

Spanish University Postgraduate Training on Addictions: The Historic Development and its Current Situation

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BACKGROUND: Drug dependence is a public health problem that requires trained professionals to effectively address this issue. The aim of this study was to analyze postgraduate university training programs specializing in addictions in Spain.

METHODS: An exhaustive review of the scientific literature was conducted, and information was collected on university training programs specializing in addictions in Spain. A descriptive documentary analysis of the curricula of Master's and other postgraduate degrees at Spanish universities was performed. Postgraduate and continuing education programs were considered. The inclusion criteria encompassed academic relevance and the availability of publicly accessible information pertaining to those programs. **RESULTS:** Thirteen active university specialized training programs in addictions were identified across the country. These programs were offered in different universities and focused on theoretical and practical aspects related to addiction prevention, treatment and rehabilitation. Some of them focused on specific areas, such as clinical or

preventive approaches, or both. In addition, a variety of methodological approaches were observed, including face-to-face, online or blended learning; courses that included clinical placements and practical experience in specialized centers and others that did not.

CONCLUSIONS: This study provided an overview of specialized postgraduate university training programs in addictions in Spain. The results indicated that there are a variety of training options in the country, providing opportunities to acquire knowledge and skills in the field of addictions. However, it is important to further research and evaluate these programs to ensure their quality and effectiveness in preparing specialists in the treatment of drug dependence. It is recommended that universities, along with relevant subsidiary agencies such as ministries of health, public health organizations, research agencies linked to universities, specialized international organizations, and professional entities, continue to collaborate, and update training programs. This ongoing effort is essential to address current and future challenges in the field of addiction.

Keywords | Drug-Dependence – Addictions – Drug – Training – Master Degree – University

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1 INTRODUCTION

Drug abuse and dependence is a worldwide problem that affects the health, welfare and safety of populations. To prevent them and treat their consequences, the coordinated intervention of many professionals from different disciplines is required. Such professionals must be adequately trained to perform this task, and in modern societies, the institution to which the society delegates the responsibility for the higher training of professionals is the university (Nadeau & Boivin, 1985).

Consequently, in almost all countries, in a more or less organized and coordinated manner, universities host various training initiatives for professionals in the field of substance abuse and dependence. Recently Pavlovská et al. (2017), published a review of European programs of addictions training based at the university. Subsequently, the same author and other collaborators (Pavlovská et al., 2019), have released a similar review centered in the United States. In the European case, its first revision effort found 34 study programs on addictions in 25 European universities, located in eight different countries. As the authors themselves indicated, the search had basically been done through the Internet using keywords in English, which could lead to an underrepresentation of the countries that do not use that language in their university system or the public information available. Not surprisingly, most of the programs are located in the United Kingdom ($n = 25$). On the other hand, only two appear in Spain, one in Germany, and none in France.

Given the interest to progressively complete this mapping with more extensive and reliable data, we have proposed in a first stage to examine at greater depth the high-level training in drug dependence offered in Spain, whose information on the Internet, in fact, is in Spanish and also often in other national languages, such as Catalan or Euskera (Basque), but rarely in English. Some programs have sometimes even offered summarized information in Italian or Portuguese, Romance languages close to Spanish, since students from Portuguese-speaking countries or from Italy usually participate with some regularity in specialization studies in Spain, together with those participants coming from Latin-American countries.

Just to clarify, throughout this article, terms such as drug dependence (as used by WHO), substance use disorder (as used within the DSM-5), or addiction (as widely used in the professional and media sectors) will be used indeterminately.

1.1 Some considerations about drugs, drug dependence and university education in Spain

In Spain, drug consumption and dependence have followed the pattern of other European countries, especially those of the Mediterranean, with a longstanding issue of alcoholism and smoking. This problem has been compounded by the consumption of other drugs, whether new or foreign to our culture. The relevant historical process on this topic could be divided into 3 phases (Comas, 1993), each one characterized according to the social changes experienced by the country (Ferrer et al., 1980).

The first period extends until 1973, years after the civil war (1936-39), during which there was a notable increase in alcohol consumption, with little societal awareness or sensitivity towards it. Consumption of other substances in general was low and it was not perceived as a problem. During this initial stage, and in accordance with limited social awareness, there are no postgraduate specialization courses. In undergraduate programs, such as medicine or nursing, the focus is primarily on the organic damage resulting from substance abuse, such as alcoholic cirrhosis, with minimal attention given to the dependencies themselves.

