

HIV Programme Review in Tajikistan

Evaluation report
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HIV programme review in Tajikistan

**WHO Technical Assistance for concept note development
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List of abbreviations

AIDS acquired immunodeficiency syndrome
ANC antenatal care
ART antiretroviral therapy
ARV antiretroviral
CBO Community Based Organization
CCM Country Coordinating Commission
CSO Civil Society Organization
DOTS directly observed treatment, short course
EDL essential drugs list
ELISA Enzyme-linked immunosorbent assay
EMCDDA European Centre for Drugs and Drug Addiction
GOT Government of Tajikistan
GDP gross domestic product
GNI Gross national income
HCV hepatitis C virus
HIV human immunodeficiency virus
HTC HIV testing and counseling
IBBS integrated bio-behavioural surveillance
ID infectious disease
LTFU Lost to follow up
LM labour migrants
MDR TB multi drug resistant tuberculosis
MoH Ministry of Health
MSM men who have sex with men
MTCT mother-to-child transmission
NC Narcology Centre
NCC National Coordinating Committee
NASA national AIDS spending assessment
NGO nongovernmental organization
NSP needle and syringe programme
OI opportunistic infections
OST opioid substitution therapy
PE penitentiary system
PHC primary health care
PLHIV people living with HIV
PMTCT prevention of mother-to-child transmission
PWID people who inject drugs
STI sexually transmitted infection
SW sex workers
TB tuberculosis
TGF The Global Fund
UNAIDS The Joint United Nations Programme on HIV/AIDS
UNODC The United Nations Office on Drugs and Crime
VCT voluntary counselling & testing
WHO World Health Organization
XDR TB extensively drug resistant tuberculosis

1. Executive Summary

The purpose of this desk review and the WHO country mission performed in Tajikistan in September 2014 was to analyse the current HIV situation and provide strategic recommendations aligned with WHO guidelines in terms of priority setting and investments needed to curb the HIV epidemic in Tajikistan. Strategic recommendations are intended to inform the ongoing Global Fund concept note development with expected disbursement from the Global Fund for the period October 2015 – December 2017.

Tajikistan developed a system of HIV prevention and care within a short timeframe and implemented it countrywide. The fundamental health system infrastructure, legislation, community systems, valuable experiences of delivering HIV prevention, ART and OST are already in place. Needle and syringe programme achievements to date are very promising. In many instances basic scaling up is required coupled with a rather simple reorganization to achieve a considerable impact on the epidemic. Having said that, Tajikistan is at risk of a volatile HIV crisis; an increasing number of HIV infections including among women with high levels of unemployment and poverty, ample availability of inexpensive heroin, abundant injecting drug use, intense labour migration, low uptake of HIV testing and treatment, inconsistent condom use reported by key populations, high levels of stigma, high burden of TB, and a weak, underfunded, vertical health system, a dangerous cocktail. Now is the time to prevent the HIV epidemic in Tajikistan from becoming generalised. Failing to create solutions to current issues will not only fuel the HIV epidemic but ultimately increase the costs for society.

The epidemiological analysis found that the HIV epidemic in Tajikistan remains concentrated among people who inject drugs (PWID), but there are signs of it increasingly affecting the general population. An estimated 60% of people living with HIV (PLHIV) are undiagnosed. Unless the number of PLHIV aware of their infection significantly increases, only minor progress can be made. The epidemiological analysis further identified a recent escalating HIV epidemic among very young children, whereby the majority of cases were not caused by mother to child transmission (MTCT). This is a very disturbing finding, and calls for urgent, thorough epidemiological investigations to identify the source(s) of infection and react accordingly.

The mission additionally found that inadequate HIV testing of key populations is a major bottleneck to controlling the HIV epidemic in Tajikistan. HIV testing is not provided where most key populations reside, gather, or come for other services (such as needle and syringe programmes (NSP), opioid substitution therapy (OST) sites, friendly cabinets for sex workers (SW) and men who have sex with men (MSM)). Adapting HIV testing strategies to the needs of key populations is crucial to achieving a significantly higher proportion of people who are aware of their HIV positive status, thus, introducing community-based rapid testing is highly recommended. Lack of HIV testing is also the major obstacle in PMTCT efforts. In all except four MTCT cases to date, the mother had not been tested for HIV during pregnancy or immediately after childbirth.

Another worrying observation is that people with HIV in Tajikistan are generally diagnosed very late and/or start ART late. Even among people who are diagnosed with HIV, only about half are enrolled into HIV treatment and care and of these, again only half are started on ART. Even fewer are expected to have an undetectable viral load, but data remains unavailable to assess this. Patients

may be lost, migrate or die undetected in the current system, which is characterized by vertical silos of disease categories deficient referral systems, disrupted information between providers, delayed testing results, limited efforts to track patients not presenting for care, and an inefficient use of resources.

Inadequate enrolment of patients into ART harms both the patient in question and the Tajik community at large, by letting the virus continue its spread throughout the country. The problem of linkage to and retention in care, particularly for PWID, requires urgent attention. The current health care system is not functioning to an extent that provides the PWID community with sufficient treatment options and support. This needs to be addressed as a high priority in order to halt the HIV epidemic. Very low OST coverage of PWID and inadequate harm reduction initiatives in the penitentiary system are major barriers to enrolment and retention in HIV care. Scaling up NSP and OST programmes is therefore crucial for the success of future HIV prevention and treatment programmes in Tajikistan.

Community systems should be strengthened and formal partnerships of Civil Society Organizations (CSOs) and government structures nurtured. CSOs can and should play a larger role in this next phase of HIV programmes in Tajikistan in order to reach key populations. Many of the findings above are caused by the vertical organization of the health system and non-optimal service delivery within this system. Specific recommendations on how to restructure and reorganize within the current health system are provided throughout the report.

Overall recommendations:

1. Ensure high coverage of preventative services for key populations (PWID, SW, MSM, prisoners, labour migrants and their partners)
2. Increase coverage of HIV testing especially among key populations (including access to rapid tests) and ensure the care pathways to HIV treatment and care services are established in all places offering testing
3. Increase ART coverage and retention in care
4. Optimize health service delivery and infection control in health facilities
5. Ensure an enabling environment to improve access to testing, treatment and retention in care

2. Introduction

Tajikistan has a population of approximately 8.16 million people of whom the vast majority are Tajik (80%). Other ethnic groups include Uzbek (15%), Russian (1%) and Kyrgyz (1%) (1). About 90% of the population are Muslim and 73% of its people live in rural areas (1). The capital city is Dushanbe (pop. 724 844) (1). Of all central Asian countries, Tajikistan has the longest border with Afghanistan, and is situated on the 'drug route'. Drug trafficking, in particular of heroin, is widespread and heroin is relatively inexpensive. UNODC estimates that 25% of all Afghan heroin (95 metric tons) travels through the country (3).

Tajikistan has a very young and rapidly growing population. In 2012, 40% were below 17 years of age and the fertility rate was 3.9. Life expectancy at birth was 67.8 years in 2012 (1,2,4). The population faces a double burden of disease, with high levels of reported noncommunicable and communicable diseases (5) and despite recent progress, health indicators such as infant and maternal mortality are still among the worst in the region (4,5). Migration has been considerable

and it is believed that up to 2 million Tajik citizens are currently working abroad, mostly in the Russian Federation (5).

In 2013, the GDP was 8.5 billion USD, of which influx from remittances alone contributed to 50% (7). The GNI per capita (Atlas) was 990 USD in 2013, the lowest in the WHO European Region. However, the GDP has been steadily increasing since the beginning of the century and is now approaching pre-1991 levels (22). Poverty rates, measured by national poverty lines, dropped from 81% in 1999 to 47% in 2009 (37).

Tajikistan's health system has evolved from the 'hospital-centred' Soviet model of health care, with few structural changes. Services are typically organized in silos and the health system is highly specialized, with an emphasis on curative and inpatient care. Reforms focusing on strengthening primary health care have recently been introduced (5). Total health expenditure has been stable over the past decade and reached 5.8% of the GDP in 2012. However, public health spending is low and out-of-pocket health expenses reached 70% in 2012, one of the highest in the WHO European Region (5).

Tajikistan has suffered from a significant 'brain drain' and has the lowest number of health care professionals per capita compared to any other country in central Asia. The average salary for health care workers is lower than the average workforce salary and physicians are primarily concentrated in the capital region. The country is largely mountainous and some regions experience rough winters impeding physical access to health care (5).

Total funding of the national HIV programme has more than doubled over the last 5 years, however, approximately 74% was funded by external sources, decreasing slightly from previous years (7). The Global Fund (TGF) is by far the largest donor (74% of all international funding to the HIV programme). TGF provides funding for procurement of HIV tests, all medicine, equipment and provision of essential and basic HIV services (blood safety, counselling, testing), OST, NSPs, and TB treatment. State funding in relation to the national HIV programme (contributing 24% of the total budget) is distributed towards the maintenance of buildings and facilities, salaries of specialized staff, utilities, minor costs of procurement of OI treatment and prevention, and monthly allowances for HIV positive children (19,7).

The national coordinating committee (NCC) is the body responsible for coordinating the national HIV/AIDS, Tuberculosis and Malaria programmes. NCC operates in the country with participation from various ministries, CSOs, and international organizations and is led by the Deputy Prime Minister of the Republic of Tajikistan (6).

3. Purpose and objectives

Background

Tajikistan is in the process of preparing a Global Fund HIV concept note proposing a grant with expected disbursement for the period October 2015 – December 2017, and has requested the WHO Regional Office provide external technical support by reviewing the current situation and providing key recommendations on priorities and targets which are aligned with WHO guidelines and recommendations.

Scope and objectives of review:

The programme review encompasses 4 key components:

- A. Epidemiological analysis
- B. Review of HIV treatment and care programme along cascade of services
- C. HIV services for key populations
- D. Analysis of service delivery models for populations affected by the HIV epidemic from the perspective of the health system

4. Methods

The evaluation builds upon a desk review of readily available information regarding the country epidemic and HIV/AIDS treatment and care, including journal articles, national publications, WHO reports, and a country mission which took place from the 15-19 September 2014 in Dushanbe, Tajikistan. During the mission, experts met with key policy-makers and representatives of the Ministry of Health, Ministry of Finance, CCM, National AIDS Centre, City AIDS Centre, infectious disease hospital, Republican TB hospital, Republican Clinical Narcological Center, Dushanbe Prison, National Reference Laboratory, reproductive health centre, health care providers and patients at the above named institutions, civil society organizations and their clients, and other national and international partners. Appendix 2 provides a full list of the country mission's informants.

5. Findings

Findings are divided into the following sections: 'Epidemiological analysis', 'Strengths and achievements', and 'Weaknesses and challenges'. Finally, conclusions and key recommendations are provided for five identified priority areas.

5.1 Epidemiological analysis

HIV epidemic

As of December 2013, a total of 5550 HIV infections had been registered in Tajikistan (68% Male, 2% Female) with 961 of those infected, dying (11). The first HIV case was detected in 1991, with the epidemic has increasing over the last ten years. In 2013, 876 new HIV infections were registered.

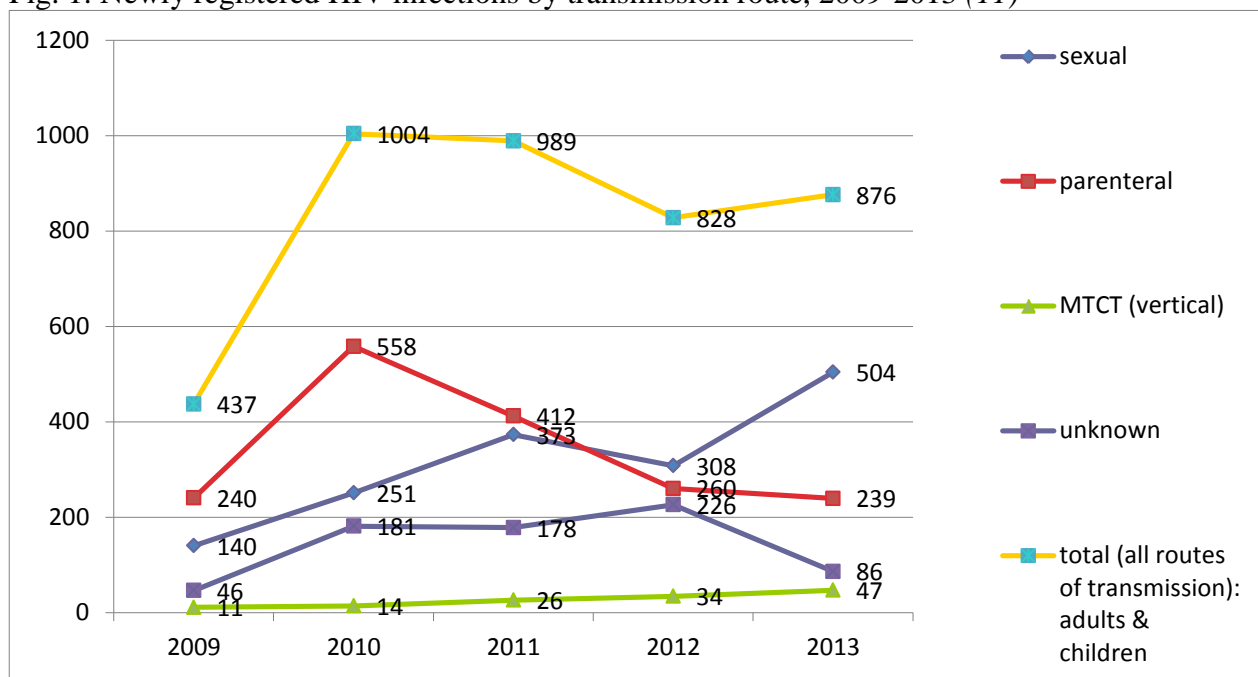
Taking undiagnosed infections into account, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO estimate that 14 000 people were living with HIV in Tajikistan at the end of 2013, with 1700 newly infected (8). Since 2010, HIV incidence has reportedly been relatively stable with an annual incidence of 10.9/100 000 in 2013, and 10.7 in 2012 (21).

Despite a recent scale-up of HIV testing, only about 1/3 of the estimated number of PLHIV in Tajikistan are aware of their status (8). The high proportion of undiagnosed infections makes accurate estimation of the overall HIV prevalence and the stability of incidence rates difficult to determine. The incidence trend over time is thus highly susceptible to the introduction of new testing policies, with the rise evident in 2010 potentially representing implementation of new testing

policies (5-10 fold increase in the screening of prisoners, and increased testing of IDUs, and increased pregnancy screening) in addition to a possible actual increase of new infections.

HIV prevalence in the adult population was estimated to be 0.3% (0.2–0.4%) in 2013. The epidemic is still considered ‘concentrated’, as the prevalence in the general population rests at < 1%, but >5% in several key populations. Women are however increasingly being diagnosed with HIV, a warning sign that the epidemic may be in the early transition towards a generalised epidemic. Over the last 5 years the number of new infections per year in women has tripled (113 in 2009 – 346 in 2013). It is expected that sexual partners of PWID, MSM and migrants are at particular risk, and men still account for the majority of new infections compared to women (530 male vs. 346 female in 2013) (11,18,21).

Fig. 1: Newly registered HIV infections by transmission route, 2009-2013 (11)



Mode of transmission

Cumulative mode of transmission (1991-2014) is as follows: 50.3% PWIDs, 42.4% sexual transmission, 2.6% MTCT and 4.76% unknown (National AIDS centre data). Lately a transition towards further sexual transmission has been reported and sexual transmission has increased for both women (1.3 x increase) and men (1.8 x increase). As of 2012, sexual transmission was the dominant reported transmission mode (figure 1). Of the newly reported cases in 2013, 58% were reported as infection through sexual contact, 27% through injecting drug use, 5% through mother-to-child transmission and 10% unknown (11,18,21).

Geographical distribution

By July 2014, the highest number of HIV infections had been registered in Dushanbe (1989), followed by Khatlon Oblast (1439), Sughd Oblast (1195), the region of the republican (central) subordination (1127), and Gorno-Badakhstan Autonomous Oblast (GBO) (402) (Table 1:11).

The largest proportions of transmissions due to injecting drug use have been reported in GBAO (70% of all reported HIV infections) followed by Dushanbe (60%), Sughd (46%), Khatlon: (44%),

and Region of the republican (central) subordination (36%). Labour migrants (LM) account for the largest proportion in rural areas and specifically in Khatlon (11%) and GBAO (7%). In Dushanbe LM account for only 2% of all reported cases (Table 1).

