

Vliv ADHD na průběh a výsledek léčby závislosti u klientů terapeutických komunit: design výzkumného projektu



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VÝCHODISKA: Poslední roky jak z klinického, tak výzkumného hlediska stále více ukazují, že syndrom ADHD může v oblasti rezidenční léčby v TK představovat velmi významný rizikový faktor ovlivňující bezpečnost a kvalitu průběhu léčby osob závislých na psychoaktivních látkách a zásadně negativně ovlivňovat také její výsledek. ADHD u dospělých osob má závažný vliv na řadu psychických funkcí a je pro klinickou psychologii v oblasti závislosti doposud málo prozkoumaným fenoménem. První zkušenosti naznačují, že jde o komplikující faktor, mj. snižující schopnost adaptovat se na léčebný program a adekvátně z něj profitovat. **CÍLE STUDIE:** Ověřit u klientů terapeutických komunit (TK) pro léčbu závislosti, jak specifický vliv má ADHD na psychickou nezdolnost, zvládání stresu, emoční labilitu a obecně tzv. životní dovednosti. **SOUBOR:** Prostřednictvím experimentální studie provedeme při nástupu do programu komplexní psychologické vyšetření na reprezentativním souboru cca 170 klientů vybraných osmi komunit v ČR. **METODY:** Tes-

tová baterie je složena z nástrojů specifických pro diagnostiku ADHD a metod ke kontrole výskytu dalších případných poruch či onemocnění. Klienti budou rozděleni do dvou skupin: (A) s diagnózou ADHD a (B) bez ní. Následně pak v průběhu celé léčby budou vyšetřováni speciálně navrženou baterií s cílem prokázat u souboru (A) zvýšený výskyt předpokládaných projevů a komplikací a lépe porozumět a popsat jejich vztah k léčebnému programu. **VÝSLEDKY:** Výsledky studie přinesou jasnou evidenci, zda umíme u této skupiny klientů efektivně a spolehlivě diagnostikovat syndrom ADHD a případně, zda se tato populace klientů opravdu ve svých projevech v očekávatelných oblastech liší od jiných klientů a zda má ADHD u nich skutečně negativní vliv na průběh a výsledek léčby. **ZÁVĚR:** V takovém případě úspěšné zvládnutí celého projektu otevře možnost cíleného vývoje a testování specifické intervence zvyšující šanci na úspěšné dokončení léčby a její lepší výsledek a zvýšení bezpečnosti pro klienty i personál.

KLÍČOVÁ SLOVA: ADHD (ATTENTION DEFICIT HYPERACTIVITY DISORDER) – PORUCHY OSOBNOSTI – DIFERENCIÁLNÍ DIAGNOSTIKA – LÉČBA ZÁVISLOSTI

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The Effects of ADHD on the Course and Outcome of Addiction Treatment in Clients of Therapeutic Communities: research design



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BACKGROUND: Both clinical practice and research have shown that the ADHD can be a significant risk factor for residential treatment in therapeutic communities. It may strongly affect the safety and quality of treatment of people dependent on psychoactive substances. While having a major impact on psychological functions, ADHD in adults has received little research interest with relevance to addiction treatment-related clinical psychology. The initial experience suggests that it is a complicating factor that may impair compliance with treatment and its outcomes.

AIMS: To test the specific effects of ADHD on psychological resilience, stress management, emotional lability, and life skills in general among clients of therapeutic communities (TCs) for addicts. **SAMPLE:** An experimental study will be used to conduct a thorough psychological examination of a representative sample comprising approximately 170 clients of eight selected TCs in the Czech Republic.

