

# Addiction Specialists in the Czech Republic: What is their Place on the Job Market? A Survey among Graduates in Addictology

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**Abstract** | Research on the employability of university graduates provides key feedback for universities, applicants, students, and decision makers. The topic is even more important at a time when the first international curricula (UPC/UTC) and professional platforms are being developed. The profession of an addiction specialist in the Czech Republic is a young one and it is still seeking to establish its position within the system of services for people with substance use disorders. Therefore, there is only limited data on addictologists' success in finding a job. **AIMS:** To identify the rate and characteristics of the employability of addictologists on the labour market, whether addictology graduates work in the field and under what conditions, and, if not, what prevents them from doing so. **METHODS:** The study population comprised the graduates of the academic programmes in addictology from 2005 to 2016. Data was collected using an online questionnaire survey, with a 59% response rate, and analysed using MS Excel and IBM SPSS 22. **RESULTS:** 58% of the respondents work in the field of

addictology, mostly in low-threshold and outpatient services. 62% of them had already worked during their studies. 53% work in Prague, two-thirds of them on a full-time basis. One-third has another employment too. One half keeps the position of addictologists, more men than women. 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 looked for such a job. The reasons for working in other fields included low salaries, the offer of a different job, and a lack of work opportunities. Those working in addictology tended to rate both the quality of the study programme and the demand for the profession in more positive terms and they are also significantly more likely to be members of the Czech Association of Addictologists. **CONCLUSION:** The results are of great value and will be used for adjusting the study programmes to meet the requirements of practice and for the internationalization process involving the implementation of the UPC and UTC curricula.

**Keywords** | Addictology – Employability – Graduate – Profession – Study programme – University

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## ● 1 INTRODUCTION

Since 2003 the team of the Department of Addictology<sup>1</sup> has developed the academic field of addictology. In the course of time, this process gave rise to the establishment, accreditation, and launching of bachelor's (2004), master's (2007), and doctoral (2011) levels of addiction studies in the Czech language (with the Ph.D. programme also offered in English) (Miovský et al., 2016; Miovský, 2007). As members of the team, the authors recently focused on efforts which may be viewed as essential for the further advancement of addictology<sup>2</sup> both in the Czech Republic and internationally. The Universal Prevention Curriculum (UPC) and Universal Treatment Curriculum (UTC) began to be integrated into all three levels of the existing study programme. The purpose is to ensure that the graduates are well-prepared for the performance of the profession both in the Czech Republic and abroad (on the basis of the recognition of education), as well as making addiction studies in the Czech Republic accessible to international students. The Consortium of Universities (ICUDDR) aims to promote addiction science and workforce development and was created as a new communication and supportive platform (the Department of Addictology has the role of the coordination centre for Europe) liaising with its partner coordination centres for the USA (University of South Florida and Iowa State University). These activities are being developed as part of a project carried out under the aegis of the International Consortium of Universities on Drug Demand Reduction (ICUDDR) with support from the Colombo Plan and the United States Department, Bureau of Narcotics and Law Enforcement Affairs, Demand Reduction Division (INL).

The availability of a specialised academic education enhances the professional quality and attractiveness of the entire field. In the past, it was common for practitioners from other fields to work in addiction treatment services. In addition to lacking specialised training, they were not originally intended to work with the target group of substance users (ATTC, 2017; Bell, 2008; van Boekel, Brouwers, van Weeghel, & Garretsen, 2014). It was also common for drug services to be staffed by poorly-qualified workers or ex-users (Kalina, 2007; Miovský, 2007). The tendency towards high-quality training is also apparent abroad (e.g. Adams et al., 2017). A range of study programmes and other credentialing opportunities in addiction science is available; in Europe there are at least 34 programmes, while in the USA the number is close to 400 (Pavlovská, Miovský, Babor, & Gabrhelík, 2017; Taleff, 2003). In the Czech Republic, the bachelor's (Bc.) programme in addictology provides a theoretical background and skills for the case management, prevention, and treatment of substance use problems. It combines general knowledge and skills per-

taining to psychology, social work, and non-medical health disciplines. The graduates possess an understanding of the transdisciplinary background of substance use problems and are able to work with other professions. In addition to addiction treatment, the follow-up master's (Mgr.) programme focuses on research and seeks to provide appropriate professional training for clinicians, as well as prospective managers, policy makers, and scientists. The doctoral studies are aimed at research into addictive behaviours and the subsequent publication of research results (for details see Miovský et al., 2016).

Efforts aimed at surveying addiction-specific academic programmes all over the world were initiated in 2014 (Pavlovská et al., 2017). This project also involves the investigation of the employability of graduates of such programmes on the labour market. In the context of Central Europe, the profession of an addiction specialist ("addictologist") is still a relatively young one (Butler, 2011); in the Czech Republic, it became embedded in the national legislation in 2008 (Act No. 96/2004 Coll.). Following an independent line of development, the "Prague model of addictology studies" (Miovský et al., 2016) produces graduates referred to as "generic professionals" (Miovský et al., 2016). This qualification integrates therapeutic skills with those associated with prevention and harm reduction (Miovský et al., 2015). In the Czech Republic, an addictologist has a unique position of a professional who is competent to perform as an independent health practitioner. However, the profession is still seeking its place within the existing system of services for substance users and dependent people and it is important to assess to what extent these efforts are successful. It is clear that such investigation is significant for the development of the profession in both the national and international context.

