

New Trends in Education and Training Programs in Addictions at the Higher Education and University Levels

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BACKGROUND: A broad range of professionals, training opportunities, and regional differences exist in the addiction study field worldwide. This educational variety poses a challenge in proposing a precise classification of study programs at the higher education and university levels to meet the criteria of quality control-based treatment for those in need.

AIM: This study aimed to reflect the broad spectrum of professionals integrated into the addiction field and propose a matrix of training and study programs at the higher education and university levels, organizing their characteristics and criteria in the first version of a possible typology. **METHODS:** A secondary analysis of earlier internet surveys was conducted, focusing on specific formats, models, profiles of study, and other training programs developed and provided by higher education institutions and universities. **RESULTS:**

We defined six basic types of higher and university education according to three criteria: level of studies and degree/certificate awarded; target applicants/disciplines (general or specialized studies), and the main scope of the program and its graduates' profiles. From these criteria, we propose a structured and clear typology of existing educational options to make addiction education transparent for new applicants and those already working in the field. **CONCLUSION:** Defining educational opportunities and proposing a typology presents a starting point for improving understanding of education and training options in addiction studies. The proposed typology offers potential for setting minimum standards for each academic level, reducing stigma, and increasing the importance of substance use disorder prevention and treatment.

Keywords | Qualification – Substance Use Professionals – Training – University Study Programs – Workforce

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● 1 INTRODUCTION

Substance use disorders (SUD) represent a constantly growing global problem affecting health, social, criminal and economy areas. An estimated 210 million illicit substance users aged 15–64 in 2009 increased to 269 million in 2108, representing 5.3% of the global population (UNODC, 2020). The COVID-19 pandemic intensified the problem with the global increase in alcohol use and risky drinking (e.g., Rossow et al., 2021). The addiction field has traditionally focused epidemiologically on alcohol and tobacco misuse. In the last three decades, the situation has changed significantly. Internet and social media addictions have grown exponentially, along with prescription drug abuse and an expansion of substance use in all age groups, including older adults, children, and chronic substance users older than 40. These factors have placed higher demands on addiction professionals in the field and on their educational requirements. This phenomenon emphasizes the urgent need to address SUDs from a public health perspective and integrate SUD treatment into primary care. This changed perception emphasizes the urgent need to include SUD diagnoses into public health and primary care services, support addiction professionals, and build capacity to deliver high-quality specialized services. Increasing pressure on specialised treatment services underscores the need for highly educated SUD professionals and primary care practitioners with addiction training. The increasing numbers of people needing prevention and treatment services highlights the severity of SUD and its impact on communities. The increased need for services also underscores the need for a quality control system for the addiction professional education process^{1,2}.

The addiction field has traditionally been represented by various primary care professions, related fields, and specialized addiction services and institutions. The lack of SUD services in primary care in many regions of the world creates an exponential growth in addiction specialists' capacity (Babor et al., 2017; Williams et al., 2011). This has created very specific institutional infrastructure, reflecting crucial movements in capacity building in the second half of the last century (e.g., Miovsky et al., 2019). Edwards and Babor (2012) cogently described the perspective of specialized education and specific career pathways based on addiction specialization following traditional qualification processes. These specializations created a common terminology for education and training strategies, with common understanding of terms such as addiction medicine, addiction psychiatry, addiction nursing, or addiction psychology. Less common and relatively new is thinking about addiction education and training as a qualification: a specific higher level and university-unique qualification producing unique and completely emancipated new professionals and a new profession in this field. This phenomenon has grown within the last four decades and is represented by pioneering study programs located at higher education institutions and universities.

The International Consortium of Universities for Drug Demand Reduction (ICUDDR) database includes 689 addiction education programs, most of them in the United States. Many universities that offer programs have multiple degrees; the database represents 378 universities from only 17 countries. The universities in the parent study of this analysis and the universities in the ICUDDR database do not overlap perfectly. There are at least 34 addiction academic programs at 25 universities in eight European countries; 43.6% were master's, 15.4% were bachelor's and 12.8% were PhD-level studies (Pavlovská et al., 2017). In the United States, many more programs at undergraduate levels and more programs in general were identified. We identified nearly 400 programs at US universities; more than 300 were degree programs and others were certificate programs. Of those that awarded a university degree, 53% were offered at the associate degree level, 16% at the bachelor's level, 18% at the master's level and 1.6% were PhD programs (Pavlovská et al., 2019). In Africa, six universities provided eight specific addiction programs. Two were graduate level, four were postgraduate level programs, and one was a certificate program (Lososová et al., 2021). A study of data on the many addiction study programs offered in Australia and New Zealand is being prepared.