METHODS: The test battery comprises specific ADHD diagnostic tools and methods intended to check for any

other conditions. The clients will be divided into two groups: (A) with the ADHD diagnosis and (B) without it. Clients in treatment will then be examined using a specially designed battery in order to show a higher rate of expected signs and complications in Sample A and to understand and describe their impact on treatment. **RESULTS:** The study should clearly show whether we can effectively and reliably diagnose the ADHD in this group of clients and whether this client population may really differ from other clients as regards their behaviour and responses in specific areas. It should also be demonstrated whether ADHD does indeed have a negative impact on the process and outcome of addiction treatment. **CONCLUSION:** The successful implementation of the project should provide opportunities for targeted development and testing of a specific intervention that will increase the chances of the successful completion of treatment and its better outcome. The safety of both clients and staff will also be improved.

KEY WORDS: ADHD (ATTENTION DEFICIT HYPERACTIVITY DISORDER) – PERSONALITY DISORDERS – DIFFERENTIAL DIAGNOSIS – ADDICTION TREATMENT

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● 1 INTRODUCTION

Significant risks posed by the ADHD (Attention Deficit Hyperactivity Disorder) in clients undergoing treatment in therapeutic communities (TCs) for people dependent on addictive substances are supported by both international (e.g. Yates & Wilson, 2001) and national (Kalina, 2008) clinical evidence. These findings gave rise to an initiative pursued among a research group at the Centre for Clinical Research of the Department of Addictology, 1st Faculty of Medicine, Charles University in Prague and General University Hospital in Prague. This initiative subsequently received support from the NETAD¹ project, as part of which the topic was addressed as a “model project”, i.e. from its early stages, the entire process was monitored and evaluated, including the stage of communication with potential partners (i.e. Czech therapeutic communities) and the negotiation of the conditions for their participation and the rules governing their clients’ involvement in the experiment. The project was developed in 2012–2013 and the entire process was finalised by submitting a grant application to GACR (the Czech Science Foundation), which considered the project and approved funding starting from 1 January 2014. Following up on the paper published last year (Miovský et al., 2013) which thoroughly covered the theoretical and clinical context of the issue of ADHD in clients of therapeutic communities, the present text seeks to describe the design of the experiment.

The ADHD symptoms (for more details see Miovský et al., 2013) may dramatically impair patients’ capacities and abilities to comply with and appropriately benefit from the treatment model offered by therapeutic communities for addicts. This must be considered in terms of the prevalence of ADHD as a comorbidity among patients/clients in treatment for dependence on psychoactive substances, as it is the case with up to 50% of adults (Davids & Gatspar, 2003; Sizoo et al., 2010). Evidence shows that there is a strong relationship between ADHD and substance addiction or substance use (Gudjonsson et al., 2012; Young et al., 2011). Specific learning disorders (such as dyslexia) are frequent among substance users, and it is estimated that up to 40% of these may be associated with ADHD (Yates, 2005; Paclt et al., 2007). There is already enough evidence to suggest that **in addition to difficulties in the individual’s personal, professional, and social life, the symptoms or residues of ADHD in adulthood may also represent a major complicating factor for addiction treatment in therapeutic communities.**

1/ Running from 2012 to 2014, NETAD (Networking in Addictology), Reg. No. CZ.1.07/2.4.00/17.0111, was a Czech development project aimed at networking and targeted development of research and education in addictology and strengthening collaboration between universities, the non-profit sector, public treatment facilities, and the private sector. The project was co-funded by the European Social Fund and the national budget of the Czech Republic.

Therapeutic communities are specialised residential facilities with an informal and open atmosphere that focus on abstinence-oriented treatment and social rehabilitation (Kalina, 2008). They provide medium- and long-term professional care lasting for 6–18 months. Gibbons et al. (2002) suggest that a therapeutic community can be viewed as a social and organisational model, as well as a treatment method. The current model of therapeutic communities is described by De Leon (2000) as a residential treatment programme that makes purposeful use of a peer group to facilitate social and psychosocial changes in the behaviour of individuals. This factor may play a particularly significant role in compliance with treatment and its outcomes among ADHD patients with impaired cognitive functions, different behavioural performance, and generally deteriorated adaptation mechanisms and social skills. The high number of failed treatment episodes among this group of patients may well be attributable to their early termination (dropping out) of the programme, a higher concentration of conflicts, and a range of other factors. Nevertheless, **timely diagnosis and appropriate treatment could have a positive impact on treatment outcomes in the future, including an improvement in the patients’ quality of life and significant saving of the funds invested in this segment of treatment services.** The annual costs of this type of treatment in the Czech Republic are estimated at some CZK 54 million (Mravčík et al., 2012).