Table 1. Distribution of 6152 PLHIV by regions, urban/rural areas, and AIDS centres, July 2014 (11)

Region	Total # PLHIV	PLHIV in Urban areas	PLHIV in rural areas (RA)	# children (<15 years)	Transmission mode	# of AIDS Centres/ ART
Dushanbe city (capital)	1989	1989	-	162 (8% of all PLHIV in Dushanbe)	Mode of transmission Injecting drug use: 60% (1192) MTCT: 2% (42) Blood recipients: 0.3% (6) Unknown: 6% (119) Heterosexual: 32% (630) <hr/> PWID: 639 Labour migrants (LM): 39 SW: 91 MSM: 4 Others: 1216	2 – ART
Khatlon oblast	1439	664 (3 cities)	775 (in 21 RA)	91 (6%)	Mode of transmission Injecting drug use: 44% (629) MTCT: 3% (49) Blood recipients: 0.2% (3) Unknown: 6% (93) Heterosexual: 46% (665) <hr/> PWID:351 LM: 156 SW: 53 MSM: 2 Others: 877	3 (city)-ART 11 (in RA)-ART
Sughd oblast	1195	684 (8 cities)	258 (in 10 RA)	52 (4%)	Mode of transmission Injecting drug use: 46% (545) MTCT: 3% (33) Blood recipients: 0.4% (5) Unknown: 1% (17) Heterosexual: 50% (595) <hr/> PWID: 188 LM:75 SW:28 MSM: 0 Others: 904	4 (city) – ART 1 (in RA) – ART
Region of the republican (central) subordination	1127	420 (3 cities)	707 (in 10 RA)	150 (13%)	Mode of transmission Injecting drug use: 36% (404) MTCT: 5% (57) Blood recipient: 0 Unknown: 9% (104) Heterosexual: 50% (562) <hr/> PWID: 229 LM:57	3 (city) – ART 7 (in RA) – ART

					SW:-56 MSM:2 Others: 783	
GBAO	402	152 (1 city)	148	4 (1%)	Mode of transmission Injecting drug use: 70% (283) MTCT: 0.5% (2) Blood recipient: 0% (0) Unknown: 0.5% (2) Heterosexual: 29% (115) <hr/> PWID: 176 LM: 27 SW: 10 MSM: 0 Others: 189	2 (city) – ART 6 (in RA)- ART in 5

Key populations and vulnerable groups

Key populations in Tajikistan include: PWID, prisoners, sex workers, and MSM. Migrants and children are considered vulnerable groups. The latest available prevalence estimates for key populations are presented in Table 2¹.

Table 2. HIV prevalence data for key populations (9,12,13)

Key Population	HIV prevalence
PWID	12.8% (2014)
Prisoners	8.4% (2013)
Sex workers	4.7% (2014)
MSM	1.5% (2011)

PWID

Injecting drug use among men has largely driven the HIV epidemic in Tajikistan with the majority of PLHIV infected through injecting drugs. Although the proportion of new HIV cases diagnosed among PWID seems to have fallen dramatically over time (down to 27% in 2013), PWID still bear a disproportionate number of HIV infections (a cumulative 50% in Tajikistan).

According to official statistics, the number of registered people who use drugs in Tajikistan is 7176, including 4837 (67%) who are injecting drug users. The vast majority of PWID in Tajikistan inject heroin (interview Republican Narcology Centre). However, this number does not represent the reality as concerns regarding the break of confidentiality, and fear of stigma and arrest, limit the willingness of PWID to be officially registered as drug users (42). According to a recent estimation report, Tajikistan has 23 100 PWID (10). The national estimate is extrapolated from estimated sizes in 12 areas of Tajikistan which cover about ¼ of the total population in Tajikistan, including the capital. The estimated PWID prevalence however appears low, in particular the estimate of PWIDs in Dushanbe (estimated to about 3000 persons) considering that the highest concentration of people who use drugs in 2011 was registered in Dushanbe (about 2000 registered PWIDs if using the national proportion of PWIDs among all people who use drugs) (Interview Republican Narcology Centre). If the estimate of PWIDs in Dushanbe is correct, it would mean that 2/3 of all PWIDs in

¹Trends for key populations obtained through integrated bio-behavioural surveillance (IBBS) are also available but not reliable because sampling methods and data collection localities in these IBBS have changed over time and thus not shown here.

Dushanbe are officially registered as drug users, which does not seem realistic given the discrepancy between registered PWIDs and the estimated number of PWIDs. Women are also not considered in the estimates, even though 10% of all PWID are women according to other sources (45). Thus, the estimated population of 23 100 PWID in Tajikistan is questionable, and could be significantly larger. However, this will remain assumed until data from other estimation models are available. It should be noted that the estimated number of PWID will affect the UNAIDS (Workbook and Spectrum) estimated total PLHIV in Tajikistan². Consequently, in case the estimated number of PWID is too low, the size of the undiagnosed population of PLHIV and the estimated number of PLHIV in need of ART will also be too low. Hence, it is crucial to have estimates on the number of PWIDs in Tajikistan as accurate as possible.

Over the last four years the number of new cases reported as transmitted through injecting drug use has decreased significantly, particularly for men (21). In 2013, 240 new cases of HIV in PWID were detected with numbers declining significantly (Table 3).

Table 3. New infections in PWID

Year	2010	2011	2012	2013
New HIV cases in PWID	682	469	293	240

HIV prevalence among PWID was 12.8% according to the latest IBBS (9). A study from 2009 by Beyrer et al. (27) found that among 491 active PWID from Dushanbe alone, the majority (80%) were unemployed; many had a history of working abroad (30%) and almost half had a history of arrest (45%). About 40% of PWID are considered to inject every day, with heroin being the drug of choice. Lifetime prevalence of injecting with a used needle was 47% and reported condom use at last sexual encounter was low (27%) (27). In the same study, HIV and hepatitis C prevalence were found at 12% and 61% respectively and history of migration was positively associated with HCV (27). The heroin trafficking route appears to have had an impact on the HIV epidemic. Kulyab, a major hub for Afghan opiate trafficking in Tajikistan, reported in 2009 a prevalence of HIV among PWIDs (35%) twice the national average at that time (45).

Prisoners

Roughly 10 000 persons are currently incarcerated in Tajikistan, with an annual turnover of approximately 14 000. About 1/3 of all prisoners have a history of injecting drug use prior to conviction. The prison population rate was 103/100 000 in 2011 which is compatible to neighbouring countries (26,30). HIV prevalence among prisoners (8.4% in 2013) has been rather stable over the past decade, however representation of the sample is questionable (sample is from four institutions in two cities out of 19) (12).

Sex workers

The estimated number of sex workers in Tajikistan in 2014 was 14 100 (10). According to the latest sentinel surveillance in 2014 the HIV prevalence among sex workers was 4.7 % (9). HIV is most common in sex workers who inject drugs or have partners who inject drugs, while syphilis prevalence among SW is about 10% (11). There is clear correlation between commercial sex and

²Workbook and Spectrum is a method to estimate adult HIV prevalence in the whole population. It is based on data from prevalence surveys and therefore requires information on the size of risk groups and the prevalence of HIV amongst these risk groups. These estimates are then fed into Spectrum, alongside other demographic and epidemiological information to estimate the size of the infected population and those needing ART.

injecting drug use in Tajikistan. Of all female PWID (2402), 39% (936) reported providing sexual services for money (10,45). The percentage of SWs who used a condom with their most recent client decreased by 13% in the period of 2009-2012 as reported by the UNAIDS (8). Sex workers themselves indicate “unwillingness of partners to use condoms” as being the principal risk of infection (10).

MSM

Although not a single case of homosexual route of HIV transmission has ever been reported to WHO /ECDC from Tajikistan, it must be assumed that MSM transmissions are falsely reported as ‘heterosexual’ or ‘unknown’, possibly due to the risk of stigmatization and discrimination. The recently reported increase in sexual transmission among men could point to a hidden MSM epidemic in Tajikistan, which is slowly being uncovered. The first ever sentinel survey among 350 MSM in Dushanbe reported a prevalence of MSM of 1.5% (IBBS 2011). The true extent of HIV transmission among men who have sex with men is unknown. Homosexuality is highly stigmatized in Tajikistan and as a potential consequence of this, bisexual practice is common (57% of MSM report having sex with both men and women) (21,19).

Labour migrants

According to official data from the Migration Department of the Republic of Tajikistan, 744 000 labour migrants were registered in 2013 (about 9% of the total Tajik population of 8 million), of which about 90% were men. However, local experts estimate that up to 2 million of the total 8 million Tajik citizens are migrants who travel abroad for varying periods of time usually for labour. HIV prevalence among migrants is low (0.4%, according to IBBS data, 2013) (13) and those infected predominantly reside outside the capital region (see Table 1). In 2013, 108 new cases were found in migrants (11). In a sentinel survey from 2013, only 1.3% of migrants who tested HIV positive also tested positive for HCV (13), indicating that HIV transmission through injecting drug use in this group could be low. However, data from a 2009 study on injecting drug use among migrants was inconsistent and migration proved to be independently associated with HCV in PWID in Tajikistan (27).

There is no epidemiological proof that at a national level, migrants are more affected by HIV than the general population; however, migration and especially illegal migration present a major problem for HIV prevention efforts, enrolment and retention in HIV care. Furthermore, outside the capital region, especially in rural areas, migrants make up a proportionally larger part of the HIV affected population (4-10% of the total PLHIV) compared to Dushanbe (2%) (Table 1). Despite the fact that labour migrants represent a low HIV prevalence group, the abundant number of labour migrants in Tajikistan and their equivalent estimated number of wives/partners (about 76% of LM are married according to data from 2008 (25), combined with a reported low knowledge and high risk behaviour (24,25), justifies labour migrants and their partners as vulnerable populations, and therefore should be included in strategies for successful HIV prevention, treatment and care in Tajikistan.

Children

About 7.6% (n=346) of all PLHIV are children below 15 years, and the number of new HIV infections in children has increased rapidly over the last three years (Table 4). Among the 130 new HIV cases in 2013, 64% (n=83) did not have an HIV positive mother and transmission mode was reported as ‘unknown’. All 83 children were below 14 years of age and 61% were in the age group 2-4 years at diagnosis, while 60% were male (data from national AIDS centre). This implies that nosocomial infection has been taking place, potentially combined with unsafe ritual male

circumcision in rural areas (anecdotal reports from interviews). The fact that more boys were diagnosed than girls, could be related to unsafe male circumcision practices (in health care settings and/or outside health care settings) or unsafe blood products, injections etc. provided at hospital facilities where services are delivered separately for boys and girls.

Table 4. New HIV infections in children

	2002-2006	2007	2008	2009	2010	2011	2012	2013
Total new HIV infections, children	17	12	7	12	17	74	138	130
Reported cases of MTCT				11	14	26	34	47
Reported as 'unknown'				1	3	48	104	83

The geographical distribution of the cumulative number of children infected with HIV in Tajikistan is provided in Table 1. Two regions (Dushanbe and the Region of the republican central subordination) in particular have a high number of children infected with HIV. Children below 15 years of age at diagnosis account for between 8-13% of all PLHIV registered in these regions, and of these more than 2/3 are not considered to have been transmitted through MTCT.

Vertical transmission also increased over the last five years and the number of new HIV infections detected among pregnant women more than doubled from 2010-2013 (53 to 112). Tajikistan reported a cumulative total of 132 mother-to-child transmission cases. In 2013 alone, 47 new cases were reported as MTCT. In 128 cases out of the total 132 MTCT transmissions, the mother was not tested during pregnancy or after childbirth. The HIV positive status of the mother and the children were detected when children presented to care with advanced disease (21). The majority of the HIV positive pregnant women were sexual partners/spouses of migrant workers and PWIDs (11). These data suggest that pregnant women of highest risk are inadequately targeted with HIV testing.

AIDS and causes of deaths among PLHIV

As of 2013, the cumulative number of deaths among PLHIV was 961. In 2013 alone, 197 deaths and 87 AIDS new cases were reported. The number of deaths from AIDS-related causes was 68 in 2013 decreasing from previous years (11) (Table 5).

Table 5. AIDS and mortality (11)

	2009	2010	2011	2012	2013
New deaths among PLHIV	103	118	187	212	197
Cumulative number of deaths among PLHIV	247	365	552	764	961
New AIDS cases	11	71	94	91	87
New AIDS related causes of death	55	53	83	78	68
AIDS related causes of death (cumulative)	176	229	312	390	458

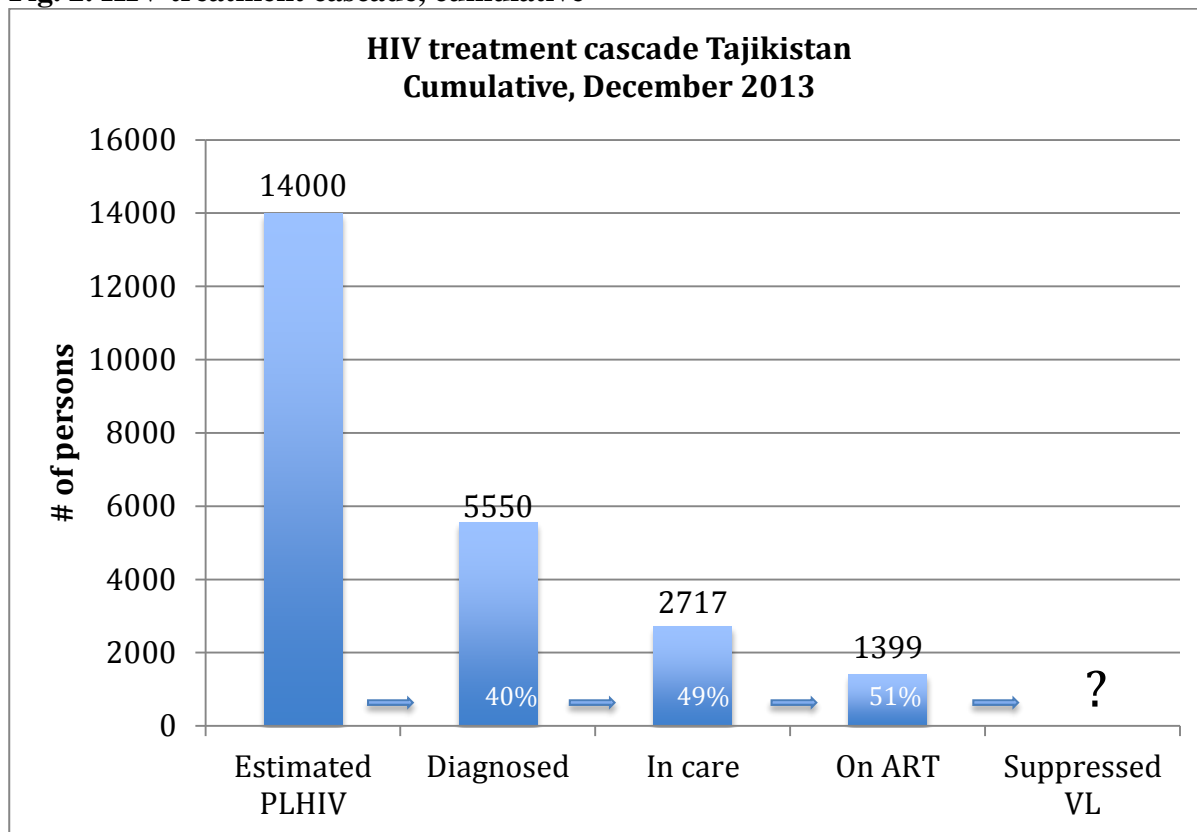
The major causes of deaths when reviewing cumulative numbers comprise AIDS-related causes (48%), TB (29%), and overdose (10%). The proportion of TB-related deaths to all deaths in PLHIV appears lower than what would be expected when taking into account data from countries with similar TB and HIV epidemics (47). One possible scenario could be that limited TB screening and delays of TB diagnosis and treatment (see also under section 5.3.3.) among PLHIV with a latent TB infection, carries a risk of developing disseminated TB, and ultimately death from an undiagnosed TB infection.

According to data from the National AIDS centre, overdose accounted for 10% of all causes of death among PLHIV (Table 5). It is not clear whether deaths among PWIDs with HIV are reported as overdoses if no other cause of death has been established. In 2011, 39 deaths were reported to be associated with an overdose of heroin; however this figure most probably does not reflect the true picture (26). Official data provide very limited information on the number of deaths related to drug use in Tajikistan, and autopsies are only conducted for about 7% of all deaths in Tajikistan (26).

HIV treatment cascade (Fig. 2)

As of December 2013, the estimated number of people living with HIV is 14 000 (UNAIDS/WHO estimation). With a total of 5550 registered cases of HIV, it is estimated that 60% of PLHIV in Tajikistan have not yet been diagnosed (Fig. 2). The total number of undiagnosed PLHIV may even be underestimated, if the size estimation of PWID is inaccurately low. A total of 2717 people were receiving medical HIV care at the end of 2013 (49% of those diagnosed). Antiretroviral therapy (ART) has been available since 2006 and by December 2013, 1399 people were receiving ART (51% of those enrolled in care) of which 30% were PWID. Data on viral suppression is not available. The estimated number of individuals in need of ART was 3400 in 2013; ART coverage of all estimated in need was thus 35% in 2013. Among the total estimated number of people living with HIV in the country, 8% were receiving ART by the end of 2013 (Fig. 2)

Fig. 2. HIV treatment cascade, cumulative



CD4 count at presentation

Late presentation is overwhelming. Of all newly enrolled in care in 2013 (n=384) with a CD4 cell count measurement at presentation (n=333), 67% were late presenters (CD4 count <350) and 40% had a CD4 count <200 (Table 6). Of all late presenters, 67% (n=150) were on ART. Data on CD4 count at HIV diagnosis is not available, only CD4 count upon presentation is available for 43% of all tested positive in 2013, and 87% of all patients enrolled in care in 2013 (11).

