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A BRIEF SUMMARY OF THE FINDINGS OF OPERATIONAL RESEARCH

"THE STUDY OF ACCESS TO HIV AND TB TREATMENT FOR SUBSTITUTION THERAPY PATIENTS WITHIN DIFFERENT SERVICE DELIVERY MODELS"

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LIST OF ABBREVIATIONS AND ACRONYMS

- AIDS Acquired Immunodeficiency Syndrome
- **AIDS Center** Regional Center for AIDS Prevention and Control
- **ARV Treatment (ART)** Antiretroviral Therapy
- CD4 Cells (CD4 Lymphocytes)/CD-4 Immune System Cells That Destroy HIV-Infected Cells
- **CDH** Central District Hospital
- ELISA Enzyme-Linked Immunosorbent Assay
- FGD Focus Group Discussion
- **HIV** Human Immunodeficiency Virus
- **IDU** Injection Drug User
- **MDT** Multidisciplinary Team
- **MOH** The Ukrainian Ministry of Health
- **NGO** Non-Governmental Organization
- **PHCF** Primary Health Care Facility
- **PLHA** People Living With HIV/AIDS
- **RCATS** Regional Center for Mental Health and Addiction Treatment Services
- **RTTC** Regional Tuberculosis Treatment Center
- **SMT (ST)** Substitution Maintenance Therapy
- **TB** Tuberculosis
- **TTF** Tuberculosis Treatment Facility
- VCT Voluntary HIV Testing and Counseling

FOREWORD

Research Background

Substitution Maintenance Therapy is an effective medicationassisted treatment for opioid dependence. Evidencebased research findings demonstrate that this approach significantly reduces the use of illicit opioids, as well as the incidence of crime, and mortality from drug overdose. At the same time, SMT can be regarded as an effective strategy to prevent the spread of HIV/AIDS, as it curbs the prevalence of risky behaviors associated with HIV/AIDS transmission. In addition, based on the rules that apply to patients enrolled in substitution therapy programs in Ukraine, they must receive voluntary counseling and testing for HIV and TB on a regular basis. Such arrangements can be viewed as an additional preventive measure to reduce the incidence of infections posing a public health threat among injecting drug users, which in turn has a positive effect on the overall epidemic situation.

As of January 01, 2014, nearly 8,500 IDUs were involved in substitution therapy for opioid dependence in all regions of Ukraine. Service delivery outlets (sites) that provide SMT are operating out of health care facilities that deal with mental health and substance abuse problems, as well as centers for AIDS prevention and control, tuberculosis treatment centers, infectious diseases clinics, municipal and district hospitals. A large percentage (44%) of patients in opioid substitution therapy programs are infected with HIV or tuberculosis (18%). However, not all patients who require specific treatment services can access appropriate programs. Some patients refuse to be treated medically. In order to improve the existing situation, the entire framework of voluntary counseling and testing, as well as TB diagnostic services offered by SMT programs need to be evaluated in a task-oriented manner, while key factors that act as barriers to timely service delivery within medically prescribed recommendations should be identified, and appropriate efficacy issues must be addressed.

Research Methodology

In accordance with the preconditions defined, the *purpose of this study was* to evaluate the scope and accessibility of medical care services provided to clients involved in opioid substitution therapy programs (SMT), and to identify key barriers that impede client access to full-scale HIV and TB diagnostic and treatment services, as well as establish ways to address such barriers.

In order to achieve the desired research objectives, the focus of the study was on analysis of client access to a range of medical and social services as listed hereunder.

The following HIV diagnostic and treatment services were reviewed within this research project:

- Pre-test counseling;
- HIV rapid diagnostic tests and enzyme-linked immunosorbent assays (ELISA);
- Post-test counseling;
- Identification of the need for antiretroviral therapy (ART), including CD4 count and viral load testing;
- Prescription and provision of treatment for HIV, including ART, and opportunistic infections;
- [Social work] case management for HIV treatment programs in outpatient and inpatient settings.
- Provision of opioid substitution therapy services (SMT) by AIDS centers and infectious diseases hospitals in an inpatient setting.

The following TB diagnostic and treatment services were reviewed within this research project:

- Counseling on TB;
- TB diagnosis, including chest X-ray screening, radiological examination, sputum analysis;
- Prescription and provision of treatment for TB patients;
- Hospitalization;
- Patient access to SMT while hospitalized in TTFs;
- [Social work] case management for patients infected with HIV/TB in an outpatient care setting.

The desired objectives within the predefined project specifications were addressed based on sociological research methodology, such as the conduct of surveys focusing on SMT program patients and staff, as outlined below:

- semi-structured interviews with SMT program clients, total persons — 500;
- focus group discussions with program clients, 8 FGDs, total attendees — 64;
- loosely structured interviews with medical and social staff of SMT programs, total persons 48.

The interviews with clients and staff of the same service delivery outlets have provided the research team with the opportunity to verify the collected data and make the findings and conclusions more specific, balanced, and accurate.

Sampling Approaches and Designs

Based on the type of research being conducted (operational), the research team was not expected to ensure a perfectly representative sample of the target population. Representation of all service delivery models operated in Ukraine was designated as a key principle to be considered in designing the sample for a quantitative survey. Since specific service arrangements and operational procedures are directly linked with the type of healthcare institution involved, the research sample includes all four service delivery models operated by appropriate service providers in the following settings:

- regional centers for mental health and addiction treatment services (RCATS),
- regional centers for AIDS prevention and control (AIDS Centers),
- regional tuberculosis treatment centers (RTTC),
- general health care facilities (municipal and district hospitals).

The representative principle was also observed in determining regions to be covered by the study (the east, center, south, and west of the country). Each of the regions is represented by one province (oblast), respectively: Dnipropetrovsk, Poltava, Mykolaiv, and Ternopil. In addition, the survey sample includes not only regional healthcare institutions and facilities, but also service delivery outlets operated outside the boundaries of the regional centers at Dniprodzerzhynsk Municipal Hospital # 1 (Dnipropetrovsk oblast) and The Komsomolsk Primary Health Care Facility (Poltava oblast).

Type of sample — representative, quota-based.

Quota specifications for different regions were defined on the basis of specific service delivery models operated in a particular region and appropriate client numbers. The resulting sample also reflects the fact that most of the regions do not have service outlets (sites) that represent all the existing service delivery models. For this reason, the sample includes service outlets that represent three service delivery models operating in each region.

Oblast	AIDS Center	RTTC	RCATS	Hospitals	Total
Poltava	0	4	72	38	114
Mykolaiv	0	30	90	40	160
Dnipropetrovsk	35	0	66	45	146
Ternopil	15	18	47	0	80
Total	50	52	275	123	500

Sampled population for semi-structured interviews with IDUs

A representative approach was adopted in defining the specification for qualitative research procedures.

Two FGDs with SMT program clients were held in each of the regions (totaling 8). Male and female respondents were included in each group. Respondent ages varied from 24 to 58. SMT program experience: from several months to six years. Participants included both HIV-positive and HIV-negative patients. Some participants are receiving ART, some report TB treatment experience. In addition, frontline healthcare personnel and social workers from SMT client service outlets were interviewed, (total persons — 48). The size of the sample has created the possibility of interviewing nearly all staff members of the service delivery outlets included in the master sample. Survey technique: loosely structured interviews.

