

TEN YEARS OF THE OPIOID AGONIST THERAPY IMPLEMENTATION EXPERIENCE IN UKRAINE. WHAT FURTHER? (First part)

ДЕСЯТИРІЧНИЙ ДОСВІД ЗАСТОСУВАННЯ ЛІКУВАННЯ АГОНІСТАМИ ОПІОЇДІВ В УКРАЇНІ. ЩО ДАЛІ? (Частина перша)

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Abstract

This publication is the first part of paper presenting with the history of the implementation of opioid agonist therapy (OAT) in Ukraine for the treatment of opioid dependence. 43 publications in foreign and domestic sources have been analyzed. The authors differentiate four stages of introduction of this treatment in the country, two stages are described in details. The earliest utilization of OAT took place in 2004-2005, within the framework of the UNDP - Applied Human Rights Project. Buprenorphine was chosen as opioid agonist. Main reason to choose this medication was a possibility to avoid a stigmatizing connotation connected with methadone. There is an important detail: at this period, OAT was promoted as a harm reduction component rather than method of treatment itself. Majority of medical professionals and especially decision makers accepted OAT mainly as a HIV prevention measure. At the beginning, main task was to develop an appropriate infrastructure and overcome a resistance of enforcement bodies and media. At this stage of OAT development, there was a biggest challenge - low coverage of patients with opioid addiction. Many obstacles rooted in conservative drug policy and old-fashioned medical care system were responsible for this situation. But first results of the treatment were promising. After introduction of methadone in 2008 the period of rapid increase of number of patients occurred. OAT changed a status from pilot projects to more or less routine narcological practice. Positive correlations were found between numbers of opioid dependent and HIV+ patients. Scientists found a clear correlation between increase of ART effectiveness and the incorporation of drug treatment for HIV-positive opioid addicts.

Professionals intended to move beyond client-level and program-level factors and expand OAT through structural-level factors by introducing and evaluating a new model of OAT delivery in Ukraine, by providing it in non-specialty care settings where primary care physicians are trained to provide OAT outside of specialty care (HIV, Narcology, TB) settings. The new settings as predicted were able to create new efficiencies and allow individuals to receive care in non-stigmatizing centers that address an array of medical and psychiatric comorbidities. To realize the integrated model primary care physicians have to be trained to provide integrated services within a non-specialty care setting to treat not only addiction, but also HCV, HIV-infection, TB and other medical comorbidities.

In the second part of this paper, we will discuss the barriers to access OAT, overcoming the stigma and discrimination of patients, the economic aspects of OAT, the role of social workers in these processes.

Анотація

Ця публікація є першою частиною статті, в якій представлено результати аналізу довготривалого та складного процесу впровадження в Україні підтримувальної терапії агоністами опіоїдів (ПТАО) для лікування опіоїдної залежності. Проаналізовано публікації (загалом 43), що з'явилися в останні роки в закордонних і вітчизняних джерелах. Окреслено чотири етапи впровадження цього методу лікування в країні, в першій частині статті детально розглянуто два з них. Оцінено як переваги методу, так і перешкоди соціального і психологічного характеру, роль

Ключові слова:

drug use, treatment of opioid dependence, social work, methadone, buprenorphine, change of attitude towards treatment.

Key words:

вживання наркотиків, лікування опіоїдної залежності, соціальна робота, метадон, бупренорфін, ставлення до наркотичної залежності.

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ставлення суспільства і представників правоохоронних органів до препаратів ПТАО. Зроблено висновок, що, попри доведену ефективність і наукову обґрунтованість методу, його використовують в Україні недостатньо. Важливу роль у сприянні змінам щодо розуміння проблеми вживання наркотиків, ставлення до хворих на залежність і, зокрема, до ПТАО, мають відігравати соціальні працівники.