The main goal of the therapeutic community-based treatment is to promote the clients’ personal growth and teach them how to lead a drug-free life (Radimecký, 2006). Treatment is also aimed at changing the clients’ patterns of self-destructive thinking and behaviour, promoting the development of the clients’ sense of personal responsibility, and helping the clients adopt basic social, communication, and coping skills. Thus, in a therapeutic community setting, one can clearly identify specific ADHD symptoms in concrete social situations and interactions (in relation to the staff, the house rules, or other clients). Therefore, this setting is particularly suited to subsequent psychosocial rehabilitation or specific interventions, as the client stays there sufficiently long (standard treatment lasts from 6 to 18 months) and there are also enough opportunities and possibilities (on the part of both the staff and other clients) to test the progress of an individual personality. The growth of the clients’ personality will make it possible for them to maintain desirable changes in their behaviour even after they have left the sheltered environment (Kalina et al., 2003). The therapeutic process is based on the approach of group-based social learning facilitated by a therapeutic team. Therefore, it appears useful to study and compare both professional and client perspectives, as the difference may be relevant in terms of diagnosis. While still in the therapeutic community, the clients are preparing for their

future life after they have successfully completed the programme. During the final stage of their treatment, ideally, they find employment and housing and make arrangements for aftercare services in an aftercare programme, which they then attend for another year (Adameček, Richterová-Těmínová, & Kalina, 2003).

We assume (for the detailed theoretical background of the project see Miovský et al., 2013) that the range of symptoms which are directly associated with the ADHD² diagnosis (including attention deficit in the presence of impulsivity, chronic restlessness, understimulation, disorganised behaviour, disorders of affect control, emotional lability, moodiness, hardness, sensation-seeking, inefficient coping with emotions and stress or problems in interpersonal relationships, communication, and social skills) will have negative effects on patients entering treatment from the very beginning. Therefore, the basic model under testing is based on the assumption that the sample of patients diagnosed with ADHD in adulthood (Sample A) will differ in the above parameters from the patients without the symptoms under consideration (Sample B). We also presume that during treatment, given such differences, the former will show a higher rate of problems, complications, conflicts, and other consequences that may be immediately associated with ADHD. It is expected that such observations can be confirmed by evaluating self-report questionnaires

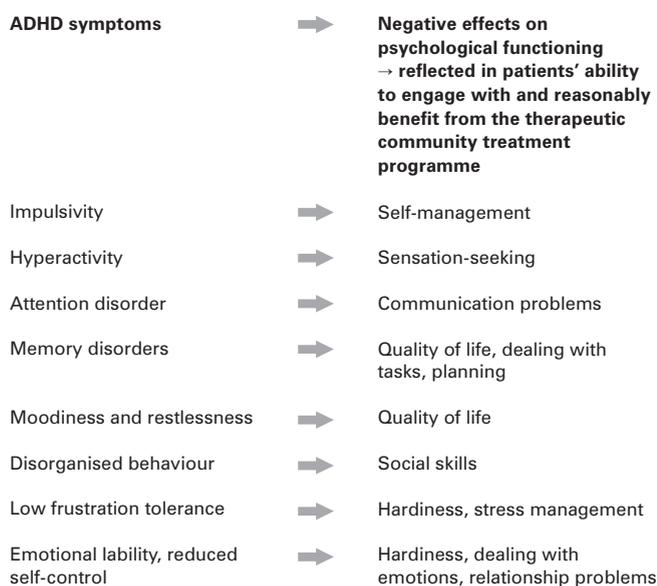


Figure 1 / Obrázek 1

The effects of ADHD on psychological functioning – theoretical model under study (for more details see Miovský et al., 2013)