Survey field procedures were conducted in the period from November 1 to 15, 2013.

KEY RESEARCH FINDINGS

1. 1. SOCIO-DEMOGRAPHIC PROFILE OF PATIENTS

Based on the survey findings, the majority of SMT program clients are male, aged 30–45. This evidence is consistent with the structure of respondent data. Thus, the research evidence indicates that males account for 71% (355 persons), while females account for 29% (145 persons) of all respondents interviewed. The same proportion is to be observed across all age groups. Nearly half of the respondents (46%) are in their thirties, while one third of them are aged between 41 and 50 (30%). Young people aged under 30 make up 17% of the entire respondent pool. The survey findings show that the oldest age group has the least population (aged over 50) — 7%.

Most of the SMT program clients are unemployed (64%). Only 16% of them are on a disability pension, and 4% — on child care leave. Majority of them (44%) point out they are not working or studying. The percentage of those who have a job is 36%.

A third of all clients serviced by SMT program sites resided together with one or two parents as of the time of the survey. Also, 27% of all respondents reported living with their husband or wife, while 19% of those interviewed reported living with their child. Roughly 14% of all clients serviced by SMT program sites claim to live on their own.

An analysis of the length of time in opioid substitution therapy shows that the majority of all respondents stay on the program for longer than one year (74%). The rest of the respondents are primarily patients who also have appropriate experience with SMT programs: only 3% of them have been in medication-assisted treatment for less than two months (Figure 1.1).



Figure 1.1. Length of time in opioid substitution therapy (SMT), %

SMT offered to service site clients is based either on methadone or buprenorphine. A vast majority of the respondents receive methadone-assisted treatment (86%), while buprenorphine-assisted treatment is received by a much smaller percentage of clients (14%).

The distribution of responses to the question, "How is your opioid substitution medication (SMT) dispensed to you?" reveals that nearly all respondents receive their medications only at service delivery outlets (98%). However, several patients in each region (1 respondent in Dnipropetrovsk, 3 — in Mykolaiv, 2 — in Poltava, and 2 — in Ternopil) pointed out that they receive their substitution drugs not only in the

service delivery outlet, but also against a prescription. Taking into account the fact that, in accordance with applicable regulations, opioid substitution medications are still not supposed to be dispensed against prescriptions in Poltava and Ternopil, the respondents from these cities either do not understand the survey question or have encountered experiences that require further scrutiny and analysis.

Thus, the body of all research data collected via interviewing service site clients must be a fairly accurate representation of the target group both in terms of social-demographic characteristics and specific SMT delivery models.

2. SPECIALIST SERVICES

All employees staffing the service delivery outlets involved in the survey point out that the clients experience no problems with access to specialized medical advice (infectious disease specialists, substance abuse professionals, physicians focusing on TB and lung disease, social workers, etc.) Some service delivery points are staffed by multidisciplinary teams (Dnipropetrovsk oblast), while others have arrangements in place with medical specialists who offer scheduled appointments to clients, or refer them for specialist services to other health care facilities. Specialists from all service delivery outlets share appropriate information and coordinate interaction between themselves on matters related to client diagnostic and treatment strategies. In the opinion of the specialists working in the Dnipropetrovsk oblast, establishment of multidisciplinary teams is the most effective strategy here. This approach creates the capability to examine a client and develop an adequate treatment plan to a high quality standard and without delays. In this case, patients infected with HIV do not need to go to tuberculosis treatment centers, at risk for possible exposure to TB, while TB patients do not need to go to AIDS centers, facing the potential threat of TB transmission from contact with other patients seeking assistance in such centers.

Table 2.1

	Service Recipients					Non- Service		
	Satis	sfied	Not Satisfied Difficult to Answer		Recipients			
	n	%	n	%	n	%	n	%
Infectious Disease Specialist	399	80	10	2	8	2	83	16
TB and Lung Disease Specialist	367	74	2	0	17	3	114	23
Substance Abuse Specialist	453	90	2	0	8	2	37	8
Nurse	494	99	1	0	4	1	1	0
Mental Health Specialist [Psychiatrist]	250	50	6	1	36	7	208	42
Psychologist	302	60	8	2	32	6	158	32
Social Worker	424	85	6	1	20	4	50	10

What specialist services did you receive at the service delivery outlet that administers your SMT, and are you satisfied with the standard of service provided?¹

¹ The numbers (percentages) shown in each row add up to a total of 500 respondents (100%).

A vast majority of all respondents interviewed confirm that SMT programs provide client access to consultation not only by substance abuse specialists, but also by field-specific medical professionals, such as infectious disease specialists (84%), and TB and lung disease specialists (77%). Based on the polling data, access to psychiatric consulting services is less available (58%). All the service delivery sites also have nursing personnel, and most of them have on their staff social workers (90%) and psychologists (68%) offering medical and social services. It needs to be pointed out that the latter (psychologists) are quite often identified with or mistaken by patients for psychiatrists. Thus, based on the research findings, the percentage of the respondents, who have received neither service, is 28%, whereas 46% have reported receiving both services at the one and same site.

Generally, the clients are satisfied with services provided by program staff (see Table 2.1). There is not much variance between survey respondents' answers in terms of different service delivery models or cities. Some discrepancies are observed only with regard to specific specialists employed by some particular service sites. For instance, a somewhat larger proportion of clients have expressed dissatisfaction with their experience with the infectious disease specialist (4%, or 7 persons), and the psychologist (3%, or 5 persons), who see patients for consultation at the service delivery outlet operating out of the RCATS located in the city of Mykolaiv, as well as social workers from the programs operating out of the AIDS center (2 people), and the tuberculosis treatment facility (3 people), (a total of 6%), based in the city of Ternopil. The situation here is most probably due to human factor issues, such as unfriendly attitudes of specific healthcare and social workers toward patients.

All patients participating in FGDs also confirm that, when necessary, they are provided with the opportunity to access specialists focusing on specific fields of medicine, such infectious disease specialists, TB and lung disease specialists, and substance abuse professionals. Based on the qualitative analysis, access to medical advice offered by specialists focusing on specific fields depends not so much on the service delivery model, as on organizational procedures and efficacy of service providers. In the service delivery outlets operating out of the TB hospital, the RCATS in Poltava, the AIDS center in Dnipropetrovsk, and the tuberculosis treatment facility of Ternopil, patients attend scheduled appointments to consult with specific medical specialists. In addition, such specialists share information and confer with one another to identify and design the most effective treatment plans and opioid substitution therapy programs for individual patients.

At the same time, some service delivery outlets refer clients to specialized medical institutions for consultation and treatment as appropriate: Dniprodzerzhynsk Municipal Hospital # 1, the AIDS center in Ternopil, RCATS, CDH located in Mykolaiv.

Focus group participants point out the positive role played by NGO-based social workers and psychologists working in the service delivery outlets in matters relating to patient referral, case management, and psychological support.

"A psychologist immediately joins in to work with the client getting a positive HIV test result. The social workers from the service delivery outlet are all good girls and doing a great job too. They take us to see the substance abuse specialist or the infectious disease doctor. When needed, they even coax or cajole medical personnel into hospitalizing us" (a client of the service delivery outlet operating out of the Mykolaiv RCATS).