At the end of this period a social alert state does begin: *new* drugs (cannabis, LSD, and especially heroin) begin to be consumed. Dependence on heroin wreaks havoc and, together with the spread of HIV/AIDS through the habit of sharing syringes, it reaches epidemic proportions, with enormous health and social damage. This period is comprised between 1973 and 1992. It coincides with the end of the dictatorship (1975-76) and the establishment of democracy (1977-78). The 80s were the worst during the *heroin epidemic*, and both civil society and public authorities give an intense and relatively well-coordinated response. In 1985, a National Plan on Drugs was created, with the participation of all national, regional, and local authorities, and a broad participation of the NGOs and other stakeholders (Ferrer & Sánchez, 1987).

Starting in 1975, a greater activity in training concerning this began, although it was based on dispersed, heterogeneous actions, without the involvement of the universities. They lack a continuous character and primarily take the form of summer schools, seminars, conferences, or short courses. They are carried out by scientific societies, professional associations (especially psychology and medicine), health centers, or by local or regional authorities. The first occasions in which the university is involved are not recorded until 1976/77, when the University of Barcelona (UB) organized some short seminars on the subject, and in the course 1977/78 a course on 'drug dependence' was initially introduced into psychology studies, later complemented by specialized annual seminars lasting 60 hours each. Also in 1979 the University of Valencia implemented a 20-hour course for teachers, and then followed by the School of Nursing at the Complutense University of Madrid organized several 96-hour annual seminars.

At the beginning of the 1980s, the first proposals and structured activities of higher level training began to appear. In 1980, a proposal for an interdisciplinary postgraduate training system of professionals was publicly presented. This proposal was subsequently published in the primary scientific journal in the Spanish language within this field (Ferrer, 1981). Simultaneously, Freixa and Aizpiri (1980) presented a proposal on "criteria of training in alcoholism and drug dependence", suggesting a basic course of 35-40 hours followed by six months of professional practice. This second proposal, with the financial support of the autonomous governments of the Basque Country and Catalonia, was implemented on two occasions in intensive one-week courses in a boarding school, although this type of courses were subsequently discontinued.

Like other relevant milestones, we would like to point out that in 1983 the approval of a University Reform Law gives universities the right to organize their own postgraduate diplomas, whether they are master degrees (usually a two-year program) or just one-year Diplomas, with an appreciable level of autonomy to respond to the diverse needs of the market and the society, following the Anglo-Saxon model. Taking advantage of this legislative amendment, the universities modify their statutes and this allows in 1986 the creation of a first Master of specialization in drug dependence at the University of Barcelona (UB), based on the above-mentioned proposal (Ferrer, 1981). For the creation of the program, various European and international experiences were taken into account, and especially the drug dependence specialization program of the University of Montreal.

That specialized training was supported by public institutions, both the National Plan on Drugs and various regional plans and a philanthropic foundation at the national level, the Foundation for Help Against Drug Addiction (FAD), promoting the creation of Masters, which are created in universities such as the Complutense of Madrid, (where there had already been an important tradition of training in this regard), the University of Deusto in Bilbao, the University of Santiago de Compostela and others (Ferrer et al., 1995).

In the field of health-related disciplines, the legal recognition of specialization, with a training process designed for that purpose, is limited to the medical profession, with the specialty of psychiatry as the highest level of specificity close to the problem of drugs. No other relevant profession in the field (psychology, social work, nursing...) has at this time recognized specialties in the same manner. However, in practice most of the doctors involved in addictions have adopted a bio-psycho-social approach distant from the traditional psychiatric one, and especially in the first promotions (1986-2006) of the then recently created master on drug dependence at the UB, the participation of physicians and psychiatrists was quite extensive (Ferrer, 1995).

Since 1992, the problems associated with heroin decrease, but the consumption of other drugs, especially cocaine and cannabis, was generalized (Cano et al., 1988). Alcoholism is increasingly taken into consideration and included in a standard way in most drug action plans, and social awareness allows adopting measures on smoking that a few decades ago would have seemed unthinkable. Although the consumption of many substances broadly persists, and continues to generate significant health issues and problems of all kinds, a pragmatic policy of harm reduction manages to reduce its impact to a great extent (Frank et al., 2021).

