In the Name of God

Islamic Republic of Iran
́AIDS Progress Report

On Monitoring of the United Nations General Assembly Special Session on HIV and AIDS

National AIDS Committee Secretariat,
Ministry of Health and Medical Education

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Contents

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Acronyms

AIDS	Acquired Immunodeficiency Syndrome
ART	Antiretroviral Therapy
ARV	Antiretroviral(drugs)
CCM	Country Coordinating Mechanism
CSW	Sex Worker
DIC	Drop in Center
HIV	Human Immunodeficiency Virus
IDU	Injecting Drug User
MSM	Men who have Sex with Men
NGO	Non- governmental Organization
PEP	Post-exposure prophylaxis
PLWH	People living with HIV
RDS	Respondent Driven Sampling
STI	Sexually Transmitted Infection
VCT	Voluntary Counselling and Testing
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNGASS	United Nations General Assembly Special Session (on AIDS)

Introduction

The HIV epidemic in Iran is in the concentrated phase. A concentrated epidemic left unheeded in lieu of effective responses for its control, may turn into a generalized epidemic. At each of the three United Nations General Assembly Special Sessions on HIV/AIDS in 2003, 2008 and 2011, the Islamic Republic of Iran has committed itself to HIV control by signing the declarations of these sessions. This report is the most important country report in the field of HIV/AIDS, and while reporting on the DoC core indicators, is also intended to provide a general picture of the HIV epidemic in Iran. The core indicators for monitoring DoC progress are significant on four grounds: first, they help evaluate the effectiveness of our national response to the epidemic; second, they form a basis for comparing trends in service delivery, programme outcomes and the epidemic itself; third, they show the level of our country's commitment to the DoC; and fourth, they express the relative status of our country within the global response to HIV/AIDS.

This is the Fourth time that Iran is reporting its DoC core indicators within the framework of UNAIDS guidelines. The first report was published in 2006 and the second and third ones in 2008 and 2010, respectively. Despite its possible shortcomings, this report contains very important information, which was produced, collected and analysed by thousands of our colleagues at country level. We hope that it constitutes a step towards controlling the spread of HIV in Iran. Nevertheless some shortcomings in the report are to be expected and we sincerely welcome any criticism or comment in this regard.

Status at a glance

Inclusiveness of Reporting Process

The reporting process was initiated in February 2012 by the National HIV/AIDS Monitoring & Evaluation Committee with the establishment of a task force, whose members included the Ministry of Health & Medical Education, the State Prisons Organization, the State Welfare Organization, the Ministry of Interior, the Ministry of Education, Drug Control Headquarters, the Blood Transfusion Organization, medical universities, the UNAIDS Country Office, PLHIV and non-governmental organizations. The task force began work on 4th February 2012, and its members have been involved in developing the various sections of the report, usually circulated by email among task force members for feedback and eventual approval. The final draft was reviewed, revised and finalized by the task force in the course of meeting on 13th March 2012.

The Status of the Epidemic

The prevalence of HIV among the general population in Iran remains low [(1)], but it stands at 15.07 per cent among injecting drug users.[(2)] Accordingly, since HIV prevalence exceeds 5 per cent in this sub-population, the epidemic in Iran is classified as being concentrated. Measures taken over the past ten years have successfully slowed progression of the epidemic among injecting drug users. [(3)] Nevertheless, injecting drug use remains the most important factor fuelling the epidemic in Iran [(4,5)] because the sharing of injecting equipment has not yet reached zero.[(2)] It is therefore critical to sustain and scale up preventive harm reduction programmes for this key group in order to reach the goal of zero new infections through injecting drug use.

There has been some evidence in recent years of the growing role of sexual transmission in the spread of HIV in Iran,[(6)] such that the proportion of recorded cases attributed to sexual transmission has been steadily growing and the prevalence of HIV among female sex workers has reached 4.5 per cent.[(7)] The majority of female sex workers do not use condoms consistently.[(7)] Sexual intercourse is not uncommon among injecting drug users and is frequently unprotected.[(2)] Evidence of high-risk sexual practices has also been observed among young people,[(8,9,10)] notably in connection with the use of amphetamine-type stimulants, which has grown alarmingly in the past few years.[(11)] For all these reasons, we must inevitably set up interventions to reduce the prevalence of high-risk sexual practices in order to control the epidemic.

The number of women living with HIV has increased in recent years.[(6)] The corresponding increase in the number of pregnant women living with HIV has led to an increasing number of children being born with HIV in recent years.[(6)] Even

though the absolute number of these children remains low, failure to scale up effective PMTCT programmes could prove problematic in the future.
HIV transmission through contaminated blood or blood products has been all but eliminated [3] but existing control measures need to continue stronger than before, using the latest equipment.
In conclusion, the HIV epidemic in Iran is in the concentrated phase. Concentrated epidemics, if neglected and not probably addressed by effective counter-measures, have the potential to evolve into generalized epidemics. [12]

The Policy and Programmatic Response

The Government of the Islamic Republic of Iran is committed to controlling HIV and AIDS as a means of promoting the health of the community as a whole. It therefore promotes a participatory and proactive approach by all programme partners in controlling the epidemic. It seeks to advance a common strategic vision rooted in the “Three Ones” concept: one strategic programme, one coordinating institution, and one monitoring and evaluation framework, which is used by all partners to gauge their interventions. The Government approves and implements interventions, whose effectiveness has been scientifically proven beforehand, and strives to avoid measures that could potentially fuel the epidemic further.

Indicator data in an overview table

Table of summarization of core indicators		
Indicator name	***Indicator definition***	***Indicator value***
Indicators related to young people and general population		
Young people: Knowledge about HIV prevention	Percentage of young people aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission	Correct answer to all questions: Girls: 16.2% , Boys: 20.6% *Reference No.13*
Sex before the age of 15	Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15	At this time there is not any reliable study to measure the indicator.
Multiple Sexual partnerships	Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months	At this time there is not any generalizable study to measure the indicator. Please refer to text.
Condom use at last sex among people with multiple sexual partnerships	Percentage of women and men aged 15-49 who have had more than one partner in the past 12 months who used a condom during their last sexual intercourse	At this time there is not any generalizable study to measure the indicator. Please refer to text.
HIV testing in the general population	Percentage of women and men aged 15-49 who received an HIV test in the past 12 months and know their results	This Indicator is not relevant to the stage of epidemic in Iran.
HIV prevalence in young people	Percentage of young people aged 15–24 who are living with HIV	According to the sentinel sites in the prenatal clinics there was 1 case in 5 surveys among 2758 pregnant women *Reference No.1*
Indicators related to sex workers		
Sex workers: prevention programmes	Percentage of sex workers reached with HIV prevention programmes	44.26% Know where can they can go if they wish to receive an HIV test and received a condom during last 12 months There is not any study about male sex workers *Reference No.7*
Sex workers: condom use	Percentage of sex workers reporting the use of a condom with their most recent client	60.89% in female sex workers There is not any study about male sex workers *Reference No.7*
HIV testing in sex workers	Percentage of sex workers who received an HIV test in the past 12 months and know their results	27.87% in female sex workers There is not any study about male sex workers *Reference No.7*
HIV prevalence in sex workers	Percentage of sex workers who are living with HIV	In female sex workers, using weighted analysis: 4.5% There is not any study about male sex workers *Reference No.7*

Indicators related to men who have sex with men		
Men who have sex with men: prevention programmes	Percentage of men who have sex with men reached with HIV prevention programmes	At this time there is not any reliable study to measure the indicator.
Men who have sex with men: condom use	Percentage of men reporting the use of a condom the last time they had anal sex with a male partner	At this time there is not any reliable study to measure the indicator.
HIV testing in men who have sex with men	Percentage of men who have sex with men who received an HIV test in the past 12 months and know their results	At this time there is not any reliable study to measure the indicator.
HIV prevalence in men who have sex with men	Percentage of men who have sex with men risk who are living with HIV	At this time there is not any reliable study to measure the indicator. Please refer to text.
Indicators related to injecting drug users		
People who inject drugs: prevention programmes	Number of Syringes distributed per person who injects drugs per year by Needle and Syringe Programmes	Between 26 to 35 syringes for every IDU *Reference for nominator: No.14 and 15* *For denominator: 5,16 and 17*
People who inject drugs: condom use	Percentage of people who inject drugs reporting the use of a condom the last time they had sexual intercourse	With wife/ husband: 15.1% With non-paid regular partner: 16.2% With commercial partner: 15.3% *Reference No.2*
People who inject drugs: safe injecting practices	Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected	All IDUs: 91.72% Male IDUs: 91.9% Female IDUs: 82.8% Less than 25 year old IDUs: 91.1% *Reference No.2*
HIV testing in people who inject drugs	Percentage of people who inject drugs who received an HIV test in the past 12 months and know their results	All IDUs: 24.78% Male IDUs: 24.8% Female IDUs: 24.2% Less than 25 year old IDUs: 16.9% *Reference No.2*
HIV prevalence in people who inject drugs	Percentage of people who inject drugs who are living with HIV	Using weighted analysis, in all IDUs : 15.07% *Reference No.2*
Indicators related to mother to child transmission		
Prevention of mother-to- child transmission	Percentage of HIV-positive pregnant women who received antiretroviral to reduce the risk of mother-to-child transmission	Estimated number is 15%. There are concerns among some experts about the denominator, that is the software has overestimated the number of HIV positive pregnant women *Reference for nominator: No.14* *For denominator: 18*
Early infant diagnosis	Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth	At this time it is not measurable. Please refer to text for further explanation.

Mother-to-Child transmission of HIV (modelled)	Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months	14%. It means that based on estimations of Spectrum, rate of MTCT decreased from natural rate of approximately 25% to 14% *Reference No.18*
Indicators related to antiretroviral treatment		
HIV treatment: antiretroviral therapy	Percentage of eligible adults and children currently receiving antiretroviral therapy	Estimated number is 7.8%. There are concerns among some experts about the denominator, that is the software has overestimated the number of HIV positive peoples who need antiretroviral treatment. *Reference for nominator: No.19* *For denominator: No.18*
Twelve Month retention on antiretroviral therapy	Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy	82.1% Female PLWH: 90.8% Male PLWH:80.5% *Reference No.19*
Indicator related to TB and HIV co-management		
Co-management of tuberculosis and HIV Treatment	Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV	19.4% *Reference for nominator: No.14* *For denominator: 18,20 and 21*
Indicators related to policy and HIV related contextual factors		
AIDS spending	Domestic and international AIDS spending by categories and financing sources	The amount of money spent by public and international sources to control and prevent HIV/AIDS between March 21, 2009 and March 20, 2010 totalled 433455877 thousand Rails (equal to 40761320 US$, each US dollar equals to 10634 Rails). *Reference No.22*
Government HIV and AIDS policies	National Commitments and Policy Instrument (NCPI)	Please refer to text and annex 2.
Prevalence of recent intimate partner violence	Proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months	At this time there is not any study to measure the indicator
Orphans school attendance	Current school attendance among orphans and non-orphans (10–14 years old, primary school age, secondary school age)	92.4% *Reference No.23*
External economic support to the poorest households	Proportion of the poorest households who received external economic support in the last 3 months	At this time there is not any study to measure directly the indicator. But regarding that at this time, 100% of Iranian families have been receiving monthly financial subsidy, the ratio of direct financial help is definitely 100%. Please refer to text for further explanation.

Overview of the AIDS epidemic

This section presents the general state of the HIV/AIDS epidemic in the Islamic Republic of Iran, based on data collected in case registry system of CDC MOH, data from sentinel sites, Data from integrated biobehavioral studies and other relevant studies.

Number of People Living with HIV

Number of Registered Cases: Based on the data of case registry system, a total of 23497 PLWH had been identified in Iran until September 21, 2011: 91.3% of them men and 8.7% women. So far, 3168 of these identified cases have entered AIDS stage and 4419 people were dead. Some 46.4% of HIV infected cases are in the 25-34 age and this is the highest in any age group. [6]

The HIV transmission routes in all the cases which have been registered since 1986 are (in order of magnitude) sharing injection equipment among injecting drug users (69.8%), sexual intercourse (10.1%), blood transfusion (1.0%), and mother-to-child transmission(0.9%). The route of transmission among 18.2% of this group is unknown. [6]

In comparison to all reported cases, transmission routes in those reported from 20 March 2009 to 20 March 2010 include IDU, 66.1%, sexual transmission 20.8%, and mother to child transmission 2.5%. In 10.6% of the identified cases in this year, the transmission mode was unknown and no new cases of transmission through blood transfusion were reported. [6]

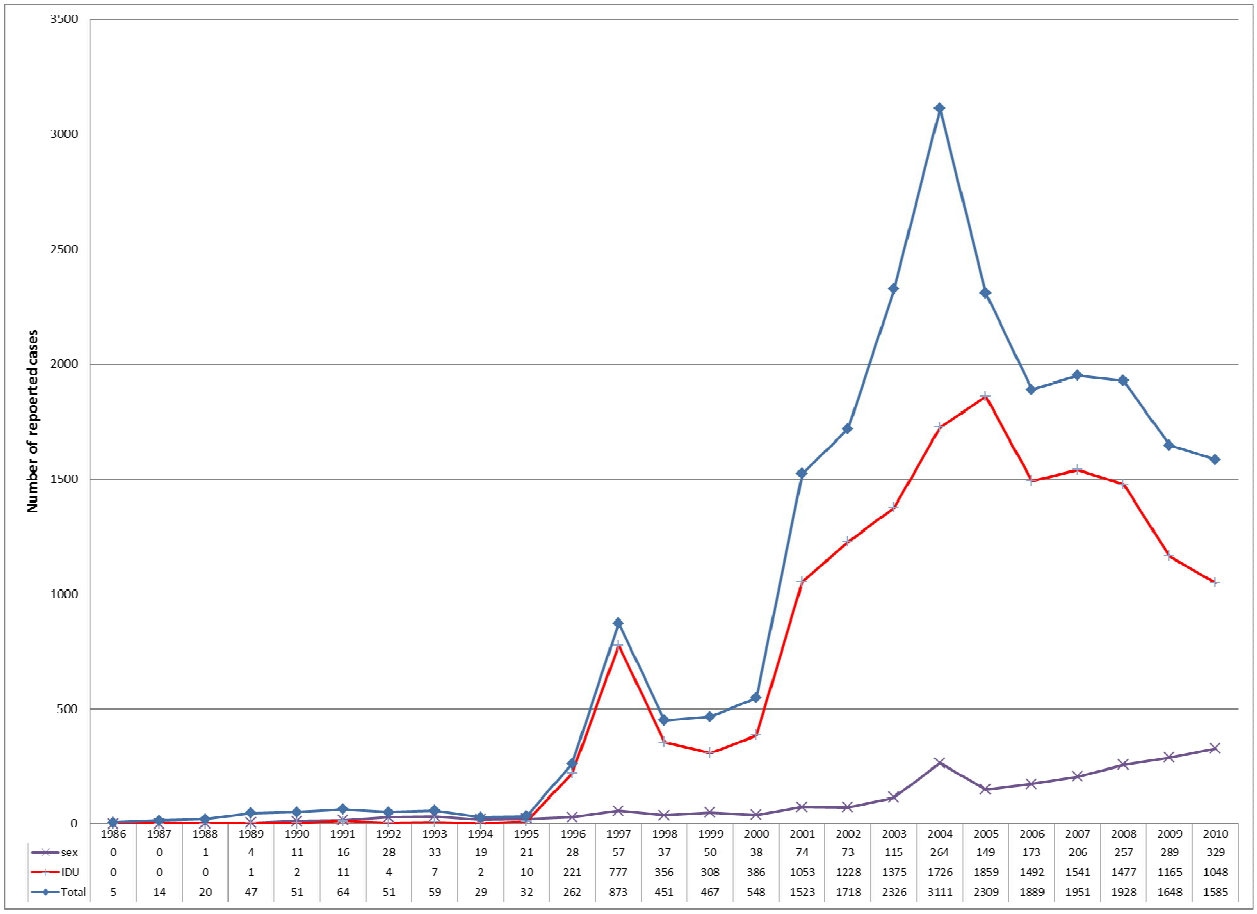
The first case of HIV in Iran was reported in 1986 and until 1995; a gradual and slight increase was noted in the country's annual reports. With an HIV epidemic identified in 1996 in some of Iran's penitentiaries, the number of identified cases suddenly underwent a significant increase and this trend continued until 2004 when the total number of identified cases reached its maximum in the course of one year. Then, there was a fall with a slight slope in the number of the identified cases (Figure 1 and 2) [6] so that total registered cases in 2010, show 18.2% decreasing in comparison to 2005. It is worth noting here that the systems for recording of identified cases was reviewed in 2004 with the reporting forms changed and a number of cases who had not appeared in the system before were reported in 2004. [24] Hence, the interpretation of the curve for annual identified cases based on the registry system data must be done with precaution.