Thus, based on the survey findings, clients enrolled in SMT programs running on different service delivery models do not generally experience major barriers that impede access to specialist medical advice in regards to substance abuse issues, HIV, or TB.

3. DIAGNOSIS OF HIV INFECTION

Based on the interviews with the staff, all the service deliver outlets that administer SMT provide pre- and posttest HIV counseling in varying scopes. However, not all the service providers have the capability to arrange testing procedures for clients on site. For example, such is the case with tuberculosis treatment facilities. Patients who receive service from outlets such as these are normally referred to AIDS centers for tests and examination, where they re-take pre- and post-test counseling. Most specialists emphasize the importance of patient involvement based on free will and personal choice to be confirmed by a signed informed consent form, which is subsequently attached to his or her medical records.

Pre-test counseling is provided by program-site-based doctors, psychologists, and social workers (as is the practice, for example, at the SMT sites operating out of the regional center for addiction treatment services in Poltava and those located in the Dnepropetrovsk oblast). Counseling can be offered individually or in a group setting. Experts point out that social workers play a major part in the counseling process. They assist health care workers in engaging clients, who refuse to be tested due to different reasons, and encouraging them into taking the tests. In the opinion of service site specialists, the main reason why clients refuse to be tested is fear of the diagnosis, low level of awareness and knowledge in some cases, and false ideas and beliefs about HIV and ARV therapy.

"They behave appropriately, but some of them refuse to give a blood sample for tests. They don't want to know their actual status. 'Why is that needed? But I don't want to know the truth!' Some give a flat "no", but they are not too many. In most cases, you hear them say, "I don't want to know about that", — hiding their heads in the sand. But as often as not, once my reasons are made clear to them, they give consent. Another problem with collecting blood samples from these patients for tests is that they all have bad veins ... It's hard to find a place on their bodies to draw blood from for a test. The Alliance's mobile outreach clinic travels to our location and provides rapid testing, when needed. Besides, that is a better arrangement in terms of client privacy" (TB and lung disease specialist, CDH, Mykolaiv).

Based on the overall impressions of the interviewers conducting the mass survey of patients and FGD moderators, service site clients do have a sufficiently strong grasp and understanding of basic HIV/AIDS issues and problems associated with HIV diagnostic testing. In the course of the interview quite a few respondents stressed the fact that they were well-informed on HIV transmission issues, as well as infection risks linked with drug use. The respondents had no hesitation answering the question about their HIV status. HIV-negative respondents reported undergoing regular medical examinations, and expressed the opinion that their service delivery outlets were effectively addressing similar concerns, and no particular area of service needed improvement or further action.

At the same time, the interviewers noted that many patients were poorly acquainted with the terminology, not easily distinguishing between the terms "HIV-positive" and "HIVnegative", while some of them even confused "SMT" with "ART". In addition, some respondents repeatedly gave inconsistent or controversial responses during the interview. For example, at the beginning of the interview, a patient reports coming to the service delivery outlet as diagnosed with HIV infection, while at a later point in the interviewing process he or she goes on to make the claim of being HIVnegative. In cases such as this, the interviewers had to seek additional clarification to find out if "the respondent is HIVpositive and when this diagnosis was made".

Most of the service delivery outlets have the capability in place to provide VCT on site. Three quarters of all respondents

(74%, or 293 persons) said they were recommended to be tested for HIV at the same site where they receive SMT. A detailed analysis of patient responses leads to more optimistic conclusions: access to VCT offered by service providers is even better than reported, whereas the problem consists in respondents being unable to understand the substance of the question. Some respondents interviewed seemed most likely to be confused about the types of tests recommended to them.

Table 3.1

	Yes		Arriving At The Service Delivery Outlet Diagnosed As Having HIV-Positive Status		No		I don't remember /I don't want to answer the question	
	n	%	n	%	n	%	n	%
AIDS Center (N=50)	23	46	27	54	0	0	0	0
TB Treatment Center (N=84)	57	68	25	30	2	2	0	0
Addiction Treatment Center (N=222)	187	84	31	14	3	1	1	1
Hospitals (N=144)	129	90	12	8	3	2	0	0
Total (N=500)	396	79	95	19	8	2	1	0

Did SMT program staff propose that you be tested for HIV?, %

All the patients failing to report arriving at the service delivery outlet with a diagnosed HIV infection were asked in the course of the interview about receiving VCT at the start of opioid substitution therapy. A vast majority of the respondents (94%, or 380 persons) reported undergoing this procedure, while only 6% (25 persons) said they had not. Most of those (20 respondents) have been on SMT for less than six months, i.e. received VCT recently prior to registering with the service delivery outlet, as required. Different reasons were identified for one patient per service provider: a heavy workload on the job, preferring to live in ignorance of the diagnostic status, or finding the question too difficult to answer, 2 respondents — "did not consider it necessary". Some FGD participants explained the latter argument by having been engaged in opioid substitution therapy for several years, as well as repeatedly testing during this time frame, and not injecting drugs since enrolled in the program. Thus, only a few clients participating in the interview exercised the right to waive receiving VCT on a regular basis (as part of the principle of free will and personal choice).

Type of Institution Out of Which The Site Provides Service	Rapid Testing		ELISA		Rapid Test Followed by ELISA		I don't remember/ I don't want to answer the question	
	n	%	n	%	n	%	n	%
AIDS Center (N=21)*	0	*	11	*	9	*	1	*
TB Treatment Center (N=55)	1	2	23	42	31	56	0	0
Addiction Treatment Center (N=177)	8	5	72	41	94	52	3	2
Hospitals (N=127)	1	1	93	73	33	26	0	0
Total (N=380)	10	3	199	52	167	44	4	1

What type of HIV test did you take?

* Due to small numbers of patients receiving opioid substitution therapy out of AIDS centers, data for this group are represented only in terms of absolute numbers.

It is worth noting that a significant number of patients (44% of those who reported being tested after the start of opioid substitution therapy, or 167 persons) are first tested using rapid assays, and later — by the ELISA method. A slightly greater percentage (52%, or 199 persons) reported being tested only by the ELISA method, and 3% (10 respondents) — only using rapid assays. Rapid testing is most extensively done in addiction treatment centers (data for TB treatment centers are not fully representative due to low respondent numbers), especially so in the RCATS located in Ternopil (91%, or 42 persons) and Poltava (67%, or 43 persons). In terms of different regions, rapid testing is least common (as stand-alone tests or via ELISA) in the service delivery outlets operating in the Dnipropetrovsk oblast (15%, or 16 persons).

Regardless of the VCT location and methodology, nearly all patients (99%) knew the test result at the time of the interview. The respondents generally observed that the diagnostic testing process was well-organized and troublefree. Only 5% of those interviewed (19 respondents) mentioned experiencing some difficulties during VCT, which are not typically directly linked to the operating procedures employed by health care providers. Most frequently, the respondents complained about *"having bad veins with the result that it took the physician's assistant a long time to draw a blood sample for a test"*. Only one woman respondent (from Ternopil) said she was left with a bad impression after conversation with the doctor: *"I was given the questions I hated to answer"*.

Counseling provided during the HIV testing process and test result disclosure,

	BEFORE	The Test,	During Test Re	sult Disclosure
	n=380	%	n=376	%
Yes	361	95	334	89
No	11	3	25	7
I don't remember, I don't want to answer this question	8	2	17	4

for patients being tested after the start of opioid substitution therapy

A vast majority of the respondents interviewed confirmed they had received pre-test (95%) and post-test counseling (89%) (see Table 3.3). At the same time, 3 and 7%, respectively, reported not receiving this service.

