



METHADON MAINTENANCE TREATMENT PROGRAMS IN HUNGARY: TREATMENT, HARM REDUCTION AND SOCIAL CONTROL

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Summary

There are three drug policy strategies for methadone maintenance treatment programmes: treatment, harm reduction and social control. In this study we examine the Hungarian methadone maintenance treatment programme. Our objective is to arrive at recommendation that can also be applied to other countries in Central and Eastern Europe, where these types of treatment do not currently exist. Patients and experts from all eight Hungarian clinics performing maintenance treatments were included in the research. The patients' group was made up of 150 individuals, and the group of experts consisted of two professionals from each of the treatment facilities.

On the basis of our research observations we recommend the "opening up" of the maintenance system, as well as an approach that accords with the principles of treatment and harm reduction. These conclusions can be applied to other countries in the region, which had similar historical, political and professional policy factors in the past.

Key words: methadone maintenance treatment, drug abuse, harm reduction, drug policy, Hungary

INTRODUCTION

In this study we evaluate the national methadone maintenance treatment (MMT) programme of Hungary, a member of the European Union situated in central Europe (with a population of 10 million). Our main objective is to examine to what extent the Hungarian National Guidelines for MMT (1) are kept. Another aim of the paper is to explore to what extent clients of the programme are satisfied with the treatment and whether their treatment needs have been met properly. On the basis of the results, we will briefly make an attempt to determine whether the harm reduction paradigm is successfully being carried out in MMT in Hungary. The relevance of this study can be explained by the fact that MMTs, apart from a few exceptions, in the Central and Eastern European regions are less common and have a shorter operation history in comparison with Western European and overseas countries, whereas risky behaviours associated with intravenous use are relatively

common in the Central and Eastern European regions (2-6). Another relevance of the study is that apart from one evaluation project (7), the Hungarian MMT had not been evaluated before.

Across the Eurasian region, all but five countries and territories have some form of Opioid Substitution Therapy (OST) provision. Programmes will soon begin operating in Tajikistan and Kosovo, but in Russia, Turkmenistan, Kosovo and Uzbekistan (where a pilot OST site was shut down in June 2009) OST is not available. Even in regions where programmes exist, OST is accessible to less than 5% of opioid users, with some exceptions in Croatia, Slovenia, Hungary and the Czech Republic. In Eastern Europe and Central Asia, only 1% of people who inject drugs are reported to be receiving OST and OST programmes have generally remained at the pilot stage rather than systematically scale up (8).

The experience gained from our study can also be used in these countries where HIV infection related to

intravenous heroin use has reached an extremely high rate (in contrast to Hungary where HIV infection among injecting drug users are less than 1% (9)). The connection between HIV and injecting drug use are studied widely (e.g. 6, 10-15).

A EuroHIV (2007) report stated that “[i]n many western and central European countries, HIV prevalence is low and the proportion of new HIV diagnoses reported among IDU is <10% and decreasing” (16, p. 12). Furthermore, “[i]n some countries in the East, the HIV epidemic started to spread intensively more than a decade ago, and large and increasing numbers of new HIV diagnoses in several countries may reflect possible continuing transmission of HIV in this population, especially among younger IDU. In the East, increasing heterosexual HIV transmission partly is attributed to IDU partners” (16, p. 13).

Regarding HCV infection, in Hungary this rate in Budapest (the capital of Hungary with a population of two million residents) is around 35%, while elsewhere in the country it is under 20% (6, 17-23).

In the following section we will take a brief look at three different drug policy paradigms that are applied in MMTs worldwide.

Medical Treatment – Brain Disease Model

According to proponents of the medical treatment – brain disease model MMT is a medical treatment (24-27) and/or addiction is a brain disease (28, 29). The understanding of drug dependence as a “chronic disease” is represented most markedly by McLellan et al. (30). The summaries and international recommendations cited in what follows interpret MMT within the context of the medical disease model and the treatment paradigm (31-35).

In those countries where MMT is considered a medical treatment, programmes have high threshold (36) as the admission criteria are strict. In Norway for example, the programmes are the part of the general health care and social services. The strict rules did not prevent the quick spread of the programme, or the inclusion of heroin users in Norway (36).

Harm Reduction as a Public Health Model

The Harm Reduction (HR) model is only slightly different from the treatment model. The literature on HR emphasizes different areas of drug use and its consequences in relation to MMT. The difference is slight in many cases because the same authors or international organizations employ both the “treatment” and the HR terms for MMT (or for other substitution therapies). Despite this, for didactic reasons, we strive to separate the two models from one another as much as possible.

Single (1995), who defines harm reduction as programmes “which attempt to reduce the harm associated with use, without the user giving up his or her use at the present time” and explicitly points out that “conceiving of harm reduction in this way means that abstinence-oriented programs would not be considered harm-reduction measures” (37). The objective of the HR model is

not achieving abstinence outside of methadone, but the reduction of individual and social harm related to heroin use (primarily infectious diseases, criminal behaviour, use of needles and drug mortality, etc.).

