Education and training in addiction medicine and psychology across Europe: a EUFAS survey

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0. Abstract

Introduction: Training in addiction medicine and addiction psychology is essential to ensure the quality of treatment for patients with substance use disorders. Some earlier research has shown varying training between countries, but no comprehensive study of addiction training across Europe has been performed. The present study by the European Federation for Addiction Societies (EUFAS) aims to fill this gap.

Methods: A Delphi process was used to develop a questionnaire on specialist training in addiction treatment in 24 European countries. The final questionnaire consisted of 14 questions on either addiction medicine or addiction psychology covering the nature and content of the training and institutional approval, the number of academic professorial positions and the estimated number of specialists in each country.

Results: Information was not received from all countries, but six (Belgium, Denmark, Ireland, Italy, Poland, and Romania) reported no specialized addiction medicine training, while 17 countries did. Seven countries (Belgium, France, Ireland, Italy, Russia, Switzerland, and The Netherlands) reported no specialized addiction psychology training, while 14 countries did. Training content and evaluation methods varied. Approval was given either by governments, universities, or professional societies. Eighteen countries reported having professorships in addiction medicine and 12 in addiction psychology. The number of specialists in addiction medicine or psychology varied considerably across the countries.

Discussion: The survey revealed a large heterogeneity in training in addiction medicine and addiction psychology across Europe. Several countries lacked formal training and where present there was a large variation in the length of the training. Harmonization of training, as is currently the case for other medical and psychology specializations, is warranted to ensure optimal treatment for this under-served patient group.

1. Introduction

Substance use disorders (SUD) and alcohol use disorder (AUD) are important, yet often overlooked (1) and patients with these disorders are often not recognized (2, 3). Specific training and research in addiction medicine and psychology have long been lagging behind other fields in public health (4). Fortunately, we see a slow increase in funding for addiction research and a growth in the number of professionals involved in addiction medicine and psychology, reflected in an increase in professional societies and scientific journals in the addiction field (5).

In 2010, 23 addiction societies from 16 European countries founded the European Federation of Addiction Societies (EUFAS) (6). Since then, EUFAS has grown to include 36 national societies from 24 countries. The member societies represent both addiction medicine, addiction psychology and in some cases, addiction practice related to social care. EUFAS aims to improve addiction treatment and prevention measures at a European level and to support countries with less comprehensive systems. In addition, EUFAS attempts to increase funding for addiction research as well as enhance and harmonize knowledge and training in addiction medicine and psychology across Europe. However, there are still large differences in training among European countries, and some countries struggle with declining professional recruitment (7).

Throughout Europe and beyond, the larger domains in health care have developed comparable treatment approaches and similar curricula in the training of medical doctors, psychologists, and other specialists. We do not know if this holds true also for addiction medicine and psychology as they are relatively new disciplines in a field that has been fronted by social workers and public health nurses for decades (8). An earlier study described 34 addiction education programs across 25 universities in eight European countries (9). Of these programs, five were medically based and four psychology-based. The programs varied greatly in format and content. In addition, some countries have published more detailed description of the trainings. For instance, a study in the Czech Republic showed a broad range of graduate and postgraduate education programs (10), and a US based study found quite comprehensive educational programs (11). Finally, a Canadian study investigated the feasibility of training in addiction medicine and research simultaneously, documenting possibilities for this approach (12). To the best of our knowledge, no broad European overview has been presented so far.

Training at specialist level should be comprehensive, evidence-based, and aim at continuous quality improvement (13). Recommendations state that training should follow a stringent curriculum, be integrated in university programs, be provided by skilled teachers trained in university hospitals with

dedicated internships, be multidisciplinary and include educational activities in psychiatry and general medicine (14-16).

Overall, increased traveling and academic exchange in Europe has been fuelled by exchange programs like Erasmus. Also, the recent development of European Training curricula and board exams in a growing number of medical specialities reflects this necessity. To make such exchange possible, also for the addiction field, there is a need for harmonizing the quality of addiction specialities. The basis for such harmonisations is a thorough knowledge on the current situation of addiction medicine and addiction psychology training. Thus, the aim of the present study was to investigate the organization and extend of specialized training in addiction medicine and/or psychology across the 24 European countries conforming the EUFAS to provide an updated overview of the training and research infrastructure that form the basis for education of addiction specialists. The survey covered formal training in addiction medicine or psychology among other educational aspects.

