmacotherapies for opioid dependence. *Psychopharmacol Bull* 1990;26(1):69-74.
23. Warner EA, Kosten TR, O'Connor PG. Pharmacotherapy for opioid and cocaine abuse. *Med Clin North Am* 1997; 81:909-25.
24. Ward J, Hall W, Mattick RP. Role of maintenance treatment in opioid dependence (see comments). *Lancet* 1999;353 (9148):221-6.
25. Ochoa E, Arias F, Ciudad A, Martín MJ. Deshabitación con naltrexona en la dependencia de opiáceos: un estudio evolutivo. *Rev Esp Drogodep* 1993;18:233-46.
26. Gutiérrez M, Ballesteros J, González-Oliveros R, Ruiz J. Retention rates in two naltrexone programmes for heroin addicts in Vitoria, Spain. *Eur Psychiatry* 1995;10:183-8.
27. Landabaso MA, Fernández B, Sanz J, Ruiz de Apodanca J, Pérez B, Gutiérrez-Fraile M. Estudio de la evolución (1990-1993) de adictos a opiáceos en programas de antagonistas. *Adicciones* 1996;8(1):67-74.
28. Schecter AJ, Friedman JG, Grossman DJ. Clinical use of naltrexone (EN-1639A). Part I: Safety and efficacy in pilot studies. *Am J Drug Alcohol Abuse* 1974;1:253-69.
29. Lewis D, Hersch R, Black R, Mayer J. Use of narcotic antagonists (naltrexone) in an addiction treatment program. Research Monograph Series. NIDA 1976;9:99-105.
30. Greenstein RA, Arndt IC, McLellan AT, O'Brien CP, Evans B. Naltrexone: a clinical perspective. *J Clin Psychiatry* 1984; 45:25-8.
31. Capone T, Brahen L, Condren R, Kordal N, Melchionda R, Peterson M. Retention and outcome in a narcotic antagonist treatment program. *J Clin Psychol* 1986;42:825-33.
32. Bedate J, Bobes J, Ochoa E, Solé J. Evaluación del tratamiento de los heroínómanos con naltrexona. Estudio multicéntrico. *Avances en drogodependencias. Ediciones en Neurociencias* 1995;129-60.
33. Torres Tortosa M, Ruiz López de Tejada M, Fernández Elías M, Pérez Pérez C, Fernández Conejero E, Ugarte I, et al. Cambios en la vía de administración de la heroína y frecuencia de infección por el virus de la inmunodeficiencia humana. *Med Clin* 1995;104(7):249-52.
34. Pérez Jiménez JP, Salvador Robert M. Transiciones en la vía de administración de heroína. Estudio en una muestra española. *Adicciones* 1997;9:23-36.
35. Cami J, Rodríguez ME. Cocaína: la epidemia que viene. *Med Clin* 1988;91;2:71-6.
36. Carreño JE, Bobes J, Brewer C, Álvarez CE, San Narciso GI, Bascarán MT, Sánchez del Río J. 24-hour opiate detoxification an antagonist induction at home- the «Asturian Method»: a report on 1,368 procedures. *Addict Biol* 2002;7 (2):243-250.
37. Elizárate E, Gutiérrez M, Fernández C, Figuerido JL, González-Pinto A, Jiménez JM. Antagonización rápida de opiáceos: eficacia en una muestra de 91 pacientes. *Psiquiatría. COM (revista electrónica)* 1998 diciembre (cita-



- do 5 mar 2003);2(4):(27 pantallas). Disponible en: URL: [http://www.psiquiatria.com/psiquiatria/vol2num4/art\\_4.htm](http://www.psiquiatria.com/psiquiatria/vol2num4/art_4.htm).
38. Fernández Miranda JJ, González García-Portilla MP, Saiz Martínez PA, Gutiérrez Cienfuegos E, Bobes García J. Retención a los 6 años en un programa de mantenimiento con metadona y variables relacionadas. *Rev Esp Drogodep* 2001; 26(1):43-56.
  39. Gimeno C, Esteban J, Pellin MC, Climent JM, Camacho I, Gimeno MI, et al. Mejoría de la gravedad de la adicción en los tratamientos con metadona. *Adicciones* 2002;14(2):151-60.
  40. March Cerdá JC, Aceijas Hernández C, Carrasco Limón F. Evaluación de los tratamientos con metadona en Andalucía (ETMA). Resultados del estudio piloto. *Adicciones* 2001;13(2):153-8.
  41. López-Ibor AJ, Pérez de los CJ, Ochoa E, Hernández HM (Maintenance treatment for opiate dependence at a naltrexone clinic). Tratamiento de mantenimiento de la dependencia a opiáceos en una clínica de naltrexona. *Actas Luso-Esp Neurol Psiquiatr Cienc Afines* 1990;18(5):296-305.