Researchers suggest that being competitive and employable on the labour market is a comprehensive career-related status involving a range of competencies including abilities, skills, attitudes, personality, and psychological endurance (Su & Zhang, 2006/2015). For universities, the employability of their graduates should be of major interest, and information from surveys among graduates provides valuable feedback (Messum, Wilkes, Jackson, & Peters, 2016). In other fields, surveys of graduates' success in finding employment are common (Polesná, 2016; Pukýšová, 2012; Dřimalová, 2012; Schneiderová, 2014; Nekuda & Sirovátka, 2014; Šeďa & Šeďová, 2012). As demonstrated by some overseas studies (Su & Zhang, 2015; Messum et al., 2016), research into the employability of addiction specialists is scarce. However, initial attempts to evaluate academic programmes or obtain feedback from students have been made. In New Zealand, for example, programme graduates were contacted as part of a survey looking into the level of alcohol and drug practitioners' qualifications (Adams et al., 2017). While primarily concerned with the evaluation of study programmes, two research projects conducted at the First Faculty of Medicine (Prague) also touched upon the topic of the employability of addictologists (Francová Sklenářová & Janouškovec, 2010; Kačírková, 2015).

1 | Special thanks go to the core team comprising Jiří Libra, Kamil Kalina, Petr Popov, Hana Fidesová, and Roman Gabrhelík.

2 | In the Czech Republic, addictology is defined as a self-standing field of study and expertise (qualification) dealing with the prevention, treatment of, and research into addictive behaviours, regardless of whether such behaviours are linked to a specific (psychoactive) substance or activity (such as gambling or gaming), which cause evident harm to the individual, the people around them (e.g. family), and society as a whole" (Miovský, 2007, p. 35).

The present article summarises the results of the first part of the study, specifically the outcomes reported by 165 graduates of the bachelor's and master's programmes (from 2005 to 2016) who participated in the questionnaire survey.

## ● 2 METHODOLOGY

### 2.1 Aims and research questions

The aim of the study was to find out the rate and characteristics of the employability of the profession of an addictologist on the Czech labour market, particularly in healthcare, social work, and education.

The authors worked with the following research questions: What percentage of addictology graduates works in addiction services? What types of services are the graduates employed in? Were the graduates primarily interested in working as addictologists? What are the conditions under which the graduates work in the services? In what positions? If the graduates do not work in addiction field, what are the reasons?

#### 2.1.1 Study sample

The study population comprised the 279 graduates of bachelor's and master's study programmes in addictology during the full period of their existence, i.e. from 2005 to 2016. The entire study population was addressed, with 19 of them not being reached via their email addresses indicated in the faculty's Study Information System (SIS). A total of 169 individuals completed the questionnaire. After irrelevant responses (a respondent not being an addictology graduate) had been excluded, the number of questionnaires returned was 165 (59.1%). The total number of graduates of the bachelor's programme only was 181 (79 individuals responded), while a total of 24 graduates completed the follow-up master's studies only (16 responses received). Both programmes were completed by a total of 74 respondents (70 responses received). The entire population consisted of 37 men and 242 women. The questionnaires were filled in by 25 men and 140 women, which makes the response rate higher among men (67.6%) than among women (57.9%). Over 50% of the respondents were aged 29 and under, 34% were in the 30-39 age category, and 10% were 40+. There were no major differences between men and women in terms of age. Half of the respondents who completed the questionnaire lived in Prague, 24 individuals lived in the Central Bohemia region, and each of the remaining regions accounted for less than 10 persons. In the Karlovy Vary and Ústí nad Labem regions men were represented to a greater degree. A total of 114 (69%) respondents had another qualification in addition to addictology, i.e. they had another specialisation requiring either secondary or tertiary education. Of those having attained a bachelor's degree in addictology, 53% had another qualification. Among those who completed master's studies, but not the bachelor's studies in addictology, another qualification was reported by 93% of the respondents. Additional qualifications were more likely among graduates of a part-time (combined) format of study and respondents over

30 years of age. Two-thirds took the full-time, one-third the part-time format of study. There were twice as many women as men in the full-time format. In general, respondents aged 29 and under were significantly more likely to study full-time, while the respondents over 40 were enrolled exclusively in the part-time format of study.