Foreword

In the USA data from a national study of 345 substance use disorder treatment centers were used to investigate social workers' knowledge, perceptions of effectiveness, and perceptions of the acceptability of opioid agonist treatment (OAT) for substance use disorders. Results reveal the importance of experience in OAT for social workers to develop a knowledge base regarding the effectiveness of various pharmacological agents. Results also underline the importance of social workers' perceptions of effectiveness in forming opinions regarding the acceptability of the use of OAT in treatment. Researchers evidence that a 12-Step orientation toward treatment has a negative influence on social workers' opinions regarding the acceptability of OAT (Bride, 2013). Christina Reardon cites Ann Abbott: «social workers have an ethical responsibility to be knowledgeable about OAT, to stay up-to-date on OAT trends, and understand the role various mental health factors play in addiction» (Reardon, 2014). Social workers are in a good position to both promote OAT use and make sure that it is used in a responsible and ethical way (Reardon, 2014; Roman, Abraham & Knudsen, 2011; Volkow, Frieden, Hyde & Cha, 2014).

Background

The principles of social work addressing patients with opioid addiction and comorbid disorders include case-management, assessment of the patient needs and finally effective treatment and care. Medical practitioners could realize that treatment of people with opioid addiction (PWOA) can be effective enough if there is support from non-medical staff, particularly social workers and psychologists. It is a well-known fact that successful treatment of drug addiction is possible if there is socio-psychological support complementary to the pharmacological treatment (National Institute of Drug Abuse, 2012).

Opioid agonist therapy (OAT) is the most effective in treatment of opioid addiction (Bart, 2012) and in prevention of HIV/AIDS and viral hepatitis among people who inject drugs (PWID) (SAMHSA, 2017).

OAT as a treatment method including some aspects: medical, socio-psychological, economic and political. The medical aspect is completely clear. Opioid agonists like methadone or buprenorphine suppress opioid withdrawal and afford opioid-dependent patients to stabilize their daily routine life and refuse from illicit drug use. Economic factors also are clear because enough data have demonstrated that investments in OAT allow to save public health funds in the ratio 1:7, it means that each dollar invested in OAT save 7 dollars which will be spend for treatment of HIV-infection and HCV, or incarceration, or other public costs linked to opioid abuse. There are still serious issues on political and socio-psychological levels, because many people suggest that OAT does not treat, but support addiction. There is still no consensus regarding the nature of opioid addiction in the society and big part of it believe that it's just bad behavior which can be changed if a person will be motivated enough. They also believe that only total abstinence is the solution for addicted patients. There are many stereotypes in the society based on moralistic and traditional points of view but not on scientific data.

The OAT provision in our country started in 2004, and it is still controversial in terms of acceptance by the non-professional society. There is an obvious paradox: the evidence based, most efficient and cost-effective treatment faces the strongest resistance to its implementation. Therefore, there is insufficient coverage of addicted patients by OAT.

Main objective of this paper is to discover factors playing important role in hindering access to treatment and to figure out strategies for overcoming the barriers to scaling-up the treatment. In addition, we are trying to clarify the mission of social work specialists in the processes of implementation and advocacy of evidence-based treatment for PWOA.

WHO, UNAIDS, and the UN Office on Drugs and Crime (UNODC) support a comprehensive package of interventions for the treatment and prevention of HIV-infection and viral hepatitis among PWID. Core interventions include needle and syringe programs (NSP) to prevent risky use of paraphernalia; opioid agonist therapy (OAT) to reduce the frequency of and encourage cessation of opioid injecting; HIV testing and counseling as a gateway to HIV treatment and care; HIV antiretroviral therapy (ART); and condom distribution programs to prevent HIV transmission to sexual partners (World Health Organization, 2012).

Ukraine as a country, where two epidemics - opioid addiction and HIV-infection - coexist, had to implement this kind of treatment. The process was accompanied by serious professional and dramatic public discussions. The number of patients involved in the treatment increased from 96 in 2004 to 10 500 in 2017. The first publication about OAT in Ukraine appeared in 2007; in 2017, the number of papers in the peer-reviewed journals achieved 30. Analysis of publications helps to understand main trends in drug policy, treatment of drug addiction and prevention of blood-borne infections, and to perceive mistakes, weaknesses and challenges on the way of equal access to treatment for one of the most vulnerable population.