MMT (or more precisely opioid substitution therapy, OST) is one of the main forms of intervention for HR (8, 38). The experts of the European Monitoring Centre on Drugs and Drug Addiction place MMT within the context of HR, or the “new” public health approach (39). The Joint United Nations Programme on HIV/AIDS WHO, UNODC, & UNAIDS (2009) consider substitution therapies to be a “core set of HR” (40).

European programmes, and in particular the Dutch or Swiss maintenance programmes, are of this type (36, 39, 41). The programme presented by Millson et al. (2007) operates in Canada, within a needle exchange programme. The majority of the patients are recruited from amongst the visitors to the needle exchange programme, for whom this is a step “forward” towards more intensive programmes with a higher threshold. Sweden for example has moved from the restrictive (“high threshold”) model to a more tolerant (low threshold, public health) model, increasing the number of participants in MMT (and in buprenorphine treatment) (42). This has resulted in better retention and the reduction of certain kinds of harm related to heroin use.

Trautmann et al. (2007) reviewed the Slovenian methadone maintenance treatment system. This study is the closest to our study in terms of both the approach and the method, and because, like Hungary, Slovenia is a post-socialist country in central Europe (43). The aspects that they examined were related, in part, to the professional, political and ideological background of methadone treatment, they also characterized the treatment system and studied patient’s satisfaction in relation to methadone programmes. At the end of the research the authors did not emphasize the critical elements of the therapeutic system, but instead formulated recommendations on how it could be operated more effectively.

MMT as Social Control

In Keane (2009), MMT is analyzed, in a Foucaultian manner, as a regulatory technology that aims to create productive and obedient subjects. According to Keane, “[w]e can emphasise the social control of drug users through MMT” (44). This train of thought is expanded upon by Saris’s (2008) Irish example, where MMT is a part of governance, primarily for socially excluded populations (the author also examines how these populations construct a political or psychiatric drug discourse) (45). On the basis of street ethnographic studies, Bourgois concludes that:

[MMT] is an expression of the competition of contradictory discourses: the criminalizing and healthiest versions of biopower that dominate in law enforcement, and popular culture, versus the ‘addiction-is-a-disease’ model that prevails in the biomedical establishment and emphasizes the pharmacological control of bodies. This

contradiction is reflected in the imposition by the legislature of repressive legal regulations that discourage high dosage prescriptions of methadone despite the emphatic consensus of federally-funded drug researchers that the biggest problem with most methadone clinics is the inadequately low doses they administer (70).

MMT in Hungary

According to the Hungarian national drug strategies in 2009 and in 2000 (46, 47), MMT is primarily a HR, low threshold service, while according to the methodological policies developed by the profession (1, 48) it counts as treatment. While there is not a sharp differentiation between these two approaches, the two documents (the National Drug Strategy and the guidelines developed by the College on Addictions, 2009) define MMT as a different drug policy tool. The first methadone treatment in Hungary was initiated in 1987, but it only became professionally and politically accepted in 2001 (49).

Participants in Substitution Treatment in Hungary

Following an initial increase in the number of patients, after 2005 their number did not increase; the financing system reached the boundaries of its capacity (tab. 2). Suboxone substitution treatment, an alternative to methadone, began in 2007. It has several traits that make it preferable to methadone (50). In 2009 a total of 638

patients were given MMT, while another 354 patients received a combined buprenorphine+naloxone therapy (20). A total of 57% of patients were treated at a single centre in the capital (20). MMT can only be offered in special outpatient centres that deal with alcohol and drug dependency. Methadone can only be prescribed by a psychiatrist or a doctor that specializes in addiction medicine (this latter qualification is generally acquired by psychiatrists). MMT is free, whereas buprenorphine-naloxone therapy represents a significant expense for patients – at Hungarian prices – and therefore cannot reach those that need it most (20).

Between 2003 and 2006 the number of patients participating in substitution treatment increased by 343%, and the 2006 figure then fell to 79% in 2008 (see table 1). Budapest has the greatest proportion of patients participating in MMT. In Budapest, there are two centres, the biggest is the the Nyíró Gyula Hospital Outpatient centre. This centre also collects and records the patients treated throughout the country (called National Methadone Register), using (since 2006) the Treatment Demand Indicator (TDI) (51).

The Ministry of Health's Guidelines for MMT on methadone treatment and the objectives of harm reduction drug strategy

These guidelines for MMT (1, 48) outline the diagnosis and treatment indication considerations necessary

Table 1. Participants in methadone substitution treatment.

	Budapest	Outside Budapest	Total
2003	249 (Annual average)	0	249
2004	N.A.	N.A.	377 (Annual average)*
2005	575	191	766
2006	672	181	853
2007	595	188	783
2008	467	210	677
2009	450	188	638

*80% from Budapest.