Table 6. CD4 distribution among all HIV cases enrolled in care in 2013 (n=333)

CD4 count measurement	No. of cases
>350	110
<350	223 (of which 113= CD4<200)

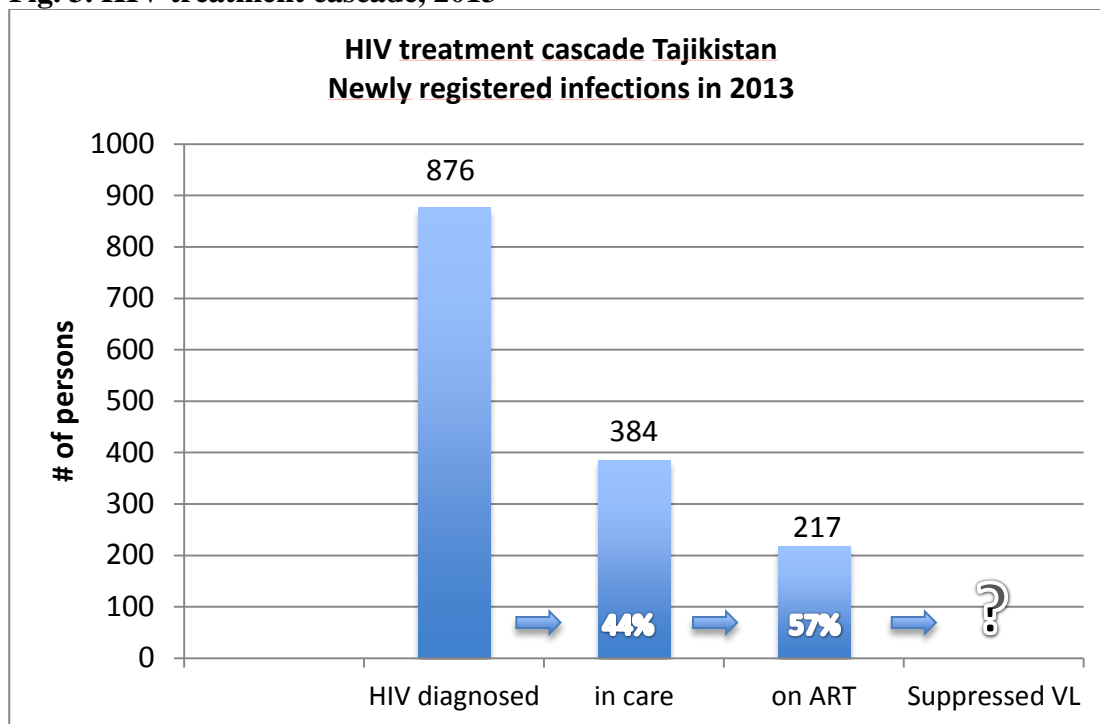
Whereas median CD4 counts for all new HIV cases have steadily increased since 2010 and reached 530 in 2013, PWIDs have a particularly low CD4 cell count at presentation and with a noteworthy decline over the last 4 years (Table 7). 48% of PWIDs with a CD4 count at presentation in 2013 had a CD4 count <200, compared to 40% of PLHIV in general. The median CD4 count among HIV infected PWIDs was very low in 2013 (117). Without having CD4 counts at the point of diagnosis, we cannot be sure whether PWIDs are tested very late or if they enter care belatedly. Either way, a mean CD4 at presentation of 117, is extremely low and suggests that the current health care system is not attracting this key group.

Table 7. PWID late presentation

Year	Total New HIV cases	New HIV cases PWID	# PWID with a CD4 count	Median CD4 count PWID	Median CD4 count for all new HIV cases
2010	1004	682	209	284	335
2011	989	469	97	231	369
2012	828	293	76	214	417
2013	876	240	69	117	530

Considering the estimated size of the undiagnosed population and the data on late presentation of the general population as well as of PWIDs, the decrease in number of new infections in the general population and in particular among PWIDs since 2010 (Fig. 1 and Table 3), may thus not represent a true decrease in number of new infections, but may also reflect that current testing procedures and policies are ineffective. The treatment cascade for 2013 (Fig. 3), shows that enrolment into care is declining, rather than improving.

Fig. 3. HIV treatment cascade, 2013



Coinfections

TB

In 2013, there were 6495 newly registered cases of TB in the general population of Tajikistan, of which 44% were females and 56% males (43). The TB incidence rate was reported as 81.2/100 000 population in 2013, and the estimated rate according to the WHO was 100 /100 000 population in 2013 (including HIV coinfection cases). TB detection rate is still considered low in Tajikistan (68% in 2010) (43).

Of the total number of registered PLHIV, 11.5% were coinfecting with TB in 2013. TB is the most common cause of death among the total number of HIV patients in Tajikistan, and the number of reported deaths among TB/HIV coinfecting patients has been relatively stable over the last five years (40 in 2009, 42 in 2013). In 2013, HIV testing was carried out in a total of 5200 TB patients, of which 165 patients were found to be HIV infected (11). A distinct increase in the percentage of TB patients tested for HIV has been evident (50% in 2009, 80% in 2013) (43). However, TB screening of HIV patients is not nearly as frequent. In 2012, 1135 patients with HIV were screened for TB, in 46 patients TB/HIV co-infection was identified.

MDR-TB is a major concern in Tajikistan. According to the latest drug resistance survey, MDR-TB prevalence is 13% among new TB cases and 56% among previously treated TB infections, the latter figure being one of the highest in the world, exceeded only by Uzbekistan (43). Furthermore, MDR-TB diagnoses not being followed up by enrolment into care is a major concern. In 2013, Tajikistan had the lowest ratio globally of enrolment into care of MDR-TB diagnosed cases, only 30% of all diagnosed cases were enrolled into care according to the World TB report 2014 (43,23).

The proportion of MDR cases with XDR-TB was 21% in Tajikistan (Dushanbe city and Rudaki district) again one of the highest in the world, only exceeded by Latvia (21.7%), Kazakhstan (22.7%), and Lithuania (24.8%) (43). The available data on resistance to second-line drugs and extensively drug-resistant TB (XDR-TB) are limited. According to the National TB Programme, a total of 99 XDR-TB patients were confirmed between 2009 and 2013.

Hep C

Compared to neighbouring countries, Tajikistan has a relatively low prevalence of HCV. Prevalence of hepatitis C seropositivity in the general population in Tajikistan is estimated at 0.5%; in PWID: 33% (31). The number of reported cases of HCV in 2011 was 84. According to the IBBS in 2011, the highest prevalence of HCV among PWIDs was recorded in Dushanbe (36%) and Khorog (21%), while the lowest prevalence was detected in Istaravshan (3%) (26). However, a study among 491 PWIDs in Dushanbe found a prevalence of more than 60% HCV infections in 2009 (27). Hepatitis C contributes to about 5% of the cumulative number of reported deaths among PLHIV (11). If treatment of PLHIV with ART increases over time, it should be expected that an increase in liver cirrhosis is seen, as patients will live longer.

5.2 Strength and Achievements

Overall national response

Tajikistan developed in a short time a system of HIV prevention and care and implemented it countrywide. Not only was the MOH involved, but also the Ministry of Justice, the Ministry of Education, the Prime Minister's Office and numerous international organizations and civil society organizations (CSOs), who also participated in the National Coordination Commission (NCC) and in the Country Coordination Commission (CCM) for the management of the Global Fund Grant. The Government introduced the necessary legal changes to accommodate new approaches and also enabled necessary HIV services in the penitentiary systems. Some of these were hard fought, such as the decriminalization of the possession of small quantities of opioid drugs for personal use and the introduction of opioid substitution therapy (OST). Collaboration was also organized between the HIV/AIDS services and TB, narcology and STI systems. Besides the public HIV health system building, civil society also became actively involved in awareness raising, advocacy, provision of advice, offering social support, needle and syringes exchange and organizing mutual support groups of and for IDUs.

The country managed to attract external funding and technical assistance to scale up its programs and to improve its approach and capacity for delivering the services. The national and local governments also engaged in funding some of the costs of HIV infection prevention, the diagnosis and treatment of AIDS and improved the organization and production of blood and blood products.

Treatment protocols and guidelines

Tajikistan has developed a wealth of protocols and guidelines to inform the response of the HIV epidemic. National ART clinical protocols are currently being revised to correspond to WHO consolidated guidelines (20), except for ART initiation CD4 cut off which remains at <350. The national policy states that there is equal access to ART for adults and children free of charge (1). ART provision recommendations (20), HIV testing policy (16), PMTCT guidelines (17), and recommendations for the provision of treatment for PLHIV coinfecting with tuberculosis (32) are considered in accordance with WHO guidelines. Guidelines on OST (41) however, are not according to international standards.

HIV testing

National HIV testing guidelines have been developed (16), in which provider initiated HIV testing is recommended for the following populations: infants/children born of a HIV positive mother, and any adult or child presenting with complaints, symptoms or medical conditions indicative of HIV. In addition to this, key populations are recommended to be HIV tested every 6-12 months, including MSM, SW and PWID. Pregnant women should be offered testing once as early as possible within the pregnancy.

In a relatively short time, HIV testing has become available at different levels of the health system. 158 testing centres across the country are currently providing HIV testing in Tajikistan including primary health care settings, reproductive health centres, maternity houses (71 sites), AIDS centres and district hospitals (40), STI settings (10), TB settings (6), narcology (12), and penitentiary facilities (19). Some AIDS centres are furthermore conducting outreach HIV testing approximately every 2 to 3 months via mobile units (interviews AIDS centres).

Over the past five years the number of people tested for HIV in Tajikistan has increased by over 2.5 times (210 179 in 2009 to 517 376 in 2013). The national HIV programme has a major focus on testing pregnant women. HIV testing coverage included 90% of all pregnant women who attended ANC, and 75% of all pregnant women in 2013. Rapid testing of PWID has been scaled up over the last five years, for instance, coverage of MSM with HCT increased from 89 in 2010 to 942 in 2013 (19,21), however HIV testing of key populations is still not at a sufficient level.

ART and retention in HIV care

ART and clinical care is provided in 40 AIDS centres (one national, four regional and the remaining at local and district levels) (11). ART has been available in Tajikistan since 2006, free of charge for patients, funded by TGF (14). The vast majority of PLHIV on ART are on first line treatment (98%) and on a WHO recommended ART regimen (11). Dushanbe City AIDS Centre has started to engage peers in order to improve their recruitment and retention of patients in care. This has resulted in a higher retention of patients and is considered a best practice model. In addition, social workers are employed at selected AIDS centres to increase retention in care.

Needle and syringe exchange programme (NSP)

NSP achievements in Tajikistan to date are very promising and represent some of the best coverage in the central Asian region (28). The first harm reduction programmes (NSP and IEC materials) in Tajikistan were initiated in 1999 in Dushanbe City. By September 2014, 52 trust points for NSPs for PWID had been initiated, of which 24 are run by NGOs and 27 are located in conjunction with AIDS centres. Both settings also conduct outreach. These trust points provide free access to HIV preventative services such as needle and syringe exchange, condoms, HIV counselling, information and education materials, a voucher system for referral to HIV rapid testing, but not actual HIV testing. Some trust points also provide peer support to PLHIV on ART and self-help groups. In 2013, trust point services were used by 9202 PWIDs, to each of whom an average of 175 needles and syringes were issued annually under a needle and syringe exchange programme. Using the estimated size of PWID, this translates to about 70 needles per PWID in Tajikistan. From 2009 to 2012, there was a reported 50% increase of PWID who reported using sterile injection equipment the last time they injected (1).

Opioid substitution therapy (OST)

OST has been included in the National Programme to Combat HIV/AIDS in the Republic of Tajikistan for the period of 2011-2015, and is recognized by the government as an effective means to reduce the spread of HIV among PWID³. The legal framework allows OST⁴, and national guidelines on the implementation of OST are in place (41).

OST was introduced in Tajikistan as a pilot in 2009, and currently OST services are provided at five narcology centres across the country (in Dushanbe, Khujand, Khorog, Kurgan-tube, Kulyab), each with a capacity of approximately 100 patients. A total of 516 patients received OST in 2013. In Dushanbe alone, 163 received OST at the time of interview. The average daily doses at the Dushanbe narcology centre were relatively high and considered satisfactory (250 mg per patient). However, a recent assessment report on OST stated that doses were low at other sites (15). In Dushanbe an 'OST user support group' is being piloted and clients appear to be satisfied with this

³ Program to Combat HIV/AIDS in the Republic of Tajikistan for the period of 2011-2015 was approved by Resolution No. 562 of the Government of the Republic of Tajikistan as of October 30, 2010.

⁴Law No. 67 "On Narcological Care", approved by the President of the Republic of Tajikistan as of December 8, 2003.

self-help group. The feasibility and efficacy of the prescription of methadone to treat opioid dependence has been clearly demonstrated in Tajikistan. Reported heroin use among OST patients in Tajikistan has reduced significantly as well as the reported number of persons sharing needles and the frequency of injections. Retention rates achieved in Tajikistan's pilot project (40-70% retained for at least 12 months) are consistent with those observed in other countries (15,21).

An additional harm reduction achievement includes the availability of naloxone is available in CSOs and relevant governmental organizations, to prevent deaths from overdose.

Prisons

HIV testing, condom and disinfectant distribution services have been introduced in the penitentiary system. NSP was introduced as a pilot in one prison (Dushanbe prison) in 2010, and has accepted a total of 38 NSP clients; currently there are 20 clients. ART coverage in prisons is substantially higher than outside prisons. Currently, 43% of all HIV positive persons in Dushanbe prison are on ART. Guidelines on methadone maintenance therapy in prisons have been developed, but the actual implementation of OST in prisons is still under consideration.

PMTCT

The newly revised PMTCT guideline is in accordance with WHO recommendations. HIV testing coverage of pregnant women has increased considerably since 2011 and antenatal centres provide comprehensive ART packages for pregnant woman and infants.

TB/HIV collaborative services

The HIV testing rate of TB patients is high. TB service staff has been trained in VCT and TB/HIV management trainings have been implemented. A TB symptom questionnaire for PLHIV was recently introduced and is systematically used at clinical appointments at the National AIDS Centre (no information from other AIDS centres). TB diagnostics and anti-TB drugs are funded through the TGF grant and are available free of charge for patients.

Data collection

All AIDS centres in Tajikistan have recently introduced a new standardised patient monitoring system whereby data from all AIDS centres are available for analysis at the National AIDS Centre. This is a great achievement. At the time of the mission, a small amount of data had yet to be entered in the new patient monitoring system (interview National AIDS Centre). This may have caused minor discrepancies in the data obtained for this report.

Legal issues

With the latest change of law, all mandatory testing has been removed from legislation and guidelines. Decriminalization of drug use and legal possession for personal use has been introduced.

5.3 Weaknesses and challenges

5.3.1 Prevention services for key and vulnerable populations (PWID, SW, MSM, prisoners, labour migrants- including their partners)

Moderate coverage of Needle and Syringe exchange Programmes (NSP)

Programmes to provide PWID with access to sterile needles and syringes are generally considered to be among the most effective means of reducing HIV and HCV transmission among PWID (WHO 2004). Despite effective NSP in Tajikistan and a high number of needles distributed per estimated PWID in Tajikistan (70 in 2013), there is still progress to be made to reach the international recommended level of 200 syringes per PWID per year (30), assuming that the estimated size of PWIDs in Tajikistan is correct. NSP coverage level was only 38% in 2013 (also assuming that the estimated size of PWID population is correct).

The mission identified the following barriers to NSP access:

- Limited funding for CSOs, including funding from the government
- Low salaries of outreach workers and, consequently, a high turnover of outreach workers and limited working hours (a few hours twice a week). Outreach workers thus have a low number of clients (maximum 40 each)
- Some PWIDs complained that they were not receiving water for injecting in NSP
- Stigma and discrimination towards PWID is abundant, even among treatment staff, medical staff in primary health care, hospitals staff, social workers, and staff in custodial settings
- Exchange of used needles is problematic because of fear of arrest if carrying needles

The mission found that clients preferred services from CSOs, but that funding for these organizations remains limited and reports of low salaries were repeatedly mentioned as being of concern during interviews with CSOs. Limited funding was reported as causing a high staff turnover of outreach workers (interviews CSOs). The consideration of increasing remuneration or incentives for outreach workers is recommended in order to increase their working hours, retain staff and increase the number of PWIDs they are able to reach. Clients further reported that sterile water should be available in the injection kits and that services for female PWIDs are limited. During interviews with service providers and CSOs, it was repeatedly mentioned that cultural norms and economic dependence on husbands or fathers impede access for female PWIDs. It is also considered inappropriate for women to go somewhere on their own, and even more to a place run by male staff.