Ověřovaný teoretický model vlivu ADHD na psychické funkce (podrobněji viz Miovský et al., 2013)

2/ The study uses the Diagnostic and Statistical Manual (DSM-IV), as it serves as the basis for all the ADHD diagnostic measures. However, the International Classification of Diseases (ICD-10) is considered and consulted throughout the research project.

and measures administered to patients in treatment on the one hand and assessment questionnaires and measures administered to the staff of the therapeutic communities on the other hand. The group of ADHD patients is also anticipated to show a higher attrition (drop-out) rate as a result of factors related to the ADHD symptoms (*Figure 1*).

Recent studies (for a review see Miovský et al., 2013) suggest that interventions aimed at promoting self-management and social skills may enhance the retention rate and improve the general outcome of addiction treatment provided in residential facilities. When considering the group of patients diagnosed with ADHD (Sample A), the relevant alternatives in terms of the ADHD diagnosis status in childhood need to be taken into account, as they divide the sample into three subcategories (*Table 1*).

Table 1 / Tabulka 1

Three main subcategories comprising Sample A
Tři základní podskupiny tvořící společně Soubor A

	ADHD diagnosed in childhood	ADHD diagnosed in adulthood (with persisting symptoms)
1.	YES	NO
2.	YES	YES
3.	NO	YES

Alternative 1, i.e. the alternative involving a history of childhood ADHD with no symptoms currently found as persisting into adulthood, will constitute an independent group within the study; it will be looked into separately and then compared with the main samples, A and B. Subgroup 3 will be subjected to a thorough clinical assessment in terms of drug use history, particularly with regard to methamphetamine and other stimulants. The reason is to control for symptoms which may clinically manifest themselves as those of ADHD, although their origin may be etiologically related to the neurotoxic effects of high doses of some stimulants, contaminants present in them, and their routes of administration. Therefore, **both Sample A and Sample B will be thoroughly monitored and assessed for any comorbidities. In addition to signs of hyperactivity, psychotic symptoms** (such as anger, hostility, and reduced stress resistance [Hosák et al., 2009]) and **signs of post-traumatic stress disorder or personality disorder may also be displayed** (Yates & Wilson, 2001; Kalina, 2008). A general outline of the testing process is provided in *Figure 2*.

● 2 PROJECT OBJECTIVES AND RESEARCH QUESTIONS

The objective of this experimental research project is to confirm whether the clients diagnosed with the ADHD, who en-