Method

We examined all available papers published in peer-reviewed international and Ukrainian journals on the topic. We also used current and previous national clinical protocols (guidelines) which were implemented in the beginning (2005) and later (2017). Key words used for search in PubMed: Ukraine, OAT, MAT, OST, Methadone, Buprenorphine, Substitution therapy. Total amount of studied papers - 43. We also looked through available articles in most popular Ukrainian newspapers and web resources.

In the analysis, we highlighted the key points of the implementation process and followed the trends of the therapy provision. In addition, we hoped in this way to understand the dynamics of attitudes of medical professionals, social workers, policy- and decision-makers as well as representatives of mass media, and finally - patients with their relatives - i.e. the audience of the treatment interventions.

Key findings

History of NON-implementation of OAT in Ukraine

The earliest mentioning of necessity of the OAT provision refers to 1996. It is a paradox, that first professionals that proclaim importance of using methadone for opioid addiction treatment were not narcologists, but infection disease specialists. The Summary of 5th Session of the Ukrainian Presidential National Committee of Fighting with AIDS in 1995 comprised the following statement: «To support an initiative of MOH of Ukraine regarding an experimental clinical study of the rehabilitation capacity and terms of methadone treatment implementation in Ukraine» (Natsional'nyy komitet z profilaktyky narkomaniyi ta zakhvoryuvannya na SNID, 1995 - 1996). This initiative was not developed and fulfilled. The main reason of that - a resistance of enforcement bodies and ambivalent attitudes of professionals in medical circles.

In this period, many narcologists were stick to a dogma that any narcotic drugs are completely contraindicated for administration in drug user treatment. It was a kind of an axiom, which does not need any prove that to treat heroin addiction by methadone is the same as to treat alcoholism by vodka.

Next serious attempt to develop OAT in Ukraine was made by international experts with technical support of the Renaissance Foundation, and later UN-Family organizations (UNDP, UNODC and UNAIDS). Social and psychological basis of massive resistance to OAT provision in the country at this period can be understood from a point of view of an anonymous narcologist: «There are many problems and poor people in our country; we don't have to make drug users happier than normal people» (Nikolai, 2001). There are more than one wrong believes in this phrase. The narcologist suggests that methadone has capacity to make people happy. The doctor is sure that methadone is not a medicine, but regular drug, which makes a person high. In addition, making this statement doctor suggests that OAT will contradicts the principle of fairness, because drug users should not get more than «normal people» should. It means the doctor does not agree with a concept according to which addiction is a disease. He would not be against paying more services and medicines for people with diabetes, asthma, cardiovascular diseases, etc. Nevertheless, addiction - it is something different and implicitly we should keep in mind that dependent people are to blame themselves for their problems, it means that there is no need to spend public resources to support them.

The period between 1995, when OAT firstly recommended for implementation, and 2004, when first pilot project started and the first person got the first dose of agonist maintenance treatment we called the «experience of non-implementation of OAT» in Ukraine. During this period, we differentiate two different trends, which we conditionally name as «Modern» and «Traditional» ones. The modern trend was based on a scientific approach and it used empirical data for treatment outcomes and results of hundreds of patients who were under professional observation. Scientific data equivocally demonstrate that OAT helps to individuals and society. However, supporters of the «traditional» approach anyway do not like to hear any arguments, and scientific facts for them serve to the only purpose - to undermine basic moral principles and values. According to them, any narcotic drug is a bad thing, and an idea to treat people with drug addiction by methadone is a criminal one, and must be rejected without any discussion. One of disputants - a general of the Ministry of Internal Affairs - said during a public discussion at a TV talk show: «For each person trying to import methadone to the country I personally will open a criminal provision».

It is interesting that during this decade the government issued some important documents about drug treatment: «Unified Standards of Narcology Care in Treatment-and-Prevention Institutions of Ukraine» in 1998 (Ministerstvo okhorony zdorovya Ukrainy, 1998); and «About the Program of Prevention of HIV/AIDS for 2001-2003 years» in 2001 (Kabinet Ministriv Ukrainy, 2001. These documents dictated to provide OAT in medical institutions for people with opioid addiction, but resistance of decision makers at the local level and especially among enforcement bodies could not allow starting practical implementation of this kind of treatment.