#### 2.1.2 Data generation and analysis methods

The data was obtained by means of a questionnaire-based evaluation study. The questionnaire was developed specifically for these purposes, using the knowledge of the study programme and the system of addiction services. Representatives of the relevant professional association were also consulted about it. The questionnaire comprised different types of items: closed multiple-choice questions, open questions (these are not covered by this article), and scales. It included a general information section asking about graduates' age, gender, type of study programme, year of completion, additional qualifications, and the format of study, with the last question in this section – “Are you currently working in the field of addictology?” – being used as a sorting criterion: depending on their answers, the respondents were referred either to the second part intended for those working in the field, or to the third part intended for those not working in the addiction field. These sections contained specific items concerning the facility the graduates worked for, in what position, what activities they carried out, how much they earned, and the benefits of their academic education in relation to their practical work, or, as applicable, the reasons why they did not work in the field. In addition, the questionnaire included questions about future work in the field.

Data was collected online using Google Docs, where a direct link to the questionnaire was created, and graduates could complete it without having to log in. This form of data collection was chosen as the easiest method of dissemination and also because of difficulties in establishing personal contacts with the graduates (their addresses were not available). The questionnaire was sent to all the graduates of the study programmes in addictology at the 1st Faculty of Medicine of Charles University using their email addresses stated in the SIS, to which the authors had access on the basis of their academic positions, following approval from the Ethics Committee of the General University Hospital in Prague. Furthermore, joint email addresses created by students in the same grade were used, as they provided the opportunity to contact all the students. The questionnaire was posted from February to April 2017. The graduates were sent three notices prompting them to fill it in. A link to the questionnaire was also provided on [www.adiktologie.cz](http://www.adiktologie.cz) and on the Addictology studies Facebook account, which is freely accessible by alumni and students.

The data was generated in computerised form and processed using MS Excel and IBM SPSS 22. The goodness of fit test (Pearson's chi-square) was used to identify the statistical significance of differences in frequencies, the Student's two-sample t-test was used to identify the statistical signi-

ificance of differences in average values, and Kendall's tau-b coefficient was used to measure the correlation between ordinal variables.

### 2.1.3 Ethical issues

The survey was voluntary; the respondents were able to decide freely whether to participate in the study or not. In addition, they could withdraw from the study at any point by discontinuing the completion of the questionnaire. While the respondents neither signed nor granted any verbal consent to their participation, their consent to their participation in the research and the processing of their data was implied by their clicking on the relevant link and completing the questionnaire. The questionnaire survey was conducted anonymously to the extent that the information about the year in which the participants completed their studies was left undisclosed. All the relevant ethical issues and risks were explicitly addressed in a cover letter which the respondents received by email. The respondents' participation in the study involved no costs or any other obligations. The questionnaire and the design of the study were approved by the Ethics Committee of the General University Hospital in Prague as Grant No. 117/16, GAUK 1. LF UK.

## ● 3 RESULTS

### 3.1 Characteristics of the respondents currently working in the field of addictology

In total, 61.8% of the respondents were already working in the field while studying. There were significantly fewer respondents under 29 who worked, and they were also the least likely to work full-time in comparison with older respondent categories. The part-time students were significantly more likely to have a full-time job alongside their studies (56% vs. 6% of full-time students). Conversely, the full-time students were more likely to have part-time or temporary jobs (27% vs. 7% of part-time students). A total of 72.5% of those who had worked in the field while studying continued to work in addictology. A total of 77.1% of those who were currently working as addiction practitioners had worked in the field while studying. On the other hand, 65% of the respondents who had not worked in the field while studying did not currently work in addictology either. A statistically significant difference was found between the length of addictology-specific work experience and whether the respondents had worked in the field while studying. Those not working in the field during their stud-

ies reported work experience of up to five years. All the respondents with a longer period of work experience reported having worked alongside their studies (they were mainly part-time students).

Altogether 19 men and 77 women were found to work in addiction services, i.e. 96 study respondents (58%) out of the total of 165. At the time of the survey, the proportion of male graduates working in the field was significantly higher than that of females (76% vs. 55%); only six men were not working in addiction services, in comparison to 63 women. While the shares of those working and not working in the field were found to be almost in balance among full-time students, part-time students were significantly more likely to work in the field after they completed their studies (70% vs. 30%). Logically, respondents aged 29 and less were found to be at the beginning of their professional career; they were the most likely to report having worked in the field for a year or less. The addictology-related work experience of the respondents in this age category did not exceed five years, while those in the other age categories, i.e. above 30, were significantly more likely to have been working in the field for 5-10 years or longer. The graduates of the follow-up master's programme were significantly more likely to have worked in the field for more than five years, with only 8% of the graduates of the master's programme embarking on their professional career in addictology in the last year, i.e. their work experience was less than one year.

A total of 53% of the respondents who worked in the field were employed in the Prague area. Over 14% of the respondents worked in the Central Bohemia region and 11.5% in the Ústí nad Labem region. The numbers of addictology graduates who worked in other regions ranged from one to seven (less than 10%). We also looked into the regional distribution of addiction workforce, considering the regions in which the respondents lived. The geographical vicinity of Prague made it possible for the respondents residing in the Central Bohemia region to commute to work in the capital (4 individuals, 36%). It can safely be assumed that the graduates who lived in regions other than Prague were very likely to work as addictologists in the same region. The results showed that 20% of the respondents working in the field commuted to work. Significantly higher rates of commuting were found in the direction from the Pardubice, and to the Central Bohemia, and Ústí nad Labem regions.