Nevertheless, given the fact that estimates of the number of PLWH indicate increases in their numbers, the decreasing trend in the number of identified cases might reflect the weakening capacity of the system in identifying cases of infection. It is possible to consider the main cause of this phenomenon to be growing cases of infection among populations across the country that are less accessible to the system for identification of PLWH.

The first case of HIV transmission through injecting drug use was identified in 1989 and until 1995, there were only around 5-10 new such cases having been identified. With the outbreak of the epidemic among injecting drug users,

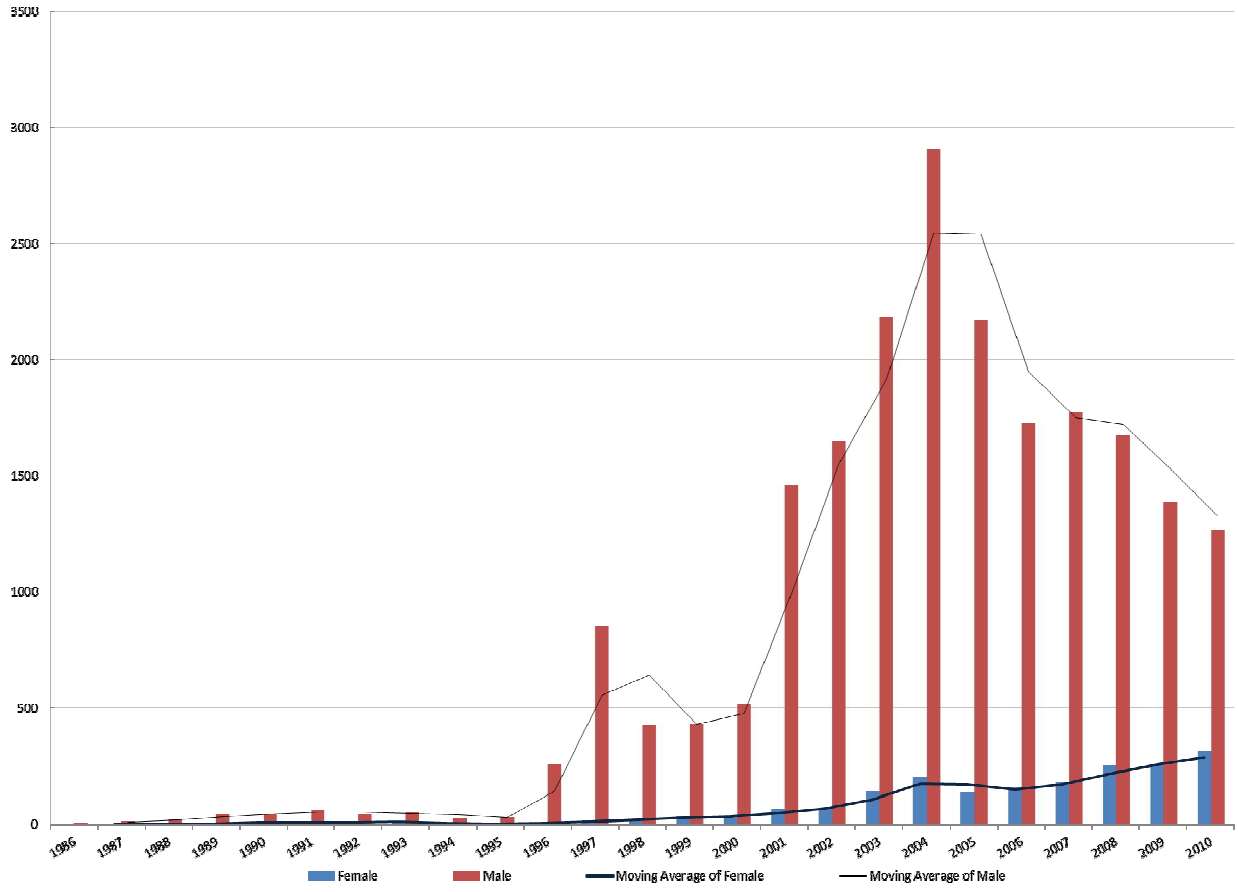
however, the rate of transmission within this cohort increased 23 times as much in 1996 compared to the rate of the previous year and was for the first time identified as the most prevalent form of transmission, a fact that has remained in place to this day. The number of registered cases of transmission through drug injection underwent a gradual increase until 2005 and in 2006 fell 16% compared to that of the previous year and the fall continued in the next years.(Figure 1) [6]
The share of sexual transmission in the identified cases remained relatively stable until 2006 standing at approximately 5-8% but the absolute value of this percentage has been rising continuously and has gone from 50 cases in 2000 to almost three times that much in 2006. This trend has been on the rise ever since reaching a total of around 20.7% of all the identified cases in 2010. The major factor behind this rise is the increase in identifying female cases [6] (Figure 2).

Figure1: Trend in transmission route of HIV, based on data of case registry system in IRAN 1986-2010



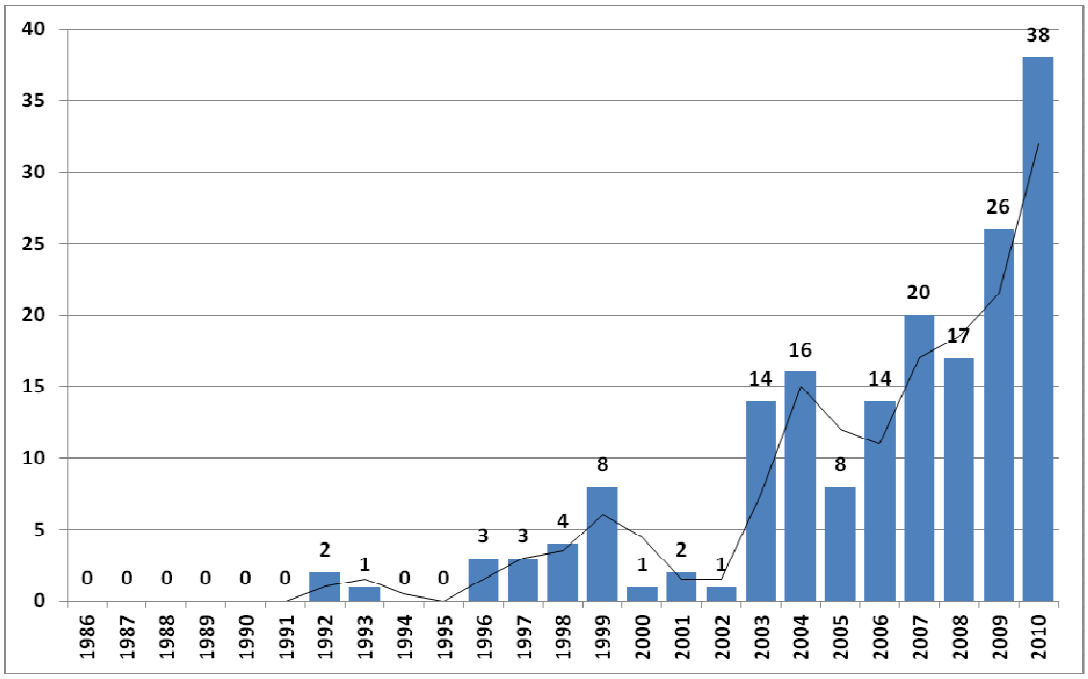
	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
sex	0	0	1	4	11	16	28	33	19	21	28	57	37	50	38	74	73	115	264	149	173	206	257	289	329
IDU	0	0	0	1	2	11	4	7	2	10	221	777	356	308	386	1053	1228	1375	1726	1859	1492	1541	1477	1165	1048
Total	5	14	20	47	51	64	51	59	29	32	262	873	451	467	548	1523	1718	2326	3111	2309	1889	1951	1928	1648	1585

Figure2: Trend in HIV reported cases disaggregated by sex, based on data of case registry system in IRAN 1986-2010



The percentage of children aged 0-14 has been meager during this period at about 1.4%. However, the number of cases has increased over recent years. Furthermore, the number of cases of MTCT has been on the rise over these few years. [6] (Figure 3)

Figure3: Trend in HIV reported cases infected through MTCT, based on data of case registry system in IRAN 1986-2010



Furthermore, the share of unknown modes of transmission among the identified cases in the first half of the 2000s has been rising from 8.2% in 1998 to 23.7% in 2006 and has subsequently dropped to 10.6% in 2010 with the consolidation of the surveillance system in place and the change in data gathering methodology. [6] The assumption plausible in this context is that at least a quota of this increase in the number of transmissions through unknown modality is on account of sexual transmission which remains in effect unknown because of the stigmatization that surrounds the case. Another cause is the increase in the number of identified cases through surveying at the sentinel sites which does not lead to the identification of the transmission mode.

The small share of women among the identified cases (8.7% so far) can be a product of the major role of drug injection in Iran's epidemic and the small number of female injecting drug users. But in comparison to previous report share of women among the identified cases raised from 7% to 8.7% and most of them infected through sexual transmission. [6]

On the other hand the incidence of the epidemic does not follow the same pattern in the different provinces of the country and for example annual incidence for the overall population based on the identified cases varied from 0.16 to 7.24 persons per 100,000 in different provinces in 2010.[6] It seems that this

inconsistency is due to the discrepancies in the prevalence of risky behaviors in the various regions of the country and also due to the differences in the rate of services provided for the identification of cases.

Estimation of the Number of HIV positive Cases: Just as is the case with other countries, the identified cases in Iran comprise only a part of all the cases. Since 2003, attempts have been made by the experts and directors of the national AIDS program to calculate the number of HIV infected cases in the country through applying special software; the results show an estimated 30,000 to 40,000 HIV infected cases in the country. In 2005, the same basis was used and the estimate was 60,000 to 70,000 while extending 80,000 in 2007. [25]

The latest estimates as of 2010 indicate that the number of women and men living with HIV in 2011 was about 32720 and 60530, respectively (totaling 93250). The respective forecasted figures for 2015 amount to 45050 and 81250 (totaling 126300), representing a 35% increase over the 5-year period starting 2011 (Figure 4). Even though prevalence is higher among men (almost twice as high) than women, comparing growth trends in women and men PLWH shows a higher rate of increase of PLWH among women than men (Figure 5).[4]

Figure4: Estimated number of PLWH during 1980- 2014 disagregated by high risk group[4]

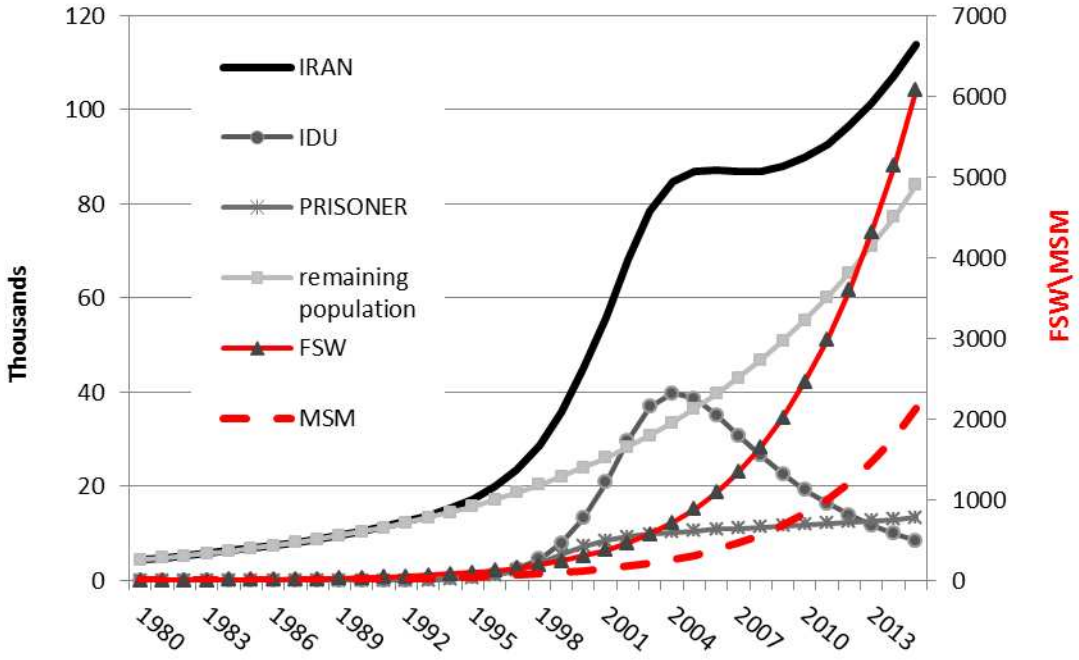
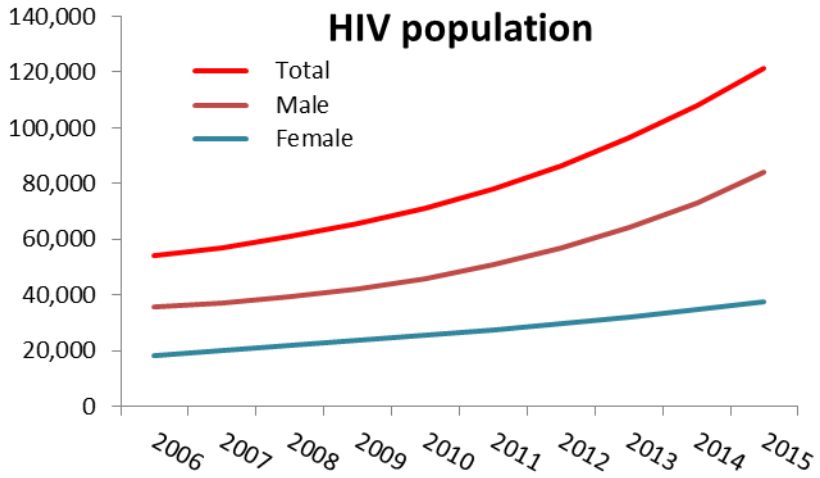


Figure 5: Estimated number of PLWH during 2006- 2014 disagregated by sex[4]



New Cases and Incidence Rate of HIV

At present, direct determination of new cases of HIV and its incidence rate is generally very difficult, costly and replete with technical difficulties and thus done less often throughout the world. Likewise in Iran such a direct study does not exist.