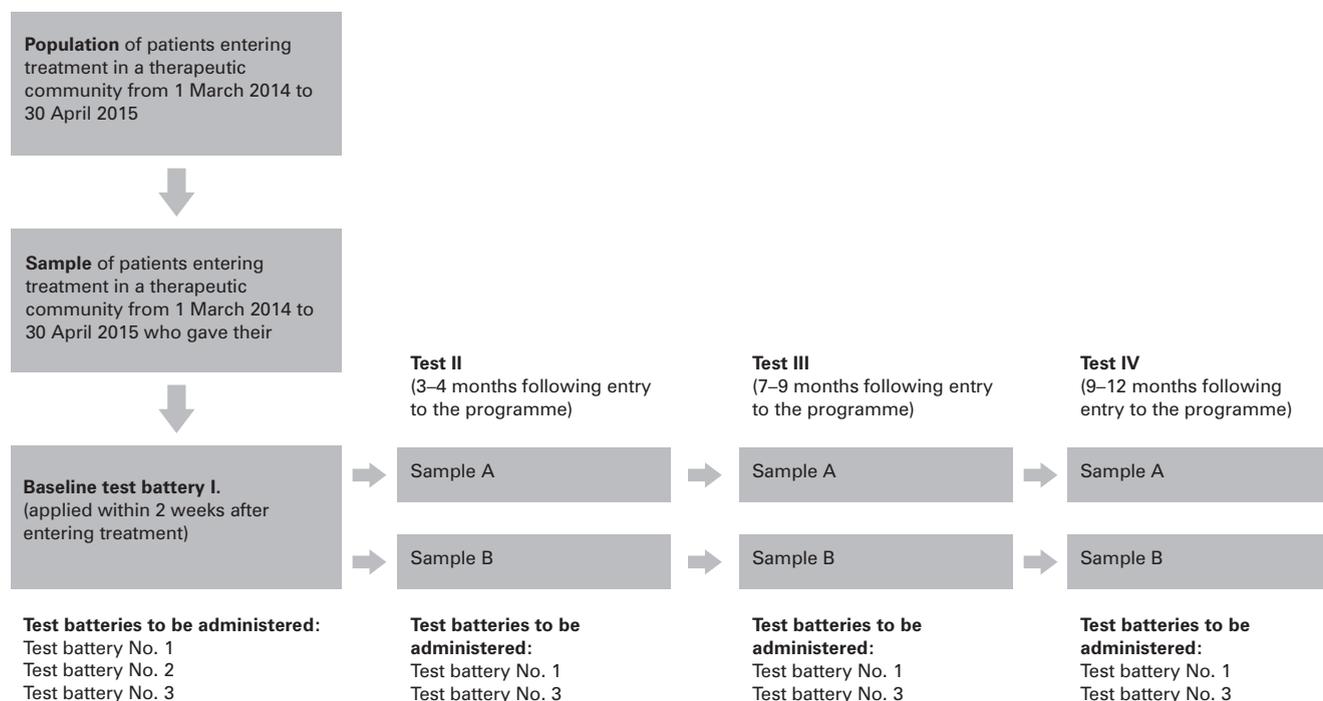


Figure 2 / Obrázek 2
Testing process
Testové schéma

ter treatment in a therapeutic community (Sample A) show a higher rate of the anticipated symptoms and complications in comparison to the clients who have not been diagnosed with ADHD (Sample B). Our intention is to ascertain whether the complications attributable to ADHD really have a negative impact on treatment compliance, life skills, quality of life, and the general outcome of the treatment programme. If successfully implemented, the study will make it possible to test and select suitable tools for diagnosing ADHD in these clients and test the hypothesis that this disorder is indeed associated with some severe negative effects on psychological functioning and, accordingly, may affect the course and outcomes of treatment. The assessment process will involve the examination of the differential diagnosis of ADHD. This will serve as an effective element in designing a subsequent randomised trial to test a special therapeutic training intervention that, it is believed, will improve the quality of life and the affected psychological functions by compensating for the ADHD-related deficits.

Thus, the key objectives of the project are as follows:

- a/ to show a relationship between ADHD among adult patients undergoing drug treatment in a therapeutic community and specific deficits in their cognitive and executive functioning that impair their ability to engage with and successfully complete the treatment,
- b/ to test diagnostic tools suitable for the further investigation of ADHD,

c/ to conduct the differential diagnosis in patients diagnosed with ADHD,

d/ to test the hypothetical need for the development of a specific training module for these patients that would make it possible to enhance their treatment outcome by providing effective compensation for the deficits arising from ADHD.

● 2 / 1 Main research questions and hypotheses

a/ Are the negative effects on the psychological functions under study consistent with the theoretical model or do they differ from it in certain aspects? If so, what are these aspects and what is the extent of the differences?

b/ Do the diagnostic tools and clinical examinations lead to consistent results in patients? If not, which tests show deviations, what are these deviations, and how significant are they?

c/ How severe is the impairment of the psychological functions under study in patients diagnosed with ADHD in comparison to those without ADHD?

d/ Is there evidence of any relationship between the ADHD diagnosis, the results of the tests and examinations applied, and the anticipated effects in terms of complications and poor behavioural performance on the part of the patient during treatment? Are such problems associated with the ADHD diagnosis?