The length of work experience and the salary earned showed a medium correlation ( $\tau_b=0.380$ ,  $p<0.001$ ), which is indicative of an obvious and strong association. *Table 1*

	Length of work experience				
	Less than 1 year	1–2 year(s)	2–5 years	5–10 years	More than 10 years
Average gross income in CZK (EUR)	CZK 13,750 (EUR 536)	CZK 16,711 (EUR 652)	CZK 19,792 (EUR 772)	CZK 21,591 (EUR 842)	CZK 25,833 (EUR 1,008)

**Table 1** | Years of work experience and average gross monthly income in Czech Crowns and Euro.

shows estimates of addictologists' average gross monthly income according to their years of work experience. Average amounts are indicated; they do not reflect salaries corresponding to specific work positions (such as that of a facility manager). As regards satisfaction with income, 47.4% of the men and 46.8% of the women were dissatisfied or rather dissatisfied. On the contrary, 26% of the women and 28.6% of the men were satisfied or rather satisfied. No differences were found between the level of qualifications in addictology (B.A. and M.A. degrees) and (dis)satisfaction with the size of the respondents' salaries. In view of the average income, we also asked whether their job with addiction services was the respondents' only employment. Two-thirds responded positively (with gender-specific differences identified: 47% of the men reported work in the field as the only source of income, in comparison to 74% of the women), while the remaining one-third had another job (52% and 26% of the men and women respectively).

The distribution of the graduates working in different addiction services suggests that they are most likely to work in low-threshold services – drop-in centres and outreach programmes (42 individuals, 44%). In addition, men were statistically more likely than women to work in these types of services. The next most common engagements were with outpatient facilities (29 persons, 30%). Twenty respondents were employed by inpatient facilities specialising in institutional addiction treatment, with three working directly in detoxification units. Twelve individuals worked in prevention. Four respondents worked in therapeutic communities (two men and two women), two in intensive outpatient treatment provided in a day-treatment setting, seven respondents focused on opioid substitution treatment, three worked in the prison system, and the remaining two in after-care programmes. Additionally, some respondents worked in research (6.5%), drug policy (4.7%), and public administration (2.8%). There were no other major gender-specific differences in terms of the type of facility the respondents worked for. The respondents under 29 were more likely to work for low-threshold facilities. No other differences were identified.

The respondents were most likely to work in the field full-time (67%). A small proportion of them worked part-time. Significantly more men were found to have an FTE<sup>3</sup> greater than 1.0 (two men out of 19; 10%, vs. one woman out of 77; 1%). While 51% of the respondents in the under-29 age category worked in addiction services on a full-time basis, in the 30-39 age category it was 81%. A total of 42% of the respondents working in the field got their job by responding to an advertisement. 14% got their jobs through references, 13% sent their CVs without any specific job advertisement and the same percentage was offered work by their current employer, and 11% were offered a job on the basis of practical placement with a facility as part of the study programme. None of the respondents obtained their job by means of a labour office. No gender-specific differences in modes of finding a job were identified.

Half of the respondents had their position referred to in their employment contract as “addictologist”; 63% of the men and 50% of the women. No differences were observed between the graduates of bachelor's and master's programmes in terms of whether their position was referred to as that of an “addictologist” or something else. Equally, there were no apparent differences between age categories and the denomination of their work position.

The results showed that 64 respondents (67%) would like to continue working in addiction services for at least the next 5-10 years. 19 respondents (20%) reported that they planned to open their own practice or saw themselves in the future as managers of addiction services or on maternity leave. Seven individuals (7% of the respondents) had plans which did not involve addictology. There were differences between the men and the women in terms of their future prospects: the men, for example, were more likely to have plans about opening their own practice or managing the service. These differences, however, were not statistically significant for any of the specific options. Given the latest developments in the field, our research also addressed practitioners' experience with the application of addictological interventions and their reporting to health insurers. It was found that more than 60% of the respondents did not do so, while 20% did. The remaining respondents did not report, but were striving for the opportunity to do so.

### 3.2 Characteristics of the respondents not working in the field

The total number of respondents found not working in the field of addictology after completing their studies was 69, six men and 63 women. These comprised 40% of the graduates of the bachelor's programme only, 41% of the graduates of both levels of the study programme, and 50% of those who completed the master's level only and thus acquired their bachelor's degree elsewhere and had another qualification. Almost 60% of the respondents not currently working in the field did not work during their studies either. Nevertheless, only 30 out of the total of 69 looked specifically for an addiction-related job after completing their studies, while 39 had never sought such work. No significant differences between gender, age categories and the degree attained were found.