In a conceptual paper, an important statement is present: «Decision about the use of methadone in Ukraine should be carried out by health professionals. The national drug policy should be based on scientifically proven facts, and not on propaganda clichés, myths and subjective opinions. Important is the role of specialists, whose qualification and awareness on the AOT issues should be improved. It should also be noted the role of media, which form public opinion. They should present not just a collection of different opinions, but also display what these opinions are based on. In addition, they must help to choose a more reasonable point of view between different ones, find out where the opinions are based on long-term scientific observations and strict, methodologically verified data, analyzed by professionals, and where there are only prejudices. Patients with opioid dependence like all citizens of Ukraine according to the legislation have the right to obtain the most modern and effective medical care, which includes OAT with methadone maintenance» (Dvoriak, Chtenguelov, 2007).

The struggle between the OAT supporters and opponents could continue more and more, but finally the United Nations Development Program made the first practical step and created a pilot project of buprenorphine treatment in two Ukrainian cities.

OAT implementation and outcomes in Ukraine

The earliest utilization of OAT took place in 2004-2005, within the framework of the UNDP - Applied Human Rights Project. Buprenorphine was chosen as opioid agonist. Main reason to choose this medication was a possibility to avoid a stigmatizing connotation connected with methadone. In the beginning of 2000-ths, for many people the word 'methadone' had strong negative associations. Buprenorphine does not have this tail. It was also taken into consideration that Ukrainian narcologists already used injectable buprenorphine for detoxification. The pilot project was accompanied by the research, which was a part of the WHO collaborative study on substitution therapy for opioid dependence and HIV/AIDS. There were 67 opioid drug users under observation. It was a prospective observational study with assessments at baseline, and at 3- and 6-month follow-ups. All assessments referred to the period of one month prior to interview. The main aims of the outcome evaluation were to explore changes in the following domains: health status and well-being of individuals in opioid treatment; community/social benefits and program performance. Improvements in the main indicators were documented after 6 months of treatment. The retention level was 66% and the mean buprenorphine dose was about 8 mg/day (Dvoryak, Grishayeva, 2008; Lawrinson, Ali, Dvoryak, 2008). Even at this stage of the OAT provision, researchers raised a question about rapid scale-up of the treatment coverage (Bruce, Dvoryak, Sylla, 2007). There is an important detail: at this period, OAT was promoted as a harm reduction component rather than method of treatment itself. Majority of medical professionals and especially decision makers accepted OAT mainly as a HIV prevention measure. OAT always was linked with HIV/AIDS issues and in furtherance, since 2005 was financed by the Global Fund for AIDS, TB and Malaria (GFATM). According to GFATM approach, OAT should be used as a prevention measure especially in countries, where HIV-epidemic was fueled by injection behavior. This is a reason why at the beginning of the OAT provision the main outcome what researchers wanted to demonstrate was the risk of HIV exposure. Studies have showed that people who started OAT reduced injection behavior dramatically - by 7-10 times in comparison with baseline indicators. In a study conducted by the group of Swiss and Ukrainian researchers a total of 331 opioid dependent patients were given buprenorphine (N=191) or methadone (N=140), and assessment of drug injection, HIV transmission risks, and legal and social status showed that HIV related transmission risks were very much reduced, whereas employment rates and mental health improved. After six months of observation, retention rate was 84.8% among the patients in buprenorphine and 85.0% in methadone maintenance treatment (Schaub, Chtenguelov, Subata, Weiler, Uchtenhagen, 2010; Schaub, Chtenguelov, Subata, Weiler, Uchtenhagen, 2009). Similar outcomes were in the study, which followed patients during 12 months: retention was comparatively high (79.5%), no significant adverse events were reported (Schaub, Chtenguelov, Subata, Weiler, Uchtenhagen, 2009). At this point it worth to pay attention that if we are talking about chronic disease - addiction is a chronic disease - we cannot use a term 'cure'. It means that one of the most important outcome of the treatment is retention. The more a patient stays in treatment, the less risk he/she has regarding drug overdose, blood transmitted infection, incarceration, etc. (Farré, Mas, Torrens, Moreno, Camí, 2002). This approach derives from understanding addiction as a chronic and relapsing disorder and it means that addiction is not curable, but treatable disease (McLellan, Lewis, O'Brien, Kleber, 2000).