Table 2. The distribution of individuals included in the sample according to their treatment location and gender.

Treatment location	Male	Female	Total
Budapest, Nyíró Gyula Hospital	59	19	78
Soroksár Methadone Centre	18	5	23
Drogoplex (Budapest)	6	3	9
Miskolc Outpatient centre	13	1	14
Pécs Outpatient centre	2	1	3
Szeged Outpatient centre	13	5	18
Veszprém Outpatient centre	2	1	3
Eger	2	0	2
All treatment locations	115	35	150

Note: Interviews were conducted with two professionals from each of the treatment locations listed in this table.

for methadone treatment (and thus for MMT too), as well as the features facilities must be qualified in providing MMT. The guidelines for MMT provide the registration of patients, the dose of methadone that can be given out (60-120 mg/day) and the amount that can be given out (and taken home). It also provides the other medical, health care and psychosocial services, as well as after-care. We have already mentioned the general objectives of the national drug strategies in 2009 and in 2000 as they relate to HR (46, 47).

AIM OF THE STUDY

Our research objectives were as follows:

1. To examine to which extent the treatment principles laid down in the guidelines for MMT (48) are being successfully carried out in practice, and the extent to which the expectations related to HR are being met (on the basis of the National Drug Strategy, 2000-2009, 2009-2018 developed by the Ministry of Youth and Sports (2001); and Ministry of Social and Labour Affairs (2010).
2. To examine to what extent clients of the MMT are satisfied with the programme.

MATERIAL AND METHODS

Participants

The data survey that we performed concerns two different target groups. The first group is the patients currently participating in a methadone maintenance treatment programme, the second is the directors of the programmes or the staff that provide methadone. A single data survey was given to both target groups.

The inclusion criteria for the patients were that they must be older than 18 and must fulfil the quotas for inclusion in the sample group. We determined the framework for the sample of patients on the basis of the substitution data for 2008. This contained the information on the proportions of patients on methadone maintenance in the national treatment locations in 2008, and the ratio of men to women at the given treatment locations. The examiners at the given treatment locations selected the patients at random. Of all the treatment locations, patients from three locations in the capital and five locations from elsewhere in the country were included in the sample group (tab. 2).

During the course of study, 150 patients were included in the sample group and a data survey was performed on 16 directors or professionals that provided methadone. Interviews took place at the treatment locations. Before beginning the survey we pilot tested the patient questionnaire with five clients. Following this, the questionnaires for both the patients and the professionals started at the beginning of August 2009 and concluded at the end of November 2009. We performed the analysis of the results with the aid of SPSS. The ethics permit was issued by the Joint Psychological Research Ethics Committee (chairman: Dr. Gergely Csibra).

Method

The research we performed through the questioning of the target groups was carried out with the aid of two questionnaires. When developing the questionnaires (for the patients and the professionals) we used the "Evaluation of Self and Treatment" questionnaire (TCU Methadone Outpatient Form) (52) and the questionnaires used in the study by Trautmann et al. (2007) as a basis.

1. The patient's satisfaction questionnaire (hereafter the patient's questionnaire) was made up of 16 pages of questions, which took approximately 40-50 minutes to answer. The main sections of the patient's questionnaire were: accessibility; the amount of and the frequency with which the methadone provided was used; the conditions of take-home methadone; rule violations through the failure to use it; attitudes to the staff providing methadone; information and sanctions related to following the protocol; and the health, social and psychosocial changes experienced by the patients.
2. The interview of the professionals was a 21 page questionnaire, which took approximately 60-90 minutes to complete. During the course of the questioning, the professional evaluated the programme. The main sections of the professional's questionnaire were: description and characteristics of the organization; the content characteristics of the service; the professional staff; criteria of success; and knowledge of the guidelines for MMT.

During the course of the interviews, the patients were asked to provide their TDI code to avoid duplication of interviews (53). The TDI identification number (a number generated using the patient's name and birth date) made the survey data anonymous insofar as it does not identify the individual. The examiners participating in the research were practicing social workers.

RESULTS

The Major Socio-demographic Characteristics of the Sample (see table 3)

The major socio-demographic characteristics were as follows. The sample group comprised of 76.7% males and 23.3% females. The average age in the sample was 33.8 years old. The largest group in the sample (26.7%) lived with parents or a companion (as a couple). The next largest groups were those living alone (24%) and those living with a companion and children (12%). The overwhelming majority in the sample (92%) lived in stable conditions. Every individual in the sample was a Hungarian citizen. A total of 40% stated that they were unemployed, while 30% had regular employment. A total of 14% were economically inactive, and another 14% had some other employment status. The majority (59.3%) had

Table 3. The socio-demographic characteristics of the sample (N = 150), in percentages.