We looked into the reasons for the respondents not working in the field of addictology. Multiple answers could be provided here. The most common responses referred to inadequate remuneration (39x), an interesting job offer in another field (30x), and a shortage of employment opportunities (28x). Four respondents reported their lack of interest in working in the field. Statistically, this reason was more common among the men, although the sample of the respondents was too small to make any generalisations. If given the opportunity to choose an addiction service they would like to work for, 20 respondents (16%) currently working outside the field would opt for outpatient services. 16 respondents would like to see themselves in aftercare programmes or low-threshold services. Other areas with a reasonable

3 | Full-time equivalent

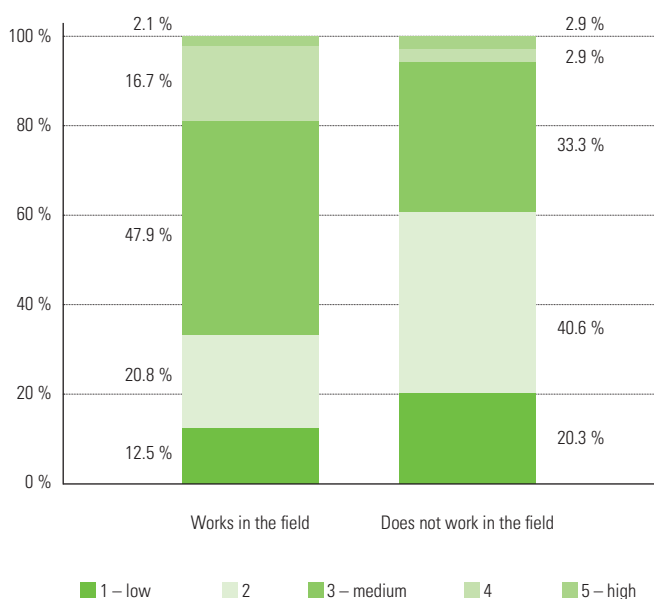
degree of representation included research, prisons, and therapeutic communities. The preferences showed major gender-specific differences; men were significantly more likely to prefer working for outreach programmes.

### 3.3 Comparison of the groups of those working and not working in the field of addictology

In an effort to look for possible differences between the group of the respondents working in the field and those currently employed outside addictology, we examined selected aspects of the way the studies and professional identification were evaluated. No major differences were found in the perception of the quality of the education attained by the study of addictology. The respondents were asked to rate it using a scale from one to five, where one stood for low and five for high quality. A lower rating was provided by a larger number of the respondents working in the field, but these were also more likely to assess the quality of the studies as rather high or high, although the difference was not statistically significant. A statistically significant difference was apparent in the perceived assessment of the level of demand for the profession of an addictologist on the labour market (a 1-5 scale, from low to high). The graduates not working in the field rated it as rather low (2.28 on average) in comparison to those who were employed as addictologists (2.75 on average) (the proportional distribution is shown in Figure 1).

Statistically, the graduates working in the field were also significantly more likely (at the 0.05 significance level) to be

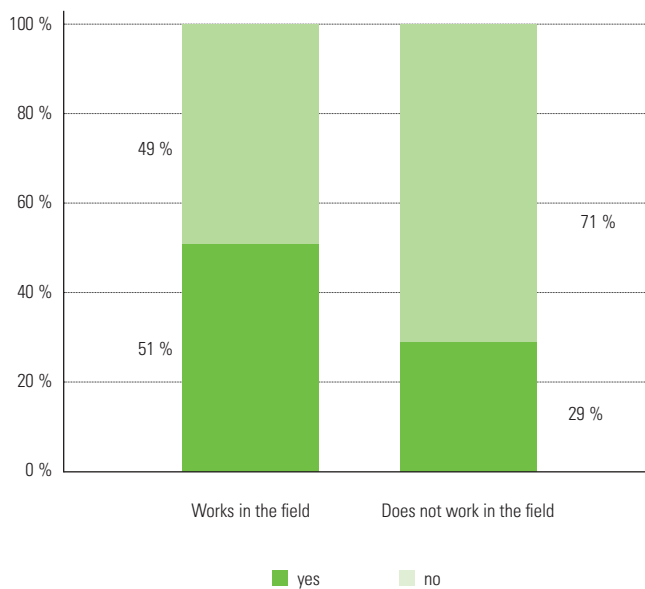
#### In your opinion, what is the demand for the profession of an addictologist on the labour market?



**Figure 1** | Rating of demand for the profession of an addictologist on the labour market; comparison of the groups of respondents working and not working in the field of addictology.

members of the Czech Association of Addictologists; specifically 51% versus 29% of the respondents from among those working outside addictology (Figure 2).

#### Are you a member of the Czech Association of Addictologists?



**Figure 2** | Comparison of membership of the Czech Association of Addictologists among the groups of respondents working and not working in the field of addictology.