Nevertheless, in 2010 the Regional Knowledge Hub for HIV/AIDS Surveillance (at Kerman University of Medical Science) conducted two studies to estimate the sizes of various subgroups of the HIV infected population, which were commissioned by the MOH (Center for Disease Management) and supported by UNAIDS-Iran and other HIV Control Program partners. In one of these studies the number new cases of HIV in 2010 in Iran was estimated by MOT (mode of transmission) at 9137 (confidence interval 95%: 7616 - 10659). [5] In the other, the number of new cases in 2010 was estimated to be 7100 using the EPP software [4] (Figure 6), which is consistent with the findings of the first study. [5] The findings of the two studies are also consistent regarding estimated figures for the 2009-2014 period and also the confidence intervals of the two models do overlap.[5]

Based on these estimates the greatest number of new cases of HIV infection is among IDUs (56% with 95% CI: 47.7%-61.6%) and their sex partners (12% with 95% CI: 9.5%-15%). Furthermore, the main route of direct and indirect transmission of HIV infection in the country was determined to be unsafe

injections (68% for IDUs and their sex partners) with transmission through sexual contact (34% opposite-sex and 10% same-sex contact) ranking second (Figure 7). [5] the annual incidence of HIV infection in the general 15-49 year-old population was estimated at about 21 in one-hundred-thousand.[5]
Based on the same estimates in 2011, incidence of HIV for sexual partners of 4 high risk group i.e. IDUs, MSMs, client of FSWs and those with temporarily heterosexual relationship was about 121 in 100,000 per year. Based on the same estimation the highest HIV incidence rate was among IDUs with more than 2500 in 100,000 per year followed by their sexual partners with 1000 in 100,000 per year. Among female sex-workers the incidence rate of HIV was estimated about 180 in 100,000. [5]

Figure 6: Estimated number of new HIV cases during 2006- 2014 disagregated by sex[4]

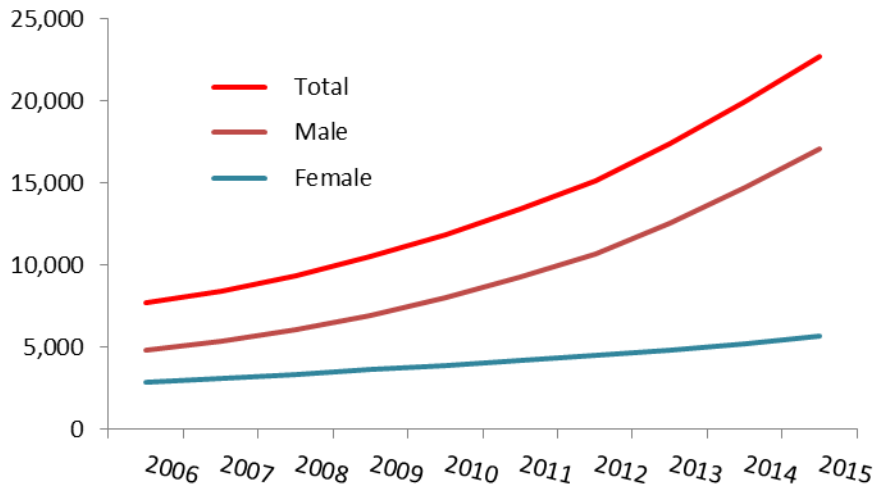
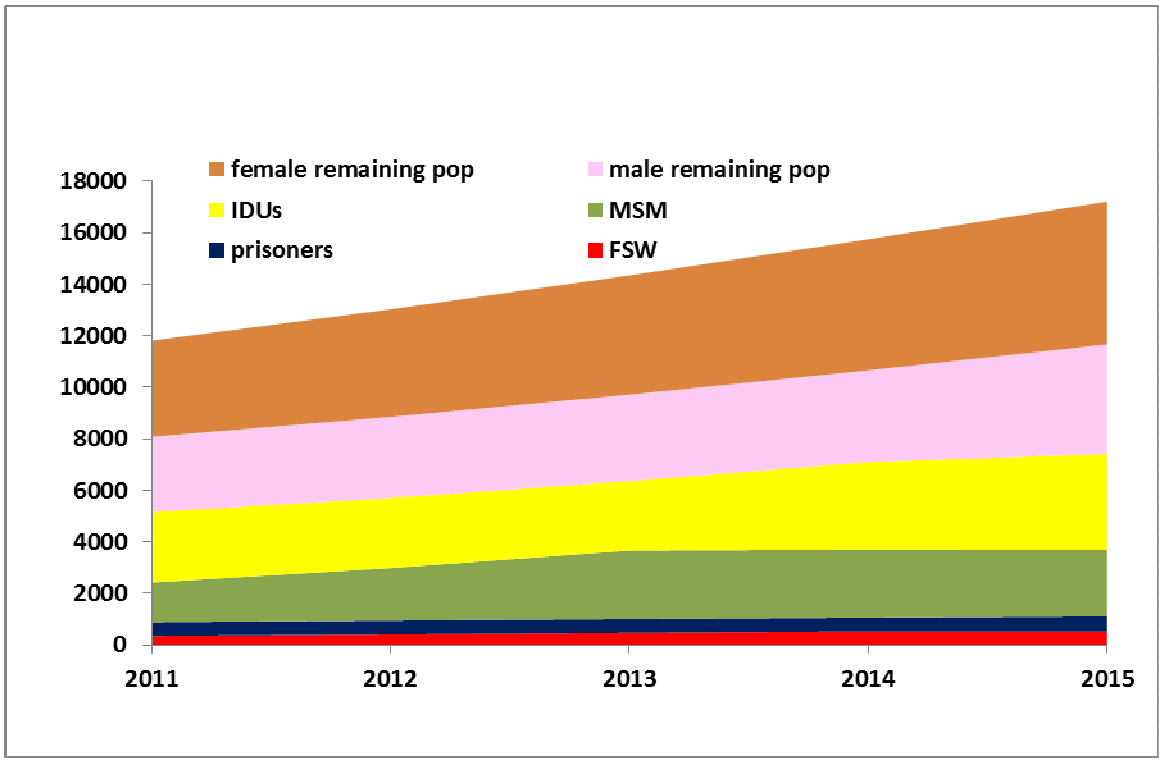


Figure 7: Estimated number of new HIV cases during 2006- 2014 disagregated by different high risk group[5]



Prevalence of HIV in Various Population Groups

Injection Drug Users: based on the 2010 bio-behavioral survey, the average prevalence of HIV among IDUs across the country is about 15% (with 95% CI: 9.5%-22.9%). Yet, the figure varies considerably from one province to another, ranging from 2.2% to 44.7% with the highest prevalence seen in Tehran, Fars and Lorestan provinces. Even though the general prevalence of HIV has not changed since the bio-behavioral survey of 2008 (which found the figure to be 15.3%) but prevalence has risen in Tehran, Khuzestan, Fars and particularly Sistan-Baluchestan province.[2]

Sex partners of IDUs: in the 2010 bio-behavioral survey of sex partners of IDUs in 2010 the prevalence of HIV was found to be 3.7% among female partners and 9.5% among male IDU with the figure for the total population group averaging 6.6%. Additionally the prevalence in the cities where the survey was conducted was 10.8%, 4.6% and zero in Shiraz, Tehran and Mashhad, respectively. [26]

For the HCV virus a total of 26.3% of the survey participants tested positive. The prevalence was 38.6% among men and 13.7% among women. HBV prevalence in the survey population was 2.9 % (3.6% for men and 2.3% for women). [26]

Female Sex-Workers: based on the 2010 bio-behavioral survey results HIV prevalence in this category averaged 4.5% across the country (with 95% CI: 2.4%-8.3%). Yet the figure varied among provinces, ranging from 0 to 28%. The highest prevalence was seen in Kermanshah and Hormozgan provinces. Among those with a history of drug injecting HIV prevalence was found to be as high as 13 %.[7]

Prisoners: in the 2009 bio-behavioral survey prevalence of HIV infection amounted to 2% for female and male inmates. Among inmates who had a history of injecting drugs the figure reached as high as 8.1% (with 95% CI: 2.1%-12.5%). [27]

MSMs: studies of prevalence among MSM are very limited and thus unrepresentative of the group as a whole. Therefore no generalized inference could be drawn in this regard. Nevertheless in the bio-behavioral survey of inmates in 2009 15.6% of men reported sexual relations with other men. Prevalence of HIV among this subset of MSM was found to be 3.7% (with 95% CI: 0.6%-18.8%). [27]

Street Children: In a bio-behavioral survey of 1000, 10-18 year-old street children in Tehran, HIV prevalence in the total sample was found to be around 4%-5%. Among children who used drugs the figure reached 9 %.[28]

General Population: HIV prevalence in the general population is quite low. Surveys of pregnant women in recent years have identified only one case of HIV.[1]

National Response to the AIDS epidemic

This section of the report deals with the national response to the HIV/AIDS epidemic in the Islamic Republic of Iran based on information and data acquired form monitoring of programs, measurement of main indicators of the report, integrated bio-behavioral survey of the HIV surveillance system, the National Policy and Commitment Instrument(NCPI) and some other studies.

Core Indicators of the Country Report

Indicators related to young people and general population

1.1. Indicator name: Young people: Knowledge about HIV prevention

Definition of indicator: Percentage of young people aged 15–24 who both correctly identify ways of preventing the sexual transmission of HIV and who reject major misconceptions about HIV transmission

Measurement tools: A study about knowledge of young people was used to work out this indicator. To measure the HIV related knowledge and behaviour a study was conducted among 821 young people aged 15- 24 in the cities of Zahedan (Shirabad, Karimabad), Tehran (Ekbatan, yaftabad), Khoramabad (Shamshirabad), Mashad (Khajeh Rabie), Gheshm, Bandar Abbas and Bam in the winter of 2011. Sampling method was multiple cluster sampling. Data was gathered by a standardized questionnaire and analyzed appropriately.[13]

Indicator value: Among study population, 72.2% had correct knowledge about reducing the risk of HIV transmission by having sex with only one uninfected partner who has no other partners, 61.5% about reducing the risk of getting HIV by using a condom every time they have sex, 68.7% and 52.1% about a healthy-looking person can have HIV and the point that one will not get HIV through mosquito bite or sneeze or cough, respectively and 62.2% about a person will not get HIV by sharing food with someone who is infected. Just 20.6% of the male and 16.2% of female young individuals gave correct response to all of the questions. [13]

Discussion: The study was conducted in urban area and did not include rural regions. Correct answer to all questions was increased from 15.5% [25] to 20.6% in boys, but the figure does not change in girls. Most of this improvement is due to better knowledge about lack of transmission of HIV through mosquito bit and sharing food. Knowledge about reducing the risk of HIV transmission by having sex with only one uninfected partner who has no other partners, was 72.2% and knowledge about reducing the risk of getting HIV by using a condom every time they have sex, was 61.5% in both sexes, and it seems it should be improved.

1.2. Indicator name: Sex before the age of 15

Definition of indicator: Percentage of young women and men aged 15-24 who have had sexual intercourse before the age of 15

Measurement tools: Population based study is recommended.

Indicator value: At this time there is not any study to measure the indicator.

1.3. Indicator name: Multiple sexual partnerships

Definition of indicator: Percentage of women and men aged 15–49 who have had sexual intercourse with more than one partner in the past 12 months

Measurement tools: Population based study is recommended.

Indicator value: At this time there is not any representative study to measure the indicator.

Discussion: In several studies such high risk sexual behaviour was observed. For example in a sample of young people conducted in 7 cities of Iran in 2008, 14.1% of 20 -24 year old boys (46 out of 326) and 1.8% of 20 -24 year old girls (3 out of 277) had more the one sexual partner in the past 12 months.[10] Another study conducted in one district of Tehran in 2004, out of 422 respondents who had sex in the 12 months prior to the study, 110 (21.1%) said they had had more than one partner in that period.[8] Another study featuring male students of a university in Tehran in 2006 (44) showed that 39% of students aged 20-24 (116 out of 295) and 28.6% of students over 25 years of age (4 out of 14) had sex with more than one partner in their lifetime.[9]

1.4. Indicator name: Condom use at last sex among people with multiple sexual partnerships

Definition of indicator: Percentage of women and men aged 15-49 who have had more than one partner in the past 12 months who used a condom during their last sexual intercourse

Measurement tools: Population based study is recommended.

Indicator value: At this time there is not any representative study to measure the indicator.

Discussion: A study conducted in one district of Tehran in 2004, out of 110 respondents who said they had had more than one partner in the last 12 months period, 43.6% used condom during their last sexual intercourse.[8]

1.5. Indicator name: HIV testing in the general population

Definition of indicator: Percentage of women and men aged 15-49 who received an HIV test in the past 12 months and know their results

Measurement tools: Population based study is recommended.

Discussion: Regarding epidemic stage in country, this indicator is not one of the indicators of monitoring and evaluation of the strategic plan.

1.6. Indicator name: HIV prevalence in young people

Definition of indicator: Percentage of young people aged 15–24 who are living with HIV

Measurement tools: HIV sentinel site

Indicator value: In 5 sentinel survey among pregnant women of general population which included 2758 cases, only one was HIV positive [1].