Table 3.4

Attitudes shown by medical workers during counseling, for patients who have received counseling

	BEFORE	The Test,	During Test Result Disclosure		
	n=361	%	n=334	%	
Friendly	286	79	253	76	
Caring	36	10	39	12	
Neutral	37	10	37	11	
Indifferent	0	0	1	0	
Unfriendly	0	0	0	0	
Difficult to answer, I don't remember	2	1	4	1	

Fairly high ratings (primarily, 'friendly') were assigned by the respondents when assessing attitudes shown by medical workers toward patients during pre-test and posttest counseling (Table 3.4). No respondent gave a negative assessment, such as 'indifferent' or 'unfriendly', in this section of the survey. Respondent satisfaction with their counseling experience is further confirmed by the distribution of answers to the question, "Were you able to talk through all the issues you wanted to discuss during your conversation with the medical worker?". In most cases (over 80%) patients gave a clear-cut affirmative answer to the question, while only 1% disagreed with this statement.

Based on the data collected through FGDs, the crucial factor that determines the quality of VCT is not the service delivery model, but employee attitudes toward clients. According to the FGD participants, most of the centers and facilities that operate service delivery outlets maintain a fairly high standard of performance in terms of VCT procedures (5 sites out of 8: Dniprodzerzhynsk Municipal Hospital # 1, TB Treatment Center, Poltava RCATS, Dnipropetrovsk AIDS Center, CDH in Mykolaiv).

"I was lucky in that I found out about this service not in another hospital but right here, in the AIDS center, staffed by excellent specialists. I'm told that they have an "I couldn't care less" attitude to patients in other places. Such attitudes are not to be found here. They spell things out for you and take the time and trouble to explain everything." (clients of the service delivery outlet operating out of the AIDS center located in Dnipropetrovsk). "The infectious disease doctor takes a client-centered approach adapted to a patient's individual needs. This way, you can get answers to any question that interests you" (clients of the service delivery outlet operating out of the TB treatment center in Poltava).

"They never brush aside the questions we ask, always there to talk through the problems and help out. If there is something we need to discuss, they'll explain everything down to the smallest detail" (clients of the service delivery outlet operating out of Dniprodzerzhynsk Municipal Hospital # 1).

The clients report that VCT provided by the service delivery outlets operating out of the AIDS center, the TB treatment center of Ternopil, and the RCATS of Mykolaiv is limited in scope and not up to a high standard of quality. A particularly poor performance in terms of counseling services and poor [biased] staff attitudes toward patients infected with HIV or struggling with substance addiction issues is observed by clients in ambulatory care clinics that service patients according to place of residence and in general hospitals.

In addition to ambivalent treatment by healthcare workers, clients participating in FGDs at two service delivery outlets (the AIDS centers in Dnipropetrovsk and Ternopil) complained about lax privacy policies that permit disclosure of HIV status and breaches of patient confidentiality. The clients who were directly or indirectly informed of their positive HIV status, contrary to regulatory requirements, cited other medical workers, patients, family members, law enforcement officers, etc. as a disclosing party. Most frequently, clients reported such incidents as occurring not at service delivery outlets, but in general hospitals.

Based on the length of time in opioid substitution therapy, clients' attitudes toward regular HIV testing are seen to change. FGD participants report that they had difficulty digesting information provided by medical staff during VCT in the course of the first months in treatment ('due to residual effects of drug taking'), and would be prepared to comply with any testing requirements in order to be offered free SMT. With the passage of time, when clients have been in the therapy program for one year or more, they tend to consider the advisability of regular testing and the exercise of the right to be involved in VCT based on free will and personal choice on a more frequent basis.

"But blood testing is a voluntary process. Those who refuse to be tested are being forced into doing the HIV test, and I don't want that. The nurse who dispenses my medication keeps urging me on saying the doctor tells her to keep reminding me of taking the blood test. But isn't HIV testing supposed to be voluntary and free from coercion?" (clients of the service delivery outlet operating out of the RCATS of Mykolaiv).

In summary, it should be stated that even with unhindered client access to pre- and post-test counseling and HIV screening using rapid tests and ELISA, the remaining issues to be addressed in this area include the need to implement the principle of client voluntary consent for VCT, especially in the case of clients with considerable SMT experience, data security and confidentiality in regards to HIV status, as well as the lack of rapid test kits in service delivery outlets of different types for HIV diagnostic testing. This acts as a barrier to timely HIV diagnosis among service site clients, causes unreasonable testing expenses to mount in connection with the need to have HIV-negative clients take ELISA tests every six months, as well as creates financial burdens on the clients having to travel to the location where opioid substitution therapy is made available, and the AIDS center.

4. HIV TREATMENT

Based on the survey findings, there is a fairly high incidence of diagnosed HIV infections among clients receiving opioid substitution therapy. Nearly half of the respondents (46%, or 231 persons) confirmed their HIV-positive status during the interview, including 19% (95 persons) who started opioid substitution therapy after being so diagnosed. The rest of the respondents were diagnosed as HIV-positive after registering with service delivery outlets as clients. A vast majority of HIV-positive patients are male (71%, or 164 respondents), most of them aged between 36 and 50 (63%). Most of the service site clients have been on SMT for longer than one year, while new clients with less than one-year experience on the program account for 15% (35 respondents). Thus, in terms of demographic data, patients with HIV-positive status do not widely differ from the general client population of service site clients.

4.1. Examination and Tests for HIV-Positive Patients

During the interviews conducted within the survey, experts unanimously concurred that currently there are no barriers on the ground that hinder access to CD4 count and viral load testing services for clients infected with HIV. When clients are diagnosed with HIV by service delivery outlets operating out of centers and facilities that deal with substance abuse and TB problems, patients in general hospitals are referred to AIDS centers (departments) for tests. Staff members of AIDS centers (departments) and service delivery outlets that administer opioid substitution therapy actively share and exchange information relating to laboratory test results and ARV treatment plans between themselves. This practice helps streamline the workflow of physicians on site, as well as identify and adjust, when necessary, appropriate opioid therapy plans for HIV-positive patients.

However, some service delivery points have their own clinical laboratories, as is the case in Municipal Hospital # 1 [Dnipropetrovsk oblast]. This service provider is situated in a general hospital focusing on different fields of medicine. Here, clients can be tested on site, as well as consult with infectious disease specialists.

The findings of the mass survey also attest to the fact that there are no barriers on the ground that limit access to testing facilities for HIV-positive patients who receive opioid substitution therapy. Nearly all of the HIV-positive respondents (96%, 221 persons) were tested for viral load and CD4 counts. Only 3% (7 persons) claimed to not undergo these diagnostic testing procedures, while 1% found this question too difficult to answer. No respondent reported being denied access to testing. However, 6 persons (two patients receiving service at Dniprodzerzhynsk Municipal Hospital # 1 and The Komsomolsk Primary Health Care Facility, one person who is a client of the RCATS (Poltava), and one person who obtains services provided by the AIDS center (Dnipropetrovsk) claimed to not receive the doctor's recommendations regarding this testing need.