## 4 DISCUSSION

### 4.1 Summary of results

58% (96 individuals) of the survey participants who completed their studies in the years 2005-2016 are currently working in the field of addictology. The result seems positive and is also supported by previous studies (Kačírková, 2015; Sklenářová Francová & Janouškovec, 2010), which consistently reported 52% of graduates employed in the field, although the numbers of respondents varied (Kačírková, 2015 – 42 individuals, full-time students only; Sklenářová Francová & Janouškovec, 2010 – 31 individuals). The results could have been affected by the period in which the research was conducted – the statistics show that in the Czech Republic there is currently a very low percentage of unemployed people. In June 2017 the general unemployment rate among the population aged 15-64 was 2.9%, which is 1.3% less than in the previous year. The employment rate among the same group was 73.3%, which meant a 1.6% increase in comparison to June 2016 (ČSÚ, 2017).

A study focusing on European countries found the greatest demand on the labour market for health professions, while graduates in humanities subjects appeared to be the least wanted (Garrouste & Rodrigues, 2013). Working while

studying seems to be a major factor in terms of future employment. The study identified a positive and statistically significant effect of work during studies on the probability of finding employment (Garrouste & Rodrigues, 2013). This finding applies to the Czech Republic, too, and is supported by the conclusions drawn from our research. Almost 62% of addictology graduates worked in the field during their studies (Sklenářová Francová & Janouškovec (2010) reported 48%).

In statistical terms, men were significantly more likely (at a significance level of 0.05) to be employed in the field, although the number of people was generally low (19). The total number of male addictology students was also low; there were 37 of them in the period under study. Possible explanations for women being represented in the helping professions much more than men were considered in the context of social work by Paulík (2004), for example. Kačírková (2015) concluded that male addictologists had greater chances of finding employment in the field than their female colleagues. It also holds, however, that men are significantly more likely to have another job in addition to one related to addictology, or have FTEs greater than 1.0. When the average monthly income, irrespective of gender and the length of work experience, is generalised, it may be that men need to provide for their family or maintain a minimum standard of living. If we look at estimates of average gross income in comparable helping professions, we find that addictologists, with a monthly average of CZK 19,500 (according to this study), fall into a category comparable to those of social workers (CZK 19,000), nutritional therapists (CZK 20,000), and general nurses (CZK 22,500) (Profesia CZ, 2017). Clinical psychologists and physicians earn somewhat more; the figures do not reflect the level of education attained, further training and courses, work experience, and other aspects, though. From 2013 to 2014 the Training Policy Centre of the Faculty of Education of Charles University carried out a survey, “Reflex”, among 35,000 university and college graduates that focused on their income, employability, and satisfaction (Koucký, Ryška, & Zelenka, 2014). The average monthly income of college/university graduates in the first five years of their careers was CZK 31,200. It needs to be noted, though, that only one-third of the graduates earned over CZK 30,000. Lower salaries are associated mainly with teachers and health professionals (with the exception of physicians). The latter includes the profession of an addictologist. However, the results of our survey of salaries may have been biased by some of the respondents’ FTE being smaller than 1.0. As the question did not point out the need to convert the size of the respondent’s salary to 1.0 FTE, the results should be considered indicative only. As shown by both Sklenářová Francová & Janouškovec (2010) and Kačírková (2015), nevertheless, low financial remuneration is one of the main reasons which prevents graduates from seeking or staying in employment in the field. This is also illustrated by graduates’ outlook for the next 5-10 years. Our research indicates that another reason may be an appealing alternative offer which a graduate may accept and thus remain employed outside the field. Koucký et al. (2014) also pointed out that in many cases university/college graduates

held positions that might well have been given to less qualified staff in the past. This outcome is consistent with our finding about addictology graduates’ work positions with their employments, which suggests that a number of addictologists work in positions for which they are overqualified; this particularly applies to the position of a social service practitioner, for which secondary education is required under Act. No. 108/2006 Coll. Kačírková (2015) found that 30% of her respondents worked as “addictologists”.

With the exception of the length of work experience, amount of FTE, and age, no major differences between the graduates of the full-time and part-time formats of study were ascertained. Part-time studies in addictology were originally designed specifically to meet the needs of those who were already working but wished to increase the level of their professional qualifications. This was supported by our findings: the part-time format was more likely to be chosen by those who had already been working in the field for several years and wished to enhance their specialisation alongside their professional responsibilities. They were also likely to remain in the field after they had finished their studies. Similar conclusions were drawn by Adams et al. (2017), who reported an originally full-time study programme being subsequently made available to students from among the workforce and its duration extended, i.e. a concept of part-time study similar to that implemented in the Czech Republic.

The research results suggest the marked centralisation of addictology graduates in the capital city, Prague. The representation of addictologists in other regions is low. Furthermore, some regions serve as a job destination, with the respondents actually living in a different region. In the future, it may be useful to pay more attention to this phenomenon, as well as to parenthood plans among 20% of the female graduates. In some periods, a perceived shortage of addictologists on the labour market may be experienced, particularly in regions other than Prague.