Indicators related to Sex Workers

1.7. Indicator name: Sex workers: prevention programmes

Definition of indicator: Percentage of sex workers reached with HIV prevention programmes

Measurement tools: The first round of bio-behavioural surveillance among female sex workers was conducted in 2010. At first a sample of drop in centers which give services to female sex workers were selected in 12 provinces. It is tried to select at least 5 DIC in each province. At least 20 -35 female sex workers were recruited in the study in each DIC. So, approximately 150 cases were included from each province. Sampling method was convenience sampling in DICs. The data were collected by a standardized questionnaire. Dried Blood Spot was used for HIV testing. Each positive test was reconfirmed and then reported as positive. 10% of all blood samples were sent to a reference laboratory for quality control. In this study 1005 female sex workers were recruited and after deletion of incomplete questionnaire, the results of 872 cases were used for final analysis. [7]

Indicator value: 44.26% (386 out of 872) of study population knew where they can go if they wish to receive an HIV test and in the last 12 months, they had received condoms the figure was 38.6% (81 out of 210) for those under 25 year and 46.5% (304 out of 654) for those 25 year or more. Knowledge about location of HIV testing and receiving condom during last 12 months was 54.0% (471 out of 872) and 62.7% (547 out of 872) respectively. [7]

Discussion: Most of the study population was from women specific Drop in Centers. These female sex workers had lower socioeconomic status. So we should be cautious in generalizing findings to all female sex workers. There is not any similar study previously conducted for comparison. But in a study among female sex workers in Tehran in 2007, 63.9% of study population had correct knowledge about location of HIV testing. [29]

There is not any study about male sex workers.

1.8. Indicator name: Sex workers: condom use

Definition of indicator: Percentage of sex workers reporting the use of a condom with their most recent client

Measurement tools: The same indicator number 1.7.

Indicator value: 531 out of 872 (60.89%) of female sex, used condom with their most recent client. This figure was 61.9% (130 out of 210) for those under 25 years old and 61.2% (400 out of 654) for those of 25 years old or greater. In the above mentioned study, using the weighted analysis, condom use in the last intercourse with a client was 57.1% [7] and this figure was used as a basis for prevention planning at the national level.

Discussion: Most of the study population was from women specific Drop in Centers. These female sex workers had lower socioeconomic status. So we should be cautious in generalizing findings to all female sex workers. There is not any similar previously conducted study for comparison. But in a study among female sex workers in Tehran in 2007, 55% of study population had used condom in the last sexual intercourse with a client.[29]

There is not any study about male sex workers.

1.9. Indicator name: HIV testing in sex workers

Definition of indicator: Percentage of sex workers who received an HIV test in the past 12 months and know their results

Measurement tools: The same as indicator number 1.7.
Indicator value: 243 out of 872 (27.87%) of female sex workers, received an HIV test in the past 12 months and know their results. This figure was 25.2% (53 out of 210) for those under 25 years old and 28.9% (189 out of 654) for those of 25 year old or more.[7]
Discussion: Most of the study population was from women specific Drop in Centers. These female sex workers had lower socioeconomic status. So we should be cautious in generalizing findings to all female sex workers. There is not any similar previously conducted study for comparison. But in a study among female sex workers in Tehran in 2007, 20.4% (57 out of 280) of study population received an HIV test in the past 12 months and know their results.[29]
There is not any study about male sex workers

1.10. Indicator name: HIV prevalence in sex workers

Definition of indicator: Percentage of sex workers who are living with HIV
Measurement tools: The same indicator number 1.7.
Indicator value: Thirty out of 817 (3.7%) of female sex workers, were HIV positive. This figure was zero percent for those under 25 year old and 4.9% (30 out of 614) for those of 25 years old or more. 3.4% (3 out of 88) of female sex workers with a history of less than 1 year sex working were HIV positive and the figure was 3.7% for those with more than 1 year sex working. Using the weighted analysis, HIV prevalence in female sex workers was 4.5 %[7] and this figure was used as a basis for program planning at the national level.
Discussion: Although the prevalence of HIV in female sex workers do not reach 5%, but a prevalence of 4.5% indicate the necessity of scaling up prevention of sexual transmission of HIV. Nevertheless Most of the study population was from women specific Drop in Centers. These female sex workers had lower socioeconomic status. So we should be cautious in generalizing findings to all female sex workers.
There is not any study about male sex workers

Indicators related to MSM

1.11. Indicator name: Men who have sex with men: prevention programmes

Definition of indicator: Percentage of men who have sex with men reached with HIV prevention programmes
Measurement tools: Population based study is recommended.
Indicator value: At this time there is not any study to measure the indicator.
Discussion: There is some evidences that this behaviour do occur over the country specially in closed setting such as inside prisons.[2, 27 and 30] But at this time there is not any representative and documented studies in this group. It seems there is a need to conduct specifically tailored studies in this group.

1.12. Indicator name: Men who have sex with men: condom use

Definition of indicator: Percentage of men reporting the use of a condom the last time they had anal sex with a male partner
Measurement tools: Population based study is recommended.
Indicator value: At this time there is not any study to measure the indicator.

1.13. Indicator name: HIV testing in men who have sex with men

Definition of indicator: Percentage of men who have sex with men who received an HIV test in the past 12 months and know their results
Measurement tools: Population based study is recommended.
Indicator value: At this time there is not any study to measure the indicator.

1.14. Indicator name: HIV prevalence in men who have sex with men

Definition of indicator: Percentage of men who have sex with men who are living with HIV
Measurement tools: Population based study is recommended.
Indicator value: At this time there is not any study to measure the indicator.

Indicators related to injection drug users

2.1. Indicator name: People who inject drugs: prevention programmes

Definition of indicator: Number of Syringes distributed per person who injects drugs per year by Needle and Syringe Programmes
Measurement tools: Numerator: Inquiries from Universities of Medical Sciences and Health Services and Welfare Organization. **Denominator:** Size estimation of injection drug user population
Indicator measurement: Numerator: Over a one-year period ending in September 2011, 6,022,834 free needles and syringes have been distributed.[14,15] **Denominator:** According to several Rapid situation Assessments implemented in Iran, it is estimated that there are between 170,000 to 230,000, IDUs in Iran. [5, 17 and 16]
Indicator value: Between 26 and 35 needle and syringe per IDU per year were distributed.
Discussion: It should be considered that the latest IDU size estimation was done in 2007. After that MMT was scaled up widely in Iran. So, total number of current IDUs as the denominator may be lower at this time. The bio-behavioural survey in IDUs in 2010 showed that 43% of IDU i.e. those with a history of drug injection during last 12 months were under MMT and about 38% had not injected during last month.[2] This may an effect on drug injection behaviour of IDUs.
In spite of many useful activities, it seems that scaling up of activities needs more resources and efforts.

2.2. Indicator name: People who inject drugs: condom use

Definition of indicator: Percentage of people who inject drugs reporting the use of a condom the last time they had sexual intercourse
Measurement tools: The second round of bio-behavioural surveillance among injection drug users was conducted in 2010. This study was implanted in 10 provinces. Except for Yazd, other provinces were the same as the first BBSS among IDUs. At first a sample of centers which give services to IDUs were selected in capital city and several important cities of each province. On average 5 DICs were selected in each province. Selection criteria of centers were set according to the type of centers (DIC, MMT centers, drug treatment centers, and so on), location of centers, and the organization supervising the centers i.e. Medical Universities or Welfare Organization). On average 13.5% of IDUs recruited outside of centers by outreach teams. The data were collected by a standardized questionnaire. Dried

Blood Spot was used for HIV testing. Each positive test was reconfirmed and then reported as positive. 10% of all blood samples were sent to a reference laboratory for quality control. In this study 2546 IDUs were recruited. [2]

Indicator value: 15.1% (240 out of 1595 who have injected during previous month) used condom in their last intercourse with their wife/ husband, 16.2% (258 out of 1595) used condom in their last intercourse with their non-paid sexual partner, 15.3% (244 out of 1595) used condom in their last intercourse with their paid partner.[2]

Discussion: It seems that scaling up of condom usage in this very important group which fuels HIV epidemic, needs more efforts.

2.3. Indicator name: People who inject drugs: safe injecting practices

Definition of indicator: Percentage of people who inject drugs reporting the use of sterile injecting equipment the last time they injected

Measurement tools: The same as indicator number 2.2.

Indicator value: 1463 out of 1595 (91.7%) of study population used sterile injecting equipment the last time they injected. The figure was 91.9% (1439 out of 1566) in male IDUs, 82.8 (24 out of 29) in female IDUs and 91.1% (173 out of 190) in those IDUs under 25 years old. [2]

Discussion: The progress was very significant in comparison the figure in previous report which was 74.5 %.[25] But it should be remembered that success in the field of HIV epidemic among IDUs is very fragile these need to be carefully guarded lest the programs that have been initiated are halted. On the other hand, some 9% of the IDUs had still used a non-sterile syringe in their latest injection.[2] This is tantamount to incidence of new cases which needs to be stopped. Therefore, these programs need to be expanded. Meanwhile lower coverage of sterile syringe-use among women IDUs justifies recent measures toward establishing centers for women and underlines the necessity of further development of such centers, particularly in the higher risk areas of the country.

2.4. Indicator name: HIV testing in people who inject drugs

Definition of indicator: Percentage of people who inject drugs who received an HIV test in the past 12 months and know their results

Measurement tools: The same as indicator number 2.2.

Indicator value: 24.78% (631 out of 2546) of the study population received an HIV test in the past 12 months and know their results. The figure was 24.2% (16 out of 66) for women, 24.8% (615 out of 2480) for men and 16.9% (45 out of 266) for IDUs less than 25 years old. [2]

2.5. Indicator name: HIV prevalence in people who inject drugs

Definition of indicator: Percentage of people who inject drugs who are living with HIV

Measurement tools: The same as indicator number 2.2.

Indicator value: It was observed that13.6% of IDUs (338 out of 2479) was HIV positive. The prevalence of HIV among male IDUs were 13.8% (332 out of 2417), 9.7 %(6 out of 62) in female IDUs and 6.6% (17 out of 256) for those less than 25 years

old. Using the weighted analysis, HIV prevalence in injecting rug users was 15.07 %[2] and this figure was used as a basis for prevention planning at the national level.
Discussion: The fact that HIV prevalence has not increased among IDUs as compared to the previous report, while studies in other countries indicate a rises in prevalence by up to 40%[31], may be attributed to the success of Iran's harm reduction programs and the necessity of continuation of these services with expanded coverage.

Indicators related to mother to child transmission

3.1. Indicator name: Prevention of mother-to-child transmission

Definition of indicator: Percentage of HIV-positive pregnant women who received antiretroviral to reduce the risk of mother-to-child transmission
Measurement tools: Numerator: Inquiries from Universities of Medical Sciences and Health Services. **Denominator:** Estimation method.
Indicator measurement: Numerator: From 21 September 2010 to 21 September 2011, totally 74 pregnant women received ART for prevention of mother-to-child transmission. [14]
Denominator: according to birth registry there was 1,363,542 from 20 March 2009 to 20 March 2010 [32] and on the other side **:** In 5 sentinel survey among pregnant women of general population which included 2758 cases, only one was HIV positive[1]. Considering these figures, it seems that there was 494 HIV positive pregnant women from 20 March 210 to 20 March 2011.
Indicator value: 15% during the abovementioned period.
Discussion: There are concerns among some experts about the denominator, that is, estimates of pregnant women who are HIV-positive. They are worried the software has overestimated their numbers and it seems that some other studies are needed to achieve a more meticulous estimation of the number of HIV positive pregnant women.
It is to be noted that all identified pregnant HIV positive women, received ART. This fact has been taken into account when constructing the indicator based on estimation of all identified and non-identified cases. 18 HIV-infected pregnant out 74 received ART because they were eligible for treatment, 54 received triple therapy, and 2 received AZT as MTCTP.

3.2. Indicator name: Early infant diagnosis

Definition of indicator: Percentage of infants born to HIV-positive women receiving a virological test for HIV within 2 months of birth
Measurement tools: Numerator: Inquiries from Universities of Medical Sciences and Health Services. **Denominator:** Estimation method.
Indicator measurement: Numerator: From 21 September 2010 to 21 September 2011, totally 58 neonates was born from pregnant HIV positive women, and 14 received a virological test for HIV within 2 months of birth. [14]
Denominator: according to birth registry there was 1,363,542 from 20 March 2009 to 20 March 2010[32] and on the other side **:** In 5 sentinel survey among pregnant women of general population which included 2758 cases, only one was HIV positive[1]. Considering these figures, it seems that there were 494 HIV positive pregnant women from 20 March 210 to 20 March 2011.

Indicator value: 24% neonate born from HIV infected women received virologic test. Considering the estimated number of pregnant HIV infected women, the figure will be 3%. It should be remembered that in the previous version of national guideline, virologic was not mandatory and most neonate was followed by serologic test. All reported neonate were followed according to this guideline. 53 of these neonate received 6 weeks AZT and 52 out of 54 received exclusive formula milk.[14]

3.3. Indicator name: Mother-to-Child transmission of HIV (modelled)

Definition of indicator: Estimated percentage of child HIV infections from HIV-positive women delivering in the past 12 months
Measurement tools: Spectrum software was used.[18]
Indicator value: 14%
Discussion: According to output of Spectrum, Mother to Child Transmission rate was 14% in 2010. This means that transmission rate was reduced from naturally occurring 25% to 14%. This figure should be reduced further and critical point for intervention is diagnosis of infected women and providing MTCTP services to them.

Indicators related to treatment and care

4.1. Indicator name: HIV treatment: antiretroviral therapy

Definition of indicator: Percentage of eligible adults and children currently receiving antiretroviral therapy
Measurement tools: Numerator: Data acquired from antiretroviral therapy registry system **Denominator:** Spectrum software for estimation
Measurement Method: Numerator: At the end of the year 2010, 2209 persons (Including 518 female and 1691 male) were receiving Antiretroviral Therapy. In December 2011, the number raised up to 2752 persons (Including 684 female and 2068 male).[19] **Denominator:** Estimated by Spectrum Software, the number of people who need ART across the country was 21620 and 35255 persons in 2010 and 2011 respectively.[18]
Value of indicator: In December 2010 and December 2011, 10.2% and 7.8% of the total people who needed antiretroviral therapy received it respectively.
Discussion: Although the number of individuals who receive antiretroviral therapy has been raised by 93%, because the growth in coverage has not been in pace with the increase in the number of individuals who need antiretroviral therapy, coverage has not changed significantly. There are concerns among some experts about the denominator, that is, estimates those in need of ART. They are worried the software has overestimated their numbers and it seems that some other studies are needed to achieve a more meticulous estimation of the number of HIV positives in need of ART.

4.2. Indicator name: Twelve month retention on antiretroviral therapy

Definition of indicator: Percentage of adults and children with HIV known to be on treatment 12 months after initiation of antiretroviral therapy
Measurement tools: ART registries [19]
Indicator value: Twelve months retention on ART for those that initiated ART during 20 September 2009 until 20 September 2010 was 82.1%. The figure for women was 90.8% and for men 80.5%. [19] 12, 24, 36 months retention on ART in 2005 to 2010 were showed in annex 3.