	Number of Cases	Percentage
Gender		
Male	115	76.7
Female	37	23.3
No information	0	0
Age		
18-29 years old	40	26.7
30-39 years old	80	53.3
40-49 years old	25	16.7
50+ years old	5	3.3
No information	0	0
Family situation		
Living alone	36	24
Living with parents	40	26.7
Raising children alone	4	2.7
Living with a partner (as a couple)	40	26.7
Living with a partner and children	18	12
Living with friends	5	3.3
Other	7	4.7
No information	0	0
Living conditions		
Stable	138	92
Unstable	10	6.7
In an institute (prison, clinic)	0	0
No information	2	1.3
Employment status		
Regularly employed	45	30
Student	3	2
Economically inactive	21	14
Unemployed	60	40
Other	21	14
No information	0	0
Highest educational degree		
Did not attend/did not complete eight years of primary schooling	2	1.3
Primary school diploma	47	31.3
Secondary school diploma	89	59.3
College/university degree	9	6
No information	3	2
Citizenship		
Hungarian	150	100
Citizen of an EU member country	0	0
Other country	0	0
No information	0	0

a secondary school diploma, while 31.3% had finished primary school and 6% had a higher educational degree.

Drug Use Characteristics

Of those questioned, 34% named methadone and 33.3% named heroin as their primary drug. Regarding the use of secondary drugs, 28% used cannabis, 21.3% methadone, 14% alcohol, 10% amphetamines, 8% cocaine and 7.3% heroin, while 43.3% smoke.

The beginning of their drug careers (the age at which they first used the primary drug) was, on average, 16.9 years of age. A total of 22% began using drugs before they were 15. The majority, 60.7%, stated that they used to inject but do not do so now, while 23.3% still inject. Of those remaining, 7.3% have never injected, while in 8% of the cases there was no information.

Treatment Characteristics

35.3% of the sample had never been to drug treatment before, while 64.7% had. The minority, 24%, had not yet been in substitution treatment, while 76% had been in such treatment.

Regarding time spent in treatment, 21.8% had been in maintenance treatment for less than a year, 13.6% for 2 years, 22.4% for 3-5 years, 27.2% for 4-10 years and 15% for over 10 years.

The patients typically took 40mg (20 individuals, 13.3%), 60 mg (27 individuals, 18%) or 80 mg (22 individuals, 14.7%) of methadone. Ten individuals took 100 mg (6.7%), and there were patients (12 individuals, 8%) that took 120 mg. The largest dose was 240 mg (in the case of one individual).

Criteria for Remaining in Treatment

The majority of those questioned, 64% were punished because they took illegal drugs (bought in the streets). Of those questioned, 82.7% thought that the punishment was justified. Continuing the presentation of criteria for remaining in treatment, 3.3% stated that if they were to continue treatment they were not allowed to be absent or stop attending. A similar number (54%) were not allowed to take illegal drugs (bought in the streets) and 51% said they were not allowed to fight or show aggressive behaviour. According to 53%, they were not allowed to sell methadone. The overwhelming majority of those questioned (84%) stated that there were regular urine or saliva drug tests during the treatment. According to 49.6%, the tests were random. Of the respondents in treatment, 58% thought that the rules that were necessary for staying in treatment were not at all strict. Only 7.3% judged them to be slightly strict, and 16% thought they were moderately or very strict. According to 20.6% of patients, it was not at all difficult to be admitted into the maintenance programme, 12.6% thought it was slightly or moderately difficult, while 47.3% (nearly half) thought it was very difficult.

Subjective Changes

In this section patients described the changes they experienced in terms of their health, drug use and social issues (fig. 1).

Respondents were asked to rate the statements below on a scale from 1 to 4. 1 stands for 'I do not agree at all', while 4 stands for "I absolutely agree".

In general, it can be stated that patients reported considerable positive changes in most areas with most mean scores exceeding 3. It seems that the treatment prevents clients from risk behavioural factors such as overdosing, excessive alcohol consumption, amphetamine and heroin consumption as well as intravenous use. The treatment also appears to facilitate the improvement of certain personal characteristics and attitudes. At the same time it is interesting to note that patients have been less successful in decreasing their medicine use (tranquilizers), drug use other than amphetamine and heroin and heroin craving.

Respondents also experienced significant improvements in their family and friend relationships, physical and mental status, whereas they are less confident whether their financial status and employment chances had improved.

Attitudes towards the Treatment Staff (see figure 2)

Respondents were asked to rate the statements below on a scale from 1 to 4. 1 stands for 'I do not agree at all', while 4 stands for "I absolutely agree".

The opinion that the treatment workers do their jobs well is fairly clear-cut (average = 3.46), as well as that staff show understanding towards patients (average = 3.36), and patients' trust in staff is above the median (average = 3.28). Clients strongly believe that they are treated equally by the staff (3.34) and relatively strongly agree with the fact that staying in the programme depends both on them and the staff (mean = 3.3). Respondents were also convinced that they are not looked down upon, embarrassed or disrespected by staff members.