The extreme variability in addiction education and the lack of a common criteria and a uniform perspective led to activities and initiatives to name and offer evidence-based practices and minimum standards for the field of addiction education. We identified a trend in defining addiction-specific curricula at various levels. For example, international criteria have been developed and are being disseminated by international bodies of educational institutions and substance misuse professionals. The Universal Treatment and Prevention Curriculum (UTC and UPC) contain evidence-based minimum standards for substance use professional education (ISSUP, 2021). Another example of unifying trends to guarantee minimal quality is the Global Centre for Credentialing and Certification (GCCC, 2021).

The broad scale of professionals, educational opportunities, and differences within regions poses the challenge of how to classify the system and propose a clear typology of programs at the higher education and university levels. The aim of our study is to conduct a secondary analysis of a previously completed internet survey with a special focus on specific formats, models, profiles of study programs and other trainings developed and provided by higher education institutions and universities. The objective of our study was to propose a typology of such trainings and study programs with their main characteristics according to (1) level of studies and degree/certificate award; (2) target applicants/disciplines (general or specialized studies), and (3) the scope of the program and its graduates' profiles.

● 2 METHODS

In 2015–2016, a comprehensive internet survey of higher education and university study programs in the addictions field was conducted of all world regions. The survey studied websites for university-based degree and certificate education programmes in addiction studies. An in-depth content analysis of programs found through a Google search was conducted

1 | E.g. https://www.emcdda.europa.eu/system/files/publications/651/SI_treatment-guidelines-p3_315812.pdf

2 | E.g. <https://cpnp.org/guideline/external/suds>

so as to map all the educational options with their characteristics, such as duration, level of education, degrees awarded, courses taught, clinical practice within the curricula, entrance requirements, etc. Partial findings were published elsewhere (Pavlovská et al., 2017; Pavlovská et al., 2019; Lososová et al., 2021) including a description of the methodological details. The following key terms were used for the mapping of programs: addiction studies and drug/alcohol studies, master in addiction, addiction counselling and substance use. The term “addiction studies” refers to any university-based programme that is either primarily focused on education in the addiction field, or is connected with treatment, prevention, research or policy related to substance use and addictive behaviors. We did not separate treatment and prevention programs, or those that were research- or policy-focused (Lososová et al., 2021). The first phase was based on a Google search of programmes identified through pre-defined key words. We also reviewed the research databases for relevant journals and papers.

In reviewing previous studies about mapping programs, only publicly available higher education and university-based degree programs were included (i.e., programs where the students gain a university degree after graduation). The only language we searched in was English, which means that each program that had information about the curriculum available in English was included. For example, we included a program in Spain that was presented in English. Programs without any information in English were excluded, which brings a limitation to this study, too. There could be programs missing and we previously also excluded programs not offering degree education, such as certified programs, summer schools, academic courses and continuous professional development courses.

As stated earlier, the aim of this study was to describe the current situation in the university educational options and to propose a typology of such programs. This paper is based on a secondary analysis of previous data (collected in the context of former studies and previously published: Pavlovská et al., 2017; Pavlovská et al., 2019; Lososová et al., 2021) focused on defining basic criteria of addiction education and training. The criteria and typical characteristics were then arranged into three categories which enabled us to propose a basic typology of higher education and university levels programs in the addiction field.

Excluded from consideration in this analysis are individual courses offered as part of an education program in medicine, psychology, social work or public health, etc. These courses, often offered as an elective, are widely available with variable foci depending on the field of study. This analysis is targeted to programs that educate and train addiction specialists.

● 3 RESULTS

The aim was to propose a clearly arranged typology of trainings and study programs at the higher education and university levels. As a result of the secondary analysis, we proposed a matrix of characteristics that enabled us to create a typology of pro-

grams. The results can be divided into three main categories, according to these criteria:

- a) Target applicants/disciplines: general or specialized studies;
- b) Level of studies and degree/certificate award, and
- c) Main scope of the program and its graduates' profile.

The process of setting a type was characterized by three steps.

(1) Step 1: Target Discipline

Specify target group/training discipline. Examine if the aim is to (a) increase previous general education (for example in medicine, social work, psychology, etc.) or (b) to get to narrow specialization from the beginning.