The training, it is agreed at the national level, should cover both the undergraduate and the postgraduate level. This includes minor training activities, with the inclusion of drugs in various subjects of various careers (medicine, psychology, nursing, social work, social education...), or at a medium level, with the creation of specific subjects or matters on drug dependence or “addictions” (including in the latter case the behavioral dependencies). There is no a specific degree on addictions in

Spain, as there is in the case of the Czech Republic, the only one of which we know in Europe of this kind (Ferrer et al., 2021).

It is important to highlight that Spain is divided into 17 autonomous communities or regions, each with its own government and competencies in various areas, including at variable extents higher education. While the Ministry of Education, at the national level, establishes general education policies, autonomous communities have a significant degree of autonomy in the management and regulation of their educational systems. This autonomy allows them to adapt educational policies to the needs and particularities of their region.

In the case of higher education, autonomous communities have competencies in aspects such as accrediting universities and study programs, financing research, promoting educational quality, and developing study plans that align with the demands of the labor market and the specific characteristics of each region (Constitución Española, 1978).

The field of traditional health specialties experienced a significant change in 1998 with the creation and formal recognition of a specialty in a profession other than medicine or nursing—clinical psychology. To achieve this, a program inspired by the psychiatry-learning model was designed, featuring several years of theoretical and practical training, primarily hospital-based. This program is known as P.I.R. (Internal and Resident Psychologist). Approximately 600 hours of content on addictions are included in the training, spread over about four months at the R1 level. However, the number of accredited specialists through this training structure has been, and still is today, quite limited compared to the actual needs of the country in this field.

Recognizing this gap, it soon became essential to establish a complementary option: the master’s degree in “general health psychology.” For instance, at the University of Barcelona, the addiction training in this master’s program is only 3 ECTS (European Credits), equivalent to about 75 hours of student time—dedicated to lectures, assignments, or placements.

At the postgraduate level, numerous master’s programs established in the late ‘80s and early ‘90s gradually disappeared over time. This was either due to a lack of a critical mass of students or because the driving energy of those who initiated them had been exhausted. However, new programs have emerged, and since the mid-‘90s, there has also been a supplementary offering of online postgraduate courses.

A last noteworthy element in this period is the adoption of the European Higher Education Area (EHEA), commonly referred to as the Bologna Process, named after the Italian city where it was established. This initiative aims to harmonize higher education throughout Europe and guarantee the standardization and mutual recognition of qualifications. While significant progress has been achieved in undergraduate studies, the same cannot be said for postgraduate studies (Lloret et al., 2004).

In the case of postgraduate studies, there was a shift from the previous dynamic that granted universities autonomy to de-

sign their own programs and oversee them with their quality controls. A new category of postgraduate and master's degrees emerged, misleadingly known as 'official' masters in Spain. This term implicitly suggested that the pre-existing ones, now labeled 'proprietary' masters, were considered 'unofficial'. In the Spanish context, official master's degrees and proprietary master's degrees represent two distinct modalities of postgraduate programs. "Official" master's degrees, endorsed by the Ministry of Education, offer a nationally and internationally recognized qualification. They follow a standardized curriculum and meet formal criteria, such as having a percentage of teaching staff with a Ph.D. or originating from the same university. Due to state supervision, a minimum quality standard is expected to be guaranteed, even for newly introduced courses from less prestigious universities. These programs often benefit from public funding, resulting in more affordable tuition fees. On the other hand, proprietary master's degrees, delivered by the universities themselves, confer a specific qualification supported by the prestige of each academic institution. These programs offer greater flexibility in terms of curriculum design and admission requirements. Universities also have the autonomy to choose their staff based on their qualifications and experience in the specific field addressed. While proprietary master's degrees may lack the same state recognition as official master's degrees, they often better adapt to the specific needs of the professional sector they target. However, it's worth noting that these programs typically come with higher tuition costs, as they rely more on the internal resources of the institution (Ministerio de Educación y Formación Profesional, 2022). Due to their ability to better align with sector requirements for the workforce, the option to hire external experts as teachers or placement supervisors, and a more substantial involvement of institutions where graduates are expected to be hired in both organization and teaching, proprietary master's programs may be more highly valued by the labor market. For these reasons, most of the existing master's programs decided not to adapt to this new modality and continue offering diplomas supported by each Academic institution, dismissing the "official" recognition.