2. Materials and methods

The current study on training in Addiction Medicine and Psychology in Europe (EUFASamp) was initiated by a working group in the EUFAS in collaboration with all authors.

Development of the questionnaire

The authors JB and ML used a modified Delphi technique (17) for consensus building among experts, which resulted in the final online survey EUFASamp (supplementary fig. S1). For the Delphi process, an international committee of experts was composed from the list of EUFAS member societies. When identifying experts, special attention was given in obtaining a wide geographical coverage, while keeping the committee small enough to allow efficient exchanges. Other selection criteria were scientific and clinical experience in the field of addiction medicine and/or psychology, extensive knowledge of addiction medicine or psychology, visible in scientific papers and having a central role in the addiction training in their respective countries. Following these criteria, we were able to incorporate a wide range of expertise and different perspectives. At the end of the selection process, 13 addiction clinicians and researchers alike, across ten European countries (Belgium, France, Italy, The Netherlands, Poland, Portugal, Spain, Sweden, UK, and three from Germany), comprised the expert committee and were involved in the Delphi process.

In the first round, the experts received via e-mail a draft of the survey on “Status of Addiction Medicine and Psychology Specialist Training in European countries” (EUFASamp) in English, and were asked to comment on completeness, structure, and comprehensibility of the survey. After the first round, authors JB and ML discussed the comments of the experts and programmed a synthesis of the results within “Nettskjema” (18), an online solution for data collection for research. In a second round, the experts were invited to comment on the feasibility of the online survey and the answer options of all items. This resulted in a two-armed survey – one arm for addiction medicine training and another arm for addiction psychology training, taking country specific circumstances into account. After a third expert round, a consensus was reached. The final online EUFASamp comprised 14 questions concerning different aspects of addiction medicine and psychology training, respectively. Each item consisted of a multiple-choice question followed by a comment section, enabling the report of country specific aspects. To verify the technical feasibility of the online survey (e.g., use of different browsers, filter functions, view on PC, smartphones, tablets, etc.) a pre-test among eight colleagues was conducted. The final EUFASamp survey can be found in supplementary material.

Data collection

A snowball sampling (19) was used by sending the survey to all 34 member societies of the EUFAS by e-mail in April 2021. The survey included the option to provide an e-mail to another person who might answer the survey. This person then automatically received the survey by e-mail. Gentle reminders and personal e-mails were sent to further representatives of the different countries where EUFAS has member societies between May and June 2021. By June 30, 2021, we had received 36 responses from all 24 countries. The number of responses per country ranged from one to five with an average of 1.5 responses and a median of one response per country. We received 11 responses concerning addiction medicine training and five responses concerning addiction psychology training only, the remaining 18 responses were for both arms of the survey. For some countries, we did not receive responses on the psychology arm (Czech Republic, Denmark, Finland, Poland, Spain, UK).

There were some duplicate answers, i.e., countries with more than one response both in the medical and psychology arms. These were studied in detail and noted in tables. In case of conflicting results, a summary of the responses was sent to the societies for verification.

Analysis

All data were compiled in a spreadsheet and numerical data were entered into tables and figures, and from the text in the commentary answer options, a short country summary was prepared. Following this step, 24 country reports were produced. For those countries that provided information on the training, the responses were e-mailed back to the member society of the respective country for feedback on the authors' interpretation of the results. The responses were integrated in the final results presented.

3. Results

Addiction medicine

Having an officially recognized specialization in addiction medicine was reported from 17 out of 24 countries (table 1), with training durations ranging from 0.5 (Germany) to 72 months (Norway). Most countries (16 of 17) included theoretical learning, education about basic procedures, pharmacological and non-pharmacological treatments, and most of them reported clinical supervision (14 of 17), tutorials or interactive learning (12 of 17), practical courses (14 of 17), medical emergencies (12 of 17), medical complications (15 of 17) and dual diagnosis (15 of 17). Of the 17 countries that reported having addiction training, an official authorization, diploma, or approval, was given by the government in seven countries, by a professional society in six countries, and by universities in four countries (see Table 1 for details). The approval/authorization was given after an examination in 15 of the countries. Eight countries included a written task on their final approval and nine countries included an evaluation of the course work.