(2) Step 2: Level of Studies

Specify level required: graduate, postgraduate, lifelong learning, etc.

(3) Step 3: Scope and Profile

Differentiate the scope of the studies. Is it theoretical, research, or clinically-oriented? Then specialize further in a partial area of the addictions field, such as prevention, treatment, criminal justice, business, etc.

We defined six basic types of programs using the process described above (Table 1). The programs described below could serve as the examples representing main common combinations of characteristics from Figure 1.

Programs were divided into two categories according to intended audience – for example, if they were focused on professionals from related disciplines such as medical doctors, nurses, psychologists, social workers, etc. who are interested in deepening their general education with addiction topics, or if they were programs specialized in addictions.

Type 1 represents follow-up study to general education in another discipline. Types 2 to 5 are focused on specialized addiction study programs when applicants choose to specialize from the beginning of their careers, starting at the associate/foundation levels, bachelor's level and continuing with master's and doctoral programs. Differences are not only in the degree level of education but especially in the profile and main scope of the programs. Some of them are strictly theoretical, while others focus on clinical practice and achieving a professional qualification. We include the addiction professional specialization into these categories as a recognized new profession in the field. The proposed types are described below in more detail, along with examples.

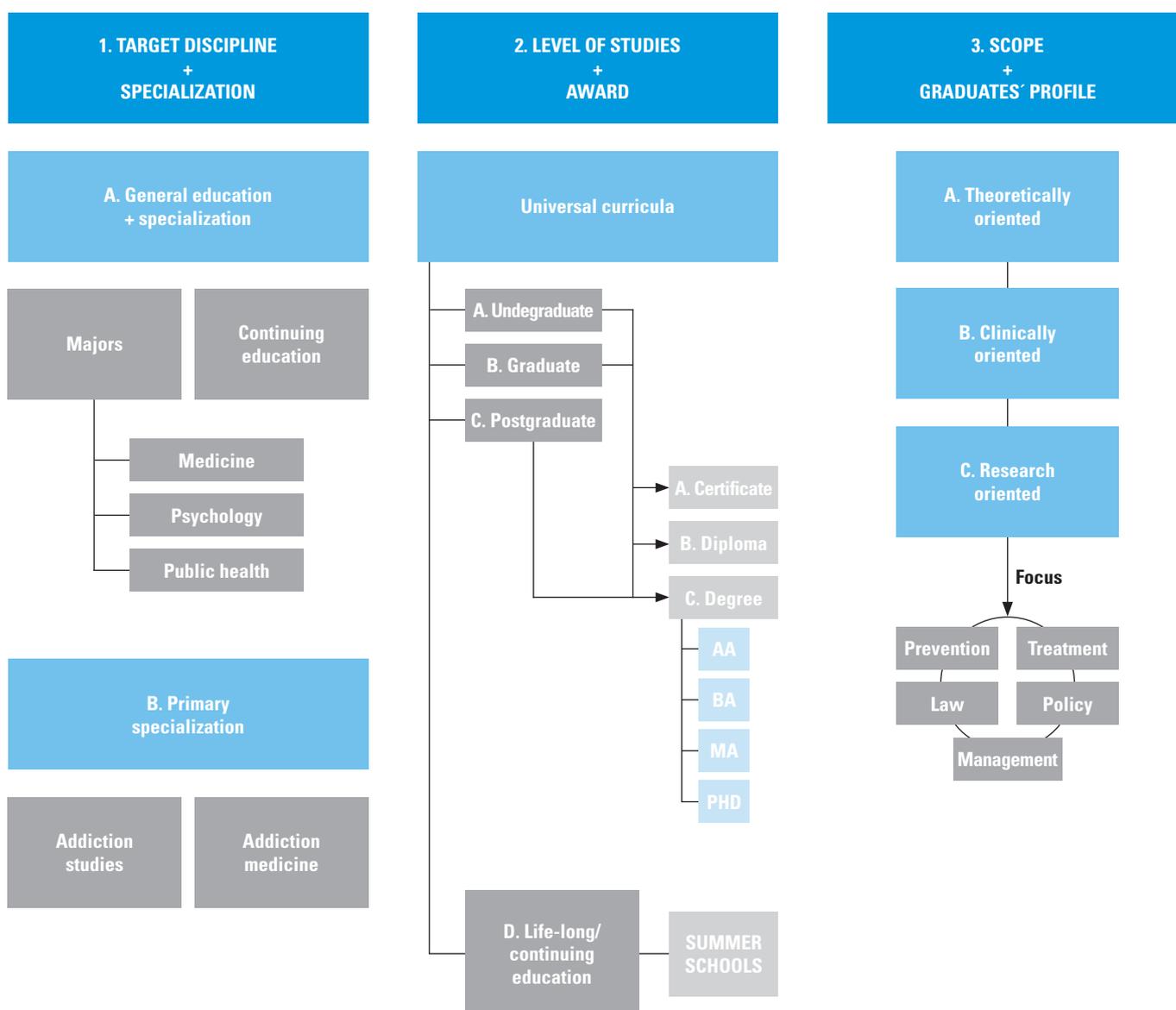
TYPE 1: Follow-up specialized study for general education in another discipline, typically on graduate level and clinically oriented on addictions