The results provided information about the types of services in which the graduates are employed. The largest number of addictologists, specifically 44%, worked in low-threshold services (this is in line with Sklenářová Francová & Janouškovec, 2010, 44%, and Kačírková, 2015, 42%). These facilities offer part-time job positions which can be taken by people who are still studying. Therefore, these jobs provide addictology graduates with their first employment opportunities. It has turned out, though, that low-threshold services are often used by young respondents as “temporary” employment, or graduates pass it by completely and head primarily for “higher-threshold” services. This trend was confirmed by the responses provided by both groups of respondents – those working and not working in the field. The second largest number of graduates was employed in outpatient services. In a way, this is a logical outcome of the development of specialised outpatient addiction treatment services and the addictological interventions they involve (a decree amending Decree of the Ministry of Health No. 134/1998 Coll., issuing a list of health interventions with

point values, as amended) and reimbursement for such interventions from health insurers. 20% of the graduates working in the field were found to report their addictological interventions to health insurers, while others intended to strive to be able to do so.

The definition of the profile of an addictology graduate as stipulated in the 2011 Accreditation File for the bachelor's study programme in addictology reads as follows: "The graduates will have received professional training for three general areas of practice: prevention of substance use and non-substance addictions; counselling, treatment, and social reintegration; and public administration, management, probation and mediation, penitentiary and post-penitentiary care with relevance to addictology." In this respect, the results of the research attest to the wide range of job opportunities for addictologists. The graduates reported being employed in both health and social addiction treatment services (Libra et al., 2015), but also holding positions involving public health, research, drug policy, public administration, education, and other areas. Importantly, attention should be focused on the ratio between the graduates working in these non-clinical fields (13%, according to our findings; Sklenářová Francová & Janouškovec (2010) reported 25%) and those who pursue a clinical career (87%). While the studies in addictology are designed in such a way as to allow both orientations (Miovský et al., 2016), the theoretical focus seems to be undervalued by students.

We looked into the perceived degree of demand for the profession of an addictologist. A statistically significant difference was found between the graduates working and not working in the field of addictology. On a 1-5 (from low to high) scale, those not working in the field rated the demand lower (an average of 2.28) in comparison to those who were working as addictologists (2.75 on average). In a survey conducted by Kačírková (2015), the graduates of the bachelor's programme rated their employability prospects as rather limited, poor, or uncertain (67% of the responses were to this effect), while 25% saw them as good, improving, or excellent. It should be noted that 56.5% of all those who were not currently working in addictology had never looked for a job in the field. This may suggest that one of the reasons for the lower rating of the demand and not actually working in the field may be a lack of interest.

Some factors which may improve the employability of university/college graduates were identified by a survey among the staff of labour offices (Skácelová & Vojtěch, 2009). One that stands out is a proactive approach to seeking a job; this corresponds to the outcomes found for addictology graduates, who very often sought employment, on a part-time basis at least, while still studying, which has a link to another key factor: work experience. Prospective bachelors and masters of addictology are required to complete 320 and 200 hours, respectively, of practical placement. The survey of Skácelová & Vojtěch also showed a high degree of employability among health professionals applying for a job; there is a shortage of qualified staff in this sector. This may be one of the reasons why no addictology graduates reported us-

ing the services of a labour office. In her study addressing university/college graduates' employability, Polesná (2016) reported that the predominant ways of finding a job in the field included advertisements, especially ones posted online, recommendations from friends and acquaintances, personal contacts, and direct offers from employers.

The graduates' greatest limitation in finding employment seems to be a lack of work experience. According to the staff of the labour offices, schools should respond to the needs of the field and adjust their curricula to meet such needs. Some of our respondents stated that they would welcome more hours of practical training during their studies. But there were others who would have preferred the time dedicated to practical placements in the curriculum to be reduced. Practical placements may also be an important opportunity for establishing contacts or receiving a direct offer of employment, as was shown by our findings, and this is supported by other studies (e.g. Pavlovská, 2012; Messum et al., 2016).

While the profession of an addictologist appears to be finding its place on the labour market, there remains the issue of graduates' employment in social services, where they often hold the position of a social worker, or even a social service practitioner, with the different financial remuneration which such positions involve. One possibility would be to attain the qualifications of a social worker as part of the studies in addictology (Kačírková, 2015), as the results showed that having an additional qualification from another field may increase addictologists' competitiveness on the labour market. The professional competencies of an addictologist are not clearly set out; a number of employers still have little idea of what an addictologist is and what is able to do. In this respect, Adams et al. (2017) point out certain conditions which need to be met for the profession and relevant training to be integrated into the existing systems. This includes the definition of practical competencies and the establishment of the mechanisms needed to observe ethical standards. They also used the term "generic undergraduate education" to underline a background in another field first, with the specialisation in addictology not being pursued until the master's level. In the Czech Republic the term "generic professional" is used to refer to an addictologist with a bachelor's degree who can integrate knowledge and skills from a range of fields (clinical work, public administration, management, etc.) and use them flexibly in meeting the needs of the client or the field (Miovský, 2014). It is also imperative that different professions work with each other and share knowledge and evidence and that roles and competences are clarified in order to provide clients with high-quality care (ATTC, 2017). Butler (2011) mentions this as the precondition for the job of an addiction specialist. He does not assume that addictologists could ever work completely autonomously. It is also essential that support is provided for students' practical placements, or for their work in relevant services while still studying.