Research has shown that to influence population level changes in rates of HIV and HCV infection, a coverage level of at least 50% of all PWID is needed (34,39,40). Reaching about 60% of all PWIDs⁵ would, according to these studies, very likely be followed by reductions in HIV and HCV infections and is a recommended target. Services should be offered close to where PWIDs reside or gather.

⁵The prerequisite for the meaningfulness of this target is of course that the estimated size of PWID is as correct as possible

Key recommendations – NSP:

- Scale up needle exchange to reach at least 60% coverage by 2017 close to where PWIDs reside or gather including in the penitentiary systems (current estimated coverage 25 – 38%)
- Provide injection kits including water for injection
- NSP should primarily be conducted by civil society including via outreach services
- Increase remuneration/incentives for outreach workers to retain staff and the number of PWIDs that are able to be reached
- Develop/strengthen services for women who inject drugs
- Continuation of providing naloxone to CSOs, and expand to also provide this to outreach workers

Low coverage of Opioid Substitution Therapy (OST)

Despite the introduction of OST in Tajikistan in 2009, OST coverage is still only reaching 1-2% of the estimated PWIDs, and the proportion of patients receiving ART in combination with OST is low (Table 9). Currently there is limited capacity at existing OST sites, with about 100 clients at each site. However the number of clients per site varied greatly (30 to 163) (Interview, Republican Narcology centre).

Table 9. PWIDs, OST and ART

No. PWID	No. PWID On OST	No. HIV+ PWID	No. HIV + PWID on ART	No. HIV + PWID on ART and OST
Estimated 23 100	516 (2013)	Estimated 2956 (using 12.8% prevalence from IBBS 2014)	419 (2013)	39 in 2011

The mission identified the following barriers to OST access:

- Limited geographical accessibility of OST and inequality in OST coverage between oblasts.
- Restrictive selection criteria for OST
- Registry requirement
- Negative attitude to drug users among prison staff, health care staff and policy-makers
- Negative image of OST among health care staff, prison staff, policy-makers, and even some PWIDs who are not in OST (“methadone is just another addictive substance”)
- Insufficient psychosocial support for OST patients
- Lack of sustainability in training of OST staff (OST is not included in curricula of medical schools)
- Limited integration of OST with TB and AIDS services at some sites
- Cultural norms, economic dependence on husbands and family members prevent women from accessing OST and other services
- Low OST doses at some OST sites (15).
- Relatively high price of methadone (0.77 USD per 80 mg solution 1:5)
- Methadone and Buprenorphine are currently not included on the list of national essential drugs

The geographical coverage of OST is still severely inadequate and a major barrier for OST access. OST is provided free of charge for all, however transportation costs for PWIDs may deter some from accessing OST. It is also concerning that only a select subset of PWID is offered OST in Tajikistan. According to the Operational Guidelines on OST of Tajikistan, only the following persons are eligible to OST: PWIDs who have been injecting opioids for more than two years have experienced two or more attempts of unsuccessful treatment and who are older than 18 years of age. This is a clear discrepancy with international/WHO standards. During interviews at the Dushanbe Narcology Centre, it was, however, conveyed that the only inclusion criteria for OST includes opioid dependence by international criteria (ICD 10 or DSM IV in the last month DSM V), over 18 years of age, IV use, and residence in the region/city where the OST program is located. It was further mentioned that preference was given to HIV and HCV infected PWIDs (Interview, Republican Narcology Centre).

In Tajikistan, there is a procedure to officially register people who are dependent upon drugs. People are entered in the registry by a narcologist when they present for care at narcology centres. Although patient information under the existing laws is confidential, there is also a legal requirement for narcology centres to cooperate with law enforcement agencies and transfer information about substance-related disorders of patients in response to a written request (42).

Negative attitudes towards drug users from prison, medical, and hospital staff were reported during interviews with clients. Throughout interviews, expressions of negative attitudes towards OST were also prevalent. We met this attitude repeatedly among different stakeholders: health care staff, policy-makers, prison staff and even PWID who were not on OST. Acknowledging the evidence of the effectiveness of OST programmes, it is surprising to see this attitude. Such negative attitudes towards drug users in general and OST specifically, most likely represent some of the most significant barriers to accessing this service. There is an urgent need to consider how to tackle this situation; and leadership from both the clinical setting as well as political leadership is needed to change the situation.

Psychosocial support is important to the success of OST, and it is recommended that psychosocial supportive therapy be delivered to every OST patient, possibly in cooperation with CSOs. Patient support groups such as the one operating in the narcology centre in Dushanbe should be available in OST facilities wherever feasible.

It is highly recommended to increase integration of care. OST should be started in narcology centres but methadone can be later dispensed in AIDS centres and other primary or secondary level health services in areas without narcology centres. ART and anti-TB treatment should be available at OST sites (see specific recommendations under health service delivery section).

It is worrying that the national OST programme is completely reliant upon international funding from TGF. Cost savings may be sought by purchasing methadone in powder form. In Kyrgyzstan the purchase price of 100 mg of methadone in 2012 was only 0.28 USD (15). The low purchase price in Kyrgyzstan is maintained through the sustainable procurement of medication from the manufacturer, and the purchase of methadone in powder form, from which the licensed pharmacies in the country produce 0.1% solution ready for use (15).

Key recommendations – OST:

- Increase the number of OST sites to at least 12, and the number of OST clients to at least 2500 (equalling 10% of the current estimated total population of PWID (including in the penitentiary systems)⁶.
- Guidelines for OST, specifically on OST inclusion criteria, should be revised in line with WHO recommendations
- Psychosocial supportive therapy should be delivered to every OST patient, possibly in cooperation with CSOs.
- Ensure patient support groups are available at OST sites wherever feasible
- Increase the integration of care (see specific recommendations under health service delivery section)
- Investigate options of methadone procurement cost savings (powder form)
- Utilize findings of the recent assessment report on OST in Tajikistan (ICAP 2013) to improve OST services

Inadequate access to prevention, treatment and care for prisoners

Since 2002, more than 600 HIV cases have been reported among the prison population. ART has been available to prisoners since 2007. As of September 2014, 43% of all HIV positive inmates received ART (data obtained during interviews in Dushanbe prison). TB incidence rates in prisons are much higher (800 cases per 100,000) than in the general population (70 per 100 000). Reports of unsafe injecting practices and unsafe sex in Tajik penal institutions are abundant (19).

There is inequality in OST availability in communities compared to custodial settings, and no system supporting continuity of treatment between these two settings. NGOs have been allowed into prisons to deliver HIV educational projects. Funding shortage interrupted these activities. No data on the effectiveness of these programs was available. As of 2014, the AIDS Foundation East-West (AFEW) will start a project in prisons and a few NGOs are involved in work with ex-prisoners.

Table 10. Prisoners, OST/HIV/ART

Total Number prisoners	On OST	HIV+	on ART
10 000 (annual turnover 14 000) (2013)	none	230 (Sep 2014)	100 (Sep 2014)

Low coverage of NSP in penitentiary system (PS)

A NSP pilot was introduced in Dushanbe prison in 2010. 20 inmates are currently using NSP, and more than 2300 syringes were distributed, indicating potentially more than 20 users or a high user rate. Return rate was 70-80%. The existence of black market inside prisons for syringes and reusing needles may be prevalent.

No OST in penitentiary system

OST is still not available in prison settings in Tajikistan despite the fact that the Ministry of Justice signed a three year action plan to introduce OST in the penitentiary system in collaboration with

⁶ OST coverage above 40% is regarded as high, coverage between 20 and 40% as medium level, and coverage below 20% - low (ref: WHO, UNODC, UNAIDS Technical Guide for countries to set targets)

UNODC in 2012. In 2014, guidelines on methadone maintenance therapy in prison settings were developed with support of UNODC; however, implementation has not been started yet. Reasons for not introducing OST in prisons were expressed as a need for additional OST training, and more advocacy among staff and decision-makers was required.

Identified barriers to NSP and introducing OST in prisons include:

- Health staff in penitentiary institutions have to report patients' diagnoses, including drug use to the law enforcement and security authorities
- Medical staff in prisons do not have professional independence from prison authorities
- Prison staff has a negative attitude towards OST and PWID in general. Methadone is considered another addictive substance. Other arguments for not introducing OST in prisons included the existence of dormitory facilities and not a cell system, and opinions such as "if there are only five OST in the community why start in prisons" and "if OST is not present in all prisons, how can the patients be moved to another prison". These obstacles may be investigated and solutions provided in Tajikistan's operational guidelines for OST in prisons
- Lack of adaptation of OST guidelines in prisons by MOH MOJ and MOI

Key recommendations – prisoners:

- Guidelines for OST in prisons that the technical group has developed should be adopted by MOH, MOJ and MOI as soon as possible.
- Initiate OST projects in at least two prisons as soon as possible (potentially accompanied by a study tour to a country with an existing, well-functioning practice of OST and NSP in prisons)
- Scale up NSP provision to at least four prisons by 2017
- Provide training on awareness of NSP and OST benefits for staff in penitentiary institutions and for prisoners
- Build capacity through the training of medical staff in prisons, especially regarding OST
- OST should be continued in short-term detention centres and remand prisons and the continuation of care following release should be ensured

Insufficient funding for Civil Society working with SW

There are 24 friendly service points (cabinets) operational in Tajikistan, of which 15 are run by NGOs. Prevention programmes for sex workers have reached out to a total of 7600 people, which constitutes 60% of the estimated number of sex workers in the country. Despite the high and increasing coverage, condom use is reportedly decreasing (1,21).

The mission visited just one friendly service point for SW (Red Rose) and its clients included mostly women living with HIV and their children. The friendly service points provide legal services (free consultation by lawyers), HIV counselling, referral for testing, and job creation projects. ART is provided free of charge but for all other diseases (including severe mental health problems and physical disorders), the service points have less than 10 USD for all medications. It is essential sustainable funding is explored.

Very limited prevention activities for MSM

There are 13 friendly cabinets for MSM (all run by NGOs) providing services in Tajikistan. The coverage of MSM with preventive activities is much higher in HIV negative MSM (39.5%) than in HIV positive MSM (0.7%). The WHO mid-term review from October 2013 reports programme targets for prevention in MSM are inadequate. This mission did not visit MSM services, but the

literature review and sexual transmission data suggest a hidden epidemic among MSM in Tajikistan.

Avoidance of health seeking behaviour among migrants

The mission did not visit migrant friendly services specifically, however, it was identified that a treaty or international agreement was absent, particularly between Tajikistan, the Russian Federation and Kazakhstan, to offer free HIV and TB or general health services to HIV or TB patients irrespective of their legal status in the particular country. The mission received reports that illegal migrants feared the health system would not respect their rights of non-disclosure of HIV, TB or drug dependency status, leading to avoidance of health services by illegal immigrants (interviews (38)).

Inadequate focus on sexual partners of key populations

Condoms are distributed at trust points but despite this, the majority of PWID and MSM are married and practice sex without a condom (9). Interventions and services for partners of key populations are currently limited.

Key recommendations – safe sex promotion:

- Further education, counselling, and safe sex promotion including the use of condoms for SW, MSM, PWIDs, and migrants in friendly cabinets and trust points, with the inclusion of partners.

5.3.2 HIV testing and linkage to care

It is estimated that 60% of all PLHIV in Tajikistan have not yet been diagnosed. Limited HIV testing is thus a major barrier to improving HIV morbidity and mortality rates and preventing further transmission of HIV in the country.

Despite the fact that the number of tests for HIV annually has increased in the past five years (from 210,179 in 2009 to 517,376 in 2013), HIV testing still predominantly targets pregnant women, donors, medical personnel and migrants. Testing of key populations (PWIDs, SW, prisoners, MSM) accounted for less than 4% (18.727 out of 517.376) of all tests for HIV in 2013 (Table 11).

Table 11. HIV Testing data 2013 (11)

Population	Size of population	Number of HIV test/Number of persons HIV tested in 2013*	Newly detected cases (national case reported data)	% tested positive	Testing coverage (%) of estimated size
All	8 208 000	517 376	876	0.17%	6%
Pregnant women	248 000	186 269 in 1 st trimester (90 769 in 3 rd trimester [#])	74	0.04%	75% of all pregnant woman (90% of all visiting ANC)
Donors	?	34 467	19	0.06%	?
Migrants	744 000	29 500	107	0.36%	4%

Medical staff	?	42 608	3	0.01%	?
Military	?	5999	0	0.00%	?
Foreigner staying >3 months	?	12 007	1	0.00%	?
PWID	23 100 (est.2014)	9872	182	1.8%	43%
Prisoners	14 000 (annual turnover)	2734	48	1.8%	19.5%
Sex Workers	14 100 (est.2014)	6552	7	0.1%	46%
MSM	30 000 (est. 2011)	942	0	0.00%	3%
TB patients	6495**	5200***	165	3.2%	80%
People tested based on clinical indication (excl. TB)	?	38 123	168	0.4%	?
STIs	?	2467	8	0.003%	?
Contacts	?	2315	120	5.2%	?

Might have been tested in the first trimester as well

? Information not available

* Conflicting answers. It is questionable if this is number of people tested or the number of tests performed

** Total TB cases notified in 2013, WHO Global TB Report, 2014

*** Number of TB patients provided HIV testing in 2013

Quality of testing data and size estimates of key populations are questionable

Table 11 suggests a high coverage of HIV tests for some key populations (PWIDs, SW). However, it is highly questionable if this is an accurate depiction of the HIV testing coverage. It is not clear if the data provided in column 3 of Table 11 above presents the number of patients tested or number of tests. We had conflicting answers to this question. The very high proportion of estimated undiagnosed populations (60%) and the available prevalence data of key populations from IBBS, presented earlier, conflicts with data presented in Table 11. The table shows testing coverage of key populations reaching 40-45% and prevalence data below 2%. There are a number of possible explanations for this inconsistency: the number of persons tested is wrong; the estimated sizes of the populations are too small; or those persons belonging to key populations who are tested are systematically not the ones with the highest risk behaviour within this population. The last option seems statistically unlikely. Most probably, column 3 represents the number of tests and not number of persons tested, which would explain some discrepancies for at least for some populations. Either way, the quality of the testing data presented is a major concern. Data for the same period varied every time we asked for new information both during the mission and after the mission. The lack of a coding system is problematic, and may result in some cases being reported twice. In conclusion,

the reliability of some of the national testing data presented in Table 11 is questionable, as is the presented testing coverage of key populations.

Data on HIV testing of TB patients is, however, considered reliable and consistent, and appears highly cost-efficient, with positivity rates > 3% in 2013. Assuming that the approximate scale of tests of medical staff and foreigners presented in Table 11 is correct, it is not considered cost-effective to test a very large number of very low prevalence groups. A significant number of tests were based on indicator diseases, however it is not specified which conditions are represented.

Inefficient HIV testing procedures and strategies

The mission identified the following major barriers for HIV testing in Tajikistan:

- Geographical barriers/ testing is unavailable close to where key populations live or gather
- Complex, resource and time-consuming HIV testing algorithm
- Limited availability of community-based rapid testing
- Fear of breach of anonymity and stigmatization
- Low uptake of ANC and user fees for groups other than key populations, including pregnant women
- Unclear provider-initiated HIV testing strategy and HIV testing based on clinical conditions

Geographical barriers/ testing not available close to key populations

Considering the extremely late presentation of PWID (Table 7) and the large proportion of undiagnosed HIV infections in Tajikistan, this mission concluded that a major identified obstacle is inadequate HIV testing of key populations. The mission identified that HIV testing is not provided where most key populations reside, gather, or come for other services (such as NSP, OST, friendly cabinets, etc.). Adapting service delivery models to the needs of key populations is vital to achieve higher proportion of people who are aware of their HIV positive status. Despite the existence of 'Service Points' or 'Friendly Services' (85 across the country) for PWIDs, SW, MSM, youth and migrants, these service points only provide pre-test counselling and then refer the attendees to national AIDS centres for actual HIV testing. Non-medical settings, such as these service points are legally allowed to offer HIV testing services. However, until now national norms and standards have been followed, impeding the ability of NGOs to offer HIV testing. Some migrant-friendly service points are located at STI clinics and can thus offer actual HIV testing (1). The expansion of such collaborations should be considered in addition to ensuring referral and connection to follow-up care. AIDS centres are furthermore conducting outreach HIV testing approximately every two to three months via mobile units (personal communication, AIDS centre and NGOs). We would strongly recommend this model be replicated and expanded to increase testing of key populations. The geographic scope of the mobile buses and intervals by which the bus operates should be increased considerably, preferably every week, from each AIDS centre in the country in order to reach key populations. It is of paramount importance to bring services closer to key population's places of residence, gatherings, where they come for other health related services, and workplaces to ensure adequate care.

Complex, resource and time consuming HIV testing algorithm

Standard HIV testing procedures include two Elisa tests and one confirmatory Western Blot (for the latter, an additional blood sample needs to be drawn). Western Blot confirmatory testing is only carried out at the National AIDS centre. It is strongly recommended that the testing algorithm be reduced to a maximum of two tests in order to minimize waiting time and costs. The algorithm should comprise: rapid test + Western Blot; or rapid test + Elisa test; or Elisa test + Western Blot.