Familiarity with the treatment protocol

38.6% of the respondents stated that they were punished for breaking treatment protocols since they had been in treatment. The majority (64%) was punished for having taken drugs during treatment. Of those who had been punished, 82.7% admitted that the treatment staff was right in doing so.

53.3% of the sample stated that it was forbidden to miss the treatment session, 54% confessed taking

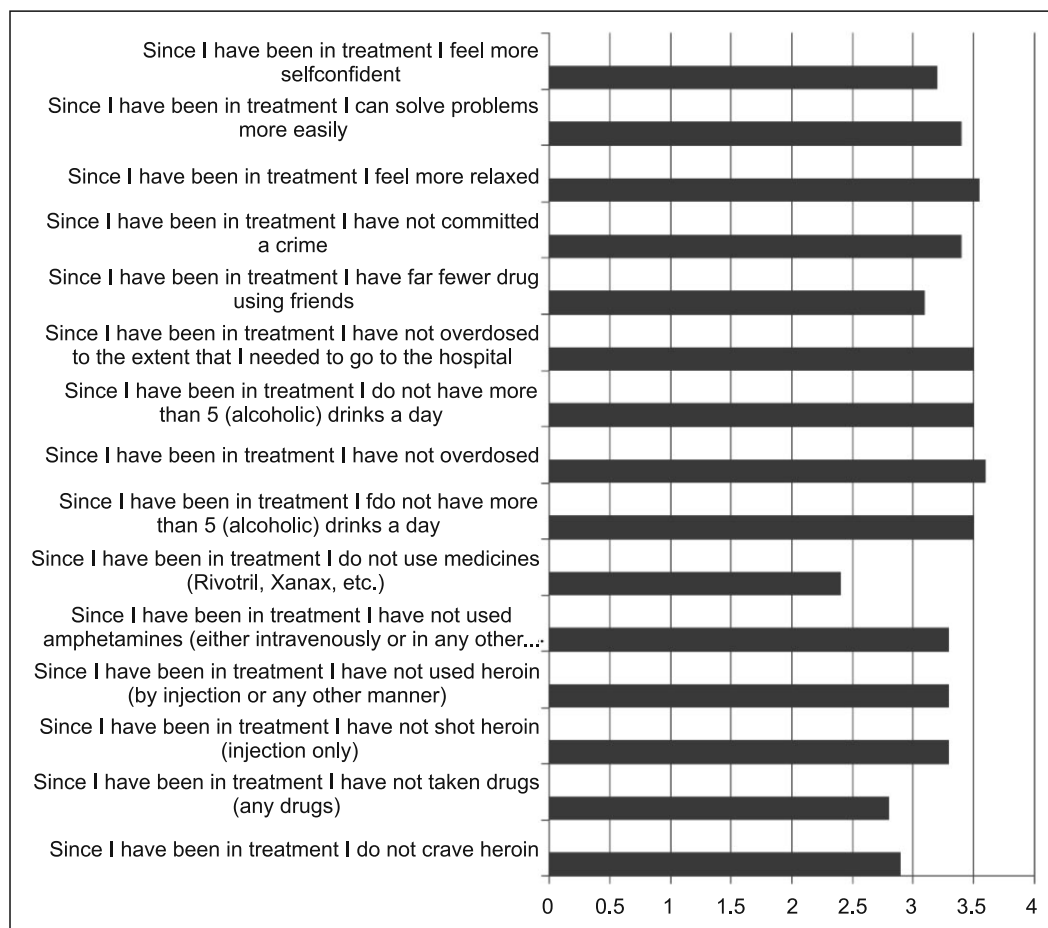


Fig. 1. The subjective changes in patients during treatment.