The objective of this article is to gather information about existing university postgraduate programs in Spain aimed at training specialists in drug dependence, and to analyze and address them.

2 METHOD

2.1 Design

Descriptive documentary analysis of the curricula of master's and other postgraduate degrees offered at Spanish universities.

2.2 Population and sample

The study population encompassed all Spanish universities. Specifically, the postgraduate academic offerings were consulted on the official websites of their campuses in the 2022-2023 academic year.

The inclusion criteria for the selected postgraduate and master's degrees were: i) a focus on specific training in drug dependence and/or addictions, whether delivered face-to-face, virtually, or through a mixed approach, and ii) being offered by Spanish public or private universities recognized by the Spanish government. Excluded from consideration were postgraduate training courses that could include only a module or content related to drug dependence within a non-specific postgraduate or master's degree, as well as training offered by centers not recognized by the university administration. Additionally, master's or postgraduate courses that presented training proposals exclusively in behavioral addictions, without including drug dependence, were also excluded. Data collection was carried out between January and May 2023.

2.3 Statistical analysis

Absolute and relative frequencies were employed to describe the analyzed categorical variables, while measures of central tendency and dispersion were utilized for quantitative variables.

2.4 Procedure

The register of universities of the Spanish Ministry of Education and Vocational Training (Ministry of Education and Vocational Training, 2022) was accessed and subsequently, the training offerings related to drug dependence from each university were consulted. The search utilized keywords (in Spanish) such as "droga," "adicción," "dependencia," "alcohol," "tabaco," "sustancia," and "toxicomania," effectively minimizing the possibility of false negatives. After locating the universities offering postgraduate courses in drug dependence, information related to the study variables was retrieved.

All Spanish universities (84 in total, comprising 50 public and 34 private) were consulted. These variables included the institution offering the training, the total number of ECTS for the course, the price per ECTS, the total price, the duration of the training, the contents of the master's degree, and the professional disciplines to which the course was addressed. In cases of incomplete information on the universities' websites, attempts were made first by email and secondly by telephone to contact the Master's staff directly for the required data. Using these methods, telephone contact was established with the directors of three public universities and one private university.

2.5 Ethical issues

This study was conducted with the utmost ethical commitment and respect towards the fundamental principles of scientific research. Every effort was made to avoid any form of bias in the study design and data analysis. Any potential conflict of interest that could influence the results has been transparently disclosed. This study has been conducted with the highest level of academic integrity and respect for the rights and well-being of all involved parties.

3 RESULTS

It has been verified that there are currently 13 university programs for postgraduate study in drug dependence in Spain. Among them 10 have the level of a *master's degree* (implying at least 60 ECTS credits), while the remaining 3 are postgraduate university courses of a lower level, ranging between 1 and 15 credits.

3.1 Situation of the *Master* programs

Among the 10 active university master's degrees, one program consists of 90 credits, another of 120, while the rest have 60 credits each. The calculation methodology for European credits (ECTS – European Credit and Accumulation Transfer System) is based on the total time dedicated by students to various forms of study—whether face-to-face (in theoretical or practical activities), individual tasks, group activities, readings, or the master's thesis. It is generally assumed that approximately one credit is equivalent to 25 hours of student dedication, typically comprising 10 verifiable classroom hours or 25 hours in a placement at

therapeutic or prevention centers. The remaining time involves estimates and may vary, encompassing readings, homework, group work, and the master's thesis.

This estimation becomes more imprecise, especially for online or blended courses, and more accurate for those employing a face-to-face methodology. For instance, a course of 80 European credits would approximately amount to 2,000 hours of investment in training.

Among the 10 master's courses currently in operation, five are conducted face-to-face, three are online, and two adopt a mixed or blended learning format. Furthermore, seven of these master's level courses are offered by public universities, while the remaining three are hosted by private universities.

The university degrees most frequently associated with specialization courses in addiction are psychology, social work, medicine, nursing, and social education. Less common are degrees in criminology, teaching, physiotherapy, occupational therapy, pharmacy, anthropology, sociology, among others (see *Table 1*).