The number of visits to achieve a confirmed HIV diagnosis has to be reduced to a maximum of two visits.

The waiting time for results of the confirmatory HIV test (Western Blot) varies. The standard is 10-15 days in Dushanbe, but for rural areas the wait can often extend up to three months. The information flow of test results is very weak and causes further delay for those individuals tested outside the AIDS centres. The results of tests are delivered only to the AIDS centre to which this person belongs, not to the site/centre/clinic/hospital/TB centre/STI clinic/ PHC site, etc. that performed the initial test or referred the patient for testing. It is then the responsibility for that AIDS centre to follow up and find this person, which of course causes problems. Furthermore, test results are handed over to the AIDS centres only when that centre delivers new blood tests for HIV testing at the national AIDS centre. For remote areas with less frequent testing performance, such as GBAO, this can mean that several months pass before they visit the AIDS centre with new tests and receive results of confirmatory tests (Interview National AIDS Centre). Furthermore, the concept of 'confidential HIV tests' is misunderstood, as it occasionally is interpreted to presume that information is not allowed to be shared with those health care providers who are able to follow up on treatment.

Currently all rapid tests are also followed up by Elisa-testing and a confirmatory Western Blot test. It should only be necessary to use one of these as a confirmatory test after a positive rapid test.

In addition to the many unnecessary tests performed on the same blood, the current information flow is far from optimal, and the risk of losing patients during this phase is very high. It is also strongly recommended to change the information flow to a test algorithm allowing the patient to be informed of his/her status, preferably within one week, but no later than within two weeks. This could include providing results to both the AIDS centre and the site that referred/sent the blood, or sending results via fax or other appropriate media, including the new electronic database introduced in all AIDS centres, in addition to postal mail/pick up. The effect of the current testing algorithm and information flow is an abundant loss of people who do not receive the results of their positive HIV test(s).

Limited availability of community-based rapid testing

The following sites offer rapid testing in Tajikistan: AIDS centres, district hospitals, infectious disease hospitals, TB settings, penitentiary facilities, narcology settings, mobile units, reproductive health centres, maternity houses, and STI clinics. A lack of supply of rapid tests has been reported. The positive increase in the use of rapid testing for key populations over the last five years should continue its increase. It is strongly recommended that rapid testing be significantly expanded and offered only to key populations, and in other exceptional cases where a test result is needed immediately (for example, women in labour). Furthermore, of urgent priority is the introduction of community-based rapid testing for key populations including for NGOs/CSOs working with key populations (those within the needle and syringe exchange programmes, outside of the health care system, and prisoners). If legal problems occur in fulfilling national standards, a temporary solution could be to have a certified nurse/doctor do consultative outreach to NGOs or attending the mobile testing bus.

Fear of breach of anonymity and stigmatization

Stigmatization has been reported as well as a breach of confidentiality in PHC and penitentiary systems in particular (Interview with City AIDS centre, NGOs, patients, penitentiary system). It is

very important to ensure confidentiality in all instances related to health and HIV status, however, the health care provider following up on treatment of the patient should be informed.

Low uptake of ANC and user fees for groups other than key populations, including pregnant women

In 128 cases out of the total 132 MTCT transmissions to date, the mother was not tested during pregnancy or after childbirth (21). This suggests that the key reason for vertical transmission in Tajikistan concerns problems of HIV testing of pregnant women. Despite the relatively high proportion of HIV tested pregnant women (90% of all pregnant women who attended ANC in 2013), home delivery is still very common especially in remote areas and the national coverage of testing for pregnant women in 2013 was thus only 75% (Interviews AIDS centres and maternity home; 19). The proportion who visits antenatal care during pregnancy is not clear, but in rural areas it is estimated between 40-80% (personal communication, National AIDS strategy) and studies have shown that many children are not registered in the country before they enter school (1,19). Low uptake of antenatal care may thus represent a major challenge in terms of HIV testing of pregnant women as well as broader PMTCT efforts. Reaching pregnant key populations with HIV testing in particular seems to be problematic.

Despite the recent change of the PMTCT protocol in only providing HIV testing once during pregnancy, some reports of further testing of all pregnant women twice during pregnancy have been given during interviews (interview maternity home and AIDS centre). The practice of offering all pregnant women a test twice is not cost-effective and should only be considered if the pregnant woman is at high risk (active drug user, active sex worker, etc.)

HIV testing is free of charge (no user fees) only for key populations in Tajikistan. Other groups have to pay a fee for this service, including pregnant women not belonging to one of the key affected populations. The introduction of user fees for HIV testing was recently implemented and potential outcomes of this intervention are yet to be seen. It is concerning that HIV testing is not free of charge for all, particularly as key populations including pregnant women, may not want to disclose their drug use/ sex work due to the stigma associated, and if by not disclosing this information they are unable to receive a free HIV test. It is strongly recommended that HIV testing is free of charge for all people.

Unclear strategy for provider-initiated HIV testing

In relation to provider-initiated HIV testing, the symptoms or conditions that should prompt an offer of an HIV test are specified as follows in the national HIV testing strategy: “the list includes, but is not necessarily confined to tuberculosis and other disorders described in the WHO clinical staging of HIV infection” (16). It is recommended that specific national guidelines on provider-initiated HIV testing are developed, or already established guidelines on indicator disease-guided testing are endorsed (29). In addition, it should be stressed that ART should start without any delay when a person with clinical symptoms has been identified (codes 113 and 117).

Weak care pathways to HIV treatment and care

Only half of those who tested HIV positive enter into HIV treatment and care (Fig. 2), and according to personal accounts it is not at all unusual that a patient enters into care 6 months to a year after a positive diagnosis. This is another major obstacle that needs to be resolved.

Identified causes of the low proportion entering HIV treatment and care include:

- Complex and time consuming HIV testing algorithm
- Poor HIV testing set-up with several visits required before entering into care
- Poor information flow between health providers
- Very limited efforts to relocate patients not showing up to get their positive result and limited use of social accompaniment for key populations

The HIV testing system and referral into care is not optimal. Up to two separate visits to health care providers are often required, in addition to a potential rapid test taken outside an AIDS centre, before entering into care is allowed. The PLHIV currently needs an appointment with an epidemiologist before they can enter medical HIV care and finally meet the doctor who is going to treat him/her. It is advisable to alter this sequence and reduce the number of visits before entering into care to a minimum. The patient needs to feel that they are taken care of immediately by a doctor, and that an initial treatment plan is established at the same visit where the patient is notified of their positive result.

Notification of HIV test results and linkage into care between different providers (TB centres/ ID hospital/ AIDS centres, etc.) is very complex as all test results currently need to go through the AIDS centre, and the result is not reported directly back to the health care provider who referred the patient for care. This needs to be changed so that the information of a positive result without delay goes to the health care provider who referred the patient for the test as well as to the AIDS centre. Furthermore, it is strongly recommended to introduce social accompanying of key populations to increase enrolment in care.

At the Dushanbe City AIDS Centre, 'peers' are involved in the tracking of patients who miss a visit or who have not received their positive test result. Peers are volunteer PLHIV who dedicate a few hours a week to work with the City AIDS Centre, and the system has shown positive results of tracing patients. Staff at the City AIDS Centre was positive towards the peer programme and their work. It is strongly recommended that AIDS centres across the country adopt and expand this model with a formalized agreement and salary for peers, partially funded by AIDS centres. The function of peers, besides locating LTFU patients, may include adherence support, counselling, and social accompanying for key populations. A systematic approach to follow-up on patients who are not showing up to receive their HIV positive test results is crucial and urgently needed. To our knowledge many AIDS centres make no effort to locate patients who do not come to receive their positive test result.

HIV testing and linkage to care – key recommendations:

- HIV testing should be free of charge for all
- Introduce community-based rapid testing: outreach/NGO/mobile buses, friendly cabinets, in places where key populations reside or gather (outside of the health care system) including rapid testing for prisoners
- Shorten the time between taking the blood sample and delivering test results through simplification of the diagnostic algorithm: (rapid test + Western Blot OR one Elisa + Western Blot)
- Optimize information flow of test results
- Offer HIV testing without user fees to all pregnant women; HIV testing of pregnant women from key populations in particular should be promoted

- Develop specific national guidelines on provider-initiated HIV testing or endorse already developed guidelines on indicator disease guided testing
- Implement revised PMTCT guidelines, including offering only one HIV test during pregnancy, twice in exceptional cases (for example, current injecting drug use)
- Start ART without any delay when a person with clinical symptoms has been identified (codes 113 and 117)
- Provide systematic follow-up on those who were identified as HIV infected, but not enrolled in care (e.g. using ‘peers’)
- Formalize and scale up the use of peers/social workers to locate LTFU patients after diagnosis
- Scale up social accompanying for key populations
- Ensure confidentiality, including in prisons
- Introduce a coding system in order to strengthen the quality of testing data and assure anonymity
- Ensure solid estimates of the sizes of key populations

5.3.3 ART coverage and retention in care

Very low enrolment and retention in treatment and care

Referring to the HIV treatment cascade from 2013 (Fig. 2), only about half of the HIV diagnosed population are enrolled into treatment and care and of those, only half were started on ART. At the patient’s first visit after a confirmatory HIV diagnosis, the positive diagnosis is conveyed and an epidemiological investigation is carried out. At the next visit the infectious diseases specialist from the clinical department examines the patient and fills out the medical chart with prescriptions for all necessary laboratory tests (CD4+ cell count, clinical and biochemical tests, chest X-ray, etc.) This visit is considered the enrolment into treatment and care. Only at the third visit, the patient is commenced on ART if deemed eligible (14). According to the national ART guidelines all patients with a CD4 count below 350 should be started on ART. However, only 2/3 of those presenting late for care in 2013 (CD4 < 350) were started on ART. The identified reasons for those patients LTFU prior to enrolment into treatment and care at AIDS centres includes death (10.5%), migration (16.5%), incarceration (13.5%), rejecting visiting an AIDS centres (19%) or the patient did not visit a doctor (28%) (14). The many visits required before patients are started on ART are a major barrier for scaling up ART in Tajikistan. Patients are simply lost in the current system of care, potentially harming themselves, their partners and communities. They do not receive their test result, nor do they enter into the treatment phase. Follow-up on a referral for TB testing or OST is also problematic.

The vertical organization of care where patients have to physically attend another facility at the other end of the city/district, or the fact that they have to overcome another barrier of meeting new doctors to whom they need to disclose their status, are additional barriers to treatment of OIs and retention in care. Indirect data also show that ART retention and adherence are suboptimal. According to data from 2012, ART was prescribed to 1505 in total, of which 1044 continued treatment (only cumulative numbers are available) (WHO mid-term review). Lack of time and resources dedicated to follow-up investigation and locating patients LTFU from the side of the providers and limited use of social accompanying further impedes enrolment and retention in care. It is strongly recommended to increase efforts to locate patients LTFU, by more efficiently using staff already employed and expanding the use of peers for this purpose (see also the section on

human resources). Increasing the use of social accompaniment is also essential in order to increase enrolment and retention in HIV care. It should further be stressed that ART should start without any delay when a person with clinical symptoms of HIV has been identified.

Social workers are employed at oblast level AIDS centres and have in their TOR the responsibility to provide counselling and track patients LTFU. However, from interviews it was clear that their actual work was more similar to a secretarial or administrative function that included duties such as finding paper journals, and duplicating patient data from one form to the other. Less than half of their time was actually spent on finding patients LTFU or counselling, despite their motivation and willingness to work according to their TOR. Furthermore, if a LTFU patient's physical address was far from the AIDS centre, social workers would not go into the field to locate this person due to a lack of money for transportation. It is highly recommended to revisit the actual workload of social workers and delegate administrative work to secretaries or other supportive staff. Social workers are key to optimizing the linkage into care, promoting adherence by locating all patients who do not receive their positive test results or who miss a visit, and to providing social accompaniment and comprehensive professional counselling and social support for PLHIV and their families. Introducing ART and OST self-help groups where feasible, potentially with the assistance of formalized 'peers,' is another instrument to increase adherence to ART.

Time for counselling on adherence and tracing patients LTFU is reportedly very limited. The amount of secretarial work should be substantially reduced for doctors capable of providing ART, nurses and social workers employed at AIDS centres. Emphasis should be on getting PLHIV into care and providing ART, including adherence support rather than reporting and documenting, which presently takes up more than half of their day (see also section on inefficient use of human resources).

The introduction of an appointment system for patients is additionally recommended, while still being flexible enough to allow drop-in patients. Reports of long waiting times or even attending when the doctor is not at the office, are contradictory to promoting retention in care. Appointment systems would also encourage consistency, with the patient seeing the same doctor as often as possible, which may also increase retention in care. An SMS reminder system would be a useful tool as well, as most people in Tajikistan, including most PWIDs, own a mobile phone.

To promote retention in care, fixed dose combinations are preferred; one tablet per day, for first line ART regimen, particularly for key populations. The recommended 1st line regimen for ART naive patients is TDF/XTC/EFV.

Insufficient budget for procuring medicines to treat OIs

ARV stock outs were reported in 2012 for a total of 1.5 months in Dushanbe AIDS centre. Since then, no stock outs of ARVs have been reported. Medicine for treating OIs on the other hand has continuously been reported as insufficient (14), and a barrier to optimal treatment of PLHIV. Increasing the budget for procurement of OIs and secure equal distribution across the country is recommended.

Low proportion of PWIDs on ART

Over the last decade, the proportion of PWIDs who are on ART has more than halved. Whereas PWIDs accounted for between 53% and 70% of patients on ART between 2006 and 2010 (ART assessment report), in 2013 PWIDs only accounted for 30% of all those on ART. Although the

relative proportion of PWIDs diagnosed with HIV has also decreased over that period, this does not fully explain the dramatic decrease. Lack of ART initiation and increased mortality of PWIDs could be additional explanatory factors. We found a somewhat reluctant attitude among some providers through interviews, to start active drug users on ART due to concerns regarding adherence. However, literature shows that OST enhances PWID adherence to HIV treatment⁷. Broadly, ART outcomes are reported as better among drug users receiving OST compared to drug users not receiving OST. Opioid substitution therapy was independently associated with HIV Type 1.RNA suppression in several studies, and in one study an increase in CD4 cell count was also associated with OST. The positive effects of OST on ART adherence may be explained by a stabilization of the patient's social situation, regular access to care and referral, being accustomed to taking medication on a daily basis, as well as an improved social support network. Expansion of the Tajik methadone substitution treatment programme and optimising OST quality deliverance is essential to achieving greater retention in care of PWIDs, as is training and awareness of clinicians on these issues. Significant impact on the HIV epidemic among PWID will only be achieved by providing in combination, comprehensive services such as NSP, OST and ART (34,35).

Prisons represent a unique opportunity to enrol all eligible patients into care. Currently 43% of all HIV positive prisoners in Dushanbe prison are on ART. This is a respectable achievement, however the need is most likely higher, and data from other prisons were not available.

Challenges in appropriate clinical management of PLHIV

National AIDS Centre staff provides training to clinical staff at other AIDS centres every year across the country in the clinical management of HIV. This mission only assessed the capacity of clinical personnel in Dushanbe city, and their understanding of the clinical management of PLHIV was satisfactory. However, a recent ART assessment report shows that despite much training in the past, clinicians from the AIDS centres across the country report challenges in the proper clinical management of PLHIV. The report concludes that treatment quality remains suboptimal. The absence of institutionalization of post-graduate HIV, HIV-TB co-infection and drug-dependency related training for health professionals, and training for members and workers of CSOs involved in the prevention and care of patients with these diseases, leads to repeated requests for funding of training and capacity building. This does not seem to be cost-effective. Recurring costs of trainees for travel and subsistence during the courses are a burden, which may be prevented by using online training and institutionalization of training. Nevertheless, continued in-service training of clinicians should be a priority, but cost savings for these programmes should be sought. It is recommended to

⁷ See Fiellin et al (2011). Drug treatment outcomes among HIV-infected opioid-dependent patients receiving buprenorphine/naloxone. *J.Acquir.Immune.Defic.Syndr.*, 56 Suppl 1, S33-S38. Gowing et al (2008) Substitution treatment of injecting opioid users for prevention of HIV infection. *Cochrane.Database.Syst.Rev.*, CD004145. Gowing et al. (2011). Oral substitution treatment of injecting opioid users for prevention of HIV infection. *Cochrane.Database.Syst.Rev.*, CD004145. Lloyd-Smith et al (2006). Impact of HAART and injection drug use on life expectancy of two HIV-positive cohorts in British Columbia. *AIDS*, 20, 445-450. Malta et al (2010). Adherence to antiretroviral therapy among HIV-infected drug users: a meta-analysis. *AIDS Behav.*, 14, 731-747. Malta et al (2008). Adherence to antiretroviral therapy for human immunodeficiency virus/acquired immune deficiency syndrome among drug users: a systematic review. *Addiction*, 103, 1242-1257. Spire et al. (2007). Adherence to HIV treatment among IDUs and the role of opioid substitution treatment (OST). *Int.J Drug Policy*, 18, 262-270. Stotts et al. (2009). Opioid dependence treatment: options in pharmacotherapy. *Expert.Opin.Pharmacother*, 10, 1727-1740. Sullivan & Fiellin (2005). Buprenorphine: its role in preventing HIV transmission and improving the care of HIV-infected patients with opioid dependence. *Clin.Infect.Dis.*, 41, 891-896. World Health Organization (2005). Effectiveness of drug dependence treatment in preventing HIV among injecting drug users World Health Organization, Geneva, Switzerland.

make use of the recent comprehensive ART assessment report (14) when planning continued in-service training.