These programs represent specialization in addictions follow the previous extensive study in another wider discipline, such as medicine, social work (e.g., New York University's Silver

Table 1 | Typology of 6 types of higher education and university levels study programs in the addictions.

	1. TARGET DISCIPLINE	2. LEVEL OF STUDIES	3. SCOPE AND PROFILE
TYPE 1	General education, e.g. psychiatrist	Graduate degree program	Clinically-oriented
TYPE 2	Primary specialization	Undergraduate certificate/diploma/AA/BA	Clinically-oriented
TYPE 3	Primary specialization	Graduate (MA)	Clinically-oriented + various specialization
TYPE 4	Primary specialization	Graduate (MA)	Theoretically-oriented
TYPE 5	General education, e.g. psychiatrist; Primary specialization	Postgraduate (PhD)	Research/theoretically-oriented
TYPE 6	General education, e.g. psychiatrist; Primary specialization	Continuing/life-long education	Theoretically/clinically- oriented

Figure 1 | Typology of 6 types of higher education and university levels study programs in the addictions.



School of Social Work; Clinical Approaches to Addiction), psychology, etc. Programs such as “addiction psychiatry,” “addiction medicine,” “addiction psychology” belong here. Applicants are usually clinically oriented, experienced professionals who are interested in working with people with SUD or who have already worked in addiction specialized services. A clear standard has not yet been established for these programs. Some of these programs have an extensive clinical component consistent with many hours of practical training and praxis in specific drug services, while others have only a theoretical profile with no clinical training component (e.g., King’s College, United Kingdom).

Addiction medicine is a rapidly-growing addiction-specific field with a history dating to the last half of the last century (O’Connor et al., 2014). Addiction medicine is represented mostly by professional organizations establishing curricula for graduate level in medicine. A good example is the International Society for Addiction Medicine (ISAM, 2021), which provides an international certificate in addiction medicine. Another example is the American Society for Addiction Medicine (ASAM, 2021), established in 1954, which provides courses and e-learning opportunities in addiction medicine. However, we specifically focused on university-level education and training.

An international group of experts from ISAM have proposed a comprehensive addiction curricula (e.g., Ayu et al., 2017). While not adopted in medical school standards (WFME, 2015), it explicates what is missing from current education standards and identifies the need to begin sensitizing students to addiction studies early in their education.

LEVEL: Graduate/postgraduate (depends on the region’s terminology). We identified two two specific categories of these study programs:

a) Post/Graduate certificate; post/graduate diploma, etc. (e.g., Pasche et al., 2014)

b) Master’s programs (King’s College program); in some cases programs are offered in form of the so called “majors,” as a narrow specialization in a broader discipline.

DURATION: Usually 1–2 years for master’s degrees; programs such as postgraduate diploma could be shorter, e.g., nine months. Duration also depends on whether the program is part-time or full-time study program.

SCOPE: Receiving a specific education in a previous general discipline, enabling specialization in the addiction field. Preparation for clinical practice.

TYPE 2: Undergraduate university/colleges and higher education institutions programs, including degrees preceding master’s level

Many undergraduate study and training programs focus specifically on addiction issues. This group of programs is typically represented by professionals called “addiction counselors” and

have a very long tradition in US (California etc.; Miller, 2020) or United Kingdom (Butler, 2011). These types of practical-oriented studies has also in some countries the first quality standards and specific kind of regulation and well-defined competencies. We also included certificates delivered by universities here, as this type of education enables the graduates to start working in the addiction field and get their license to do so, mostly at the addiction counselor positions. High variability within this type of programs brings many educational options of varying quality.