5.1. Indicator name: Co-management of tuberculosis and HIV treatment

Definition of indicator: Percentage of estimated HIV-positive incident TB cases that received treatment for both TB and HIV

Measurement tools: Numerator: Inquiries from Universities of Medical Sciences and Health Services. **Denominator:** Estimation method.

Indicator measurement: Numerator: Since 22 September 2010 Till 22 September 2011, 111 persons living with HIV and incident TB, received TB treatment and ART. [14] **Denominator:** Following measures were taken for making estimation: By taking into account the estimated number of the people who need Antiretroviral Therapy (35,255 individuals), [18] prevalence of TB in similar population (20%) [20] and estimation of incident TB in people living with HIV who need ART (About 7.5%), the number of 573 will be obtained. **Indicator value:** Thus totally 19.4% of PLWH and incident TB, received anti TB and ART.

Discussion: It seems that two factors may contribute to lower coverage of comanagement of TB and HIV: 1. Until 21 September 2010, 11231 PLWH referred to triangular clinics and have had medical record in these centres. 6495 of them referred to these clinics at least once in the year ending in 21 September 2010.[14] If we consider the estimated number of PLWH i.e. 100000, and those cases diagnosed as HIV positive i.e. 23497, this means that 23.5% of PLWH were diagnosed and only 6.5% were received care during the year ending in 21 September 2010. 2. At the same time difficulty of TB diagnosis among PLWH contribute to lower coverage of indicator.

Indicators related to Policy and Environmental Factors related to HIV

6.1. Indicator name: AIDS spending

Definition of indicator: Domestic and international AIDS spending by categories and financing sources

Method of Measurement:

1. Enquiries from the health departments of Universities of Medical Sciences and Health and Treatment Services about their spending on measures to control and prevent HIV/AIDS
2. Making inquiries from international organizations about their spending on HIV/AIDS control and prevention programs
3. Making an inquiry from the Global Fund to fight AIDS, Tuberculosis, and Malaria in Iran about its spending on measures to control and prevent HIV/AIDS

Indicator Measurement: The amount of money spent by public and international sources to control and prevent HIV/AIDS between March 21, 2009 and March 20, 2010 totalled 433,455,877 thousand Rails (equal to 40,761,320 US$, each US dollar equals to 10,634 Rails). The amount of money spent by the government of the Islamic Republic of Iran in the same period was 385,055,353 thousand Rails. During the same period, international organizations spent 48,400,523 thousands Rails.

7.1. Indicator name: Government HIV and AIDS policies

Definition of indicator: National Commitments and Policy Instrument (NCPI)

Indicator value: See Annex 2 and Text

7.2. Indicator name: Prevalence of recent intimate partner violence

Definition of indicator: Proportion of ever-married or partnered women aged 15-49 who experienced physical or sexual violence from a male intimate partner in the past 12 months
Measurement tools: Population based study is recommended.
Indicator value: At this time there is not any study to measure the indicator.

7.3. Indicator name: Orphans school attendance

Definition of indicator: Current school attendance among orphans and non-orphans (10–14 years old, primary school age, secondary school age)
Measurement tools: A society based survey was utilized to work out this indicator. Based on multiple cluster random sampling, a survey was implemented in 2008 on 2000 teen aged and young individuals aged 10-24 with record of over one year residence in the cities of Zahedan (Shirabad, Karimabad), Tehran (Ekbatan, yaftabad), Khoramabad (Shamshirabad), Mashad (Khajeh Rabie), Gheshm, Bandar Abbas and Bam. Knowledge scale of the young people was measured by a standard questionnaire. In this way target data about the young people aged 15-24 was acquired. [23]
Indicator value: 92.4% of the children survey in this report and aged 10-14 with at least one parent alive attended school at the time of the study. Due to the small number of those children who had lost both parents, it is impossible to give reliable figures for this group.

7.4. Indicator name: External economic support to the poorest households

Definition of indicator: Proportion of the poorest households who received external economic support in the last 3 months
Measurement tools: Population based study is recommended.
Indicator value: At this time there is not any study to measure directly the indicator. But regarding that at this time, 100% of Iranian families have been receiving monthly financial subsidy from 14 months ago, the ratio of direct financial help is definitely 100%. Moreover, Imam Khomeini Relief Committee and Welfare Organization also provide some special financial and non-financial help to the poorest families.

Strategic Plan

History

After detection of the first HIV positive case in 1987, national response was commenced by holding AIDS Supreme Council in 1988.[3] National response was first focused mainly on providing safe blood, proposing some treatment services and establishment of registration system to record the detected cases. Subsequently standard precaution was added to the above measures. Simultaneously with HIV epidemic among Iranian IDUs in mid-decade of 1990 some harm reduction measures were taken too. But till end of the decade, HIV

controlling activities were mainly rendered as discrete actions, not within a strategic program framework. [3] In 2001 for the first time within a nationwide program, a five year strategic plan was developed for the years 2002-2006 by Ministry of Health and Medical Education with comparative partnership of some other organizations. In this strategic plan with emphasis on partnership of all stakeholders including governmental and non-governmental sectors, 11 strategies were considered to control HIV and AIDS epidemic in Iran[3]

1. Education and Information
2. Safe blood provision
3. Strengthening epidemiologic surveillance system
4. Strengthening prevention of transmission of HIV through service providing centers
5. Voluntary, HIV Counselling and testing:
6. Harm Reduction
7. Care and Treatment of STDs
8. Counselling, Care and Treatment for PLWH and Their Families
9. Strengthening of Required Infrastructure
10. Strengthening applied researches
11. Socioeconomic support of PLWH and their families and those at risk of HIV

This program lacked a monitoring and evaluation plan. It could not obtain State Members' approval while being performed so that could not be entirely fulfilled in practice. At the end of its last year of operation, an attempt was exerted to evaluate it retrospectively, and subsequently a report was published on for this purpose. [3]

The second strategic plan was arranged for a 3 year long period for the years 2007-2009. This program was arranged by contribution of the partner organizations and was composed of 10 strategies, 75 specific aims and 498 main activities. It developed with partnership of MOH, RCO, Prison Organization, Welfare Organization, Army Forces, MOE, Ministry of Transportation, BTO, and Imam Khomeini Relief Committee. Its strategies was similar to the first strategic plan, except that “Strengthening epidemiologic surveillance system” and “Strengthening applied researches” integrated into “establishment of epidemiologic surveillance system and data management”, “Strengthening prevention of transmission of HIV through service providing centers” integrated to “Care and Treatment of STDs “and changed to “Prevention, Care and Treatment of STDs “and “standard Precaution” was added to strategies. [3]

Although it didn't get the States approval, but attracted much attempts to be executed. From the second year a plan was designed for monitoring and evaluation of the program and some studies were implemented for evaluating the situation among injecting drug users, sex workers, MSMs as well as operations of the behavioral disease consulting centers. In the ending year a monitoring program was performed retrospectively. [3]

The third strategic plan

The third strategic plan (2010-2014) was developed based on experiences and documentation of first and second strategic plans.[33] It developed with partnership of all stakeholders. The role and responsibilities of all stakeholders is determined in the strategic plan. It was approved by Health High Council on 4 November 2011 and delivered by The First Vice President. It contains 10 strategies and 161 target settings. A plan is designed for its monitoring and evaluation and has a special action plan. Members of monitoring and evaluation provincial committee and provincial technical bodies including representative of county, Medical University, Education, Prison Organization and Welfare Organization in tree session received the necessary training programs for execution of the program. The strategies of the third strategic plan are as follows:

1. Education and Information
2. Safe blood provision
3. Voluntary, HIV Counselling and testing:
4. Harm Reduction
5. Prevention of sexual transmission of HIV
6. Care and Treatment of STDs
7. Counselling, Care and Treatment for PLWH and Their Families
8. Support and empowerment
9. Establishing of an Epidemiological Surveillance and Data Management System
10. Strengthening of Required Infrastructure

The most important changes of strategies include high lightening of “prevention of sexual transmission of HIV” regarding increasing reported cases of infected by sexual route and available data about sexual behavior of high risk groups and young people.[33]

Assessment of Strategic Plan based on NCPI(Annex1)

Because of active partnership of all the different partners which contributed to development of current national planning, all dimensions of the control and prevention of HIV is covered. Hence, all the partners consider themselves effective and owner of the programme. As well, with respect to the achievement of the surveillance system, and monitoring and evaluation programme, its target setting seems more realistic. Its budgeting is specifically outlined and more specific criteria is used for its outlining. On the other hand, taking changes of the epidemic into consideration, made the programme to focus more on prevention of sexual transmission.

Country Committee Secretariat in Ministry of Health and Medical Education, is the overall responsible organization for development and implementation of the multi-sectorial strategy for AIDS control. Other participants are: Ministry of Welfare and Cooperation, Ministry of Science, Ministry of Labor, Ministry of Education, Ministry of Interior, Prisons Organization, State Welfare Organization, Iranian Red Crescent Organization, Insurance organizations, Transportation and Bus Terminals organization, Blood Transfusion Organization, Islamic

advertisement Organization, Ministry of Culture and Islamic guidance, Islamic Republic of Iran Broadcasting, Assistance Committee of Imam Khomeini, Armed Forces, National Youth Organization and Joint United Nations Programme on AIDS.

Sectors of Education, Health, Work, Military, Transportation, Youth, Children and Prisoners were taken into consideration in the multi-sectorial strategy and special funding was allocated for their HIV specific activities. Specific HIV budget was earmarked for Ministry of Health and Medical Education. Other organizations receive their necessary budgets out of the credits specified as national credits for youth, education, health and social harms. In addition international credits, to a limited extend, are the other funding source.

The multi-sectorial plan is covering such vulnerable people as injection drug users, spouses of prisoners, spouses of PLWH, spouses of the injection drug users, HIV infected people, women at risk (Sex-workers), peoples with sexually transmitted infections, migrants, marginal area dwellers , easily available young people, students, university student, Red Crescent young volunteers, blood receivers, girls and women, young people, prisoners, soldiers, workers whose job make them at risk, orphans at risk, mobile populations and general population. As well multi-sectorial strategy took notice of such places as prisons, schools and work-places alongside of such issues as stigma and discrimination, role of gender empowerment and equality, HIV and poverty, preservation of human rights and participation of HIV infected people. Multi-sectorial strategy also includes operational plan. The strategic plan with its operational plan have taken into consideration the formal goals of the plan, specific targets, development process and ways to achieving goals, detailed cost of each program, funding source, framework of monitoring and evaluation.

Civil society is involved in multi-sectorial strategic planning. So that representatives of non-governmental organizations, PLWH and academic sector are members of national committee and sub-national committees. But according to the most of the key informants, non-governmental organizations play a limited role. Their role in drafting the strategic plan is not prominent, but they had a very considerable role in implementing programs among high risk groups. The multi-sectorial strategic plan has been approved by non- governmental organizations and all such organizations have conducted their HIV programs compatible with the multi-sectorial strategic plan.

In addition, HIV has been taken into consideration in the country major development programs such as development plan (for reduction of epidemic diseases), country evaluation plans, supportive framework of the United Nations, and the general supportive insurances. But most key informants believe that impact of HIV on socio-economic development has not been considered in the planning.

There are reliable estimates about the current needs of those adolescent people and children who are in need of antiretroviral therapy. Coverage of HIV Programs are monitored. This is disaggregated by sex. Monitoring program has been designed to cover all the country's target groups. Periodical studies were

considered for female sex workers, injection drug users and prisoners in the surveillance system. These data are used to identify the current gaps and to determine future priorities, program planning and resource allocation. Coverage of HIV programs are monitored disaggregated by geographical and provincial areas. Coverages are evaluated based on the overall monitoring and evaluation program.

Generally it seems that appropriate efforts have been conducted in the country in the year 2011 in line with national strategic plan. The main achievements since 2009 are listed below.

- Reduction of growth of HIV epidemic amongst injection drug users and prisoners.
- Approval of the national strategic plan in the Superior Health and Food Security Council and circulating the approved plan to the related organizations and settings by vice president.
- Continued intersectorial cooperation on technical aspects and planning.
- Establishment of Monitoring and Evaluation Committees.
- With respect to the current stigma on high risk sexual behaviour, special focus was made on such behaviour in this plan.
- Establishment of a regional education centre in the Kerman university of Medical sciences on surveillance system.
- Improvement of antiretroviral drug provision and distribution system.
- Increases in coverage by broadcasting and media on HIV information.
- Continuation of appropriate programs such as insurance coverage, provision of treatment free of charge, empowerment of PLWH through expansion of positive clubs and programs of harm reduction.

Still the following important challenges remain as listed below.