Psychological and social stabilization of a patient also depends of duration of treatment. It is necessary to take into consideration that retention in treatment itself depends of quality of service and professional level not only of medical staff, but also social workers, psychologists and of other professionals working with patients during the long-term process of addiction treatment (Altice, Bruce, Lucas et al., 2011; Bojko,

Dvoriak, Altice, 2013). However, at the beginning of the OAT provision majority of narcologists were trying to finish the treatment in 10-12 months and correct understanding of the therapeutic goals came to Ukrainian professionals later. Main task on the first stage was to develop an appropriate infrastructure and overcome a resistance of enforcement bodies and media.

Looking back at the period 2005-2017 we can identify as a minimum four stages of OAT implementation. Here we briefly review two of them.

First - the period 2005-2008 - early beginning phase, which we called the «Dating and hopes» period. At this time, many professionals believed that OAT could solve almost all the problems. Narcologists were enthusiastic regarding to new method and had expectations that by this way it is possible to stop opioid abuse and risky behavior if resistance of conservative circles is overpassed. This idea was supported by some factors like relatively small number of well-motivated patients, additional technical and financial assistance from international donors and high expectations from the new therapy. At the same time, some conclusions and plans were presented with a vision in public health perspective. It was marked that many difficulties existed in the implementation and expansion of buprenorphine maintenance treatment (BMT): 1) methadone was still unavailable due to resistance in Ukrainian society; 2) extensive measures of control required to supervise buprenorphine administration; 3) only narcologists may prescribe buprenorphine; and 4) buprenorphine was administered daily under direct observation. Although barriers exist, the reality that 350 individuals have entered into BMT programs in Ukraine, with high levels of retention in treatment, remained promising. Considering the demand for OAT, deregulation was necessary, including GPs to be allowed to prescribe buprenorphine. Furthermore, the availability of methadone had to be realized. Both programs were desperately needed if OAT was to scale up from 350 to 6 000 patients by 2008, and most importantly, to achieve the goal of 60 000 patients to influence the HIV epidemic in Ukraine (Dvoriak, 2007).

After introduction of methadone in 2008 the period of rapid increase of number of patients occurred. OAT changed a status from pilot projects to more or less routine narcological practice. This period (2008 - 2010) we named conventionally «Sturm und Drang»¹. It was characterized by rapid increase of number of treatment sites, professionals involved in the therapeutic process and patients. Number of patients in January 2008 was 547, and in December 2010 - 6 000 - increase was more than 10 times (Tsentr hromads'koho zdorovya Ministerstva okhorony zdorovya Ukrainy, 2017).

Positive outcome of OAT was confirmed by different studies, particularly it was shown that OAT significantly improves the somatic health of patients and reduces manifestations of criminal behavior among clients and promotes their social reintegration. Authors made conclusions: extension of OST programs is recommended as an effective intervention in public health, especially to control the epidemic of HIV infection; OAT should be an integral part of the national drug policy, as well as a functional, non-discriminatory system for care of PWID (Dvoriak, Prib, Chtenguelov, 2009; Dvoriak, Chtenguelov, 2009).

Data of the first and second phases were presented in six peer-reviewed papers. A. Mazhnaya & Z. Islam exposed summary of these works in a review. Conclusions were as follows: feasibility of methadone and buprenorphine maintenance treatment in Ukraine; reduction of opioid use, injection behavior and criminal activity was confirmed in all articles; data were similar to ones provided in previous studies of Western scholars; likewise, high level of retention in OAT was showed. Finally, it was stressed that there is lack of data on improvement of quality of the treatment services and need to create predispositions for scaling-up the program. As a matter of fact, it was clear that further studies in format of implementation science needed (Mazhnaya, Islam, 2015). At this stage of OAT development there was a biggest challenge - low coverage of patients with opioid addiction (World Health Organization, 2013). Many obstacles rooted in conservative drug policy and old-fashioned medical care system were responsible for this situation (Dvoriak, 2010). The most reliable recommendations: 30-40% of estimated number of people with

¹ Storm and stress.

opioid addiction should be covered by OAT (World Health Organization, 2009). There were only less than 5% in treatment in 2013 (World Health Organization, 2013).