In some regions, Type 2 initiates the constitution of a new profession, “addiction specialist”, which brings an absolutely independent professional qualification and is well-defined in legislation and as a job position in the labor market in the context of services for SUD treatment. For some regions, the qualification is represented by a license, foundation, or associate degree, or specialized long-term training; for others, the bachelor’s degree is set as the educational base (i.e., in Europe, according to the Bologna process structure), such as addiction specialist in the Czech Republic.

LEVEL: Higher education, associate degrees (US degree), foundation degrees (British degree), certificates, diplomas, bachelor’s level.

DURATION: Depends on the concrete type of program and degree, usually from six months for certificates to four years for bachelor’s study programs.

SCOPE: Practically-oriented/vocational education, ready to practice in the field, provides the graduates with necessary knowledge and skills for the labor market, with or without an ambition to continue studying on higher degree level. The most important benefit for Type 2 is in providing the qualification for the career in addiction field.

TYPE 3 and TYPE 4: Specialized and highly professional university degree education and training programs in addictions: emerging specific qualification perspective for new generation of substance use professionals

Master’s level programs create a core in the university education, as Bologna process structure in Europe defines. This category of programs represents an emerging and recognized generation of professionals in the addiction field; we could call them “addiction specialists.” This is a separate, very highly professional, and specialized group of professionals; in some countries we could already observe attempts to prepare education and quality standards and competencies for this profession to be integrated into legislation and clinical settings of the country. Usually, the master’s programs follow the previous specialized bachelor’s level in the same focus, or could get on any general discipline but with the interest in the addictions, it means this is a really specialized education.

These programs could be generally divided into two categories: clinically-oriented programs preparing the students for direct work and therapy with people having diagnoses of SUD; and of-

ten related to achievement of a specific qualification; and theoretically-oriented programs or other programs related to the addiction area. These can serve as education base for managers of addiction services, for state administration institutions, and so on.

The main scope of the programs demonstrate important differences. The programs can focus on one specific area of addiction specialization, such as prevention, treatment and rehabilitation, addiction counseling; or could create a comprehensive model of education (e.g., Prague comprehensive model of Addictology provided by Charles University in Prague, Czech Republic) where all components are included as necessary part of the field (harm reduction, prevention, treatment, aftercare, criminal justice etc.). This is linked to the clinical component of the programs. Some are really strong in guaranteeing the practical experience of their students; others are poorer in this sphere (Pavlovská et al., 2017).

It is key to mention that every region and every university or faculty creates their own curricula. A unified curriculum defining basics of addiction studies does not yet exist in Europe. Important work has been done by ICUDDR and Colombo Plan in preparing the universal criteria, UPC/UTC and others, and spreading them around the world. To date, there are programs based on these curricula provided in Africa, the Philippines, Asia, Latin America, the United States, and Europe. Addiction studies could be established upon the competency models. We know of examples where this model functions well and helps inform graduates and employers about the profession, its skills, knowledge and practical competencies.

LEVEL: Graduate/postgraduate, i.e., master's level degrees (degrees represented by Master of Arts, Master of Science, or others)

DURATION: Usually 1–2 years.

SCOPE: Could be strictly theoretical and bring an academic education or prepare the graduates for a management or state administration career; or could be very practical and clinically oriented and so as follow the previous specialized education of the graduates. Programs can differ in their main focus, students can choose to specialize in a very narrow area of addictions, such as prevention, treatment, criminal justice, etc.

TYPE 5: Postgraduate education (PhD level) focused on research or academic career

At this level, applicants dedicate their studies to research on addiction topics, publish the results in professional journals, and share knowledge at the conferences and with other colleagues at the universities, mainly through teaching. They develop an academic career by proposing research grants and leading projects. Type 5 is available for both categories of the addiction professionals; those educated in other general disciplines and those specialized specifically in the field of addictions.

Pavlovská et al. (2017; 2019) identified four PhD programs in addictions in Europe and five programs in the United States.

Programs could be integrated into another more general theme, such as public health or social research (University of Stirling – Doctorate of Applied Social Research (DASR) Programme: Drug and Alcohol Studies, Liverpool John Moores University – Public Health (Addictions), or could be a separate academic specialization (Charles University in Prague; Specialization in Health Care: Addictology; King's College; Addictions).