Table 1 | Characteristics of master's degrees and postgraduate courses on drug dependence offered at Spanish universities

	Programme Name	Institution	ECTS	Price/ECTS	Total price (EUR)	Years	Modality
1	Máster en Drogodependencias	Universitat de Barcelona	90	76,67	6,900	2	In person
2	Experto en Tratamiento de las adicciones	Universitat de Barcelona	15	83,33	1,250	1	In person
3	Máster Universitario en Investigación, Tratamiento y Patologías Asociadas a las Drogodependencias	Universitat de Valencia	120	35,34	5,156	2	In person
4	Máster Universitario en Educación y Rehabilitación de Conductas Adictivas	Universidad Católica de Valencia	60	54,83	3,290	1	In person
5	Máster en Adicciones: Perspectiva Biopsicosocial	Universidad de Oviedo	60	45,00	2,700	1	In person
6	Máster Universitario en Psicofarmacología y Drogas de Abuso	Universidad Complutense de Madrid	60	52,65	3,159	1	In person
7	Máster en Prevención y Tratamiento de las Adicciones	Universidad de Salamanca	60	25,00	1,500	1	Semi in person
8	Máster Universitario en Prevención en Drogodependencias y otras Conductas Adictivas	Universidad Internacional de Valencia	60	83,00	4,980	1	Online
9	Master de formación permanente en prevención y tratamiento de las conductas adictivas	Universitat de Valencia	60	30,00	1,800	1	Online
10	Curso en conductas adictivas	Universitat Autònoma de Barcelona	6	66,00	396	1	Online
11	Experto en intervención y prevención en Adicciones	Universidad Nacional de Educación a Distancia (Spain)	70	47,14	3,300	1	Online
12	Máster en Drogodependencias	Universitat de Barcelona	60	72,83	4,370	2	Online
13	Màster de formació permanent en prevenció i intervenció socioeducativa en l'àmbit de les drogodependències	Universitat Ramon Llull (Barcelona)	60	124,00	7,440	2	Blended learning

Note: ECTS: European Credits Transfer and Accumulation System

Table 2 | Characteristics of the internships, contents and disciplines targeted by specialization masters in drug dependence in Spain

	Practice		Contents			Discipline profile					
	Clinical	Prevention	Hours	Clinical	Prevention	Other	Medicine	Psychology	Education	Social Work	Nursing
1	Required	Required	500h	Yes	Yes	Policy, Research	X	X	X	X	X
2	Requested for admission	Not required	–	Yes	No	–	X	X	X	X	X
3	Required	Required	400h	Yes	Yes	Policy, Research	X	X	X	X	–
4	Required	Required	200h	Yes	No	–	X	X	X	X	X
5	Required	Required	–	Yes	No	–	X	X	X	X	X
6	Required	Not required	160h	Yes	No	Research	X	X	X	X	X
7	Not required	Not required	–	Yes	Yes	–	X	X	X	X	X
8	Not required	Required	100h	No	Yes	Policy	X	X	X	X	X
9	Not required	Not required	–	Yes	Yes	–	X	X	X	X	X
10	Not required	Not required	–	Yes	No	–	–	–	–	–	X
11	Not required	Not required	–	Yes	Yes	Policy	X	X	X	X	X
12	Not required	Not required	–	Yes	Yes	–	X	X	X	X	X
13	Required	–	150h	Yes	No	Research	–	–	X	X	–

3.2 Other issues

The costs for participants in postgraduate training activities can range from a minimum of €25 per credit (as seen in an online master's degree offered by the Universidad de Salamanca) up to a maximum of €124 per credit (as observed in the case of the Universitat Ramon Llull of Barcelona). In absolute terms, among the courses currently in operation, the higher cost is associated with the Master program at Universitat Ramon Llull in Barcelona, which is a private university.

The next most expensive Master is the Master in Drug dependence at the University of Barcelona (€6,900, in total for two years), whereas the most economical one is the blended-learning master's degree offered at the University of Salamanca (€1,500, one year).

Among the master's level courses analyzed, half of them necessitate practical training, typically ranging from a minimum of 140 hours (as observed in the master's degree from the Complutense University of Madrid) to the mandatory minimum requirement of 500 hours (as required by the Master program at the University of Barcelona). Some courses, like the last one mentioned, provide the option for students to voluntarily extend the number of practical hours to around 1,100. Typically, practical training is a requirement for face-to-face courses, but not for online courses, although, in certain instances, four credits may be mandatory, as seen in the case of the University of Valencia. In other courses, practical training might be offered as an additional option for students who request it, provided that suitable centers are available.