Non-medical aspects of OAT

At the beginning of OAT implementation in Ukraine, and even before the process started a clinical protocol (guideline) was developed with detailed instructions how to administer buprenorphine or methadone for this kind of therapy. Several basic principles were outlined in this guide. One of them demanded that a multidisciplinary team should provide OAT. It had to include narcologist, nurse and social worker or psychologist. If scope of work for doctor and nurse was outlined very clear, there was no full clearness for non-medical professionals. It was well known that treatment of addiction needed some psychosocial components and it was proclaimed that every person on OAT should get psychological counseling, even a separate guide on this was recommended (Merser, Vudi, 2001). However, personnel of narcology clinics where OAT was provided had no special well-educated social workers. Some organizations had psychologists as staff members, but these specialists usually had not enough experience in maintenance treatment. Usually they previously worked in abstinence-oriented programs. In majority of the programs, so-called «social workers» were not in staff of narcology clinics, but belonged to different NGOs. These people had no special systemic education in social work, but some experience in drug counseling and only in the 12-Steps format. All of them had their own history of drug abuse and recovery. Absolute majority of these counselors did not support the idea of maintenance therapy with opioid agonists therefore instead of motivation for adherence to treatment they supported the idea to finish methadone use as soon as possible and move to rehabilitation programs. From these people point of view a final goal of treatment has to be the abstinence from all narcotic drugs including prescription ones.

There was also other problem. Methadone or buprenorphine administration has strict manualized rules and is seriously monitored by medical officials and police, and all deviations from the protocol can be qualified as a violation of the law about narcotic drugs turnover. This is the reason why prescription and distribution of medicines for patients is effectuated very accurately without any deviations. At the same time psychological counseling is not manualized, there is no clear requirements for number and duration of sessions. The same we can say about the content of psychological counseling. Implicitly it is suggested that counselors themselves should know how to build psychological counseling and what format of work should be offered to patients. It is amazing, but counselors usually did not register in documents their interventions. Looking to medical record or the journal of counseling (this is only document which a counselor had to fill in) it was possible only see notes like «A counseling session was provided». All intentions to assess and evaluate effectiveness of the counseling in OAT sites completely failed because there was serious lack of records or documents to analyze. There were only some anecdotal observations based on communications with patients and some «social workers». The latter said that they work with patients «upon request» and discuss with them just current psychological problems. Group counseling was very limited.

Addiction and comorbidity

We should take into consideration that OAT was originally introduced in Ukraine for HIV prevention, because negative stereotypes about OAT were prevalent among decision makers as well as patients and providers. Even first order of MOH on OAT implementation had name «On the development and improvement of substitution maintenance therapy for prophylaxis of HIV/AIDS among drug users» and mentioned that the treatment should be provided for patient with opioid addiction and HIV-infection.

Even more, at this stage (2005-2006) only HIV+ patients had chance to get access to this kind of therapy. As a narcologist cited his patient «Do you mean that I need to get infected to have a right for this treatment?» At this period, researchers faced the questions: how OAT works for patients with comorbid disorders, when they are HIV+, have TB or psychiatric problems. A study conducted with Penn University in 2010-2011 showed that HIV-positive addicts well tolerated OAT and demonstrated high level of retention. In the situation when after 12 weeks in treatment they have free choice to continue methadone treatment or move to detox and rehabilitation program no one agreed to do this. Methadone maintenance was well accepted by HIV+ and HIV- opioid dependent individuals showing the potential for significant public health impact if made more widely available with sustained access and support. The study showed that AIDS-center could provide OAT with the same success as specialized narcology centers and even provide more medical services. Scale-up of addiction treatment for PWID, especially OAT, can have a significant impact on preventing injection related morbidity, such as HIV and HCV infection. Due to the data, it was recommended to open OAT sites in all AIDS-centers, if there are patients with opioid addiction among their clients (Dvoriak, Prib, Chtenguelov, 2009; Dvoriak, Chtenguelov, 2009). The data completely corresponded with findings of other researchers that supposed a necessity of integration of OAT in routine practice of HIV care. Scientists found a clear correlation between increase of ART effectiveness and the incorporation of drug treatment for HIV-positive opioid addicts.