Table 2 shows the number of professorships dedicated to addiction medicine in the different countries responding to the survey. Also, the estimated number of medical specialists dedicated to addiction medicine are provided, together with the number new specialists each year. Of the 24 countries, 18 reported having dedicated professorships for addiction medicine. For four of these we did not receive an indication of number. Of the remaining 14, the numbers varied from 1 fulltime professorship in Denmark and Norway to 23 in France. The number of dedicated addiction units for addiction medicine was highest in France with 10 units. Germany tops the list for number of specialists in addiction medicine per capita, followed by Denmark, Finland, France, and Norway.

Addiction psychology

Nineteen countries reported on addiction psychology specialist training. Fourteen of these countries indicated having some specialist training and 12 reported on length of training ranging from 2-4 months (Spain) to 5 years (Croatia, Norway, Sweden) (Table 3). The amount of content of training varied between the countries: in 10 of 14 countries theoretical learning is an element within the specialist addiction training, while clinical supervision (6 of 14), tutorials or interactive learning (7 of 14) and practical courses (6 of 14) are further elements of specialist training. Of the 14 countries reported having a specialist training, an authorization or approval was given by the government in two countries (Luxembourg, Spain), by a professional society in four countries (Austria, Norway, Portugal, Sweden), and by universities in four countries (Czech Republic, Greece, Hungary, Lithuania). The approval/authorization was given after an examination in six of the countries, oral examinations

in three cases. Five countries included a written task on their final approval and four countries included an evaluation of the course work.

Table 4 shows the number of professorships dedicated to addiction psychology in the 16 different countries that responded to this part of the survey. Additionally, the number of specialists dedicated to addiction psychology is shown, together with the number of new specialists qualifying each year. Of the 16 countries, 12 reported to have dedicated professorships for addiction psychology. For two of these we have not received an indication of a number, but among the remaining 10, numbers varied from one part-time professorship (Italy) to ten full time professorships and one part-time professorships dedicated to addiction psychology in the Czech Republic, followed by six part-time professorships in Austria. These figures are in some ways reflected in the number of dedicated units for addiction psychology and the number of specialists, with Germany topping the list. Norway and Portugal top the list for number of specialists in addiction psychology.

4. Discussion

Training in addiction medicine and psychology showed a large heterogeneity across 24 European countries, both in training procedures and the magnitude of academic staff. For *addiction medicine* 17 of 24 countries reported a specialized training, with a length varying from a short addition to psychiatric training, to a fully independent speciality of up to five years. Belgium, Denmark, Ireland, Italy, Poland, and Romania did not report specialized training in addiction medicine. Most training programs required some form of examination before authorization. The large variation in the number of academic positions dedicated to addiction medicine ranged from the high number of 23 in France to none in five countries. Lastly, the number of medical doctors authorized as specialist in addiction medicine varied greatly, with higher numbers reported in Germany having a shorter training duration, but with quite high numbers even in Denmark, Finland, France, and Norway that all had longer specialized training.

Similarly, for *addiction psychology*, 14 of 19 countries reported having specialized training. Belgium, France, Ireland, Italy, Russia, Switzerland, and The Netherlands did not report specialized addiction psychology training. The length of the training varied from one to five years, most with some form of examination before authorization. Professorships where less common compared to addiction medicine, and were mostly found in the Czech Republic, Germany, and Austria. Also, the number of addiction psychology specialists was low compared to addiction medicine, with Portugal and Norway topping the list.

The large heterogeneity observed in our study is discordant with the growing need for harmonization in health care within Europe (20). The great variability in the training offered and the number of positions dedicated to addiction training may lead to inequalities in the provided treatments across Europe, and probably indicates that not all patients are receiving treatment that fulfill the criteria of qualified specialist practice (13-15). Most worrisome is that quite a few countries lack any formal training in the addiction medicine and psychology fields.