## 4.2 International context of the results

Graduates' higher employability requires continuous liaison between the graduates, universities, and employers in practice. Universities should evaluate their study programmes, innovate them in response to the needs of practice, and improve and review their graduates' competitiveness on the labour market. A good practice and a step towards the more effective training of students may be the implementation of specific curricula – the Universal Prevention Curriculum and the Universal Treatment Curriculum (ICUDDR, 2017). Developed in the USA, these schemes are currently being adopted by European universities, including Charles University as the European coordination centre. The key objective is the establishment of an international framework for educational transfer between countries, which is what the International Centre for Credentialing and Education for Addiction Professionals is currently working on (Colombo Plan, 2017). This project seeks to provide students with both theoretical and practical expertise, using both our own historical resources and inspiration from abroad. These models can help us articulate a more accurate profile of a graduate and define the professional competencies of an addictologist. This can also be used for effective promotion of the profession among employers and raising awareness among the general public and professional community.

One of the key topics for further discussion on the development of the Prague model (Miovský et al., 2016), as well as the university education of addiction specialists in general, is the orientation of study programmes, i.e. whether these programmes should be oriented clinically or theoretically and what knowledge and skills the graduates should receive as part of the respective lines of expertise (for details see Pavlovská et al., 2017). Czech experience with addictology graduates' employability on the labour market clearly shows a high degree of success, partly thanks to the profile and competences of the graduates. There are other programmes that show similar experience. In New Zealand, for example, two-thirds of the addiction workforce (out of the total of 1800) engage in frontline clinical work. While a large number of these individuals do this as part of their medical or nursing practice, 30% refer to themselves as "addiction practitioners" (Te Pou o Te Whakaaro Nui, 2015). Prideaux et al. (2007, in Adams et al., 2017) point out the importance of the collaboration between study programmes and key stakeholders in the field in promoting addictologists' professional identity. It thus seems that we may witness the emergence of a new form of professional identity of addictologists with a university degree.

The study has its limitations. The self-sampling of the respondents who completed the online questionnaire may have biased the results. We have no information about those who decided not to complete the questionnaire; some respondents were impossible to reach. The data was mainly collected online, without the researchers' participation. The study may also be limited by the response rate. In addition, some of the questions in the questionnaire were inaccurately formulated, so the resulting data may have poor informa-

tion value or be incapable of being interpreted (e.g. the item concerning gross average monthly income). The authors of the study participated in the development of the study programme; representatives of the Czech Association of Addictologists were consulted in order to ensure impartiality. The limitations will be addressed in the next wave of the data collection, concerning students graduating in 2017 and 2018. On the other hand, the study is exceptional in terms of its coverage, as regards both the number of respondents and the range of areas under scrutiny. The findings will be used to make effective adjustments to the curricula and to the practice of addiction services and to facilitate open discussion on the future orientation of addictology.

## ● 5 CONCLUSION

With a view to the international development of addiction-specific study programmes (see e.g. Babor, 2000; Taleff, 2003) and the discussion about the first long-term policy document regarding a system of education in addictology in the Czech Republic (Miovský, 2014), our study produced important findings. The Prague model of study (Miovský et al., 2016) provides its graduates with qualifications for work in health services in line with the applicable legislation (addictology is regulated by the law as a health profession; cf. physiotherapy, for example). In terms of the Czech labour market and the employability of addictology graduates, this creates a very specific situation which differs from that in many other countries. Crucial factors include addictologists being able to establish and operate healthcare facilities and enter into contracts with health insurers and secure this type of coverage for people with drug problems. This is a breakthrough with the potential to change healthcare for people with addictions and the status of addictologists within the entire system. It is a unique model that could be used in other countries, too. The testing of the model generates a number of key questions concerning the profile and competences of the graduates, their status in relation to other professions, and funding.

The results of the study suggest that addictology graduates have a variety of opportunities to find employment in the field and the potential to integrate the profession into a diverse spectrum of services. They will be put to further use as feedback for those responsible for the development of the study programme in addictology and as a source of information for the professional association.

The study also prompted further research on whether it is the ongoing "mirror" study dealing with the employability of addictology graduates from the perspective of their potential employers from among the providers of addiction services (the importance of such two-to-three-sided surveys was confirmed by Su & Zhang, 2015), or the effort to assess differences between men and women in their respective motivation to study and work in addictology, as the results revealed such gender-specific differences. Additional analysis of motives could be performed among part-time students of addictology, who generally already

work in the field, have families and experience, and decide to go on to study at university nevertheless. It would definitely be useful to repeat the research to make it possible to monitor the development on the labour market, its saturation, and demand.

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