Postgraduate education brings a new perspective in addiction science, as it represents highly important group of professionals, creates a research-based knowledge in the field, brings back the evidence-based information, and helps support development of the field. Hand-in-hand with this level of education go highly ranked addiction specialized journals or libraries. Important trainings exist for those who finished their PhD studies; ISAJE training programs for postdoctoral students could serve as an example.

LEVEL: Doctor of Philosophy (PhD)

DURATION: Varies in every program and is led by the student's performance; it usually takes 3–6 years, with the average of 3–4 years.

SCOPE: Preparation for an academic and/or research career, focused on professional grants and projects, publishing, presenting and teaching. Conditions for graduation cover all of these skills.

TYPE 6: Life-long learning for the addiction professionals, both with previous general or specialized education

Type 6 represent continuing education in the addiction field, i.e., various professional courses and training programs following already existing careers and bringing addiction professionals up-to-date. These are mostly non-degree programs, yet provided by universities. We could mention regular summer and winter schools, such as those operating at the University of Amsterdam, Netherlands (Summer Institute on Addictions) or the clinically-oriented school at the University of California San Diego (Summer Clinical Institute in Addiction Studies). Highly-specialized trainings are also available in online formats, e.g., INEP (Introduction to Evidence-Based Prevention) offered at Charles University, Prague, or UPC/UTC programs or courses delivered by universities (in collaboration with Colombo Plan). Some regions require continuing education for addiction professionals to ensure high-quality SUD treatment services.

LEVEL: Usually non-degree, short-time courses or trainings; could be strictly online.

DURATION: Varies course to course, can be very short-term, or on the other hand, cover very specific topics in-depth over longer periods (from a one-hour lesson to 200 hours of specific training; e.g., crisis intervention or motivational interviewing.)

SCOPE: Depends on the interest of the professionals and offerings of the educational institutions. Includes short lessons or courses on a narrow topic, or could be focused on intensive

specific trainings. Programs can be strictly theoretical or alternatively very practical and clinically-oriented.

● 4 DISCUSSION

The proposed typology is a first attempt to provide students with a better orientation to the education and training options for addiction studies. For employers, state administrators and legislators, clients and the general public, the typology offers clear information about treatment practices and addiction specialists' competencies. This first typology may not fully address regional differences and gaps in addiction training and standards, but we hope that it will develop over time.

The typology and characteristics of the programs show that we know about many programs in addictions provided around the universities in the world. Many options and levels exist. However, we need feedback from the clinical practice, state administration and other fields to ensure that graduates have stable options for employment. We also need to ensure that legislation supports the need for highly trained addiction professionals who can provide quality care for people with SUD. For example, in the Czech Republic, Pavlovská et al. (2018) conducted a comprehensive survey within all graduates in the bachelor's and master's programs in Addictology focused on their employability, and found that 58% of the respondents work after graduation in the field of addictology, mostly in low-threshold and outpatient services. Sixty-two percent of them had already worked during their studies; two-thirds of them on a full-time basis. With statistical significance, men are more likely to work in the field. 69 persons do not work in the field of addictology, with 39 never having sought employment in the field.

Different regions have obviously different needs and offerings, and varying trends were observed in defining the addiction specialist qualification. This is clearly visible in comparison of African and New Zealand approaches and also of education of social workers in the United States where the programs are designed often as specialty programs that follow more generalized bachelor's degree (psychology, medicine, social work; Adams et al., 2017; Běláčková, 2007), and of for example the Czech strategy for establishing a new profession Miovský et al. (2016) refer to a specialist in addictions, a generic professional that has knowledge and skills in all aspects of substance use studies including practice such as prevention, treatment, harm reduction and research, basic science, and policy. This view is closely related to the legislation, qualification recognition and regulation of the profession of addiction specialists. The Czech Republic has a profession of "addictologist" rooted in the separate law defining that even a graduate in bachelor's level of addiction studies is able to work in the field individually and without any supervision, i.e., is a fully competent professional ready to work in various settings from prevention, harm reduction services to treatment and aftercare and also criminal justice or management. Conversely, in the Australian or African educational and legislation system, the addiction professional must fulfil predefined years of work experience, have an appropriate education, and become a registered member with the professional body to be able to work separately in the field, as

the qualification itself does not entitle a candidate to provide professional counseling (Pavlovská et al., 2018).