Further research should analyze how differences in training correlate with differences in treatment provision and treatment facilities for the same addiction problems across Europe. In addition, varying structures and funding systems of addiction services may promote a different composition of the workforce of addiction professionals an affected individual may encounter at various stages of disease and recovery. Therefore, training of other professional groups including social workers and nursing practitioners, should be investigated. The known wide treatment gap between need and provision for people suffering from addictions receiving specialized treatment also calls for the analysis of addiction education that is included in the training of other health care professionals (21).

The European Union of Medical Specialists (UEMS) aims to promote the highest standard of training at European level and to define standards for each medical speciality (22), but does not have addiction medicine as one of the specialities. Addiction is only mentioned as a subspeciality of psychiatry.

There is a huge variation in addiction medicine and psychology specialist provision per capita ranging from zero to around 100 per million inhabitants. It is not easy to determine what would be an optimal level as this depends on many factors inherent in the health care provisions in each country. But decreasing this cross-country heterogeneity, mostly by introducing specialization in countries where such specialization is not provided, could ensure better health care for these patients, also through reduction of stigma. Furthermore, the harmonisation of the quality of addiction specialities across Europe would also contribute to an improved cross-country exchange regarding student mobility and knowledge. Thus, there is a need to ensure good quality education of both general health care and addiction professionals across Europe to decrease the burden of disease caused by addictions (16).

Limitations

The survey did not reach all the countries and country representatives. The information presented only includes those responding. Also, responses were not supported by official documents or regulations. The information was based on personal declarations by the respondents, which might be subject to error. However, respondents were identified as key stakeholders of the field, including leaders of national associations or scientific societies of addiction medicine or psychology, reducing the risk of information bias. The survey could have gone for stricter and more systematized definitions of education and training, but that would have come with the risk of not counting initiatives and arrangements falling just outside more narrow and specified definitions. The multidisciplinary of the addiction field, only including training and professorships in medicine and psychology may also have introduced “blind spots” in the survey. Taking these limitations into account, the survey may still be viewed as a preliminary overview, and as a baseline measurement that needs to be expanded and repeated. It can a starting point for discussions on the future development of addiction training throughout Europe.

Conclusion

Some European countries have local trainings for addiction medicine and psychology, some incorporate this training in other specializations, while still others lack formal training. The heterogeneity in training and especially the lack of training in some countries are of great concern.

Like other health care disciplines, a harmonized (minimum) curriculum for addiction medicine and psychology training in Europe should be set up.

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Table 1. Training for addiction medicine in Europe

		Training												
		Type				Content								
Country	Length of training (months)	Theoretical learning	Clinical supervision	Tut./intera. learning	Practical courses	Non-pharmacological	Pharmaco-therapy	Basic procedures	Medical emergencies	Med. complications	Dual diagnosis	Who certifies?	Certificate/Diploma/Degree	Comment
Austria	6-48	x	x	x	x	x	x	x	x	x	x	Professional society	Oral theoretical examination, written master thesis, and course work evaluation	
Belgium	No specific training													
Croatia	24	x	x	x	x	x	x	x	x	x	x	Government	Oral theoretical examination, written thesis, and course work evaluation	
Czech Republic	12-24					x	x	x		x	x	University	Oral theoretical examination and master thesis	Recertification every 3 years
Denmark	No specific training													
Finland	24-36	x	x	x	x	x	x	x	x	x	x	Professional society	Theoretical examination	
France	12-24	x	x	x	x	x	x	x		x	x	University	Oral theoretical examination, written thesis, and course work evaluation	
Germany	0,5	x			x	x	x	x	x	x	x	Professional society	Oral examination	5-6 weekend courses in addition to other medical speciality
Greece	12-24	x	x	x	x	x	x	x	x	x	x	University	Oral theoretical examination and written thesis	Part of psychiatric training
Hungary	24	x	x									University	Theoretical examination and course work evaluation	Some part of psychiatric training
Ireland	No specific training													
Italy	No specific training													Some training in psychiatry or gastroenterology
Lithuania	Some *ad hoc* training	x		x	x	x	x	x						Some training in psychiatry or toxicology
Luxembourg	No information	x										Government	Theoretical examination	
Norway	60	x	x	x	x	x	x	x	x	x	x	Government	Theoretical examination, written thesis, and course work evaluation	
Poland	No specific training													Part of psychiatric training
Portugal	3	x	x	x	x	x	x	x	x	x	x	Professional society	Theoretical examination	
Romania	No specific training													
Russia	24	x	x		x	x	x	x	x	x	x	Government	Oral theoretical examination, written thesis, and course work evaluation	Part of "Narcology"
Spain	12	x	x	x	x	x	x	x	x	x	x	Government	Course work evaluation	Can be chosen as part of psychiatric training
Sweden	30	x	x			x	x	x	x	x	x	Government	Theoretical examination	
Switzerland	12-24	x	x	x	x	x	x	x		x	x	Professional society	Oral theoretical examination and master thesis	Recertification every 3 years
The Netherlands	24	x	x	x	x	x	x	x	x	x	x	Government	Theoretical examination and course work evaluation	Master class
United Kingdom	12		x	x	x	x	x	x	x	x	x	Professional society	Course work evaluation	Recertification every 5 years