  42. Ochoa E, Arias F, Somoza JC, Vicente N, Jordá L. Retención en un programa de mantenimiento con naltrexona: 2 años de seguimiento. *Adicciones* 1992;4(3):207-14.
  43. Sopelana P, Diéguez A, Bautista L. Perfil de los drogodependientes que ingresan en una unidad de desintoxicación hospitalaria durante un período de cuatro años y medio. *Actas Luso-Esp Neurol Psiquiatr* 1992;20:81-91.
  44. Arias F, López-Ibor JJ, Ochoa E. Predictores evolutivos en un programa de mantenimiento con naltrexona. *Adicciones* 1996;8:479-500.
  45. Secades Villa R, Fernández Rodríguez R, Fernández Hermda JR. Factores asociados a la retención de heroínómanos en un programa libre de drogas. *Adicciones* 1998;10(1):53-8.
  46. Agencia Antidroga. Plan Regional sobre Drogas. Comunidad de Madrid. Memoria 2000.
  47. Santos Díez P, García Merita ML, Barreto Martín P. Variables psicológicas predictoras de evolución en una Unidad de Deshabitación Residencial (UDR). *Anales de Psicología* 2001;17(2):171-6.
  48. San Narciso GI, Carreño JE, Pérez SE, Álvarez CE, González MP, Bobes J. Evolución de los trastornos de personalidad evaluados mediante el IPDE en una muestra de pacientes heroínómanos en tratamiento con naltrexona. *Adicciones* 1998;10(1):7-21.
  49. García A, Ezquiaga E. Estudio clínico-descriptivo por sexos de una muestra de 433 drogodependientes. *Adicciones* 1991;3(4):349-57.
  50. Arias Horcajadas F. Trastornos psiquiátricos en dependientes de opiáceos en tratamiento de mantenimiento con naltrexona. Tesis doctoral. Alcalá de Henares, 1995.
  51. Arias F, López Ibor JJ, Ochoa E. Comorbilidad psiquiátrica en dependientes de opiáceos en tratamientos con naltrexona. *Adicciones* 1997;9(2):235-53.
  52. Judson BA, Goldstein A. Naltrexone treatment of heroin addiction: one-year follow-up. *Drug Alcohol Depend* 1984; 13:357-65.
  53. Lerner A, Sigal M, Bacalu A, Shiff R, Burganski I, Gelkopf M. A naltrexone double blind placebo controlled study in Israel. *Israel J Psychiatry Related Sci* 1992;29:36-43.
  54. Resnick R, Aronoff M, Lonborg G, et al. Clinical efficacy of naltrexone: a one year follow up. *NIDA Res Monogr* 1976; (9):114-7.
  55. D'Ippoliti D, Davoli M, Perucci CA, Pasqualini F, Bargagli AM. Retention in treatment of heroin users in Italy: the role of treatment type and of methadone maintenance dosage. *Drug Alcohol Depend* 1998;52(2):167-71.
  56. Kleber HD, Kosten TR. Naltrexone induction: psychologic and pharmacologic strategies. *J Clin Psychiatry* 1984; 45:29-38.
  57. Albanese AP, Gevirtz C, Oppenheim B, Field JM, Abels I, Eustace JC. Outcome and six month follow up of patients after Ultra Rapid Opiate Detoxification (UROD). *J Addict Dis* 2000;19:11-28.
  58. Gold MS, Dackis CA, Washton AM. The sequential use of clonidine and naltrexone in treatment of opiate addicts. *Adv Alcohol Substance Abuse* 1984;3:19-39.
  59. Washton AM, Pottash AC, Gold MS. Naltrexone in addicted business executives and physicians. *J Clin Psychiatry* 1984; 45:4-6.
  60. Pino Serrano C. Desintoxicación rápida de opiáceos. Estudio descriptivo sobre 50 pacientes heroínómanos y su seguimiento a 1, 3 y 6 meses. *Psiquiatría Pública* 1996;8(5): 279-291.
  61. Avila JJ, Ortega L, Rodríguez F, Pérez A, Izquierdo JA, Garrido E. Tratamiento de pacientes dependientes de opiáceos con naltrexona y abordaje psicoterapéutico. XVII Reunión Nacional de la Sociedad Española de Psiquiatría Biológica. Salamanca, 1993.
  62. Ariño J, Tejero JA, Pérez I, Mendia A, Estébanez A. Evaluación de un programa de naltrexona en un servicio ambulatorio de toxicomanías. *Adicciones* 1993;5:53-66.
  63. Ochoa E, Cebollada A, Ibáñez A. Implicación familiar como predictor en un tratamiento de mantenimiento con antagonistas opiáceos. *Adicciones* 1994;6(1):51-60.