- Remaining of stigma on the HIV at risk groups
- Existing of the laws that limits access to the most at risk groups specially those groups with high risk sexual behaviour specially female sex workers
- Lack of suitable programs in the field of street children
- HIV being a taboo in some organizations particularly in education system
- Inadequate interested human resources for implementing programs
- Inadequate capacity of powerful NGOs for implementing programs
- Addiction features has begun to change and increasing stimulants usage which may reduce the effect of harm reduction programs and the need to the new programs

Prevention

Needle and Syringe Programs

By August 2011, there were 421 centers operating under supervision of universities of medical sciences or the State Welfare Organization that delivered free needles and syringes to IDUs.[14,15] Some 158 of these centers were run by

the private sector. Over a one-year period ending in September 2011 these centers had distributed some 6,022,834 free needles and syringes.[14,15] This amounts to 26-35 syringes per individual IDU. It seems that a significant number of IDUs are obtaining their needles and syringes from pharmacies. Based on the 2007 bio-behavioral survey of IDUs 48.6% of those who had injected drugs over the preceding month had, in fact, bought the syringes and needles they had used on most occasions from a pharmacy.[34] Those who had obtained the syringes and needles they had used on most occasions from DICs and outreach teams amounted respectively to 21% and 6.6% of the IDUs.[34]

According to the bio-behavioral survey of IDUs in 2010, respondents continue to carry out risky behavior on a daily basis despite relatively high levels of awareness regarding HIV transmission risk factors. [2] Even though distribution of free syringes and needle has impacted on the injecting mode of drug use tremendously, remaining high-risk injections among some individuals continues to diminish the effectiveness of prevention programs. Levels of use of new syringes in the most recent injection among IDU clients of DICs was found by this study to be 91.7%[2] whereas the figure in the 2007 survey was 83.2%.[34] Prevalence of use of others' syringes and needles, particularly discarded, used syringes and needles was found to be low in this survey, but a small group of individuals continue to swap syringes with friends or re-use their own old syringes. A total of 12.9% had lent their syringes to another, either as a favor or in exchange for money. [2] 37% reported using used syringes and needle over the preceding month which, however, had been their own in 76% of the cases.[2] What this means is that some 9% of the population being studied had injected with used syringes and needles over the one-month period preceding the survey. Therefore, it seems that further development of harm-reduction programs remains a serious imperative. A study commissioned by the MOH's Center for Disease Management and funded by UNAIDS-Iran and other HIV control program partners was conducted by the Regional Knowledge Hub for HIV/AIDS Surveillance (at Kerman University of Medical Science) to determine the impact of interventions on HIV incidence. It was found that an increase in coverage level of sterile syringe programs in IDUs from 80% to 95% could lead to an estimated 75% drop in the rate of incidence of HIV infections in this population.[5]

Substance Maintenance Treatment

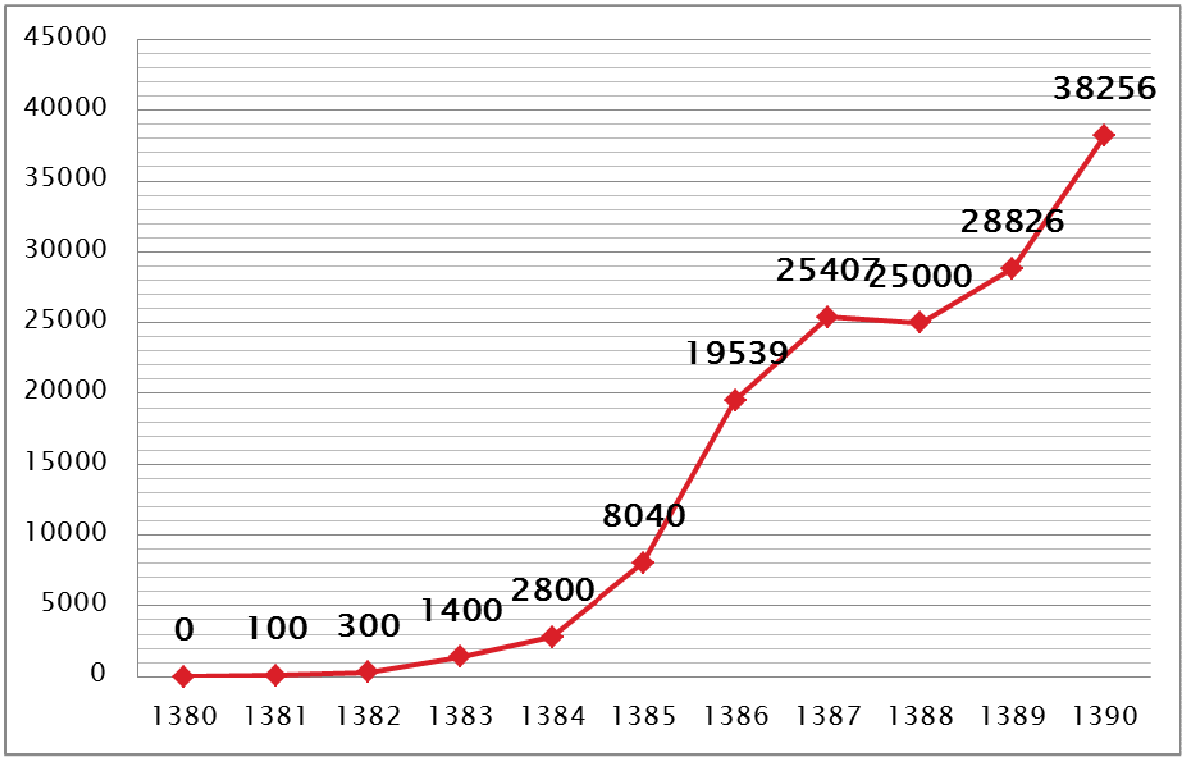
Methadone Maintenance Treatment: by August 2011 methadone maintenance treatment was being offered to IDUs at 3373 centers supervised by medical sciences universities, State Welfare Organization or Prisons' Organization. Of these, 3023 were private sector centers. [14,15,35] Over a one-year period ending in September 2011, a total of about half a million drug users have received methadone maintenance treatment. [14,15,35] This is certainly not to say that at any given time there were as many people being treated, nor does mean that all treatment recipients were injecting drug users. The 2007 bio - behavioral survey had found that of those individuals who had injected drugs over the preceding one-year period, 33% were receiving maintenance treatment

at the time of the study. [34] This figure was 42.6% in the biologic-behavioral survey of 2010.[2] Though the increase indicates an improvement of MMT coverage, it also underscores the need for expansion of the program. The trend of development of MMT programs in Iranian prisons over the 2001-2011 periods has been one of growth. By February 2012, more than 38,000 inmates were receiving methadone maintenance treatment.(Figure 89)[35] An estimated 120,000 inmates, both injecting and non-injecting drug users, have been deemed in need of substance maintenance treatment.[36] Therefore it seems that all this substantial progress notwithstanding, still far from all inmates in need of MMT are covered by treatment. Therefore further support for MMT is essential for extending coverage without compromising quality of treatment both at community level and in prison settings.

Another important issue pertains to indications of increased use of methamphetamine compounds among drug users and MMT recipients. [11] The same concern also extends to inmates. [36] If injecting becomes the common method for use of such substances, the success of current harm reduction programs could be completely undermined. Research for situation assessment as well as design and implementation of evidence-based interventions in this regard seems vital.

Other Substance Maintenance Treatments: in addition to MMT, buprenorphine maintenance treatment is also offered for drug users, including injectors. Opium tincture maintenance treatment has been delivered as a pilot project during 2008-2010. Trail results suggest it to be effective for certain categories of drug users who are not suitable candidates for MMT and at this time 3500 persons are under treatment with this tincture. [37]

Figure 8: Graph depicting growth of the number of inmates covered by methadone maintenance treatment nationwide



Prevention of Sexual Transmission of HIV

Condoms are provided free of charge to clients at primary healthcare network family planning units, centers for behavioral disease counselling (triangular clinics), DICs and conjugal visit rooms in prisons**.** Access to condoms is also possible by purchase at pharmacies and other retail venues. Variety of available condoms has improved significantly in recent years. Considerations are underway on making the female condom also available. [38]

Injecting Drug Users: in the 2010 bio-behavioral survey about 50% of IDUs were found to be ever-married or married with 30% actually living with their spouses.[2] About 41% of them have had sex with their spouses over the preceding year. About 17.5% of them reported the consistent use of condom. Nearly 59% of married or ever-married participants reported that they have not had any sexual intercourse with their spouses during last year. 22.4% reported having had commercial sex over the preceding year.[2] Ratios of those who have used a condom in their last marital, commercial or casual sexual contact were 34%, 53% and 43% respectively.[2] Figures for consistent condom use in the previous year during commercial and non-commercial sex were 31% and 24% respectively.[2] The same survey found that 33.5% of IDUs had received free condoms.[2] In the

2007 survey, the figure for those who had not had sex in the preceding year was 54% and the figures for condom use in the last marital, commercial and casual sexual contacts were 29%, 37% and 34%, respectively.[34] Again, despite positive changes, there is a long way to go in improving coverage of condom use. A study commissioned by the MOH's Center for Disease Management and funded by UNAIDS-Iran and other HIV control program partners was conducted by the Regional Knowledge Hub for HIV/AIDS Surveillance (at Kerman University of Medical Science) to determine the impact of interventions on HIV incidence. It found that an increase of condom use in IDUs from 30% to 90% could reduce new cases of HIV in their sex partners by 93 %.[5]

Female Sex-Workers: in the 2010 bio-behavioral survey of female sex-workers, two-thirds of the respondents reported receiving free condoms in the preceding year.[7] The ratio of those who had consistently used a condom during sex with a paying partner over the preceding month was 30%.[7] Meanwhile, 30% had never used a condom at all.[7] In 47.7% of the cases they had not used a condom in their non-commercial sexual contact during the preceding month. 60.9% had used a condom during commercial sex in the preceding month.[7] The figure was found to have been 55% among sex workers in Tehran in a study conducted in 2006.[29] The comparison indicates the relative effectiveness of prevention programs that have been launched in recent years, albeit limited in scope. A study commissioned by the MOH's Center for Disease Management and funded by UNAIDS-Iran and other HIV control program partners was conducted by the Regional Knowledge Hub for HIV/AIDS Surveillance (at Kerman University of Medical Science) to determine the impact of interventions on HIV incidence. It found that an increase of condom use coverage by 40% in female sex-workers and their clients (from 55% to 95%) could reduce new cases of HIV infection by 89% in both categories.[5]

Sex Partners of IDUs: sexual partners of IDUs were found to have used condoms in the last sexual contact with their regular and non-regular partners in 60% and 25% of the cases respectively.[26]

Inmates: Only 10% of inmates had used a condom in their last sexual contact (in conjugal visit rooms while incarcerated). This figure indicates the necessity for programs aimed at improvement of the situation.[27]

Men who have sex with men: There are indications that the behavior does occur in certain places in Iran, particularly in confined spaces such as prisons.[2, 27, 30] Nevertheless, there is no reliable, documented study conducted for this category. It would seem that a thorough study of this population needs to be conducted.

HIV Information and Education

Information and educational activities have been performed for different target populations. As a matter of their nature, monitoring, documentation or measuring of coverage for such programs is generally quite difficult.[3]

Youth: Activities for youth education include family education courses at universities, limited AIDS education at school level, educational courses at some municipal Culture Houses, some State broadcaster programs, mandatory

HIV/AIDS & STD lectures for couples before marriage, Red Crescent educational courses and some activities within the framework of peer education.[3] Still it seems that these activities need to be improved. In a study conducted in 2011, a total of only 20.6% of boys and 16.2% of girls responded correctly to all question on modes of transmission, prevention methods and misconceptions on HIV.[13]

Female Sex Workers: educational activities for female sex workers are generally designed based on peer education and delivery of services at Welfare Organization supervised Women's DICs and NGO run Vulnerable Women's Counselling Centers supervised by Medical Sciences Universities.[38] In the 2010 bio-behavioral survey 91.8% of the respondents were able to correctly answer the question: "Could the chances of AIDS infection be reduced by limiting sexual relations to a single, non-infected, faithful partner?" Furthermore 96.9% held that the probability of AIDS infection could be reduced by condom use during sex. Less than half of the respondents of this study knew that HIV could not be transmitted by mosquito bites or sharing a meal with an infected person. Only a total of 55.3% of these individuals considered themselves to be at risk of HIV infection. [7]

Injecting Drug Users: information and education for IDUs is delivered at Triangular Clinics, outreach programs, community based educational centers, prisons, DICs and NGOs.[38] In the 2010 survey there were only a small percentage of IDUs who had no knowledge of HIV.[2] This small percentage was similar to that found in the initial round of surveys of HIV behavioral serveillance in IDUs in 2007.[34] An overwhelming majority of respondents knew of the effect of condom use and limiting sexual contact to a single, non-infected partner in preventing HIV transmission.[2] The risk of HIV was understood by more than half of the individuals, which represents a significant increase compared to the initial round of surveys of HIV behavioral surveillance in IDUs.[2] In the initial round of surveys 48.2% of IDUs saw themselves at risk of HIV, [34] whereas in this study 61% understood the risk.[2] Awareness and sensitization with regard to prevention is on the increase among IDUs but the effect of such awareness on their behavior seems limited as we continue to see unprotected sexual contact with multiple partners within this population. In order to apply the awareness to behavior alteration there needs to be specific measures and interventions such as increased access to means of prevention; reinforcement of educational content and promotion of healthy behavior through peer education.[2] The also needs to be community level drug-use and HIV de-stigmatization aimed at capacity building for increased public acceptance of preventive interventions and allowing the return of these individuals to the social mainstream. Misconceptions such as believing that mosquito bites and sharing meals with PLWH could lead to transmission of the infection continue to more-or-less exist among IDUs as among the general public.[2]

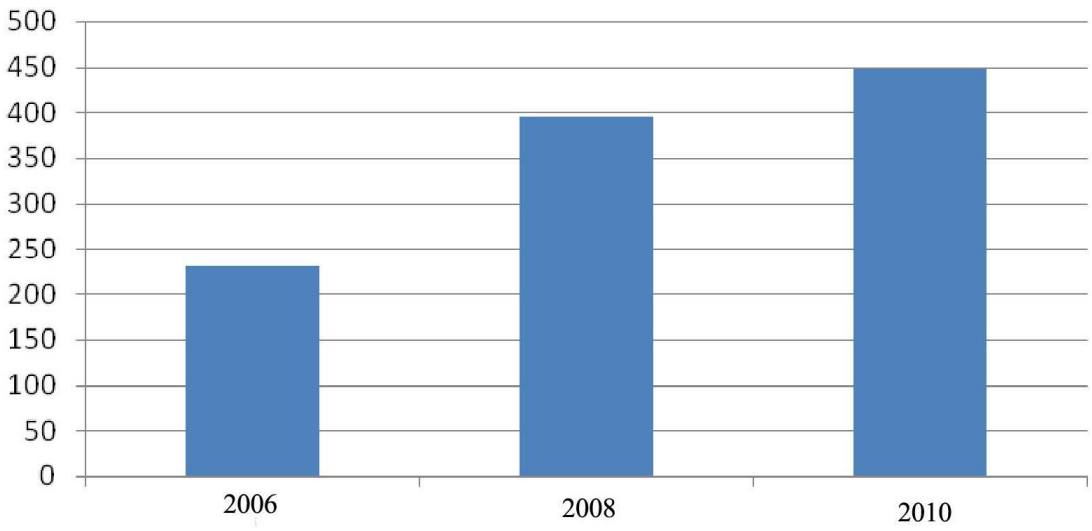
Inmates: some activities have been implemented by the Prisons' Organization. Education has taken the shape of classrooms, face-to-face education, peer education and telephone counselling hotlines.[36] Upon entering a prison, inmates receive information on harm reduction through pamphlets, group education and

prison audio-visual systems.[36] In the 2009 survey of inmates only 15% of men and 10% of women understood sexual prevention methods for HIV correctly and were able to reject misconceptions in this regard.[27] These findings have led to further development of educational activities as described in this report in the section on Best Practices. These will have to be evaluated in future studies.[36]
Men who have sex with men: there are indications that the behavior does occur in certain places in Iran, particularly in confined spaces such as prisons.[2,27,30] Nevertheless, there is no reliable, documented study conducted for this category. It would seem that a thorough study of this population needs to be conducted.