A similar example is the study program level preferred. Programs in Europe and Africa emphasize training of highly specialized workers by offering master's and doctoral degree programs, in contrast to the United States, where graduate and postgraduate studies are limited, and most programs are associate or bachelor's degree levels (Pavlovská et al., 2019).

Undoubtedly, online programs are an important addition to standard face-to-face educational opportunities, not only in the regions where options are limited. The Online opportunities could bring education to people who are interested in studies yet come from a different country, or lack time or money to study face-to-face (Csiernik & McGaghran, 2013). Of course, the COVID-19 pandemic brought many new options in online education and also changed current approaches and university study program offerings. We are observing new attempts in combining face-to-face teaching with more forms of distance and online methods. This could represent a totally new trend in addiction education, much more available to those interested, and open a space for sharing knowledge within the regions and people with various educational and experience basis.

As there is a huge variability within the regions and programs provided, an attempt to propose a unifying criteria and base of such a specialization are visible and is needed. Quality standards of addiction specialists education can serve as a good guideline, such as competency models. For example, the British educational system uses accreditation standards (SACREP), and perhaps this could serve as a model for other European universities in preparing such documents, and sharing experience, enabling students to continue their studies abroad, and creating joint degrees and more exchange programs.

Also, the first attempts to unify the curricula of a standard addiction education have been made. We can witness development and spreading of UPC/UTC and other universal curricula, such as that for recovery. Still, we agree that this diversity is key and needed. The aim is not to have each program the same, but we could make an effort to define any set of the so-called minimal quality standards to clarify the core knowledge, skills and performances for different levels of addiction education. Results of this study could help to open the discussion and raise awareness to the topic of qualifications variability and possible ways of approaching a better definition of the whole addictions field.

Further study of the specific competencies these programs expect students to achieve and how they relate to the needs of the industry and each specific profession is necessary and underway. International work groups sponsored by ICUDDR, the International Nurses Society on Addiction (IntSNA) and other groups aim to develop practice level competencies that should be mapped to educational program's learning objectives.

Developing and increasing the addiction specific institutional infrastructure emerged as a significant factor in establishing comprehensive university-level addiction education and

training programs. Huge pressure on increasing of quality and professionalism in addiction education and training facilitated capacity and variability of these programs according to regional and local needs and specifics. In this context, it is possible to speak about these university programs as a natural consequence of this complex process and as a critical prerequisite (Miovsky et al., 2019). Without close relationship and intensive contact with clinical praxis it is not possible to successfully profile these programs. Dialogue between university education providers and service providers is absolutely critical (e.g., Pavlovská et al., 2018). The major challenge for this delicate relationship is to involve professional societies and create fundamental tri-lateral partnership that can bring real sustainability in terms of constant demand for highly educated and trained professionals and building their own professional identity. That represents the paradigm shift mentioned by Thom et al. (2017) and reflects also the activities, goals and philosophy of ICUDDR.

Limitations of the study: We conducted a secondary analysis of data gained strictly from universities' official websites, which means some data was not available; and strictly focusing on information available in English language so there are gaps representing programs from non-English speaking regions. The original data were mostly focused on addiction specialization programs, which brought limited information about those general education following other disciplines, such as medicine or psychology. We tried to balance these limits by describing common criteria that were common for all types of programs. This is a first attempt to classify the variable educational options that the addiction field needs to discuss and confront. More research on this topic is needed.

● 5 CONCLUSIONS

The addiction studies field has been expanding rapidly in recent decades. In addition, the increasing appeal of the addiction profession has amplified the demand for quality education and training opportunities. The various disciplines interconnected within the SUD system of care present many training options. However, for people interested in the addiction treatment field (students, professionals, state administrators, and the general public,) identifying training opportunities can be challenging.

This study proposed a basic matrix of characteristics that can be compiled into six original types of education and training at higher education and university levels. Such a typology and the simple process of defining educational options could serve

as a starting point to improve understanding of education and training needs in the addiction treatment field. Furthermore, this initial typology can help set minimum standards for each academic level, which could be helpful for the next steps in developing training standards for the addiction treatment field.

Authors' contributions:

Conceptualisation: AL; Data curation: AL and MM; Methodology: AL; Formal analysis: AL, MM, AV; Results: AL, MM, AV and KJ; Visualisation: AL and MM; Final edition: all authors. All authors have read and agreed to the published version of the manuscript.

Declaration of interest:

None.

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