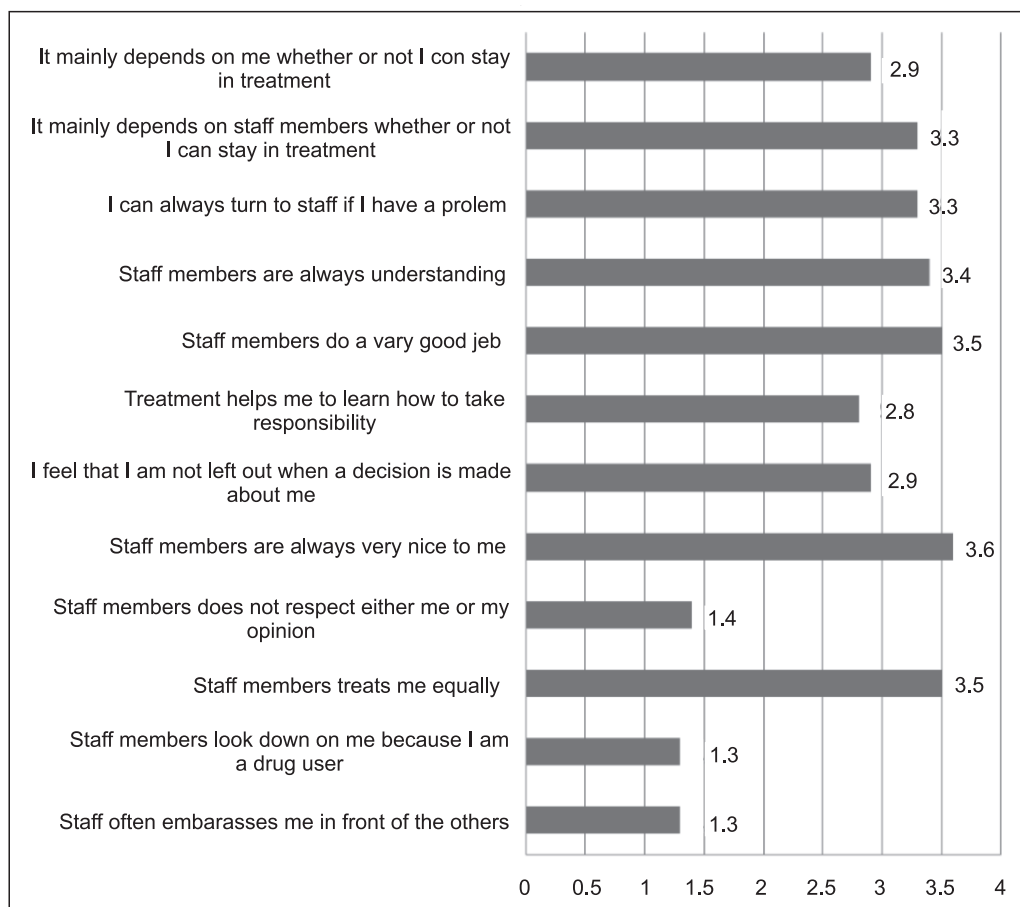


Fig. 2. Clients' attitude towards staff.

drugs, 51% stated being aggressive, while 53% admitted having sold drugs during treatment. This seems to suggest that approximately only half of those in the treatment were aware of the protocol. It is also interesting to note that 58% declared that the criteria regarding being allowed to stay in treatment were not strict at all.

Interviews of the Professionals

Amongst the institutions responding there were nine addictological out-patient clinics, six addictological care centres and one institution that combined both.

The hours of operation for a significant portion of the institutions did not differ, on average they opened at eight or nine a.m. and closed at three p.m. at the earliest and seven p.m. at the latest. Four of them were open on Saturdays and only two were open on Sundays.

In addition to emergency detoxification programmes, the respondents named the following additional objectives: harm reduction (22.2%), achieving abstinence (16.7%), improving the quality of life (11.1%), restoring the ability to work (11.1%), social regulation (11.1%), and (5.6% each) reintegration, instilling the desire for change, facilitating everyday life, normal lifestyle and the continuance of maintenance treatment.

Criteria of Success

Those questioned typically considered the criteria of success to be the prevention of infectious diseases (16 experts), the reduction of illegal drug use (14 experts), the reduction of injecting (16 experts), the reduction of criminal behaviour (16 experts), remaining in long-term therapy (10 experts) and the development of motivation towards abstinence oriented treatments (16 experts).

The minimum doses necessary to achieve the desired substitution effect are shown in table 4.

Table 4. The minimum methadone doses that are considered necessary.

	Frequency	Percent
10 mg	1	6.3
20 mg	2	12.5
30 mg	3	18.8
40 mg	1	6.3
Changing	2	12.6
Total	9	100.0

DISCUSSION

During the course of the cross-section analysis of MMT in Hungary we sought out 150 patients and

16 professionals as a part of a questionnaire study. The professionals worked at eight treatment locations, (we have eighth methadone centres in Hungary so they represented each centres). Our objective was to examine how and to what extent the treatment principles set down in the guidelines for MMT (1, 48) or the HR expectations formulated in the two National Drug Strategies (46, 47) are implemented during the course of maintenance treatments. It was also aimed to assess the efficiency of the Hungarian MMT through examining the level of satisfaction of the clients with the MMT.

Our previous research (54, 55) was reconfirmed by the fact that admittance to treatment is still not easy; nearly half of the sample judged it to be difficult. Also from our previous research (54) we know that there is great demand for admittance to MMT. The waiting period – seemingly in contradiction to what we would have concluded from the previous data – was short (about half of the patients were admitted after one week). The difficulty of admittance is underscored by the fact that 76% of the patients have already received MMT (therefore, it was not new patients that were admitted). These data do not support the expectations of the HR model.