HIV-positive FGD participants also reported the availability of access to testing for viral load and CD4 counts and no barrier to timely diagnostic testing. They also spoke about additional incentives offered by some service site employees, specifically, case management provided by the AIDS center.

4.2. Prescription of ART

In the opinion of the doctors and clients of SMT programs, patient access to HIV treatment is currently available and unhindered. Most of the HIV-positive patients interviewed (74%, or 170 persons) were prescribed ARV-therapy, 88% (150 persons) out of which are receiving ARV medications. An analysis of the reasons for denial of treatment identifies personal fears and beliefs as the main barrier. This conclusion is based on the responses given by some patients participating in the mass survey. However, the total number of denied-service incidents is small (20), making a statistical analysis impossible. Specifically, some patients mentioned not only their fears (2 persons), but also their beliefs to the effect that "feeling good, they don't think it necessary to start taking ART" (9 persons) or "opioid substitution therapy (SMT) is not well compatible with ART" (3 persons). Only one patient (RCATS of Ternopil) reported being denied ART due to a shortage of ARV medications.

Many more objective obstacles were pointed out by the patients already receiving ART. When asked the question, "Did you experience any problems in the course of treatment for HIV?", half of the respondents (51%, or 89 persons) indicated at least one of the following (Table 4.1).

Table 4.1

Did you experience any problems in the course of treatment for HIV? For those who have been prescribed ART

	n=170	%
Severe side effects	50	29
Lack of money for hepatoprotective drugs or other concomitant medications	31	18
Interruptions in opioid substitution therapy (SMT) while hospitalized [in an inpatient setting]	9	5
Negative attitudes of medical staff	6	4
Lack of money for other expenditures	6	4
The need to hide the intake of ARV medications from family and friends	5	3
Lack of knowledge about HIV treatment during opioid substitution therapy (SMT)	2	1
Disclosure of HIV status	1	1
Other reasons	9	5

Patients typically complain about feeling poorly due to receiving SMT and ART at the same time (29%), and lack of money for buying additional medications — most commonly, hepatoprotective drugs (18%). Organizational (interruptions in opioid substitution therapy while hospitalized) and psychological barriers linked to negative attitudes among medical staff or trying to hide the diagnosis from family were mentioned much less often. It should be noted that several patients in each region [oblast] covered by the survey mentioned breaks in opioid substitution therapy (with the exception of Poltava). This problem was cited by four patients serviced by the TB treatment center in Mykolaiv, as well as by one patient from each of the service delivery outlet based in the Ternopil oblast, the Dnipropetrovsk RCATS, and the Dniprodzerzhynsk Municipal Hospital. However, we are not in a position to clearly identify and specify how long this problem has been an issue, as this point is outside the scope defined by the survey instruments.

Other complaints by the respondents were again about feeling poorly, ineffective efforts to develop a treatment plan that works, poverty (when *"there is not enough money even to buy food and pay travel expenses to the AIDS center"*), and no paid work.

At the same time, the findings of the mass survey show that patients are typically well informed about specific aspects regarding SMT and ART. Only 1% of patients receiving ART complained about low knowledge levels in this area. However, most of the respondents who were prescribed ART, (95%, or 161 persons) reported the fact of medical staff discussing with them the specific considerations to be taken into account when undergoing SMT and ART at the same time. Only 4% (6 persons) denied this fact, while 1% (2 persons) found the question too difficult to answer. FGDs established that counseling on ART in an SMT setting for HIV-infected patients is still an issue of current importance for some service delivery outlets. While clients serviced by the Dnipropetrovsk AIDS center and the Poltava RCATS were satisfied with the counseling provided, clients serviced by Dniprodzerzhynsk Municipal Hospital # 1 and the RCATS in Mykolaiv claimed to not be provided with necessary ARTrelated information, citing cases of on-site doctors acting biased or unfriendly.

In the course of the mass survey, all respondents receiving ART were provided with the opportunity to leave comments and suggestions for improvements to the treatment process. As the interviewers point out, many patients found the questions fairly difficult to answer, and they either selected the response option 'satisfied with everything' (46%) or 'difficult to answer' (54%). At the same time, quite a few respondents made a range of suggestions summarized below in order of frequency of mention:

I. Introduction of SMT programs based on opioid substitution medications dispensed by prescription, because "as it is, this costs you too much in terms of effort

and travel expense, as well as interferes with employment opportunities or creates problems in relationships with employers and/or fellow employees". In the opinion of the research team, this proposition is more acceptable and practicable than the others, as it only requires the political will of local-level decision makers.

II. *"Dispensing a seven- to ten-day supply of opioid substitution medications (SMT) at a time"*. This idea seems fairly popular among service site clients.

III. *"Dispensing medications within ART and SMT programs in one location"*. Even though many cities have established SMT programs operating out of AIDS centers, the normal

procedures and operations of some host health care facilities and service delivery outlets are being negatively affected by continuous inspection efforts by law enforcement agencies, as is the case in Ternopil. In addition, some patients will find it inconvenient to travel to the service delivery points, all the more since ART is administered much less often than SMT.

IV. "Providing assistance in the form of hepatoprotective drugs and other medications". The purchase of medications is a major problem, because patients normally have to buy all pharmaceutical drugs, except for those related to ART, SMT, and some others, for their own money, while most of them are unemployed and have no other sources of regular income. Projects funded through the grants provided by the Global Fund with a focus on providing care and support to PLHA have endeavored to alleviate this problem over the course of the last few years, but their range of capability extends only so far.

Experts participating in the survey reported that today there are no barriers that prevent access of HIV-infected patients to ART, that treatment plans are being adapted to meet appropriate requirements for patients simultaneously receiving SMT, as well as that arrangements are in place to accommodate patient health monitoring and ART adjustment needs, as necessary. At the same time, the experts directed the focus of research efforts to the range of issues other than those highlighted by patients: some patients refusing to receive ART and developing commitment to ARV therapy adherence among patients already enrolled in appropriate programs.

"Patients exchange a lot of false information between themselves: taking up ART makes you feel bad; antituberculosis drugs if taken at the same time make you feel even worse, let's throw them in the trash can and tell the doctor we take the medications as recommended. One says to another, "Look here, my teeth have fallen out because of methadone, I have stomach aches from anti-tuberculosis drugs ... But none of them does anything about making a dental appointment, or seeing a doctor about their stomach complaints. Their stigma is a major problem, and changing their beliefs and attitudes is a real challenge" (TB and lung disease specialist, TB treatment facility, Ternopil).

These data are indicative of the low efficacy of awareness raising and educational efforts within secondary prevention services targeting IDUs, as well as the low efficacy of pre- and post-test counseling during VCT.

5. DIAGNOSIS OF TUBERCULOSIS

5.1. Patient Testing in Different Service Delivery Outlets

All the sources used in the research process point to the fact that both patients and service site staff demonstrate a responsible approach to the possibility and risk of patients contracting tuberculosis. All the service delivery outlets² run patient screening programs on a regular basis: 93% of all respondents (463 persons) said they were asked questions about TB symptoms in the course of the mass survey by service site staff, while 5% (27 persons) said they were not, and 2% (10 persons) were so diagnosed prior to registering with the program. Nearly all of those interviewed (98%, or 480 persons) reported being offered by service site staff to see the TB and lung disease doctor, and the majority of patients (93%, or 458 persons) claimed to have consulted with this specialist as proposed. Only 6%, or 28 persons, failed to show up for this medical appointment after being referred.