Voluntary Counselling and Testing

Main venues for VCTs in Iran are the behavioral disease counselling centers and counselling posts. The State Welfare Organization and the Prisons' Organization both play a role in delivering VCTs, with behavioral disease counselling centers established in Iranian prisons with over 300 inmates. Furthermore the Iranian Blood Transfusion Organization and certain NGOs have set-up a number of counselling posts across the country where VCT is offered. The Red Crescent was also involved in launching such centers in the initial years when the program started, but its centers have ceased operations in recent years.[38] The number of VCT centers has increased over recent years. While they numbered only 231 in 2006, there were 447 such centers in 2010.[38](Figure 9) In terms of geographic distribution it is safe to say that in each city where there is a medical sciences university, there is at least one VCT center. The target population includes PLWHA, their families, drug users, and people with a history of higher-risk sexual contact, people with STIs as well as individuals volunteering to receive services at their own discretion. In an overwhelming majority of cases testing is indeed voluntary; however, some evidence suggests that there have been cases of testing without the patients' knowledge in the private-sector run centers. Access is open for all and all services are delivered free of charge.[38]

Figure 9: Graph depicting growth of the number of VCT centers in I.R.Iran



HIV Testing Strategy in Iran: HIV diagnosis in Iran complies with internationally defined standards comprising two positive ELISA tests and a positive Western Blot test. The national policy on HIV testing is based on provider initiated testing whereby efforts are aimed at providers identifying higher-risk individuals and HIV vulnerable populations in order to counsel and encourage them to volunteer for testing. This procedure has already been delineated in relevant protocols and guidelines for certain populations, such as TB patients, at-risk pregnant women, people with STIs and inmates. In the soon-to-be-published VCT guidelines modality of testing, counselling and re-testing in populations requiring regular tests have all been specified.[38]

Access to VCT in Various Populations: *Injecting Drug Users:* in the 2010 behavioral survey of IDUs 24.78% of IDUs were reported to have been tested over the preceding year and informed of their test results. Some 90.8% of the respondents knew the right location for HIV testing. As for the location of their previous test, 55.9% mentioned behavioral disease counselling centers. Doctors' offices and privately run laboratories were only mentioned as the testing site by 6.4% of the respondents.[2]

Sex Partners of IDUs: the main VCT location used by members of this population was counselling centers. Of these, 39.5% were university affiliated counselling centers, 2.63% were Blood Transfusion Organization affiliated centers and 4.61% were prison counselling centers. There was not a significant difference between women's and men's levels of utilization of counselling centers (46.1% for men vs. 30.2% for women).[26]

Female Sex Workers: according to the nationwide bio-behavioral survey of female sex workers in 2010, 48.3% of the respondents had had a previous history of HIV testing. Of these some 72.5% had been tested within the year preceding the study and of those tested, 84.5% were aware of their test results. This means that about 30% of the respondents were both tested within the year preceding the study and were aware of the test results. Location of VCT sites was known to 84.4% of the respondents in this population.(7) It would seem that for this population, in addition to VCT provision, there needs to exist also an Opt-Out testing approach. (7)

Inmates: There have been several studies of this population heretofore. There was a bio-behavioral survey of inmates in Kermanshah and Ahwaz in 2007 (39) and another in 2010 which involved 27 prisons.(27) The 2007 survey found that 17.4% of inmates in Ahwaz and 28.3% of inmates in Kermanshah had a history of testing with the main venue of testing being the prison itself. 53% of those tested were aware of the results. Thus, 9.22% of inmates in Ahwaz and 15% of inmates in Kermanshah had both been tested and were aware of the results.(39) Given the fact that inmates are easily accessible for HIV counselling and testing, the aforementioned service coverage seems meager. 34.6% of Ahwaz inmates and 63% of Kermanshah inmates knew the right location to seek VCTs.(39)

Men who have sex with men: There are indications that the behavior does occur in certain places in Iran, particularly in confined spaces such as prisons.(2,27,30) Nevertheless, there is no reliable, documented study conducted for this category. It would seem that a thorough study of this population needs to be conducted.

Prevention of Mother-to-Child Transmission

Identification of HIV infected women has followed an upturning trend in recent years.(6) This would seem to explain what was noted above about the increase in HIV positive children. The requirement for assessment of all pregnant women in terms of risks related to HIV has been included in national prenatal care guidelines. Any woman with any of the risk factors or with a spouse that has any of the risk factors (history of drug injection, higher-risk behavior or incarceration) is required to be referred for VCT. Yet, since many private-practice physicians routinely prescribe HIV testing for all their pregnant patients and given the absence of any records or any reporting mechanism on HIV testing, accurate figures on the real number of tests performed are not available.(38) Nevertheless, from September 2010 to September 2011, there were 3116 women identified as at-risk of HIV infection in assessment of potential risks. They did receive counselling and were tested for HIV and were informed of the results.(14)

From September 2010 until September 2011, a total of 74 pregnant women received ARV therapy. This amounts to 15% of the total estimated number of HIV infected pregnant women.(14) Any pregnant woman identified as HIV positive is covered by mother-to-child-transmission prevention services. For 14 of the neonates born to these mothers, virologic (PCR) HIV testing was conducted. For 53 of the neonates born to these mothers ARV prophylaxes were applied for the first four weeks after birth. All the 14 neonates tested had negative virologic

results at the end of the first month. 52 of the neonates were fed exclusive formula in the first six months after birth. Virologic testing for HIV detection has been launched at counselling centers since 2009 and currently 67% of the centers have access to such tests.[14] It is hoped that the coverage will increase.
Analysis of this information would indicate that services planned in MTCT prevention need to be reinforced. A developmental review is already underway to assess strengths and weaknesses of the program and suggest a suitable solution.

Assessment of Prevention Based on NCPI:(Annex1)

Most of the interviewed people were of the opinion that needs assessment has been studied for HIV control and prevention plan. Such needs were specified based on behavioral study or evaluation of the information and viewpoint of different groups of the society and were inclusive of the followings:

--Identification of the at risk and most at risk groups
--Rapid amassments
-- Second generation Surveillance system
-- Results of the recent studies and the experts' opinions

There is a specific policy or strategy on HIV for informing and educating the people and communicating with them. The key messages which are most propagated are listed below.

--Abstaining from drug use, emphasizing on injecting drugs
-- Abstaining from sex-working
--Being faithful
-- Abstaining from high risk sexuals and having safe sex
--Later start of sexual relationship
-Reduction of number of sexual partners
-Constant condom use
-Better accepting and more participating of PLWH
-More involvement of the men in reproductive health program
-Awareness about HIV status
-Prevention of mother to child HIV transmission
-Using of sterilized needle and syringe
-Abstaining from non-sanitary tattooing and bloodletting

It seems that during the past years, activities were conducted to involve media. As well there is a policy to upgrade youth's HIV based life skills educations. In this respect, HIV education remains part of a formal educational curriculum in secondary and middle high schools and teachers are also educated on the same basis. Such trainings of the teachers took place and special educational packages were prepared for this group as well as the students. In primary schools, educations are offered as primary life skills education. Many of these trainings are conducted within framework of extra-programs or in World Day of Drug Control. It seems that the trainings adjusted for those parameters compatible with age, gender and reproductive health conditions.

For some groups of young people as university students and volunteers of marriage, educational programs offer such issues as HIV control and prevention and also sexually transmitted infections.
Although street children and those staying in juvenile detention centers are included in target groups of the national plan, but it seems that there is no specific drafted strategy to provide HIV information to this group of people and those young people who don't attend to school. Most of the key people are of the opinion that there is a policy for promotion of information, education, and communication vulnerable people. In brief, this policy or strategy is inclusive of:

- Educational plan under the national strategy is covering different target groups including at risk and most at risk groups.
- Different educational materials have been provided for these groups, together with different training policies. Training plans being conducted by peer groups is considered in this classification.
- Trainings relevant to harm reduction have been included in the plan.
- Training and information giving to the IDUs are offered by triangular clinics.
- Educating the prisoners and their spouses take place at the time of their visit in the prisons.
- counselling hot-lines are active.

Most of the key persons were of the opinion that population sub-groups and the HIV control and prevention programs dedicated to them, were as followings:

- Promotion of condom use for the injecting drug users and their spouses, sex-workers and other at high risk groups and their spouses, prisoners and sexual partners of the infected people.
- Drug substitution treatment for IDUs and prisoners.
- HIV counselling and testing for the IDUs and their spouses, for the sex-workers and other at high risk people and their spouses for the prisoners and the infected people's sexual partners.
- Reproductive health care, treatment, and prevention of sexually transmitted infections for the sex-workers and other at high risk groups, their spouses and their prisoners.
- Reduction of stigma and discrimination for IDUs, sex workers and other at high risk groups and prisoners.
- Reduction of vulnerability through for example increasing income of the IDUs, prisoners and sex-workers.

In general, attempts for creating supportive policies relevant to HIV prevention in the year 2011 is positively evaluated (Average grade of 7 out of 10).
Since 2009, significant achievements in this regards are as mentioned below:

-Serious attempts have been conducted to attract Medias cooperation on HIV issue which resulted in provision of

information packages and holding different educational workshops.

-Currently, more demand is received from broadcasting for holding communication sessions, and written Medias are dedicating more number of columns to discuss about this matter

- Attempts to increase information of the young people on HIV

-Efforts to have more access to the female sex-workers and other vulnerable women who have been less accessible than the IDUs and the prisoners

Still some important challenges exist which are listed below:

-Stigma of HIV related behavior, as well the cultural impediments are still hindering offering explicit information either through medias or through Other responsible organizations

-Limitations to access to sex-workers as well as to the MSM

According to the key persons , HIV control and prevention programs has been successful to a desirable extent in such scopes as : blood safety, reduction of harm in IDUs , HIV counselling and testing, information, education, prevention of mother to child HIV transmission, positive prevention for the people living with HIV, reproductive health cares including preventive services for the sexually transmitted infections as well as relevant therapies and also standard precautions in the health care and treatment centers. But such issues as promotion of condom use, HIV prevention program for the young people who don't go to school, HIV prevention in work places, stigma reduction and discrimination, prevention programs among MSMs, reduction of risk for the sex – workers and school based HIV education for the young people still needs more effort.

Most of the key persons believe that the efforts for implementation of HIV prevention programs in the year 2011 can be evaluated as positive as a whole (Average grade of 7 out of 10). Since 2009 the most important achievements in this concern are inclusive of:

-inclusion of more groups at risk of HIV

-More school-based education

- Establishment of phone counselling line (Hot line)

- Expanding number of the behavioral counselling centers.

-Establishment of counselling centers for vulnerable women.

- Continued harm reduction programs.

-Positive prevention programs

The remainder challenges are listed as under:

-Insufficient information by mass media about safe sex

-Insufficient information in schools about HIV prevention

-Existence of stigma and discrimination in the society to a wide extent

-Insufficient preventive measures or sexual transmission in female sex-workers and other groups at high risk of sexual behavior.

-Insufficient preventive measures for mother to child transaction

Care and Treatment

Assessment of Care and Treatment Situation

Service Provision System: provision of HIV care and treatment services, including ARV therapy, has been included in the National Plan. With the implementation of behavioral disease counselling centers (triangular clinics) a structure for delivery of these services has now been established. Iran's health network represents a successful example of service provision system in the region as it allows access to so many programs at the remotest levels in the field. At field level 46 local medical sciences universities or schools undertake the administration of health services. In most Provinces (32 provinces) there is at least one medical sciences university (while more than one medical sciences university or school in some provinces) that carries out this responsibility. According to the organizational chart designed by the health network, each university must establish a behavioral disease counselling center. Depending on demand and in accordance with scale, some medical sciences universities have launched more than one such center, with the number of active centers across the country now totaling 103.[14] At the same time 134 centers are also in charge of delivering care and treatment to patients inside prisons.[35]

The Care and Treatment Committee bears the responsibility of developing the national guidelines. It comprises of representatives of MOHME AIDS Control Office, Infectious disease faculty members of medicals sciences universities as well as some practicing specialists at behavioral disease counselling centers. The latest version of recommendations was revised and published in April 2011 and delivered to all physicians at behavioral disease counselling centers, infectious disease specialist working as care and treatment focal points and physicians representing the Prisons' Organization during four training sessions. The package included such headings as "Patient Evaluation and ARV Treatment for Adults", "ARV Treatment for Children", "Approach to TB and HIV Coifection", "Approach to Common Patient Complaints (including prevention and treatment of opportunistic infections)", "Prevention of MTCT", "Prevention after Occupational Exposure", "Prevention after Non-Occupational Exposure", and "Nutrition for PLWH."[40] Another set of recommendations titled "HIV Counselling and Testing" will soon be published. [38]

ARV Therapy: procurement and distribution of ARV drugs began within the framework of the national health and treatment system in 1997. There are currently 14 types of ARV drugs available in Iran. This variety allows for the provision of a wide range of three-drug combination regimens in Iran. ARV drug prescriptions are free across the country through medical-sciences-university-affiliated behavioral disease counselling centers in accordance with the aforementioned guidelines. There are no limits either in terms of quotas or prioritization of access based on patients' sex, age, or social stratum. All cases identified that are indicated for ARV therapy (in accordance with the national guidelines) who wish to receive treatment are covered by ARV therapy free of charge.[38] 96% of ARV therapy delivery centers are equipped with CD4 counting

machines. For 22% of the centers CD4 counting can be performed at the same city where the behavioral disease counselling centers are located.[14] The number of persons covered by therapy has increased 93% since the previous report, but given the considerable increase in the number of persons in need of therapy, level of coverage has not improved as significantly. It seems that the problem is in part due to insufficient coverage of VCT services, which leaves a considerable portion of PLWH unidentified. Another cause of the problem may be reluctance by some identified PLWH to seek therapy which could in-turn be due to a variety of reasons such as lack of belief in effectiveness of treatment, insufficient satisfaction with the quality of services or contradicting priorities like substance addiction.

Recipients of ARV therapy are 8.5% female and 91.5% male, which gives women a higher share when comparing with the sex ratio of total number of identified cases. This may be due to better compliance and utilization of treatment services by women or higher drop-out rates for men. In a performance assessment of behavioral disease counselling centers in 2009, conducted on a sample of behavioral disease counselling centers across the country, 37.5% had active cases, which is to mean the patient at least one referring within the twelve month period prior to the study. This means that a large number of identified PLWH drop out of services after entering into treatment.[41]

Value for the treatment retention indicator for those who began ARV therapy from September 2009 to September 2010 was 82.1 %.[19]

TB and HIV: the issue of TB and HIV has been heeded since the first set of guidelines for HIV care and treatment. Based on the national guidelines for clinical response to HIV, TB screening programs include regular check-ups, annual PPDs, sputum examination and chest X-rays.[42] Likewise, HIV risk assessment for TB patients and referral of cases with HIV risk factors to VCT services has been included the national program for TB. Nevertheless, the coverage of PPD testing of PLWH with active case files has been estimated at only 46%. Of the 6495 PLWH who have attended behavioral disease counselling centers at least once in the year ending by September 2011, only 4345 (66.9%) were screened for TB in their final visit.[41] Percentage of PLWH and with active TB being treated for both diseases is 27.9% of the total (see indicator 5-1 in the present report). In the same period of the 1477 persons for whom an HIV care case file was opened for the first time, 114 (7.7%) have been placed on TB prophylaxis.[14] The figure needs much improvement, given the 20% prevalence of latent TB among PLWH.[20] Meanwhile in the 2009 evaluation of performance of behavioral disease counselling centers conducted on a sample of Iran's behavioral disease counselling centers, many inaccuracies were found in recording patient data into case-files which may have led to under-reporting of coverage of services.[41] As such, planning is underway for creating electronic case files for patients. The project is currently in piloting stage. Possible under-reporting notwithstanding, it seems that TB programs for PLWH are in serious need of improvement.