Laboratory obstacles

All ARV and TB drugs, HIV diagnostics (rapid test, Elisa test, Western Blot, CD4 count and VL tests) are exclusively funded by TGF. CD4 counts are available at the regional level and VL tests only at the national level. In theory, CD4 cell count should be measured at enrolment into care, however, it is not consistently collected. In 2013, of the 384 enrolled within care, only 333 had a CD4 count measured in the same year. There are five CD4 measuring devices in the country at present, but more are planned for implementation. Plans on how to collect samples from remote areas were in place, but how well these plans work in reality was not clear. No data on CD4 counts outside Dushanbe were presented. Lack of transparency in providing laboratory data on CD4 counts outside Dushanbe makes a reliable estimation of the country's epidemic difficult. Increasing the availability of CD4 testing considerably, and introducing this also at diagnosis is recommended, including in remote areas. It is recommended to increase access to CD4 count at time of diagnosis, every 6 months for those not on ART, and following, once every second year.

VL testing is only available at the National AIDS Centre where availability is very limited due to budget constraints and the capacity of equipment. The VL lab takes part in quality control rounds of National Reference Laboratory of Australia in Melbourne. However, no data on the results of quality control were presented. It is estimated that 5000 samples per year would be the maximum capacity of current equipment. The sustainability of the technical laboratory staff is also vulnerable due to low salaries. The capacity of the current VL equipment will become saturated in 2015 if the number of people on ART increases in a linear fashion to 6000 by the end of 2017 and if the target for VL measurements is followed (one VL at the baseline before ART and then VL every six months whilst on ART). Tajikistan may require consultation regarding appropriate laboratory equipment considering the sample logistics in the country, the level of education of the laboratory staff, and available funds. There is a need to increase training of laboratory staff in VL measuring, both in Dushanbe (to provide back up for the one person currently capable of PCR) and for other areas of the country.

An HIV drug resistance monitoring system does not exist and collection of early warning indicators is not included in the implementation plan.

Pregnant women and ART

The percentage of HIV-infected pregnant women who received ART in 2013 to reduce the risk of HIV transmission from mother to child ranges from 32% (21) to 56.1% (1,3,21). Data sources are thus not consistent.

The transfer from ANC to AIDS centres after delivery may be a weak point in the treatment continuum of women who have given birth. It is recommended initiation of ART at ANC, and also the continuation of ART after giving birth without any interruptions is ensured, by strengthening linkages between ANC and AIDS centres. Dispensing of ART in ANC should continue, as well as training clinicians at ANC in ART.

A National strategy on the continuous quality of care improvement is absent

A comprehensive national strategy on the continuous quality of care improvement is absent. The number of health institutions, and communication and collaboration between health institutions is not supported by a standard. This manifests itself in long delays of reporting positive HIV laboratory test results to the institution or doctor who is required to follow up care.

ART coverage and retention in care – Key recommendations:

- The same doctor is to see the same patient wherever possible
- Introduce appointment systems and SMS reminders for appointments where feasible
- Closely follow up patients who miss a visit (for example, via peers, nurse, social workers)
- Counsel on adherence (by peers, nurse, social workers, doctors)
- Support ART and OST self-help groups
- Reduce the amount of secretarial work for doctors capable of providing ART; the emphasis should be on getting PLHIV in care and providing ART (see also specific recommendations under Health Service Delivery)
- Increase access to CD4 count at the time of diagnosis, every 6 months for those not on ART, and following, once every second year
- Provide regular VL monitoring for PLHIV on ART (e.g. one baseline testing prior to ART and twice a year on ART)
- Invest in viral load equipment due to the necessary expansion of ART coverage and the subsequent increase of people enrolled in care
- Increase the number of human resources with capacity to handle PCR
- Provide systematic training of clinicians at AIDS centres on HIV clinical management (consider options of online training)
- Build the capacity of ANC centres and OST sites in relation to dispensing ART
- Ensure 100% access to ART for all eligible inmates
- Prioritize fixed dose combinations, one tablet per day, for first line ART regimen, particularly for key populations. Recommended 1st line regimen for ART naive patients: TDF/XTC/EFV
- Ensure an adequate budget for procuring OI medicines and equitable distribution across the country
- Optimize OST quality deliverance (optimize individual doses, provide psychosocial support)
- Enhance data collection on hepatitis C co-infection

5.3.4 Health service delivery and infection control

Limited integration of care

HIV services are vertically organized and financed separately from the general system of public health and separately from narcology/OST, STI, TB services and the Sanitary-Epidemiological Services (SANEPID). Linkages between out-patient and in-patient care are weak, as well as linkages with other vertical programmes (TB, ANC, prison settings, narcology). Patients are being referred, but many never follow up on this referral (Interviews TB centre, AIDS centres).

It may make sense to organize and finance the acute phase of an emerging infectious disease as a vertical system. However, if and when the situation stabilizes, when co-morbidities become manifest, the need for effectiveness and efficiency materializes to broaden the care for HIV patient services (33). Integration of HIV services should be considered as part of an encompassing

approach to integrate all relevant vertical disease-oriented health systems. Such integration would lead to more effective and efficient use of infrastructure, financial resources, human resources and management capacity. It will additionally make HIV-oriented services more sustainable and most of all become more patient centred.

Comprehensive integration of all community-oriented HIV and HIV/TB involved vertical systems in one institute for public health, dedicated to the common public health functions, and all individual-oriented HIV and HIV/TB services into the mainstream system of primary, secondary and tertiary care, may represent the solution in some countries, but the current state of the epidemic (concentrated to key populations) in Tajikistan does not call for such large scale integration, and it is not feasible during the next three-year GF grant period. Given the urgency of coping with the HIV epidemic and its still concentrated incidence and prevalence, focusing on key populations is warranted. Hence, smaller but most likely very cost-effective steps are recommended hereafter. However, the MOH should nevertheless embark on the development and implementation of a comprehensive integration policy and plan, in order to free up its scarce financial and human resources to cope with the current epidemic, the growing chronic character of AIDS, and the expanding need for continuous ART. Suggestions for an approach to shift from institutional to functional assigning of health interventions to existing or new, to-be-established (for instance, merged) institutions have been included in an earlier WHO report (38).

Strengthening the capacity at a PHC level, which the MOH is carrying out as a pilot, is laudable to assist in raising awareness, prevention and HIV testing; however, further scaling up in PHC is at this stage of the epidemic is not considered cost-effective. Resources are better spent in areas with the highest concentration of key populations and these are not known to frequent the PHC facilities. Reports of fearing a break of confidentiality with the family doctor and reluctance to disclose HIV status to the family physician, stigmatization and discrimination in primary health care facilities and the community, are major concerns. (interviews AIDS centres; 1). Furthermore, In Dushanbe alone more than 45 PHC facilities exist. Efforts to build capacity in all PHC facilities to dispense ART, etc. is not considered cost effective, particularly considering that 40 existing AIDS centres already have been set up throughout the country. However, HIV testing and efforts to de-stigmatize HIV should of course continue in PHC settings, and HIV testing on clinical indicator diseases could be promoted and enhanced as previously mentioned.

At the present stage of the HIV epidemic, and considering the current health system set-up, it is the opinion of the review team that Tajikistan would greatly benefit from introducing the thoughts of a 'one stop shopping' or 'shared care' model in relation to services for PLHIV⁸. Offering services where the patient is already seen for care, instead of requiring the patient to go to different locations to receive treatment for different diseases, is the fundamental thought in both models and has proven effective to increase clinical outcomes (44). Specific recommendations for how collaborations could be strengthened for those TB/HIV co-infected, and PWID infected with HIV, are provided below. This could represent important first steps towards a more integrated HIV service delivery model in Tajikistan, which may also cover diagnostics and treatment of STIs and broader sexual and reproductive health, Hepatitis C, etc. at a later stage.

⁸ "Shared health care is a model of integrated health care delivery in which the collaboration among practitioners of different disciplines or with different skills and knowledge allows for the delivery of patient health care by the most appropriate health care practitioner" Ref: Poulton BC, West MA. The determinants of effectiveness in primary health care teams. *Journal of Interprofessional Care*. 1999;13(1):7-18.

TB/HIV collaboration

The proportion of TB/HIV co-infected patients on ART has increased over time, but is still insufficient (In 2011, 57.4%; and in 2012, 67.2%) (1). According to national clinical guidelines, TB patients should start ART irrespective of CD4 count and within two weeks after anti-TB treatment has started.

It is crucial to obtain TB diagnostics as quickly as possible in order to prevent any further delay in the initiation of anti-TB treatment and ART, and consequently improve survival.

The identified barriers to TB diagnostics and treatment of TB/HIV co-infected patients include:

- No rapid TB diagnostics are available at AIDS centres
- TB diagnostics are confirmed by a consortium of TB doctors before anti-TB treatment can be initiated
- Anti-TB treatment is not available at the majority of AIDS centres.

The consequent late initiation of TB treatment means that ART initiation is also deferred. Considering that TB is the leading cause of death among PLHIV, these service delivery issues should urgently be resolved while rapid diagnosis and prompt initiation of both TB and HIV treatment should be prioritized. It is recommended to offer rapid diagnostics and treatment initiation of TB at AIDS centres in parallel to simplifying both diagnostics of HIV (as described in the previous section) and TB, thus limiting to a minimum the time starting the necessary treatment and care for the patient. Since 2010, the rapid molecular test Xpert MTB/RIF has been recommended as the primary diagnostic test for TB among PLHIV who have TB signs and symptoms. WHO further recommends ART for all HIV-positive TB patients within the first 8 weeks of initiation of TB treatment, irrespective of their CD4 cell count, and even earlier initiation of ART (within two weeks of TB treatment) for those TB patients with profound immunosuppression (CD4 cell count less than 50) (36).

Consultative visits or part-time employment of TB specialists to AIDS centres and OST sites to offer TB treatment, which is already happening at a few AIDS centres in Tajikistan, should be scaled up considerably.

PWID /HIV/TB/Hep C

Currently PWID are required to show up at AIDS centres to receive ART. It is strongly recommended to introduce dispensing of ART on-site in OST centres. Furthermore, only a few narcology centres offer TB treatment by regular consultations of TB experts. This should be expanded to all OST sites. OST should be dispensed in AIDS centres if no other options of OST exist within a district. OST should also be dispensed in all hospitals by outreach OST providers in order to enable treatment continuation. It was mentioned in interviews that hepatitis C was believed to be a major reason for PWID defaulting on ART. Data supporting this is not available, and in general, data on hepatitis is scarce in Tajikistan. Drugs to treat HCV are available but in insufficient quantities and are not free of charge for patients. Currently hepatitis C testing is offered free of charge at a few PHC centres (interviews, AIDS centres), but is generally only available with substantial user fees in Tajikistan. It is recommended to introduce testing for hepatitis C and hepatitis B immediately in PLHIV who inject drugs and later expand testing strategy to include all PLHIV. Obviously, treatment of hepatitis C would be optimal, however, considering current prices for hepatitis C treatment, and the limited budget available both from TGF and the GOT, this may

not be feasible at present. Should prices of hepatitis C medication decrease, which may occur within a reasonable timeframe, it is recommended treatment is prioritized also.

Referral from ANC/infectious disease hospitals/TB hospital/ prison health

Following treatment from one facility or after release from prison, HIV patients are currently referred to continuation of ART in AIDS centres. However, very few resources are available to facilitate this referral and patients, especially key populations, are at high risk of discontinuing treatment. Social accompaniment for key populations, introducing appointment systems when referred, operational follow-up by AIDS centre, and using more active community-based organizations to facilitate this linkage, could potentially increase the success of referral. In addition, it must be stressed that ART should be dispensed in all hospitals (ID, TB, etc.) either by outreach ART providers or by training infectious disease specialists of hospitals.

Key recommendations – Integration of care:

- Dispense ART on site in OST centres
- Provide ART in all hospitals by outreach workers or by training infectious disease specialists to administer ART
- Dispense OST medicines in AIDS centres if no other options of OST dispensing exist within a district
- Provide OST in all hospitals by outreach OST providers enabling continuation of OST
- Offer TB diagnostics at AIDS Centres (AC) by procuring four fast TB testing machines such as the GeneXpert MTB/RIF system (e.g. placed at Dushanbe City AC and oblast level ACs in Sogd, Kulyab, and Kathlon Province).
- Have a TB diagnosis made by a single TB doctor instead of by multiple doctors
- Provide a clinical TB expert on the premises of AIDS centres and OST sites (e.g. part time/consultative visits) for diagnosis and treatment
- The continuation of HIV treatment and care started in ANC/ID hospitals/TB hospitals/prison health, etc. should be strengthened in particular for key populations (including social accompanying for key populations by peers/social workers; operational follow-up by AIDS centre, actively using community-based organizations to facilitate this linkage)
- HIV treatment is not to be decentralized into PHC (too early considering stage of epidemic and number of PLHIV), however, HIV testing in primary health care should continue but with active referral to follow-up from AIDS centre in regards to enrolment into treatment and care

Inefficient use of human resources

Despite the ‘brain drain’ which is often referred to in Tajikistan, the number of qualified staff working at AIDS centres in the country, including infectious diseases specialists, is high considering the current low number of HIV cases in Tajikistan. For every infectious disease specialist employed at AIDS centres across the country, the current HIV caseload is an average of about 150 people (21 infectious disease specialists for 3137 patients in care) (11). In addition to infectious disease specialists, AIDS centres have a total of 6.5 paediatricians, 7.5 obstetricians/gynaecologists, 4.5 TB experts, 5.5 psychologists, 12 medical nurses, 5 social workers, 29 epidemiologists and 13 epidemiologist assistants (11). In conclusion, we are seeing in Tajikistan a lower-than-average caseload than most other countries and on paper it means that each infectious disease specialist could manage to see all of their patients within one month.

Despite the lower-than-average caseload, staff at AIDS centres complains about being overloaded with work, but reasons for this should be sought elsewhere than doctor-patient ratio. Problems in relation to human resources are more related to a skewed distribution of staff across the country and a high turnover of staff due to the low salaries. It is important to note that most clinicians employed at AIDS centres are spending the majority of their time (reportedly 4-5 hours per day) on reporting, documenting, entering in databases and doing other secretarial work (Interviews AIDS centre and narcology centre; 14). The current reporting obligations of HIV doctors are not a cost-effective use of their time and reduce patient-doctor contact time, time available for counselling, and outreach work. In addition, keeping positions and office space, while not filling vacancies in order to increase the remuneration of employed staff is not cost-effective and is an inefficient use of available resource.

The same burden of administrative workload is observed among other trained staff at AIDS centres including social workers and medical nurses. Employing secretaries or administrative staff to carry out this work would allow these trained personnel to focus on what they are employed and educated to do, namely, handling patients, counselling and social support, tracking down patients LTFU, outreach work, etc. It is also recommended within the TOR, to include provisions for outreach work for community-based HIV testing, to be performed by medical nurses or doctors.

Unnecessary duplication in reporting was also observed in AIDS centres and ways of diminishing this duplication of work should be investigated.

The number of manual support staff at AIDS centres (electricians, plumbers, cleaning staff, security staff, etc.) is considered very high (e.g. seven full-time staff at the National AIDS Centre alone). It is highly recommended to carefully review the need for this quantity of full-time staff, and for ways to increase the efficiency of those that are required. It should be considered whether some of the resources spent for these functions could be directed towards increasing the number of secretarial/administrative staff thus freeing up the time of doctors, nurses and social workers for tasks they alone are mandated to perform. Also the quantity of epidemiology and M&E staff appears very high. Currently, there are almost as many epidemiologists (n=33) as there are doctors (n=45) employed at AIDS centres in Tajikistan. The number of epidemiologists employed is overwhelming considering the still relatively low level HIV epidemic in Tajikistan and it is the opinion of the review team that resources could be spent more cost-effectively (for instance, finance other urgently needed staffing priorities such as scaling up employment of TB specialists).

Another area where efficiency could be improved is the frequency of patient visits. During the mission, the team identified that approximately 70% of the patients who are on ART are asked to come every month, with the remaining 30% every third month (Interview AIDS centre). This is not considered cost effective and may even compromise retention in care.