The required practical learning is generally of a clinical nature. However, in four cases (the Masters of the University of Barcelona,

the Catholic University of Valencia, Oviedo University, and the International University of Valencia), practical activities in prevention are also mandated. Some courses establish a balance of credits, with the requirement for clinical practice slightly higher than that for prevention. For example, at the Catholic University of Valencia, nine clinical credits versus six prevention credits are mandated. In other cases, such as the University of Barcelona, a minimum number of credits for each type, both clinical and prevention, are required. However, in the second year, students have the flexibility to complete their entire practical component (15 ECTS) in a treatment center, research, or a prevention program, based on their preferences (see *Table 2*).

3.3 Other minor Postgraduate courses

In addition to the postgraduate courses with the level of a master's degree, there are other courses with a lower academic load—less than 60 European ECTS credits. However, accessing these courses always requires having previously obtained a university degree.

Three minor postgraduate courses related to the subject of addictions were identified. One of them, with 15 credits, corresponds to an expert face-to-face course at the University of Barcelona, focused on treatment, and is part of the same program as a master's degree of 90 credits. The remaining postgraduate courses at this level consist of certificates or short courses, ranging between two and six credits. All of these, as of now, are delivered in an online format. As an exception, there is a postgraduate degree in behavioral addictions and psychological manipulation, comprising 30 credits and offered online. However, as it does not address drug dependence at all, we have excluded it from further analysis.

4 DISCUSSION

The aim of this study was to collect information on existing postgraduate university training programs in Spain designed to train specialists in drug dependence. To achieve this objective, a descriptive documentary analysis of the curricula of master's and postgraduate programs in Spanish universities was employed.

An element of confusion in Internet searches arises from the fact that the term "master" is neither traditional nor officially registered in Spain, where alternatives like "magister" or "maestría" may also be used. As a result, different training offerings found online using the term "master" may not be provided by universities or recognized university bodies. These offerings are often distance courses sold on the internet by private health centers or training centers that offer courses across various disciplines. To maintain clarity and consistency, these non-university courses (8 in total) have been excluded from further analysis.

The results obtained revealed that there are currently 13 university programs of postgraduate studies in addictions in Spain. Of these, 10 are at a *master's degree* level and the remaining 3 are lower level postgraduate courses.

In terms of course load, most Master's programs have a minimum load of 60 ECTS credits, which is the legal requirement. However, some programs have a higher load, up to 120 credits. As explained above, one credit is considered to be equivalent to 25 hours of student' dedication. It is important to bear in mind that this estimate may vary, especially for online and blended courses.

In terms of the delivery mode, six of the Master programs are conducted face-to-face, four are offered online, and three adopt a blended learning format. Additionally, it was observed that programs specializing in addiction are most frequently accessed by individuals with degrees in psychology, social work, medicine, nursing, and social education. Less common degrees include criminology, teaching, physiotherapy, occupational therapy, pharmacy, anthropology, sociology, among others.

In geographical terms, the supply of training in drug dependence is fairly distributed throughout the country, although an unusual concentration of courses is observed in the city of Valencia, with four Master's programs offered by three different universities. This high supply may be related to a rigorous and committed regional policy of requiring accreditation of the training for professionals in drug dependence training. However, this demand and level of experience is not observed in the same way in other regions of the country.

The current training offerings discovered may differ if searched one or four years earlier, and slight changes may have occurred by today regarding the data at the time of their collection. This variability is because some courses are permanent, while others are irregular and are only offered when a sufficient number of students are enrolled or when public financial support is available. This has been observed with some prestigious universities, such as the University of Santiago de Compostela and the University of Deusto in Bilbao. Although they used to offer postgraduate specialization courses in the past, they no

longer do so today (Universidad de Deusto, 2024; Universidade de Santiago de Compostela, 2024).

One limitation of this study stems from the reliance on the availability of information on the internet during the information search period (January-March 2023) as an inclusion criterion. Due to this choice, some courses, potentially including some that are very significant, may not have been found or included.