Table 2 / Tabulka 2

Characteristics of patients undergoing treatment in Czech therapeutic communities, 2003–2011 (Mravčík et al., 2012)
Charakteristiky pacientů léčených v TK v ČR v letech 2003-2011 Mravčík et al., 2012)

Indicator	2003	2004	2005	2006	2007	2008	2009	2010	2011
Number of communities	17	14	12	12	11	10	10	10	10
Capacity (slots)	238	218	183	185	169	138	160	160	158
Number of clients	510	546	491	451	472	427	349	408	402
- injecting drug users	428	429	400	375	347	326	343	350	351
- pervitin users	270	306	287	271	291	283	276	292	313
- heroin users	187	151	132	93	66	67	69	68	46
Average age of clients	23.4	24.2	24.9	25.1	24.2	23.8	26.6	26.7	27.2

e/ Is there a difference between stimulant users and opiate users in their psychological profiles in relation to the incidence rate of ADHD and can it be used to support the notion of the higher incidence of ADHD among stimulant users (a relationship with the premise of self-medication with stimulants among the ADHD patient subgroup)?

● 3 STUDY POPULATION AND SAMPLE

Therapeutic communities are inpatient facilities, the primary mission of which is to help clients in recovering from substance use by means of activities that are intended to promote the development of their personality while they abstain from mind-altering substances. They offer a safe and stimulating environment for growth and maturing, facilitated by social learning promoted in a context with clear and simple rules (Libra et al., 2012). The study participants will only be selected from therapeutic communities that hold valid certificates of professional competency. The certification guarantees adherence to the core parameters of the treatment programme and serves as the terms of reference for the study as regards the classification of the treatment programme and its basic parameters, such as its content, structure, length, character, and overall philosophy. In addition, it ensures compliance with the basic standards pertaining to physical, technical, and human resources.

The population of the present study comprises all the patients undergoing treatment in Czech therapeutic communities that have received certificates of professional competency. The general characteristics of this population are summarised in *Table 2*.

The study sample will be constructed using a two-step selection procedure. Simple random sampling (a computer-based draw) will be used to select at least six facilities³ (approximately a half of the study population) out of

3/ By the beginning of 2014 a total of eight eligible therapeutic communities had joined the project. Thus, over 50% of all the clients receiving treatment in these facilities in the Czech Republic are involved in the trial.

the group of all the therapeutic communities with certificates of competency. These will then be formally asked for collaboration. All the existing facilities (10 certified communities) have been preliminarily notified of the study. The project team have been in contact with them and informed them about the preparation of the project (2012–2013). After the draw, the selected facilities were contacted and invited to collaborate.

The second step will then involve all the patients from the collaborating facilities. The study sample will thus consist of all the patients entering the treatment programme in the period from 1 March 2014 to 30 April 2015 (14 months). Such a procedure simply combines the institutional sampling and general sampling methods (Miovský, 2006). If they grant their consent, each patient entering treatment during this period will be included in the study. The preliminary total number of patients is indicated in *Table 3*.

In view of the fact that no accurate statistics that could be used to describe the parameters of the population of therapeutic community patients in the Czech Republic are currently available, the expected drop-out rates for the study sample were calculated on the basis of an educated theoretical guess. The purpose is to come up with the final number of study participants at the end of Stage III of testing; these criteria will be met by each client who stays in the residential treatment programme for 7 to 8 months.

● 4 METHODS AND THEIR APPLICATION

In terms of the data collection process, the project is divided into four stages – testing waves (for more details see also the study timetable). The general testing process is outlined in *Figure 2*, where the intervals between the use of test batteries and the timing of the test process are indicated.