Based on the data reported by the clients, screening by chest X-ray is used as a diagnostic tool in nearly all of the service delivery points. All of the clients interviewed (100%) who receive SMT reported undergoing this type of examination. In the course of the FGD, screening for TB was not a cause for much discussion among the clients. All agreed that no alternative options were available in this area: no patients are accepted into SMT programs without taking a screening test in a recent past, service site staff always make a point of reminding patients of the need for testing on a regular basis (once every six or twelve months), and if the testing is not done in due time, opioid substitution therapy is suspended. No major barriers that interfere with testing have been brought to light in this context.

"A chest X-ray once a year. If there's anything coming up that doesn't feel right, the first thing they do is send you to be tested" (clients of the Ternopil TB treatment facility).

Microscopic examination [bacterioscopy] is performed in the case of a smaller percentage of patients in comparison. In the course of the mass survey, 69% of all respondents (339 persons) reported having their sputum samples examined while receiving SMT, 30% (148 persons) claimed to not have their sputum samples examined, while 1% (3 persons) were not able to respond to the question. Significantly, this percentage varies from region to region. In addition to screening by chest X-ray, microscopic examination [bacterioscopy] is typically conducted in all service delivery points located in the Dnipropetrovsk oblast as reported by 139 respondents out of 144.

Based on the survey findings, an above-average prevalence of microscopic examination [bacterioscopy] is observed for clients serviced by the outlets operating out of the RCATS and RTTC located in Poltava. The similar rate is below average (25%) among service delivery outlets that operate in the setting of the general hospitals located in Mykolaiv and Komsomolsk. The clients cite the failure of doctors to refer them for testing as the main reason for not undergoing it, as was reported by 70% of the respondents who did not have their sputum samples examined (104 persons). Microscopic examination [bacterioscopy] was not made for the rest of the clients for the following reasons: "they did not consider it

² Except for the service delivery points operating out of TB treatment centers in which clients diagnosed with TB receive opioid substitution therapy concurrently with anti-tuberculosis treatment.

necessary" (26%, 38 persons), "they were feeling fine" (8%, 12 persons), "due to a heavy workload on the job", "they did not want to know the diagnosis", "waiting in long lines to be tested" — one person for each type of response.

A vast majority of the patients (98%) reported encountering no problems while being tested for TB. The rest of the patients interviewed (2%, or 10 persons) referred to standing on long lines in the ambulatory care clinic and the TB treatment center (Mykolaiv), and the need to pay the fee of chest X-ray screening (RCATS, Ternopil).

In addition, the FGD participants, who are clients of the service delivery point located in Dniprodzerzhynsk Municipal Hospital # 1, reported cases of medical staff, other than staff working on site, adopting a biased approach toward patients, during testing for TB, and no TB testing procedures having been conducted while hospitalized as a patient with substance abuse problems.

As regards staff working in service delivery outlets, 87% of all patients (425 persons) said the medical workers make sure TB testing is done in a timely manner (especially, screening by chest X-ray), concern themselves with patient testing issues, and remind clients to bring test result records (documentary proof or copies of chest X-ray reports) to the service point (to be filed together with patient information cards). Medical staff performance here is rated at nearly 100%. This outcome is consistent with the responses of the respondents from Ternopil (100%), Poltava (96%), and Mykolaiv (93%). A smaller percentage in comparison is observed in the Dnipropetrovsk oblast, where, based on the findings of the FGD, testing for TB is done on site. For this reason, the question whether medical workers here are committed and interested in patient testing outcomes is not of relevant significance for this region. Most likely, they simply inform patients of test results instead, and ask questions to find out how they are feeling.

5.2. Consulting with the TB and Lung Disease Specialist

Most of the service site clients have reported seeing the TB and lung disease specialist after being tested (72%, or 352 respondents). The following reasons were cited by some patients to explain why they failed to do so (136 persons): "they didn't consider it necessary" (57%, or 78 persons), "they were not told to" (29%, 39 persons), and/or "they were feeling fine" (15%, 21 persons), as the test results (especially identifying no major lung problems) are handed over to patients without first having the patient see the physician.

All of the service site clients participating in FGDs have given positive reports about the organizational aspects of TB specialist consulting services and patient monitoring procedures. If a TB case is suspected, medical staff on site refer clients for opportunistic screening. Treatment plans and SMT are developed and prescribed by TB and lung disease specialists in consultation with substance abuse treatment professionals and infectious disease doctors. When necessary, service site clients can find out more about treatment and side effects of TB drugs from the TB and lung disease specialist.

"Our TB and lung disease specialist is open to discuss any issue. She explains everything in plain language and is always there to help" (clients of the service delivery outlet operating out of the CDH in Mykolaiv).

"If needed, they provide transportation to take you to the TB treatment center for consultation" (clients of the service delivery outlet operating out of Dniprodzerzhynsk Municipal Hospital # 1).

The experts interviewed also reported that clients of all the service delivery outlets are provided with the opportunity to consult with the TB and lung disease specialist, as and when required. Such consulting services are made available either on site or patients are referred to facilities that deal with TB and lung diseases. Dissatisfaction in this area was reported by the clients serviced in Dniprodzerzhynsk Municipal Hospital # 1, who complained about the lack of professional competence of the TB and lung disease specialists on site or the absence of them.

6. TREATMENT OF TB

Based on the survey findings, 20% (101 persons) of all respondents participating in the mass survey have been diagnosed with tuberculosis. A vast majority of them (91 persons) were diagnosed after the start of opioid substitution therapy (SMT). Only 2% of those interviewed (10 persons) were already diagnosed with TB when registering with the program. As of the time of the interview, half of those diagnosed with TB (nearly 10% of all respondents (54 persons) were receiving treatment. Two-thirds of them (35 persons) were being treated in an inpatient setting, a third (19 persons) — as outpatients. The rest of the patients had completed their treatment programs (47 persons). No patient diagnosed with TB has reported an interrupted treatment program. Cases of HIV/TB co-infection were reported by 13% of the respondents (65 persons).

The experts report effective interaction and coordination in matters relevant to TB treatment in all of the service delivery points covered by the survey. Unless a patient discharges TB bacteria into the air, he or she may continue with opioid substitution therapy at service delivery outlets based in substance abuse treatment centers, AIDS centers, or general district hospitals. Some clients are transferred to service delivery outlets located in TB treatment centers, if such are available in the region. Clients with active TB disease, who have tested positive for the presence of mycobacteria, are sent to TB treatment centers for therapy in an inpatient setting.

More than half of the patients interviewed (51 persons out of 91) diagnosed with TB said they experienced no major problems while receiving treatment for this disease. The rest of the respondents reported severe side effects as an issue of current relevance (16 persons), lack of money (8), interruptions in opioid substitution therapy while hospitalized for treatment (5 persons, including 2 — serviced by the site operating out of the RTTC in Mykolaiv, and one person serviced by each of the sites operating out of the RTTC, AIDS center in Ternopil, and the RCATS of Dnipropetrovsk), negative attitudes of medical staff (3 persons), poor knowledge about specific aspects of TB treatment if combined with SMT (1 persons). Seven respondents could not identify any problem.