The recommended intervals of seeing HIV patients are:

Without ART:

- CD4 350 – 500: every four months
- CD4 over 500: every six months

On ART:

- After starting ART: the first visit in two to four weeks
- Thereafter, during the first year, every three months
- Thereafter, three to six months

- Requirement for six-month intervals: the last two viral loads below the limit of detection and the patient is adherent to ART

Finally, the mission found that staffing norms for HIV/AIDS sector staff were absent in the National Human Resources (HR) Plan. It is strongly recommended to include staffing norms for HIV/AIDS staff in the National HR Plan. They should be based on review results of particular staffing needs and patient load, these being optimal in regards to efficiency and quality of care. Similarly, in order to optimize diagnosis and treatment, offer continuity of care and preventing withdrawal of staff and patient commitments while improving efficiency, it is recommended to update norms for health care staff based in other institutions such as TB and narcology centres, to facilitate their consulting activities in AIDS centres and other health facilities.

Key recommendations – Human Resources

- Free up clinical time in order to expand ART provision by:
 - Minimizing clinician’s administrative burden, by delegating to non-clinical staff, duties such as:
 - paperwork (while avoiding duplication)
 - entering data in databases
 - counting of pills
- Include in the TOR medical nurse/doctor outreach work for community based HIV testing
- Critically look at the workload of manual staff and epidemiologists at AIDS centres and consider the required number of staff
- Consider increasing the interval by which HIV patients on ART are seen for care
- Introduce incentives to facilitate a more equal caseload at AIDS centres across the country
- Consider technical assistance to optimize health service delivery, organization, human resource optimization and strengthen management capacity
- Include staffing norms for HIV sector staff in the National Human Resources Plan

Critical issues regarding health information systems

The Electronic HIV Case Management System is in place at all AIDS centres in Tajikistan, which is a great improvement. Focus should now be on assuring that quality data are continuously being entered. Data collection in the case management system for incarcerated persons was not as comprehensive as for PLHIV receiving care in the regular health system. It is advised to implement systematic quality control on data in the HIV Case Management System and analyse key information on a regular basis, including progress in relation to the ‘HIV treatment and care cascade.’ These analyses should be strategically used for policy-making.

At present, CD4 count at diagnosis is not collected and not all patients enrolled in care have a CD4 count measurement. Continued efforts to record CD4 count at diagnosis are crucial and should be regarded as a high priority to improve the quality of surveillance data. Currently, data are available on CD4 count at first presentation to care, but this is limited to the people actually linked to care. As viral load is scaled up, it needs to be ensured that the newly introduced electronic case management system should be able to register these data.

The current interpretation of ‘anonymous testing’ impedes access to reliable testing data. When ‘anonymous testing’ is applied, data on age, transmission mode, sex, etc. is not collected. Considering that 1.3% of ‘anonymous testing’ (n:79) tested positive out of 6099 tested, it is important to at least receive information about the persons transmission mode. The test can still be

anonymous in terms of not providing a name and address as long as a code is assigned. We strongly encourage introducing a coding system to improve the quality of testing data and to assure anonymity.

The main concern regarding the UNAIDS based estimates for Tajikistan's total PLHIV is the potential lack of accurate data on the size of the PWID population. It is recommended to introduce methods other than Spectrum/UNAIDS to estimate the number of undiagnosed PLHIV and to scrutinize the quality of recent estimations of the size of key populations. We would strongly recommend that more solid estimates of the sizes of key populations are carried out, whereby capacity development to improve modelling of key populations should be considered.

Data collection on TB/HIV coinfecting patients was weak and should at least include reporting and analysis of MDR/XDR-TB coinfection among PLHIV. Likewise, epidemiological data on hepatitis and hepatitis coinfection in particular were very limited. An epidemiological study of hepatitis B and C virus among PLHIV and PWID in Tajikistan should be considered, including other areas besides Dushanbe. The study may also include sample collection to genotype HCV in Tajikistan. These data would provide information to plan for HCV treatment in the future.

Key recommendations- Health information systems

- CD4 at diagnosis should be collected and analysed
- The quality of the recent estimations of the size of key populations should be scrutinized
- Geographical information of key populations (in particular PWIDs) and modelling to estimate size should be enhanced. Capacity development to improve modelling of key populations should be considered
- Introduce methods other than Spectrum/UNAIDS to estimate the number of undiagnosed PLHIV
- Strengthen data collection from prison health systems
- Strengthen the collection of national data on TB/HIV co-infection and include reporting of MDR/XDR-TB co-infection data
- Perform systematic quality control of data collection
- Analyse key information on a regular basis, including the 'HIV treatment and care cascade,' and use this information for policy development
- Consider conducting an epidemiological study of hepatitis B and C virus among PLHIV and PWID in Tajikistan

Escalating transmission of HIV among children – Potentially alarming infection control issues

The rapidly growing number of children below 15 years of age diagnosed with HIV, including those with an 'unknown' route of transmission, is profoundly concerning. The lack of epidemiological investigation and follow-up interventions on the escalating number of 'unknown transmissions' among children is even more concerning.

The mission found that over the last three years an increasing number of children below 15 years (the majority between 2-4 years of age at diagnosis) were found to be HIV positive with an unknown transmission mode (48 in 2011, 104 in 2012, and 83 in 2013). Many of these children were presenting late with low CD4 cell counts. Neither the mothers nor the fathers of these children were HIV positive. This suggests that nosocomial infection has been taking place and may still be taking place, potentially combined with unsafe ritual male circumcision in rural areas (anecdotal

reports). However, unsafe male circumcision alone cannot explain the situation as approximately 1/3 of the HIV positive children were female.

It is of urgent priority to conduct an epidemiological investigation of recent new HIV infections diagnosed in children without HIV positive parents, and identify the possible causes of transmission of HIV to these children and act appropriately.

In the meantime, it is of utmost relevance to scrutinize the implementation of infection control programmes and build capacity to ensure safe injecting practices and infection control in all health facilities. It has previously been reported that “lack of single use commodities alongside with weak monitoring system, undermines government’s efforts to mitigate HIV transmission in the clinical care settings” (46). Standard precaution practices, including the availability and use of gloves and other precaution measures, should be promoted country-wide as should advocacy for voluntary unpaid blood donation. Research on how other countries have implemented voluntary blood donation and what would be feasible in Tajikistan is likely to be beneficial as a first step.

Indications for the use of injections and blood transfusions may require review, as the mission received anecdotal reports of injections that could have been avoided. Staff should review the guidelines and standard operating procedures regarding the need to prescribe and administer injections, and the use and administration of blood and blood products.

Finally, a policy to encourage the reporting of medical errors without fear of punishment of any kind is recommended to identify issues within the health facilities.

Key recommendations – infection control:

- Investigate epidemiological data of recent, new HIV infections diagnosed in children without HIV+ parents
- Ensure the implementation of international standards on the clinical use of blood, possibly reducing the number of transfusions, thus reducing the risk of transfusion related infections and adverse reactions
- Develop capacity to ensure safe injecting practices and infection control in all health facilities, while adjusting the indication to use injections to international standards
- Advocate for voluntary unpaid blood donation
- Encourage the reporting of systematic problems within institutions to take action to improve services.

5.3.5 Enabling environment

Underutilized community systems

During the mission it was a recurring concern of CSOs that funding was low and government funding was not provided. A more formalized role of CSOs should be investigated in the future national HIV programme. CSOs could potentially become contracted by the government to carry out HIV prevention work, promote and increase access of key populations to HIV testing, enrolment and retention in care, in collaboration with AIDS centres and other stakeholders under supportive supervision and with continuous quality control.

Key recommendations – Community Systems:

- Strengthen community systems by formalizing their responsibilities, offering supportive supervision and financial support
- Strengthen the role of community systems in particular in relation to expanding HIV testing of key populations, PMTCT efforts for key populations (HIV testing and social accompanying of pregnant women identified as belonging to key populations to treatment and care), driving NSP, and retention in treatment and care (OST and ART).

Fragmentation and reliance on donor funding

Financing of investments and recurrent costs, with the exclusion of regular staff salaries, is provided mainly from external donors. The government also provides some financing for the repair of infrastructure. The financing of health services from public funds is fragmented over national and oblast levels, with the MOH paying for national institutions and the oblasts for all other services. Financing by oblasts is unequal due to differences in relative wealth levels and subsequent differences in tax revenues raised by oblasts (38). This impedes the mainstream general health services as well as the services of the vertical systems offered in their jurisdictions. The oblasts are also responsible for the upkeep of the infrastructure of health services, and some face difficulties in maintaining the health facilities up to standard.

Current line item budget funding and institution-based financing instead of patient HIV care-pathway-based financing prevent HIV patients and potentially TB-HIV co-infected persons from being diagnosed at places where they are most likely to be reached for diagnosis and treatment, resulting in limited referrals and thus leading to those infected avoiding treatment.

Besides the government funding, the funding by international agencies and multinational and bilateral donors is also fragmented (7), preventing flexibility and cost-effective use via project funding, straining coordination and management capacities, and impacting sustainability.

Although government funding of HIV services has increased over the past few years to up to 24% of expenditures in 2013 (7), the planned increase for the next GF period of 2015-2017⁹ of 7% of government funding, equals the current inflation percentage, that is, there is no increase of government funding in real terms despite the fact that government of Tajikistan sees HIV (and TB) as a priority.

Lack of pooling of funds

Given the limited available funds, pooling of all funds for vertical and horizontal health services would be preferable and is intended to start with the establishment of health insurance, possibly leading to re-centralization of funding of the covered health services. However, its introduction has been postponed until 2017, the end of the next GF grant period.

In conclusion, the sustainability of established services and of further investments is threatened by a fragmentation of care and funding of the health services, combined by the lack of pooling and flexibility in financing of care, the reliance on donor funding for regular, structural as well as 'pilot-project' based funding, without consideration of follow up care, and the uncertainty of funds availability for expansion.

⁹ According to the draft Concept Note, provided to the mission during its visit.

Key recommendations – Sustainability and Finance

- Increase financial support to CSOs
- Investigate the option of procuring cheaper methadone (e.g. in powder form)
- Increase the government's contribution to HIV care in real terms, that is, by more than the inflation rate.
- Assure technical assistance to review and reduce fragmentation of the financing system of HIV care, and reduce the inequality of public funding between Oblasts

Human rights violations

Acts of discrimination were reported by PWID from medical services, social services and the police.

Human rights and the International Code of Medical Ethics are violated in HIV prevention and care through:

- Providing mandatory treatment against the will of the patient which is also as such not clinically effective and violates the medical ethics: *“A physician shall respect a competent patient's right to accept or refuse treatment.”*¹⁰*“No one shall be subjected to torture or to cruel, inhuman or **degrading treatment** or punishment”*¹¹
- Disclosing the medical diagnosis, i.e. drug dependence status and HIV status, to others against the will of the patient: *“No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.”*¹²*“A physician shall respect a patient's right to confidentiality. It is ethical to disclose confidential information when the patient consents to it or when there is a real and imminent threat of harm to the patient or to others and this threat can be only removed by a breach of confidentiality”*¹³

Human rights are violated by:

- Refusing OST to those who are drug-dependent in the penitentiary institutions, while available outside these institutions in public health care, i.e. in narcology centres: *“Everyone has the right of equal access to public service in his country.”*¹⁴
- Stigmatizing and discriminating HIV and HIV-TB patients, and of those suffering from drug dependency (the latter in many cases based on an underlying psychiatric disorder), thereby reducing their access to diagnosis and treatment and fuelling the HIV and HIV-TB epidemics.
- PWIDs complained of being forced by police when in an abstinence crisis, to report names of other drug users and dealers, or to admit criminal offences even if they had not committed these, before getting access to medical service

¹⁰International Code of Medical Ethics. World Medical Association.

<http://www.wma.net/en/30publications/10policies/c8/>,

¹¹ Art 5 Art12 Universal Declaration of Human Rights. United Nations Assembly:

<http://www.un.org/en/documents/udhr/>. (Highlight is from the author of this paper)

¹²Art12 Universal Declaration of Human Rights. United Nations Assembly:

<http://www.un.org/en/documents/udhr/>

¹³International Code of Medical Ethics. Op Cit.

¹⁴ Art. 21 Universal Declaration of Human Rights. United Nations Assembly:

<http://www.un.org/en/documents/udhr/>

Key recommendations – legislation and human rights:

Revise the legislation base and implement adopted amendments

Opt for technical assistance in this revision of the legislation base and subsequently implement the adopted amendments in order to:

- Reduce chasing and arresting SWs and people visiting NSP sites, activities which are not conducive for HIV detection, prevention and treatment
- Continue and expand NSP in prisons
- Assure universal availability of and continuity in OST treatment by: Uninterrupted provision of OST across civil health institutions and penitentiary institutions (including pre-detention) as a regular treatment opportunity for all opioid dependent people; Amending the Health Code and subsequently inserting methadone in the Essential Drugs List (EDL) which will also facilitate the procurement of cheaper methadone, e.g. in powder form
- Prescribe and dispense methadone according to adopted guidelines
- Provide the mandate to accredited CSOs to offer rapid HIV testing by amending the Health Code
- *In regards to the Criminal Code (CD) and Criminal Procedures Codes*
 - Delete art 101 CD due to the evidence of ineffectiveness of mandatory treatment
 - Allow for medical staff in penitentiary institutions, supported by staff of narcology centres, to deliver drug dependency treatment, including OST, irrespective of the place of starting drug use and the moment of diagnosis of drug dependency i.e. assure equality in access to prevention and treatment.
 - Health staff in penitentiary institutions should not have to report to law enforcement and security authorities, and disclose the drug use and HIV status of inmates, respecting internationally adopted rules of medical secrecy
 - To assure independence of health staff working in penitentiary institutions it is strongly recommended that they are not employed by the penitentiary system authorities.

6. Recommendations

6.1 Overall priority areas

1. Ensure a high coverage of preventative services for key populations (PWID, SW, MSM, prisoners, and migrants, including their partners)
2. Increase the coverage of HIV testing (including access to rapid tests) and ensure the care pathway to HIV treatment and care services is established in all places offering testing
3. Increase ART coverage and retention in care
4. Optimize health service delivery and infection control in health facilities
5. Ensure an enabling environment to improve access to HIV testing, treatment and retention in care

6.2 Key Recommendations

Priority area 1: Ensure a high coverage of preventative services for key populations (PWID, SW, MSM, prisoners, and migrants, including their partners)

Key recommendations – NSP:

- Scale up needle exchange to reach at least 60% coverage by 2017 and provide in close proximity to where PWIDs reside or gather, including in the penitentiary systems (current estimated coverage 25 – 38%)
- Provide injection kits, including water for injection
- The NSP should primarily be conducted by civil society, including via outreach services
- Increase remuneration for outreach workers to retain staff and the number of PWIDS that are able to be reached
- Develop services for women who inject drugs
- Continuation of providing naloxone to CSOs, and expand to also provide this to outreach workers

Key recommendations – OST:

- Increase the number of OST sites to at least 12, and the number of OST clients to at least 2500 (equalling 10% of the current estimated total population of PWID, including in the penitentiary systems)¹⁵.
- Guidelines for OST, specifically on OST inclusion criteria, should be revised in line with WHO recommendations
- Psychosocial supportive therapy should be delivered to every OST patient, possibly in cooperation with CSOs
- Ensure patient support groups are available at OST sites wherever feasible
- Increase the integration of care (see specific recommendations under health service delivery section)
- Investigate cost-saving options of methadone procurement (powder form)
- Regular monitoring of service quality and training for staff
- Utilize findings of the recent assessment report on OST in Tajikistan (15) to improve OST services

Key recommendations – prisons:

- Guidelines which have been developed for OST in prisons should be adopted by MOH, MOJ and MOI as soon as possible.
- Initiate OST projects in at least two prisons (potentially accompanied by a study tour to a country with an existing, well-functioning practice of OST and NSP in prisons)
- Scale up NSP provision to at least four prisons by 2017
- Provide training on awareness of NSP and OST benefits for staff in penitentiary institutions and for prisoners
- Build capacity through the training of medical staff in prisons, especially regarding OST
- OST should be continued in short-term detention centres and remand prisons and continuation of care following release should be ensured

¹⁵ OST coverage above 40% is regarded as high, coverage between 20 and 40% as medium level, and coverage below 20% - low (30)

Key recommendations – safe sex promotion:

- Further education and counselling, and safe sex promotion, including the use of condoms for SW, MSM, PWIDs, and migrants in friendly cabinets and trust points, with the inclusion of their partners

Priority area 2: Increase the coverage of HIV testing (including access to rapid tests) especially among key populations, and ensure the care pathways to HIV treatment and care services are established in all places offering testing**Key recommendations – HIV testing and linkage to care**