Furthermore, researchers identified five descriptive topics: the convenience and comprehensive nature of co-located care, contrasting providers' philosophies and their specific role in forming integration, the limits to disclosure and communication between patients and providers, OAT enabling HIV care access and engagement, and health system challenges to delivering integrated services (Guise, Seguin, Mburu, McLean, Grenfell&Rhodes, 2017).

A later study assessed a level of coverage with OAT of HIV-positive patients in different regions of Ukraine. It was found that there was positive correlation between numbers of opioid dependent and HIV+ patients. In all regions including those most affected, the number of OAT treatment slots was quite low. The highest and lowest levels of coverage were 7.3% and 0.4%, respectively in percent regarding number of HIV+ patients. Authors came to conclusion that there is significant geographic variability in both numbers of HIV positive individuals and numbers of PWID across Ukraine; however, there may be a more concentrated epidemic among PWID in many regions of the country. Scale-up of addiction treatment for PWID, especially OAT will significantly prevent HIV and HCV infection. Ukraine can learn from the mistakes other nations have made in denying critical treatment opportunities to PWID (Zaller, Mazhnaya, Larney, Islam, Shost et al., 2015).

Another study revealed a strong correlation between OAT provision and TB treatment in PWOA group. TB is a disease that affect opioid addicts by 7-8 times more often than general population in the same age group. In addition, it is important to keep in mind that among PWOA there are almost 20% of HIV-positive patients, and combination of HIV-infection with TB is a main cause of mortality among HIV+ population (Feshchenko, Viyevskiy, 2011). The study of associations between OAT and adherence to TB treatment showed necessity to provide opioid addiction treatment in TB facilities. The sample under observation was a group of PWOA (N=110) receiving treatment in tuberculosis facilities where OAT existed (N=57), and in facilities where OAT did not exist (N=53). Qualitative and quantitative assessment had unequivocal results: outcome of TB treatment measured by number of using prescribed anti-mycobacterial medicines and indicators of patients' satisfaction depended on participation in OAT programs. Drug addicts with TB who had no access to OAT demonstrated worse indicators of compliance and consequently lower effectiveness of TB treatment. These findings required policy change to increase the number of OAT sites in TB clinics and make OAT a low-threshold treatment option for PWOA in Ukraine (Morozova, Dvoryak, Altice, 2013; Dvoriak, 2013; Dvoriak, 2011).

Another study was dealing with the treatment of comorbid depressive disorders. It is a well-known fact that many opioid addicts suffer from depression that is not causally connected with addiction. These people need additional treatment because agonist therapy help them with opioid withdrawal, but cannot relieve depressive symptoms. The study findings confirmed that patients with depression receiving buprenorphine therapy should be treated by antidepressants, particularly it was proved by additional prescription of Sertraline, which belongs to the class of Selective Serotonin Reuptake Inhibitor (SSRI). It was the first study in Ukraine on this topic, which empirically supported the idea about need to treat PWOA not only for addiction but also for other non-psychotic psychiatric disorders (Dvoriak, Karachevskiy, 2011). Unfortunately, this initiative did not develop enough because of limitations by current legislation, which does not allow narcologists to prescribe antidepressants and demands to send patients to a psychiatrist for this kind of treatment. Stigma of psychiatric service is not less than in narcology, and this fact hinders addressing to psychiatrists. Furthermore, patients should pay for this treatment by their own and it is an additional barrier.

Combination of different disorders with opioid addiction is registered more and more often as the process of OAT provision develops, and this fact put an issue about new approach to treatment of opioid addiction. Addiction needs to be treated with due consideration of all problems that occur in a patient. The integration of care can be presented and used in two versions. One of them - integration of OAT in a treatment set of HIV-infection or TB, or psychiatric disorders when in specialized treatment facility patients together with basic treatment receive OAT. Another and more effective option - when general practitioners of family doctors can provide for patients all services, not only OAT, but all needed treatment interventions.