In this context, we would like to highlight the case of the master's degree on addictions (European Prevention Curriculum, Universal Treatment Curriculum) from the University of the Balearic Islands. This degree was created and offered for the first time in the academic year 2020-21, and a detailed account of it can be found in Orte et al. (2022). This program is noteworthy because it was developed after the publication of EPC-UTC and is based on it. However, according to the information provided by its administrators, after the first offering, a critical mass of students has not been reached to offer a second edition, despite plans to offer it annually and run it once this critical mass is achieved. Therefore, during the information search period, this course was not active, and its data were not available.

It is important to bear in mind that university education in Spain is not free of charge, although it is relatively affordable if compared to other countries. Public scholarship systems exist to facilitate studies for students lacking financial resources, along with loan programs that students can repay after completing their studies. Postgraduate programs are also not free, and some of them can be relatively expensive for participants. As a reference, the average salary in 2023 has been estimated at € 1,920 per month. Some courses may be financed by public administrations or, on an individual basis, paid for by the companies or institutions where the students are employed.

The costs of participating in postgraduate training activities vary, ranging from a minimum of €25.35 per credit to a maximum of €96.30 per credit. On the other hand, it is challenging to determine whether the information found on the electronic media of the universities included in this study always corresponds to offers that have been effectively implemented. For example, the Master's degree at the Universitat Ramon Llull has been advertised for three years but has not been initiated at any time, as the first edition was offered for three consecutive years and, due to a lack of candidates, was not initiated.

Geographically, the offering of specialized training in drug dependence is well-distributed throughout the country, although there is an unusual concentration of courses in the city of Valencia, with four master's programs offered by three different universities. This significant supply, indicative of sufficient demand for these courses, may be linked to a particularly rigorous and committed policy of the regional authorities in requiring accreditation for the training of their professionals.

In fact, as early as 1998, the regional government (Generalitat Valenciana), through the Directorate General of Drug Dependence, issued a decree authorizing drug treatment centers. An essential condition for these centers to open and operate was to have, at the very least, a professional from each discipline who could

demonstrate specialization in drug dependence. Unfortunately, to our knowledge, this level of quality is not required in other regions, where such specialization and training may be valued but is not mandatory or verified, leading to a potential absence in many centers.

In some cases, we know that certain courses benefit from aid from public administrations that reduce their cost. As an example, the Master in Drug Dependence at the University of Barcelona has received uninterrupted support from the Department of Health of the autonomous government of Catalonia over the last 30 years (Ferrer et al., 2021). This support enables the program to reduce the cost of enrollment for each participant by approximately €1,000. This aid is applied without distinction to students from other regions, as well as from other European and Latin American countries.

Half of the Master's programs analyzed require practical training, typically ranging from a minimum of 140 hours to a mandatory minimum requirement of 500 hours. These practical placements are generally of a clinical nature, though some programs also mandate practical activities in prevention. It's noteworthy that internships are primarily required in face-to-face courses but not in online courses, although, in certain cases, they may be offered as an additional option for students upon request, provided suitable centers are available.

In light of the findings, it is evident that while this study primarily focused on postgraduate education in drug dependence, there are notable areas for further exploration. Future research endeavors could delve into the doctoral programs available in addiction studies and assess the adequacy of undergraduate training in drug dependence across various academic disciplines. Additionally, given the expanding scope of addiction research, incorporating insights into behavioral addictions would be beneficial, providing a more comprehensive understanding of the field.

On the other hand, while the master's program approaches were examined regarding the inclusion of content related to prevention, treatment, clinical aspects, or others, conducting a detailed analysis of the content would have been beneficial. Future research could delve into a specific and comprehensive analysis of the curriculum across various training programs.

In conclusion, this study provided an overview of postgraduate university training programs in drug dependence in Spain for the academic year 2022-2023. A significant number of master's and postgraduate programs have been identified across

different universities, exhibiting variations in academic load, delivery modes, and practical requirements. These programs play a crucial role in the education of professionals specialized in drug dependence and contribute to addressing this issue in the country. However, there is a need to continue promoting the development of specialized training programs in Spain to ensure adequate coverage and quality care for individuals with substance use disorders.

It is worth noting that a more comprehensive understanding of the state of university specialized training on addictions in Spain would require searches conducted within the country itself, leveraging a certain knowledge of the training field, awareness of existing offers, and proficiency in the respective national languages. This is reflected in the fact that out of 13 identified courses, only two had (part of the) information available in English.

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