According to the data, the patients enter MMT after a long period of drug use (average: 16.9 years), and on their own (so not through referral). The number of patients treated in MMT has shown a slow decrease in recent years, and most of the patients are treated in a single centre in the capital. Therefore, it cannot be said that MMT is easily accessible throughout the country.

The patients in our sample are characteristically given 40 mg, 60 mg or 80 mg of methadone, for 10 individuals the methadone dose is 100mg, and for 12 individuals it is 120mg. One in three patients receives a dose of more than 81mg. These data show similarities with the dosages observed in Slovenia (43), and are a little bit lower than doses in the United Kingdom (56). The effective dose is about 60-120mg (41, 48, 57). The Hungarian doses, which can be considered low, bring the effectiveness of the treatment and/or the achievement of HR objectives into question. The low doses also raise the question of how methadone maintenance treatment programmes assess themselves within the Hungarian maintenance programme, as genuine maintenance treatment or a “long term” detoxification-style treatment (in the USA this period cannot be longer than 180 days) (58).

The overwhelming majority of those questioned (82%) stated that there were regular urine or saliva tests during treatment. At the same time the responses in relation to how often these tests were performed proved to be rather dissimilar. From these responses we can conclude that the urine tests are occasional, while at the same time there are other MMTs where analysis of urine is regular (59). The small percentage of supervised methadone administration theoretically strengthens the ties to HR.

According to the patients, after treatment began they had significantly fewer drug using friends and committed significantly fewer crimes, there was also a significant

improvement in various variables and in the realm of physical/emotional condition. This is similar to patients in Slovenia (43). These factors underscore the maintenance programmes’ effectiveness in HR. Those questioned do not crave heroin since they have been in the treatment, or more precisely they only report low-level cravings, and this is a change that includes elements of both the HR and treatment models. A positive result is that since entering the treatment patients’ large-scale alcohol consumption and overdoses have ceased. On the other hand, we can infer from the responses that drug use occurs during treatment (while the consumption of various medicines also increases). The latter result, seeing as we are talking about medicines that have the potential to be highly addictive (e.g. clonazepam), may relate to the methadone dosages and to access (or lack thereof) to psychosocial services. A total of 40% of the patients are not satisfied with the hours of operation, which is a blow to the goal of easy access, and therefore to the objectives of HR.

As regards satisfaction with staff and treatment environment, respondents have generally expressed positive opinions, which is quite similar to the findings in Slovenia (43).

Opening hours and accessibility of the treatment centre are crucial issues. Clients basically do not consider accessing the outpatient centre as a problem. However, they are less satisfied with the opening hours, which seems to suggest that treatment centres take clients’ needs less into consideration when deciding on their opening hours despite the fact that it is clearly laid down in the Guidelines for MMT that clients should be given the opportunity to receive their doses at weekends as well. Only four centres are open on Saturdays, while two on Sundays.

Our findings regarding keeping and familiarity with the protocol are also ambiguous. Our data suggest that clients are less informed about the rules as well as the criteria of remaining in treatment although they had been asked to acknowledge and agree with these when signing the contract at the beginning of their treatment. It can be concluded that a considerable proportion of the clients are not properly informed about the criteria of being allowed to stay in treatment.

Although getting admission into the MMT has high criteria (at least this is what data suggest), the protocol does not make a clear statement whether MMT should be considered as a high or low-threshold service (although staying in treatment is tied to strong criteria). Based on our findings as well as client needs and feedback, it can be said that there is a latent intention to consider MMTs as low-threshold, or at least the possibility to consider them as low-threshold, mainly regarding admission criteria. This however requires the acquisition of a different treatment paradigm, mainly on drug policy level.

While 82% declared that there were regular urine or saliva tests during treatment, respondents were less confident in being able to tell how regular these tests were.

Another criteria to stay in treatment was the prohibition of selling methadone. 16% stated that they had already sold methadone during treatment, which can be interpreted as a favourable figure, but at the same time it can be considered as a warning to the management and staff.

In the staff interviews, 22.2% emphasized HR and 16.7% treatment elements of MMT. Both are low values, and it may be presumed that the staff consider other factors to be more important (e.g., patients' quality of life in 16.7%).

In our study we found data related explicitly to social control in connection with the doses. In accordance with the observations of Bourgois (2000), we suggest that the low methadone dose serves social control instead of treatment or HR. The supposed drug policy goal is the retention of "problematic" patients in a service, thereby controlling them, even if the methadone dose does not serve therapy or HR.

CONCLUSIONS

The data of our research do not completely fulfil the objectives of the HR, treatment or social control models. We observed a MMT that is isolated in the Hungarian health care system (the low proportion of those referred from other branches, the low proportion of those referred onwards and the high proportion of those that have already had MMT). We also observed that MMT is implemented in a medical/health care environment where a high ratio of psychiatrists and family doctors decline to treat addicts, and in particular drug addicts (60). It is questionable whether that isolated programme can achieve the objectives that have been set for it in the guidelines for MMT (48) or in the national drug policy (46, 47).