The opinions shared by many FGD participants are consistent with the responses offered by the respondents involved in the mass survey: access to specific treatment for TB disease is readily available and free.

"No cost charged. They charge you if you need some special service. But no fee is payable when it comes to the standard range of services to be provided on a mandatory basis. And you are given medications every day.

The TB and lung disease specialist came to see us regularly. Every day. And so did the treating physician. And the Chief of Service. There was one problem though, the food was no good" (clients of the service delivery outlet operating out of the CDH in Mykolaiv).

Most commonly, the clients complained about their financial situation and lacking the money to buy hepatoprotective drugs, drugs for treatment of opportunistic infections, and other medications, while some of them also mentioned poor nutritional care in hospital wards for TB patients.

Some patients, e.g., those who receive service in Mykolaiv, do not think they are in a position to access treatment for TB due to lack of money, especially in the case of clients with active TB disease. But personally, they were not infected with TB and referred to experiences shared by some people they knew. However, this view was opposed by other FGD participants with successful TB treatment outcomes, who said the hospital ward conditions were acceptable, basic treatment regimens using medications accessible, and medical staff friendly and forthcoming.

Concerning organizational aspects of treatment. The responses of clients with TB treatment experience were equally divided into two groups: 46 respondents said they were basically satisfied with the organizational aspects of TB treatment and SMT, while the rest of them (45 persons) were not able to suggest any improvements.

Based on the patient responses, interruptions in opioid substitution therapy for hospitalized patients represent a barrier that interferes with treatment program outcomes. The reason behind this is that many health care facilities that treat patients with TB are not properly licensed and endorsed. For example, this problem was highlighted by patients who receive service in the Dnipropetrovsk oblast, as there is no service delivery outlet offering SMT at the TTC of Dniprodzerzhynsk. Based on the responses given by medical workers, this circumstance has a major negative impact on the client treatment process and deters patients from getting tested for TB.

As an improvement to the process, some respondents proposed that medications within SMT programs should be dispensed by prescription (Mykolaiv, Ternopil). Some clients pointed out major problems in developing medication regimens that accommodate simultaneously administered drugs for TB and opioid substitution therapy.

RESEARCH CONCLUSIONS

The research findings confirm that the existing regulatory system of the Ukrainian Ministry of Health, organizational arrangements in the service delivery outlets that provide opioid substitution therapy, and projects supported by international funds create a framework that ensures that program clients have access to the scope of services consistent with their needs in the area of opioid substitution therapy, as well as HIV and TB testing and treatment.

Diagnosis and Treatment of HIV/AIDS

Clients of SMT sites or AIDS centers (for patients referred by service site staff) are provided with access to quality pre- and post-test counseling by trained physicians, psychologists, and social workers. Medical workers, most commonly nurses, continuously keep track and make sure that clients are tested for HIV and provided with ART in AIDS centers in a timely manner, as scheduled.

Note should be taken of the fact that the approach adopted in the Dnipropetrovsk oblast is interesting and worth replicating. Based on this concept, a multidisciplinary team is set up within an SMT program site. The team comprises substance abuse professionals, infectious disease specialists, physicians focusing on TB and lung disease, and social workers. This strategy creates the capability to provide SMT program clients with a comprehensive package of services, such as pre- and post-test counseling, HIV diagnostics, viral load count, CD4 cell count testing [HIV antibody tests], as well as prescription of ART and AIDS treatment monitoring opportunities. In addition, this approach creates the ability to make timely adjustments to therapy plans [SMT] and take comprehensive preventive measures to counter the side effects of medications administered within SMT and ART programs.

Most of the clients serviced by SMT program sites operating out of central district hospitals have reported being satisfied with access to consulting opportunities across all specialist areas and the 'one-stop shop' approach that allows all testing to be done in one location.

The clients receiving opioid substitution therapy in service delivery points and the experts underscore the positive role played by social workers involved in counseling and referral of clients to AIDS centers. The social workers can be engaged by healthcare institutions or non-governmental organizations. Social workers do not only conduct counseling sessions in an individual or group setting, but also work to develop adherence to testing guidelines among patients, their commitment to treatment goals, as well as (which is often the case) escort clients to AIDS centers, keep track and make sure that they are tested and provided with ART in a timely manner, offer assistance in dealing with their social problems (issuance of personal identity documents [domestic passports], employment issues, application for disability benefits, and other social assistance opportunities, child care services, etc.)

Even though most of the service delivery points offering SMT programs provide quality counseling services and ensure client access to all medical services as required, some clients still refuse to be tested for HIV, viral load and CD4 cell count, or refuse to undergo ART. This fact is indicative of the low efficacy of primary and secondary prevention efforts by both government agencies and non-governmental organizations.

Data privacy protection, first and foremost, disclosure of medical records to unauthorized parties who are not entitled to it under the law, remains a major concern. The situation also has a negative effect on client willingness to seek HIV testing and treatment services.

The clients highlight another limiting factor that negatively affects access to HIV testing, which is the inability to undergo HIV testing, receive treatment recommendations and ART right on site. This inconvenience is primarily suffered by clients of service delivery outlets operating out of TB treatment centers.

The clients of service delivery points that provide opioid substitution therapy services (especially those with a job) also complain about scheduling problems caused by inconvenient hours of service. Nearly all of the service delivery outlets work only several hours a day, which is not enough to accommodate opioid substitution therapy, counseling and testing activities.

Also, the survey findings confirm the concern that medical workers involved in primary health care need further training in HIV/AIDS, the lack of which triggers negative attitudes toward clients on opioid substitution therapy during testing and counseling, or refusals to provide service.

Diagnosis and Treatment of Tuberculosis

Based on the research findings, clients serviced by SMT programs have unhindered access to TB diagnosis and treatment. Both patients and service site staff take a responsible approach to the possibility of clients being infected with TB. A vast majority of the respondents (93%) reported that staff members had asked them questions about symptoms and signs of TB, while all of those interviewed (100%) claimed to be screened by chest X-ray, and microscopic examination procedures [bacterioscopy] were performed in the case of 69% of the respondents.

As opposed to HIV testing, the clients and experts have reported no cases of patients refusing to be tested for TB. Efforts to develop early awareness among patients are being initiated at the stage of program entry. All clients seeking opioid substitution therapy must first be tested for TB, and the provision about mandatory testing at scheduled dates is laid down as a specific requirement in the contracts that clients are expected to sign. Case management is used as a tool to build up patient responsibility, specifically through service site staff reminding patients of TB testing dates, and coercive compliance-enhancing strategies, such as suspension of opioid substitution therapy services [dispensing of SMT medications] until proof of TB test results has been provided.

Based on client reports, screening by chest X-ray is employed by service delivery outlets as the main diagnostic tool for TB (100%), while sputum microscopy [for tubercle bacillus] is mentioned by a much smaller percentage of the respondents (69%). The lesser use of microscopy procedures as compared to screening by chest X-ray may be attributable to low client motivation or lack of medical indications. Clients commonly report no barriers that prevent their access to diagnostic testing for TB. Only 2% of the patients complained about long waits at health care offices in Mykolaiv, 1% — about the need to pay for a TB test [chest X-ray] (most probably, to cover the cost of X-ray film), Ternopil. The analysis of qualitative research data indicates that the most favorable conditions in terms of TB testing and counseling are enjoyed by clients of service delivery outlets operating out of general hospitals, as they are equipped with all necessary diagnostic tools and facilities, and staffed by MDTs.