For practical reasons and to provide for different combinations involving Tests 1, 2, and 3, the tools and methods used in the study are divided into several groups (test batteries) (*Table 4*). We also tried to minimise the burden imposed on the clients and particularly the staff of the thera-

Table 3 / Tabulka 3

Expected parameters of the study sample comprising therapeutic community patients
Popis předpokládaných parametrů výběrového souboru pacientů TK

Sampling procedure and expected drop-out	Study population: Clients entering treatment from 1 March 2014 to 30 March 2015	Study sample	Test I	Expected drop-out	Test III
Number of clients	502	→50%	251	→30-35%	176–164
- injecting users	438	of clients	219	of clients	154–143
- pervitin users	386		193		136–126

Table 4 / Tabulka 4

Test batteries used in different waves of testing
Popis testových baterií pro jednotlivá kola testování

Test battery number	Tool
Test battery No. 1:	The DIVA 2.0 diagnostic interview (Kooij & Francken, 2010) was chosen as the primary specific test to diagnose ADHD (only the scales assessing the current condition are used for Tests III and IV). Its results will be compared with those obtained using other measures (see further below).
Test battery No. 2: To be administered only once at the initial baseline testing (see the outline of the testing process in <i>Figure 2</i>):	Clinical history
	MMPI-2 (Butcher et al., 2001), a clinical measure
	Raven Advanced Progressive Matrices IQ test (Raven et al., 1998)
Test battery No. 3: To be administered at Test 1, Test 2, and Test 3 (see the outline of the testing process in <i>Figure 2</i>):	EuropASI questionnaire (McLellan et al., 1980) – records, interview
	SCL-90 (Degoratis, Lipman, & Covi, 1976)
	WHO-QOL 100 (WHO, 1995; Dragomirecká & Bartoňová, 2006), a measure of health-related quality of life
	SOC questionnaire (Antonovsky, 1993)
	Personal Views Survey (Kobasa, 1985; Šolcová, 1995)
	Change Questionnaire (Miller & Johnson, 2008)
	CTQ assessment questionnaire, Conners Scale (Conners, 1985; Czech version: Paclt et al., 2007)

peutic communities, whose participation in the study involves not only educating the clients and preparing them for testing, but also active implementation of the study by testing their clients. This required specific agreement and alignment in the administration of methods in such a way as to harmonise the process and procedures in all the therapeutic communities, i.e. to ensure that the staff of all the TCs carry out the testing in the same way, using the same tools, same instructions, etc. The study follows and complies with all the ethical criteria for research: the clients will receive the Informed Consent Form and the Information for Study Participants (in addition to written materials, a verbal explanation of the purpose, objectives, and course of the project will be provided by the staff of the therapeutic communities).

A contract of collaboration was executed with each participating therapeutic community at the initial stage of the project which laid down the rules and conditions for its implementation. The staff of the therapeutic communities are remunerated for their work in the project according to

a pre-agreed and approved formula determined by the number of clients assessed and retests administered. In addition, as part of the grant, the therapeutic communities receive modest contributions intended to cover their operating and administrative costs incurred in relation to the implementation of the project and computers and all the diagnostic tools needed for the study are made available to them for use. Any compensation provided to the clients for their participation in the study is purely at the discretion of the therapeutic communities; in most cases, such compensation (e.g. free admission to a swimming pool or participation in sports activities) is covered by project contributions intended for study-related operating costs.

The study implementation process is divided into six key activities (KA1–KA6) according to the relevant scopes of work. The key activities and their time frames are specified below. For more details see also the outline of the testing process in *Figure 2* and the overview of the testing methods used in *Table 4*:

a/ KA1 – introductory phase: preparation of the experiment in terms of the selection of institutions, the testing of the sampling procedure, communication with the selected facilities, training of the staff and induction of the project team, and the setting up of the technical and organisational framework (including the purchase of tests): **Duration:** Commencement of the study – 6/2014