Table 2. The professional body of addiction medicine (academic and clinical) in Europe. The letter "n" indicates that there are some, but number unknown. Blank cells indicate no information. Zero ("0") indicates known non-existent. Slash ("/") indicates more and conflicting responses

Country	Professorships		Addiction specialists		
	Full time	Part time	In total	Per 1 million inhabitants	New per year
Austria	3[a]	3[a]			
Belgium		3[a]			
Croatia		3/20	25	6	3-5
Czech Republic	2		30	3	1-2
Denmark	1		144	25	10-15
Finland	1	1	146	26	10
France	23		1000-2000	15-31	100
Germany	1/2	7	7000	84	200
Greece		3			
Hungary	0	0	160	17	1-2
Ireland	1	1			
Italy	0	0			
Lithuania					
Luxembourg					
Norway	1		150	28	20
Poland	0[a]		0	0	
Portugal	n		70	7	
Romania	0	0	0	0	
Russia	n		N		
Spain	0[a]	0	0	0	0
Sweden	3		60	6	
Switzerland	2	2			
The Netherlands	n	n	100-200	6-12	30
United Kingdom	9		81	1	20-25

a) addiction medicine is taught by other professorships, like psychiatry

Table 3. Training for addiction psychology in Europe

Country	Length of training (months)	Training Type: Theoretical - Clinical supervision	Training Type: Tut./ intera. - Practical courses	Who certifies?	Certificate/Diploma/Degree	Comment
Austria	6-48	x x	x x	Professional society	Oral theoretical examination, written master thesis, and course work evaluation	
Belgium	No specific training					
Croatia	60	x	x x		Oral theoretical examination, written master thesis, and course work evaluation	
Czech Republic	12-24			University		Several ways into specialization
France	No specific training					
Germany					The 3-5 years psychotherapy courses following a master degree, end with a certificate that allows for publicly funded treatment of all mental disorders, including Addiction	
Greece	24	x x	x x	University	Oral theoretical examination, written master thesis, and course work evaluation	
Hungary	24	x x		University	Theoretical examination and written thesis	
Ireland	No specific training					
Italy	No specific training					
Lithuania	24	x	x x	University		Master program, no certification
Luxembourg	No information	x		Government	Theoretical examination	
Norway	60	x x	x	Professional society	Written thesis	
Portugal	No information	x x	x x	Professional society		
Russia	No specific training					
Spain	2-4	x x	x x	Government	Course work evaluation	
Sweden	60	x		Professional society	Theoretical examination and written thesis	

Switzerland	No specific training
The Netherlands	No specific training

Table 4. The professional body of addiction psychology (academic and clinical) in Europe. The letter "n" indicates that there are some, but number unknown. Blank cells indicate no information. Zero ("0") indicates known non-existent. Slash ("/") indicates more and conflicting responses

Country	Professorships		Addiction specialists		
	Full time	Part time	In total	Per 1 million inhabitants	New per year
Austria		6			
Belgium	1[a]				
Croatia	10	1	20	5	
Czech Republic	1		20	2	1-2
Germany	2/3	5			
Greece		3			
Hungary	1		10	1	0-1
Ireland	1	1			
Italy		1			
Lithuania					
Luxembourg					
Norway	n		100	19	
Portugal		n	100	10	
Spain	0[a]	0	0	0	0
Sweden	n		30	3	
Switzerland	2	1			

a) addiction psychology is taught by other professorships