Based on client reports, all of them are provided with the opportunity to consult with the TB and lung disease specialist, when required, and most of the respondents (72%) have been to see this specialist after registering as a client on site. Commonly, the respondents interviewed express positive views about access to service, as well as the quality of medical advice offered by TB and lung disease specialists, and their attitudes toward patients.

Service delivery staff based in health care facilities of different types also report close and effective interaction with physicians on site and the lung disease specialists whose services are provided either on a visiting basis as per scheduled appointments, or who examine and counsel patients in TB treatment centers.

The current importance of further regular testing for TB in service delivery outlets is underscored by the fact that only a few clients (2% of all respondents) were diagnosed as TB patients at the time of program entry [for opioid substitution therapy]. In most cases, (18% of all respondents) the diagnosis was made after enrollment as a service site client. Quite a few clients (13% of all respondents) are now faced with the challenge of being co-infected with HIV and TB.

More than half of all patients and experts share the assertion that treatment for TB using anti-tuberculosis drugs is accessible and free of charge. Most commonly, clients complain about side effects of anti-tuberculosis drugs, therapy-related medical complications, and financial difficulties due to the need to buy hepatoprotective drugs, drugs for treatment of opportunistic infections, and other medications, while some other clients also complain about poor nutritional care in public health facilities that treat TB clients in an inpatient setting. Out of 91 patients with TB treatment experience, 5 people have reported interruptions in opioid substitution therapy during the period of hospitalization, including two patients who receive service in the RTTC of Mykolaiv, and one patient serviced in each of the following facilities: RTTC, AIDS center (Ternopil), RCATS (Dnipropetrovsk). Negative staff attitudes have been reported by 3 people, and poor knowledge about specific aspects of TB treatment if combined with SMT — by one person. However, account should be taken of the popularity of beliefs entertained by the clients of service delivery outlets without personal experience with TB in regards to the financial inaccessibility and low efficacy of treatment programs.

It needs to be pointed out that not all service delivery outlets employ the questionnaire-based method of client interviewing as the primary screening tool for public care facilities in accordance with the Unified Clinical Protocol of Medical Care for Tuberculosis. Most likely, questionnairebased interviewing is predominantly utilized by service delivery outlets operating out of TB treatment centers, which indicates insufficient knowledge of medical staff on site about newly established protocols for TB-related diagnostics.

Just as was the case with the discussion centering on HIV issues, the service site clients pointed out the need to provide them with a package of cross-cutting [integrated] assistance to cover the existing TB diagnosis and treatment needs. First and foremost, this presupposes access to sputum microscopy [bacterioscopy] and screening by X-ray for TB, and antituberculosis drugs in the outpatient stages of treatment right on site [at outlets that provide SMT].

RECOMMENDATIONS

Even though, in overall terms, patients involved in opioid substitution therapy basically have unhindered access to HIV and TB testing and treatment services, some concerns [factors] here remain unaddressed and negatively affect client attitudes toward healthy lifestyle issues and adherence to medical treatment recommendations. The inability to access the entire range of medical services (SMT, testing for HIV and TB, provision of ART and treatment for TB in an outpatient setting) in one health care outlet represents a major barrier here. Service delivery sites that have resolved this problem and set up programs of integrated assistance, based on the 'one-stop shop' approach, for instance, those that are operating in the regional centers for addiction treatment services in Dnipropetrovsk and Poltava, must shift focus to facilitating access to social services by socially maladapted patients, homeless, unemployed, or stand in need of a legal source of income, or, in some other cases, do not have personal identity documents, have problem relationships with family, or have no family at all.

Giving due consideration to the physical, mental, and social health of opioid substitution therapy clients, the creation of patient-oriented centers focusing on medical and social services for patients with substance dependence problems within SMT outlets is seen as of current relevance and importance. This is designed to ensure universal client access in all service delivery points not only to SMT, but also to the following:

• Quality pre- and post-test counseling and testing. Also, it is recommended that rapid diagnostic tests be used more widely, and greater attention be given to counseling, especially post-test counseling, irrespective of whether the test results are positive or negative.

- Professional medical advice by infectious disease specialists and physicians focusing on TB and lung disease who can act, as is already a common practice in many service delivery outlets, as part of MDTs, and see patients at scheduled dates and times on site.
- Provision of ART on site in the same location where it was prescribed.
- Quality and professional social services that facilitate social adaptation and re-integration of clients. Comprehensive programs of case management must be developed and implemented with the involvement of psychologists and law professionals who have the necessary skills in dealing with the target group, as well as social workers who provide services on a peer-to-peer basis. To improve the effectiveness of teams involved in providing social services, particular emphasis must be placed on regular training programs based on the exchange of experience and best practices that deal with typical and specific client problems. Training can be provided online or by telephone with the assistance of highly experienced specialists [national level experts], in the form of interdepartmental task meetings and events at regional level, e.g., on the initiative of local steering groups focusing on HIV/ AIDS, TB, and substance abuse issues (in the form of conference sessions).
- Regular testing for TB. Yearly screenings by chest X-ray, sputum microscopy, if TB symptoms and signs are in evidence, and opportunistic [X-ray] screening tests. Service delivery points not equipped with necessary facilities can make appropriate arrangements with

neighboring health care providers capable of meeting the requirements. In this context, the development of non-judgmental attitudes among medical staff working in such public health outlets remains a concern to be addressed.

• Anti-tuberculosis drugs and social assistance to patients who need treatment for TB in an outpatient setting.

Integrated service centers as outlined above will assist patients with substance abuse problems in building sustainable motivation toward regular testing and treatment awareness, engaging in more responsible behaviors in regards to health issues, dealing with social problems in a more effective manner, and enabling them to be fully reintegrated into society in the future.

Integrated patient-centered care of higher quality can be facilitated by joint conferences attended by medical workers from service delivery outlets that administer opioid substitution therapy, training workshops to be run on an ongoing basis focusing on the newly adopted regulatory framework of the MOH, counseling methodology, treatment of clients with coinfections, establishment of centers of excellence, for example, in the Dnipropetrovsk or Poltava oblasts. Full advantage must also be taken of the accumulated experience of community-based organizations in engaging service site clients in awareness raising programs with a focus on HIV, TB, and STI.

Given the tendency toward a gradually diminishing scale of international aid efforts in response to the HIV/AIDS and TB epidemics, further case management activities supported by service delivery outlets that administer SMT remains a major concern. Another issue worth noting is that the project community-based organizations have built up a strong capacity in collaboration with health care facilities, which enables them to professionally assist health care providers to run effective opioid substitution therapy programs. This situation can be resolved through stepping up efforts to develop and implement the policy of contracting out social services funded by both national and local governments (which is currently ensured by the Ministry of Social Policy), while preparing enabling laws and regulations.

Involvement of service site clients who are receiving opioid substitution therapy in socially useful activities, ideally on an employment basis, suited to their health conditions, also plays a positive role in resolving their social problems. Based on the experience reported by the charitable association, *Svitlo Nadiyi* [light of hope], there are powerful but still underutilized resources to be tapped through partnership between NGOs and local employment agencies, specifically when vulnerable populations, including service site clients, are engaged in community work.