Integrated care for PWOA

Data regarding most important aspects of treatment and care for opioid dependent patients, specifically with co-morbid diseases, in the programs of opioid agonist maintenance therapy were analyzed. Possibility of integration of different medical and psychosocial services was postulated. Quantity of medical services and level of coverage by them were assessed. Some factors influencing integration level in different clinics were found (Dvoriak, Prib, Chtenguelov, 2011). As a result, it became clear that OAT could solve some problems of opioid dependent patients, but not all of them. OAT improves the physical health of patients, reduces manifestations of criminal behavior of patients and promotes their social reintegration. At the same time, many patients have no adequate aid for some medical and psychosocial problems. Moreover, other serious problem is that many PWOA have no access to the treatment due to different causes. Ways to improve the implementation of OAT are:

- change of regulatory policy (which will allow to continue OAT in the case of hospitalization or incarceration of a patient, and also to receive OAT medication for a certain time for the patient's home use in a stable condition);
- advanced training of staff on OAT issues;
- optimization of staff working conditions and improvement of the quality of a medical institution functioning in a whole; and
- mandatory introduction of the integrated care model.

Last years of the decade of OAT implementation were devoted to improving the OAT prerequisites. This included assessment and analysis of barriers and ways of overcoming them.

It was recognized that the most important way of OAT improvement - implementation of an integration care model for PWOA. The basis for this conclusion - the data of literature review (Altice & Friedland, 2010) and the study done in Ukraine by the UIPHP research team. It was a cross-sectional study of randomly sampled 296 HIV-infected opioid-dependent PWID from two representative HIV-endemic regions

in Ukraine where co-located (CL), non-co-located (NCL) and harm reduction/outreach (HRO) settings are available. The primary outcome was the quality of healthcare, measured by a quality healthcare indicator (QHI) -composite score representing eight guidelines-based recommended indicators for HIV, addiction and tuberculosis treatment. The secondary outcomes were individual QHIs and health-related quality-of-life (HRQoL). OST alone improved quality-of-life, while receiving care in integrated settings improved healthcare quality indicators for PWID (Bachireddy, 2014).

The model of integrated care that we planned to implement included opioid agonist therapy (OAT) and treatment interventions for socially dangerous infectious diseases (HIV-infection, tuberculosis, viral hepatitis) with psychosocial support (Dvoriak, 2016). During the model implementation researchers and practitioners did not intend to introduce new interventions, but they ensured that evidence-based intervention (EBIs) were deployed and they searched for answers «how» each intervention is deployed and «why» it works (or does not work). An important part of the activity was case-based learning with longitudinal co-management of patients by primary care providers and specialists from «clinical experts» in the field of HIV, TB and Narcology. Such development is consistent with practices of OAT expansion in a number of countries by increasing access to OAT in primary care settings - a model that is cost-effective and improves a number of treatment outcomes (Morozova, Dvoriak, Pykalo, Altice, 2017). Obtained data have confirmed the hypothesis that integrated care model works in Ukrainian clinical and social context. Even the pilot project could convince public health professionals that integration of services for PWOA has many advantages: satisfaction with treatment, subjective self-perception of well-being, and trust in physician significantly increased in patients receiving OAT in NSC-facilities. It was found that attitudes towards PWOA and HIV-positive patients significantly improved over time among general practitioners and family physicians. The most important finding: OAT can be successfully integrated into primary care in Ukraine and improves outcomes in both patients and clinicians contributing to scaling-up OAT for opioid dependent patients (Morozova, Dvoriak, Pykalo, Altice, 2017).

So, the analysis of clinical, organizational, political and social aspects of OAT makes it clear that maintenance treatment of opioid dependence with methadone or buprenorphine and psychosocial support is associated with retention in treatment, reduction in illicit opiate use, and improved social functioning. Integrated care model works in Ukrainian clinical and social context. Despite research demonstrating OAT's effectiveness as an evidence-based practice, such treatment remains underutilized. To get the full picture it would be worth to examine other aspects - the barriers to access OAT, overcoming the stigma and discrimination of patients, the economic aspects of OAT, and the role of social workers in these processes. That will be done in the second part of the paper.

(To be continued)

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