The professional policy environment (49), the professional refusal to treat addicts (60), the factors contributing to admittance into MMT (it is primarily those that have already been treated that are admitted), as well as the frequency with which patients are referred to MMT or referred from MMT to other health and social services, or more precisely the lack of this, presents a picture of MMT functioning as a closed, isolated system. Here the objectives of neither treatment, nor HR nor social control can be achieved. MMT can only be performed at clinics specialized in addiction – and not even at all of these – and these clinics comprise a closed system parallel to the out-patient psychiatric system (there are psychiatric clinics where addictological patients are not treated 'per se'). This psychiatric system also functions in an isolated manner within Hungarian health care (61). These systems are set in one another like a Russian nesting doll, each having relative independence, their own system of institutions and groups of experts. The drawbacks of this "nesting doll" system – in addition to the unnecessary parallels and the high costs – are: its impenetrable nature (whether we consider the movement of patients or the mobility of the professionals); the significance of the institutions' demands instead of the patients' demands; the lack of structure with a centralized aspect; the maintenance of stigmatization and the difficulties in working against this stigma. These considerations are also listed in the two national drug strategies (46, 47)

and, on the political side, in the not yet adopted, national alcohol policy concept (62).

In the future it is necessary to strive to ensure that MMT is not enclosed within the present Hungarian drug policy. Along with other maintenance programmes, reaches the drug users that need it, giving them psychosocial assistance in addition to medicinal treatment and making their social reintegration possible. We can call this process as "mainstreaming" of MMT into the psychiatric as well as into the health care in Hungary. For this, we must use other health care and social services, or must refer them to those that are performing these services. MMT is particularly important in the case of disadvantaged heroin users that are not admitted into the treatment system, as well as where public injection appears (63, 64). This low threshold model, which increasingly takes HR aspects into account, can also serve as a lesson for countries where professional or political impediments to MMT or other maintenance treatments exist (8).

In short, we can conclude that, in the future, the termination of the sharp opposition between the two approaches (HR and disease models) seems to be emerging (65, 66, 67). Peterson et al. (2008) emphasize that in the case of heroin users that have not been admitted into MMT, the public financing of MMT, as well as the increase in HR elements according to the concepts of the study (developing a low threshold), can increase the number of drug users that are admitted into the treatment (68). Bevan comes to similar conclusions, and states that "[t]here is a pressing need that public health principles should in fact be the foundation of all drug treatment interventions, and that investment in drug treatment is sound public health policy" (69).

RECOMMENDATIONS

Based on our findings, recommendations are made concerning the current guidelines for MMT. The WHO guidelines (2) for MMT supplemented with psycho-social services can be considered as a base for an integrated and multidisciplinary approach.

1. We recommend that MMT should be low-threshold in regard to programme entrance, whereas criteria for staying in the programme should be high-threshold. This should be based not only on addictological but also drug-policy – based concepts as well.
2. New goals exceeding the public health treatment paradigm have to be set up such as improving the client's social, employment, educational, mental status, setting client's recovery as an ultimate goal ("methadone assisted" recovery [30]), improving the client's life quality.
3. The national guidelines for MMT should contain clear recommendations, that on top of MMT, what additional services are needed for clients in different phases of the treatment. The main aim is to modify the current MMT paradigm and facilitate the development of a more complex service system where health and social services are integrated. An other relevant aim is to guide MMT towards

the mainstream public health system, along with other addictological services.

- We also recommend that evaluation tools developed for assessing the efficiency and monitoring the efficiency of MMT should be used as it is already laid down in the national guidelines for MMT.

LIMITATIONS

During the course of measuring patient's satisfaction we sought out 150 patients in methadone maintenance treatment. As described in the "Sampling Procedures" section, we determined the sample size on the basis of the National Substitution Data, which served as a kind of sampling quota. Therefore, the research sample reflects the national proportions in relation to the number and gender of patients treated. The development of the sampling quota was made more difficult because we did not have another national database upon which to base our sampling quota in order to make it – and therefore our sample – more precise. The TDI data could have served as a good basis, but they are lacking or untrustworthy in many cases. Random selection was used to ensure the representative nature of the sample. At the same time, we would be able to make more confident statements if it had been possible to create a larger sample.

Finally, it may be stated that the validity of the responses given to the questions may have been influenced by the fact that the interviews were performed in the treatment environment, at the treatment site (but not in the presence of the treatment staff). However, the infrastructure necessary for performing questioning at a different location was unavailable.

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NOTE

In 2011 the new government (established after the parliamentary election in 2010) withdrew the "Drug strategy 2009" (Ministry of Social and Labour Affairs, 2010). At the time of writing there is not any valid drug strategy in the country. □

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