b/ KA2: Test I: initial testing using the baseline Test Battery I (including the initial setting up and fine-tuning of the procedure, i.e. in parallel with KA 1); to be performed not later than 2 weeks after the patient has entered the programme. Tests to be administered: Test batteries Nos. 1, 2, and 3. **Duration:** 3/2014–3/2015

c/ KA3: Test II: testing using Battery II., 3–4 months after the patient has entered the programme (i.e. after Test I). Tests to be administered: Test batteries Nos. 1 and 3. **Duration:** 6/2014–7/2015

d/ KA4: Test III: testing using Battery III, 7–9 months after the patient has entered the programme (i.e. after Test I). Tests to be administered: Test batteries Nos. 1 and 3. **Duration:** 9/2014–12/2015

e/ KA5: Evaluation of the results: pooling, computerisation, and the interim and final evaluation of the data. **Duration:** 10/2014–3/2016

f/ KA6: Computerisation of the data, interpretation of the results, and publications: Statistical and qualitative analysis of the results and the publishing of the results of the study (including their preparation for publication). **Duration:** 1/2015–12/2016

● 5 CONCLUSION

If the results are positive and the hypotheses are corroborated, we will possess evidence supporting the present clinical assumption that a specific psychological intervention/training programme for clients of therapeutic communities needs to be developed in order to reduce and compensate for the envisaged ADHD-related effects. Seen as the crucial added value of the study, such evidence would justify developing and testing the intervention and its effectiveness, as well as investigating the interaction of variables that we can influence.

Since its preparation began, the project has been coordinated in partnership with the Therapeutic Communities Section of the Association of NGOs, which showed interest in the project. It was also presented and discussed at its meetings on several occasions. The support for the project on the part of this professional association means there is a better chance of the individual treatment facilities becoming involved in it. In addition, efforts have been made to link the project with the activities pursued by the European Association of Therapeutic Communities. Some of its members have already shown active interest in collaboration. In addition to the research and clinical benefits, the project's

added value also lies in therapeutic communities being shown as a homogeneous and high-quality model of addiction treatment suitable for rigorous clinical research.

Furthermore, the research team are seeking to enhance the existing collaboration with international partners in the field, particularly the Scottish University of Stirling. Dr. Paul Rowdy Yates, a Senior Research Fellow there, was an initiator of the idea and one of the first to point out this phenomenon. Equally, there has been ongoing collaboration with Prof. Dr. Wouter Vanderplasschen of the Department of Orthopedagogy, Faculty of Psychology and Educational Sciences, Ghent University. The project thus offers a great opportunity for all three universities to enhance their collaboration on research projects and the further academic growth of their PhD students.

If successfully implemented, the study will make it possible to test and select the best tools for diagnosing ADHD in the clients under consideration and test the hypothesis that this disorder is indeed associated with major complications during treatment and poorer treatment outcomes. This will serve as an effective element in designing a subsequent randomised trial to test a special therapeutic training intervention that may improve the quality of life and the affected psychological functions by compensating for the ADHD-related deficits. A number of clients in addiction treatment show ADHD-related problems. These individual predispositions make them more vulnerable to substance use, as well as posing problems in their dealings with stress and strong emotions. The reduction of individual resilience by circular causality, emotional lability, and impaired coping skills then lead to psychological complications that have a negative impact on adherence to residential treatment and treatment outcomes. If implemented, our project may pave the road to the development of a suitable rehabilitation programme – an intervention addressing the aforementioned psychological deficits in clients which could help in enhancing the overall effectiveness of treatment in therapeutic communities and the quality of patients' life following treatment. A therapeutic community offers a particularly suitable environment for the application of such an intervention, as this type of programme is well represented by the target group under consideration, and the residential treatment modality provides ideal conditions for systematic long-term work and the delivery of such a type of intervention. The compensation for the above deficits in clients with ADHD will make it possible to increase the number of successful residential treatment episodes and thus cut the social costs incurred as a result of ineffective interventions in both economic and professional terms.

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