- HIV testing should be free of charge for all
- Introduce community based rapid testing: outreach/NGO/mobile buses, friendly cabinets, in places where key populations reside or gather (outside of the health care system) including rapid testing for prisoners
- Shorten the time between taking the blood sample and delivering test results: through simplification of the diagnostic algorithm: (either rapid test + Western Blot or one Elisa + Western Blot)
- Optimise information flow of test results
- Offer HIV testing without user fees to all pregnant women; HIV testing of pregnant key populations in particular should be promoted
- Develop specific national guidelines on provider initiated HIV testing or endorse already developed guidelines on indicator disease guided testing
- Implement revised PMTCT guidelines (including offering only one HIV test during pregnancy, twice for exceptional cases (for example, current injecting drug use)
- Start ART without any delay when a person with clinical symptoms has been identified (codes 113 and 117)
- Provide systematic follow up on those who were identified as HIV infected but not enrolled in care (e.g. via using ‘peers’)
- Formalize and expand the use of peers or social workers to locate patients LTFU after diagnosis
- Scale up social accompanying for key populations
- Ensure confidentiality, also in prisons
- Introduce a coding system in order to strengthen the quality of testing data and assure anonymity
- Ensure solid estimations of the sizes of key populations

Suggested target setting for HIV testing

- HIV testing coverage of key population: at least 50% of the first year, and at least 60% of the second year of carefully and reliably estimated key populations, and prioritize using rapid tests for key populations.
- Enrolment in care: at least 80% of those diagnosed are enrolled in care

Priority area 3: Increase ART coverage and retention in care

Key recommendations – ART coverage and retention in care

- Personal continuity of care: have the same doctor take care of the same patient unless this is impossible
- Introduce appointment systems and SMS reminder for appointments where feasible
- Closely follow-up patients who miss a visit (or example, via peers, nurse, social workers)
- Counsel on adherence (via peers, nurse, social workers, doctors)
- Support ART and OST self-help groups
- Reduce the amount of secretarial work for doctors capable of providing ART; the emphasis should be on getting PLHIV in care and providing ART (see also specific recommendations under Health Service Delivery)
- Increase access to CD4 count at the time of diagnosis
- Provide regular VL monitoring for PLHIV on ART (e.g. one baseline testing prior to ART and twice a year on ART)
- Invest in viral load detecting equipment due to the necessary expansion of ART coverage and expected increase in numbers of people enrolled in care
- Increase the number of human resources with capacity to handle PCR
- Provide systematic training of clinicians at AIDS centres on HIV clinical management (consider options of online training)
- Build capacity of ANC centres and OST sites in relation to dispensing ART
- Ensure 100% access to ART for all eligible inmates
- Prioritize fixed dose combinations; one tablet per day for first line ART regimen, particularly for key populations. Recommended 1st line regimen for ART naive patients: TDF/XTC/EFV
- Ensure an adequate budget for procuring OI medicines and equitable distribution across the country
- Optimize OST quality deliverance (optimize individual doses, provide psychosocial support)
- Enhance data collection on hepatitis C co-infection

Suggested target setting for ART

- At least 80% of those enrolled in care are retained
- ART coverage: at least 6000 eligible PLHIV on ART by the end of 2017

Priority area 4: Optimize health service delivery and infection control in health facilities

Key recommendations – Integration of care

- Dispense ART on site in OST centres
- Provide ART in all hospitals by outreach workers or by training infectious disease specialists to administer ART
- Dispense OST medicines in AIDS centres if no other options of OST dispensing exist within a district
- Provide OST in all hospitals by outreach OST providers, enabling continuation of OST
- Offer TB diagnostics at AIDS Centres (AC) via procuring four fast TB testing machines such as the GeneXpert MTB/RIF system (e.g. placed at Dushanbe City AC and oblast level ACs in Sogd, Kulyab, and Kathlon Province).

- Have a TB diagnosis made by a single TB doctor instead of by multiple doctors
- Provide a clinical TB expert at the premises of AIDS centres and OST sites (e.g. part time/consultative visits) for diagnosis and treatment
- Introduce testing for hepatitis C and hepatitis B immediately in PLHIV who inject drugs and later expand the testing strategy to include all PLHIV
- The continuation of HIV treatment and care started in ANC/ID hospitals/TB hospitals/ prison health, etc. should be strengthened in particular for key populations (incl. social accompanying for key populations by peers/ social workers; operational follow up by AIDS centre, actively using community-based organizations to facilitate this linkage)
- HIV treatment is not be decentralized into PHC (too early, considering the stage of the epidemic and the number of PLHIV), however HIV testing in primary health care should continue but with active referral to follow-up from AIDS centres in regards to enrolment into treatment and care

Key recommendations – Human Resources

- Free up clinical time in order to expand ART provision by:
 - Minimizing clinician’s administrative burden, e.g. by delegating to non-clinical staff, duties such as:
 - paperwork (while avoiding duplication)
 - entering data in databases
 - counting of pills
- Include in the TOR medical nurse/doctor outreach work for community based HIV testing
- Critically look at the workload of staff at AIDS centres and consider the required number of staff
- Consider increasing the interval by which HIV patients on ART are seen for care
- Introduce incentives to facilitate a more equal caseload at AIDS centres across the country
- Consider technical assistance to optimize health service delivery, organization, human resource optimization and strengthen management capacity
- Include staffing norms for HIV sector staff in the National Human Resources Plan

Key recommendations- Health information systems

- CD4 at diagnosis should be collected and analysed
- The quality of the recent estimations of the size of key populations should be scrutinized
- Geographical information of key populations (in particular PWIDs) and modelling to estimate size should be enhanced. Capacity development to improve modelling of key populations should be considered
- Introduce methods other than Spectrum/UNAIDS to estimate the number of undiagnosed PLHIV
- Strengthen data collection from prison health systems
- Strengthen the collection of national data on TB/HIV co-infection and include reporting of MDR/XDR TB co-infection data
- Perform systematic quality control of data collection
- Analyse key information (including the ‘HIV treatment and care cascade’) on a regular basis and use this information for policy development
- Consider conducting an epidemiological study of hepatitis B and C virus among PLHIV and PWID in Tajikistan

Key recommendations – infection control

- Investigate epidemiological data of recent, new HIV infections diagnosed in children without HIV+ parents
- Ensure the implementation of international standards on the clinical use of blood and blood products
- Possibly reducing the number of transfusions and thus reduce the risk of transfusion related infections and adverse reactions
- Develop capacity to ensure safe injecting practices and infection control in all health facilities, while adjusting the indication to use injections to international standards
- Advocacy for voluntary unpaid blood donation
- Encourage the reporting of systemic problems within institutions to take action to improve services.

Priority area 5: Ensure an enabling environment to improve access to HIV testing, treatment and retention in care

Key recommendations – Community systems

- Strengthen community systems by formalizing their responsibilities, offering supportive supervision and financial support
- Strengthen the role of community systems, in particular in relation to expanding HIV testing of key populations, PMTCT efforts for key populations (HIV testing and social accompanying of pregnant key populations to treatment and care), driving NSP, and retention in treatment and care (OST and ART).

Key recommendations – Sustainability and Finance

- Increase financial support to CSOs
- Investigate option of procuring cheaper methadone (e.g. in powder form)
- Increase the government's contribution to HIV care in real terms, that is, by more than the inflation rate.
- Assure technical assistance to review and reduce fragmentation of the financing system of HIV care, and reduce the inequity of public funding between Oblasts

Key recommendations – Legislation and human rights

Revision of legislation base and implementation of adopted amendments

Opt for technical assistance in the further revision of the legislation base and subsequently implement adopted amendments in order to:

- Reduce chasing and arresting SWs and people visiting NSP sites, and people carrying sterile or used needles and syringes, which are not conducive for HIV detection, prevention and treatment
- Continue and expand NSP in prisons
- Assure universal availability of and continuity in OST treatment by: Uninterrupted provision of OST across civil health institutions and penitentiary institutions (including pre-detention) as a regular treatment opportunity for all opioid dependent people; Amending the Health Code and subsequently inserting methadone in the Essential Drugs List (EDL). This will also facilitate the procurement of cheaper methadone, e.g. in powder form
- Prescribe and dispense methadone according to be adopted guidelines
- Provide the mandate to accredited CSO to offer rapid HIV testing by amending the Health Code

- *In regards to the Criminal Code (CD) and Criminal Procedures Codes*
 - Delete art. 101 CD due to the evidence of ineffectiveness of mandatory treatment
 - Allow for medical staff in penitentiary institutions, supported by staff of narcology centres, to deliver drug dependency treatment, including OST, irrespective of the place of starting drug use and the moment of diagnosis of drug dependency, i.e. assure equality in access to prevention and treatment.
 - Health staff in penitentiary institutions should not have to report to law enforcement and security authorities and disclose drug use and HIV status of inmates, respecting internationally adopted rules of medical secrecy.
 - To assure independence of health staff working in penitentiary institutions it is strongly recommended not be employed by the penitentiary system authorities.

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Appendix

Terms of References

WORLD HEALTH ORGANIZATION
REGIONAL OFFICE FOR EUROPE



ORGANIZATION MONDIALE DE LA SANTÉ
BUREAU RÉGIONAL DE L'EUROPE

WELTGESUNDHEITSORGANIZATION
REGIONALBÜRO FÜR EUROPA

ВСЕМИРНАЯ ОРГАНИЗАЦИЯ ЗДРАВООХРАНЕНИЯ
ЕВРОПЕЙСКОЕ РЕГИОНАЛЬНОЕ БЮРО

Evaluation of the HIV programme in Tajikistan

15-19 September 2014

1. Background

By the end of 2012, Tajik authorities had reported a cumulative total of 4 585 HIV cases, including 343 that had progressed to AIDS and 148 deaths among AIDS cases, to the WHO Regional Office for Europe and the European Centre for Disease Prevention and Control (ECDC). In 2012 alone, 814 HIV cases, 87 AIDS cases, and 24 deaths among AIDS cases were reported. The rate of newly diagnosed HIV infections in 2012 was 10.2 per 100 000 population, slightly lower than the rate for 2010 and 2011, however double that of 2009 and preceding years. Of the newly reported cases with information about transmission mode in 2012 (75%), 52% were infected through heterosexual contact, 42% through injecting drug use and 6% through mother-to-child transmission. Tajikistan has reported a cumulative total of 98 mother-to-child transmission cases, including 34 (35%) in 2012.

Taking undiagnosed infections into account, the Joint United Nations Programme on HIV/AIDS (UNAIDS) and WHO estimate that 14 000 (10 000–20 000) people were living with HIV in Tajikistan at the end of 2013, that 1 700 people became newly infected and that less than 1 000 people died from AIDS-related causes during 2013. HIV prevalence in the adult population was estimated to be 0.3% (0.2–0.4%).

As of 2010, HIV testing was offered free of charge at 235 testing facilities. According to national HIV testing policies, partner notification was mandatory and anonymous. HIV testing was systematically offered to pregnant women, sexually transmitted infection patients, blood donors, military recruits, street children, refugees, nationals returning from long-term residence abroad and people seeking visa, residence or citizenship. As reported to the WHO Regional Office for Europe and the European Centre for Disease Prevention and Control (ECDC), 447 636 HIV tests were performed in Tajikistan in 2012, more than double the number of tests in 2009 and almost five times that in 2008.

A total of 2 717 people were receiving medical HIV care at the end of 2013. Antiretroviral therapy (ART) has been available since 2006 and by December 2013, 1 145 people were receiving ART. Of the people on ART, 421 (30%) had been infected through injecting drug use. Among the total estimated number of people living with HIV in the country, 9% (6–12%) were receiving ART.

Tajikistan's response to the HIV epidemic is supported by the Global Fund (TGF) grant and the country is reliant on TGF for covering the cost of HIV treatment. The country is in the process of preparing an application for an HIV grant which requires external technical support to review the current situation and align the country's response with WHO guidelines and recommendations.

WHO and the Global Fund have Cooperative Agreement regarding the provision of WHO technical assistance to applicants to the Global Fund prior to submission of their concept notes. The contract is effective during the period from 1 January 2014 until 31 December 2015. Technical assistance is organized through external consultants and is based on discussions with the countries and the Global Fund Portfolio Managers, and from formal Country Requests.

Tajikistan is eligible for the Global Fund grant country to support national programme on HIV/AIDS. The country requested the WHO Regional Office provide technical assistance in situational analysis and the National Strategic Plan for development of the Concept Note. This TOR incorporates program review.

2. Program review

Program review will include 4 key components:

- E. Epidemiological analysis
- F. Review of HIV treatment and care along the cascade of services
- G. HIV services for key populations
- H. Analysis of service delivery models for populations affected by the HIV epidemic from the perspective of the health system

A. Epidemiological analysis will focus on:

- Assessment at the level of, and trends within, HIV disease burden (incidence, prevalence, mortality), including estimated data on the HIV epidemic.
- Assessment of whether trends in the HIV burden are plausibly related to programmatic efforts or other factors.
- Defining the investments needed to directly measure trends in HIV disease burden in future

B. Review of HIV treatment and care program along the cascade of services

- HIV testing for general population and key populations, including community-based testing and linkage to HIV treatment and care services, incorporating CD4 count at time of diagnosis
- Early HIV infant diagnosis, MTCT and paediatric ART
- Enrolment and retention in HIV care, including general HIV care, management of co-infections and co-morbidities, integration of HIV/Viral hepatitis, HIV/TB, HIV/OST services
- ART estimated need and coverage, criteria for ART initiation, adherence
- ART regimens (1st line, 2nd line and 3rd line)
- Monitoring of ART response and diagnosis of treatment failure: VL, ARV toxicity, HIVDR
- Patient tracking system
- ART outcome: viral suppression

Analysis of HIV treatment and care program will also include a review of treatment, care policy and national clinical protocols.

C. HIV services for key populations (PWID, SW, prisoners, labour migrants)

- Needle and syringe program
- Drug dependency treatment (OST)
- ART access
- Prison settings
- Community outreach (HIV testing and linkage to HIC treatment and care services, ARV dispense, case management/social accompanying)

Analysis of HIV services for key populations will focus on coverage, quality and integration with other health services within the health system.

D. Analysis of service delivery models for populations affected by the HIV epidemic from the perspective of the health system

Analysis will be focused on:

- the capacity of the national health system to provide effective human, financial and infrastructural resources to address the health needs of those affected by HIV epidemics, including key populations which require a proactive approach in service delivery with strong social support and case management
- health systems barriers and interventions needed to optimize and monitor HIV services along a continuum of care, and ensure high coverage with HIV testing, enrolment to HIV treatment and care, adherence to ART, and integration and linkage of services.

3. Participants

Five external consultants:

- ✓ Maiken Mansfeld – public health expert from the WHO Collaborating Center on HIV and Viral Hepatitis (Copenhagen)
- ✓ Andrej Kastelik – harm reduction/OST expert from Center for treatment of drug addiction (Slovenia)
- ✓ Jan Bultman – health system expert and independent consultant (Netherlands)
- ✓ Matti Ristola – clinician, head of HIV services, Helsinki University Hospital (Finland)
- ✓ Signe Rotberga – head of UNODC Programme office, regional HIV advisor (Kazakhstan)

will be supported by two WHO staff members:

- ✓ Irina Eramova – senior medical officer from WHO Regional Office for Europe (Copenhagen)
- ✓ Sayohat Hasanova – national professional officer, WHO CO (Dushanbe)

4. Methodology

The preparation phase will include a desk review and analysis of available documents (WHO guidelines, national policy/strategy/plans, clinical guidelines, publications, reports, etc.)

During the country mission WHO experts will visit relevant institutions and facilities and collaborate with key informants including policy-makers, health care providers and beneficiaries, NGOs, other national partners where appropriate. Together with local clinical experts they will also have access to medical records of PLHIV for a review of clinical management.

5. Time, duration and geographical sites of the mission

Mission is planned for September 15-19, 2014. Additional days will be added for a desk review and an analysis of national background documents and report writing.

6. Deliverables

Key recommendations based upon a public health approach will be developed and presented to the national stakeholders by the end of the mission. Compliance of approaches and recommendations with the main WHO recommendations, including 'Consolidated guidelines on the use of antiretroviral drugs for treating and preventing HIV infection' 2013¹⁶ and 'Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations' 2014¹⁷ will ensue.

All team members will provide their written contribution using the template (to be delivered) to Maiken Mansfeld from the WHO CC by **25 September 2014**. A draft mission report will be shared with team members for comments. Key recommendations will be agreed and finalized no later than **October 5, 2014**, and will be shared with the stakeholders in Tajikistan and will inform the final Concept Note version.

The final report with findings and recommendations will be prepared by the WHO CC on HIV and Viral Hepatitis, and will be submitted to the WHO regional office for Europe by the **end of October 2014**.

The report will be posted on the WHO Regional Office for Europe web site.

¹⁶<http://www.who.int/hiv/pub/guidelines/arv2013/download/en/>

¹⁷<http://www.who.int/hiv/pub/guidelines/keypopulations/en/>

Annex 2. Review team and List of informants

Review team consisted of five external consultants:

MaikenMansfeld – public health expert (WHO Collaborating centre on HIV and Viral Hepatitis)

MattiRistola – clinician (WHO Collaborating centre on HIV and Viral Hepatitis)

Andrej Kastelik – harm reduction/OST expert (Slovenia)

Jan Bultman– health system expert (Netherlands);

Signe Rotberga – head of UNODC Programme office, regional HIV advisor (Kazakhstan).

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