Prevention and Treatment of Opportunistic Infections and Vaccination: over the one-year period ending in September 2011, of the 1421 patients indicated for cotrimoxazole prophylaxis in their last visit, 1098 (77.3%) have received treatment. (14)

In the report on evaluation of services at behavioral disease counselling centers, coverage of hepatitis B, combination and influenza vaccination in those with active case files was 68%, 68% and 43%, respectively. The figure for Pneumococcal vaccination, which is not routinely provided by the national health system, was much lower at only 12 %.(41)

Assessment of Care and Treatment Programs based on NCPI (Annex 1)

Most key informants believe that the fundamental components of a comprehensive care, treatment and support services' package on HIV have been specified and include:

- A comprehensive service delivery package has been developed for counselling centers as the main structure providing services to PLWH. Additionally comprehensive care and treatment guidelines including ARV therapy for adults and children, prevention and treatment of comorbidities from TB and other opportunistic infections as well as prevention packages for pregnancy terms and occupational/ non-occupational exposure have been developed with training on such packages delivered at various field levels to service providers. In addition to delivering care and treatment services, counselling centers have been obligated to refer patients and their families for supplementary services such as support services.
- Voluntary and informed Counselling
- Clinical care for PLWH
- Vaccination, prevention and treatment of opportunistic infections
- ARV therapy
- HIV counselling and testing for TB infected patients
- Prevention of MTCT
- Referrals for specialized services
- Care and support service delivery through establishment of Positive Clubs
- Peer education
- Care and support for PLWH, Street children, vulnerable women and women heads of households

According to most key persons levels of implementation of HIV treatment, care and support services have been appropriate in the following cases:

ARV therapy, ARV therapy for TB patients, prevention by co-trimoxazole in PLWH, counselling and testing for TB patients, provision of antenatal ARV therapy for women, early detection in children, treatment of children suffering from AIDS, non-occupational post-exposure prevention, occupational post-exposure prevention, psychosocial support for PLWH and their families, TB infection control at HIV treatment and care centers , preventive TB treatment for PLWH, TB screening of PLWH, treatment of common HIV-comorbidity infections and management of STDs.

Yet a majority of key persons believe that interventions have not been acceptable in such areas as: workplace care and support, workplace HIV treatment services, workplace referral services and nutrition.
Many key persons believe that there is a policy in place to simultaneously develop generic medications and import ARV medications and that the government does have access to regional mechanisms for order-placement and supply management of such products as ARV drugs, condoms, replacement medication and laboratory diagnostic kits.
On the whole, efforts to implement HIV treatment, care, surveillance and support services in 2011 were assessed as being acceptable (with an average score of 6 on a scale of 0-10).
Major achievements and advancements since 2009 include:

- Further general development of treatment, care and support services
- Updating of guidelines based on standardized international resources
- Wide-scale training of individuals active in PLWH treatment, care and support
- Procurement of necessary medications
- Greater variety of ARV medications
- Increases in the number of counselling centers and regular, continuous operation of behavioural disease counselling centers
- Improved access to ARV therapy
- Improved training for PLWH on self-care and treatment
- Increases in the number of harm reduction centers
- Provision of insurance coverage to the drug Peg Interferon and payment of its franchise fees by MOHME
- Implementation of evaluation of national treatment services in 2010

Remaining challenges include:

- There is a wide gap between the number of identifies vs number of estimated cases due to limitations of diagnostic services
- Diagnostic services often require expensive tests. Furthermore these tests or their complementary examinations are not available at provincial districts thus necessitating patient referrals to other cities.
- Treatment interruptions are frequent among patients which may be due to patient non-compliance, simultaneous drug addiction or intermittent incarcerations
- Social stigma continues to be a challenge among specialist service providers particularly in implementing special procedures and more offensive interventions
- There is insufficient co-management hepatitis C treatment
- There is insufficient dental services provided for PLWH
- Laboratory facilities for certain important tests
- Quality of existing services needs improvement
- There is a shortage of financial and human resources to deliver care services to PLWH at home.

Support

Support Activities

By executive order of minister of welfare and social security extension of coverage of the public Treatment Services Insurance to PLWH has been required of relevant authorities. Positive clubs, as noted in the section under "Best Practices," have been established to provide support for PLWH. Some PLWH receive counselling subsidies from the Welfare Organization through these positive clubs. Every orphan of PLWH identified is admitted to a Welfare Organization affiliated center. There is an executive circular prohibiting denial of services to PLWH by any support service center.[43] Nevertheless, the situation is far from ideal and there remains much more to be done. Findings of a study suggest that occupational status of PLWH in Iran is worse than the average for the non-infected general public, with a host of factors hindering PLWH employment at private sector, public sector and self-employment enterprises.[44]

Assessment of Support Programs based on NCPI[(Annex 1)]

Most key informants concur that the government does have policies and strategies to provide socio-economic support for PLWH and people affected by HIV. Such socio-economic support includes: universal insurance coverage, sustenance subsidies, establishment of positive clubs, employment and empowerment programs, staple food distribution at some counselling centers, utilization of services delivered by the Imam Khomeini Relief Fund, and formation of psycho-social support committees for PLWH.

Additionally, the Welfare Organization has revised client accommodation guidelines at various centers (nurseries, shelters, centers for victims of social harms, etc.) aiming to integrate service delivery to PLWH as clients.

Most key informants agree that some policies and strategies exist to deal with HIV-related needs of orphans and other vulnerable children. Recently Welfare Organization has begun compiling a manual in this regard. Still, it seems that there is no exact estimate of the number of orphans and vulnerable children receiving the services. Furthermore, most orphans in need, who have not been placed in families, are protected by the Welfare Organization as are all street children who can be reached.

On the whole, most key informants believe (with an average score of 3 out 10) that measures to meet the needs of orphans and vulnerable children in 2011 must significantly improve.

Yet, there have been some improvements since 2009, including:

- Standardized definition for "vulnerable and street children"
- Development of guidelines by the Welfare Organization in this regard
- Conducting a behavioral survey of street children in Iran's capital, Tehran

- Existence of NGOs interested in the issue
- Training for caregivers of HIV-infected and orphaned children to know how to deal with the infection and not to fear it
- Training for relevant care and treatment centers on how to refer clients to ARV therapy and other services

Remaining challenges include:

-There is insufficient access to vulnerable children and orphans in the community.

-Street children are generally controlled by criminal gangs, therefore it is quite difficult to support and empower them to care for themselves.

-Because of the stigma associated with the disease, HIV-infected orphans are not easily adopted by couples.

-The organizations in charge of providing services to these children are not provided with sufficient resources and funding.

-Some authorities lack sufficient and proper knowledge, awareness and attitudes on PLWH

-Accurate data on vulnerable and orphaned children is missing, which hinders factual estimation of their needs.

-Very few organizations are involved in protection and support for vulnerable and orphaned children.

Since 2009, some of the most notable achievements and areas of progress have been:

- Ratification of the PLWH Insurance Coverage Act
- Increase in the number of support services such as positive clubs
- Provision of care and support services with the establishment of positive clubs

Assessment of Human Rights Status based on NCPI (Annex 1)

Most key persons believe that there are laws, bylaws and guidelines to protect PLWH or higher-risk populations against discrimination. These address the following populations:

- Immigrants
- Vulnerable children and orphans
- People with disabilities
- Injecting Drug Users
- Inmates
- Girls and women
- Young women and men

Such laws and regulations include the following:

- - Article 19 of the Constitution considers all individuals equal before the Law. Article 29 emphasizes the right of access to treatment and welfare services.
- - In the Law to Combat Addiction, drug-users are considered to be patients. Drug users, including IDUs, who participate in harm-reduction or detoxification programs are immune from prosecution.
- - PLWH are entitled to employment, insurance, access to public healthcare services and support services of Imam Khomeini Relief Fund.

- - Child and adolescent PLWH have the right to education.
- - No employer may dismiss a person living with HIV on the sole grounds of being infected.

There are, of course, certain mechanisms in place to ensure the enforcement of the above laws. These include:

-The Judiciary is responsible for ensuring implementation of laws

- According to Article 91 of the Constitution, the Guardian Council is in charge of oversight of the implementation of legislation in accordance with the Constitution.
- Implementation of laws are supervised by the parliament
- Medical sciences universities oversee the performance of behavioral disease counselling centers
- Public demand obligates the government to implement legislated laws
- In evaluation procedures for various programs, particularly those in the health sector, certain welfare and social justice indicators have been foreseen. Policymakers and administrators of various sectors are held accountable in these areas.

Nevertheless, most key informants believed that in practice, there is insufficient heed paid to ensuring the implementation of these laws. Some of these laws are implemented quite acceptably, particularly those that apply more generally and are consistent with conventional popular culture and beliefs. An example would be the State's commitment to provide AIDS prevention and treatment for inmates as a measure to promote justice in this regard.

There are some regulations, laws and bylaws that deal with reducing the obstacles against implementation of effective HIV prevention, treatment and support programs among vulnerable, higher-risk populations. The content of these policies and regulations includes:

- The national structure of the health system is required to deliver HIV related services to all who need them, irrespective of their criminal/offender status. For some of the aforementioned populations, specific organizations have been placed in charge of delivering services to these populations. For example the Welfare Organization undertakes delivery of services to transgender persons and socially vulnerable individuals while MOHME is responsible for delivery of services to PLWH.
- Substance Addiction Prevention Guidelines ratified by the Expediency Council in 1998 places MOHME (under DCHQ supervision) in charge of provision of treatment services for drug addicts and support for at-risk individuals. Addicts who receive treatment are not legally considered to be offenders.
- The requirement of providing prevention services to inmates has been acknowledged by high ranking authorities.
- There is also an executive order issued by the former judiciary chief, in which distribution of syringes, needles and disinfection paraphernalia has been emphasized.

Most key informants believed that there is no systematic mechanism to record, document and process cases of discrimination experienced by PLWH. Some documentation may take place through radio or television programs, theater

performances or newspapers and magazines. In cases dealing with care and treatment, patients may report discrimination through medical sciences universities or by writing to MOHME and demanding a proper response. Additionally, there have been qualitative studies to identify obstacles against access of PLWH in various services with particular emphasis on care and treatment services, the results of which have been made public.

It seems that some policies and programs exist to ensure both women's and men's access to HIV prevention, treatment and care. But there are also specific policies and programs in place to ensure women's access to such services. There are also specific programs for equitable access of higher-risk and vulnerable populations to HIV support, prevention, care and treatment services. These include the following areas:

- Needle & syringe distribution programs
- Programs to launch service delivery DICs and outreach teams
- Establishment of behavioral disease counselling centers (the so-called triangular centers) to provide HIV prevention, treatment and care services
- Establishing women's counselling centers and increasing outreach teams for women
- Training programs for organizations active in HIV-related issues
- Programs to establish shelters for homeless women

Most key informants were of the view that these programs had failed to consider every possible means of providing access to prevention and treatment services for higher risk individuals and other vulnerable populations. Some of the ways in which such access could be established were mentioned to be:

- DICs for women sex workers, other at risk women and women with higher-risk behaviors
- Centers for behavioral disease counselling, MMT and DICs for IDUs
- Treatment and counselling centers for individuals who have changed their sex or who intend to do so
- Use of peer groups in delivering education on means of HIV transmission and prevention

There are programs to prohibit HIV screening for employment. The content of such programs and laws include:

- - Prohibition of HIV testing at the time of employment

Existing programs to reduce community discrimination against PLWH include:

- Programs designed for the media
- Programs designed for health workers
- Programs designed for the workplace
- Programs designed for religious leaders
- Programs designed for PLWH
- Prevention programs run by NGOs and competent PLWH

Based on the views of a majority of key informants, on the whole, improvement is needed in policies, laws, regulations and their implementation in the area of promotion and protection of rights of people in AIDS-related issues in 2011 (with an average score of 4 on a scale of 1-10).

Nevertheless, important achievements have been realized which include:

- Policies and legislation regarding care and treatment have been appropriate and well implemented.
- There has been an increase in access of PLWH to care and support services
- Two positions have been designated for PLWH at the CCM
- There has been more openness to discuss relevant issues with policymakers, religious leaders and in the media

Some remaining challenges include:

- Cultural barriers against proper delivery of interventions among homosexual persons and sex workers
- Insufficient information delivered to the general public on the rights of PLWH through the media
- Insufficient educational content at school level
- Insufficient education for PLWH regarding their rights and how to defend them
- Insufficient education for the judicial sector on defending the rights of PLWH
- Insufficient education at workplaces

Political Support, leader ship and Fiscal Expenditure

Assessment of Political Support based on NCPI(Annex 1)

Most key informants believe that high-ranking state officials including the minister of health, senior vice-president (at meetings of Supreme Health Council) and high-ranking officials at province level, do speak about AIDS and the its response measures to some extent at meetings and important events, addressing the general public. An example would be the participation of ministers and heads of state institutions at the world AIDS day conference, where they speak about their respective organization's activities contributing to the national response. Through political and fiscal support, the government has involved PLWH and members of higher risk populations in designing and launching government HIV-related policies and programs to some extent. Examples include:

- Involving PLWH in policy decisions for national programs through allocating two positions to representatives of PLWH in the Country Coordinating Mechanism (CCM). As such, these representatives participate in preparing project proposals to be submitted to the Global Fund.
- Participation of PLWH in the administration of Positive Clubs and managing the PLWH empowerment programs conducted at these clubs.
- Involvement of PLWH in national M&E programs

Programs conducted at Positive Clubs, which are being developed and implemented with the aim of social support and empowerment of PLWH, help train competent individuals who would subsequently be even better able to participate in the programs.

There is a National AIDs Committee with specified terms of reference for coordination and management of the AIDS Plan with an active participation and administration of the government. The Committee has about 30 members. Such state officials as the minister of health, treatment and medical education, deputy minister of health in health affairs, director of the Center for Disease Management, director of the MOHME AIDS Office and representatives from the Ministry of Education, Drug Control Headquarters, Prisons' Organization, Welfare Organization, Ministry of Welfare and Ministry of Interior, are all members of the Committee. There are also representatives of civil society (two members) and PLWH (one member). The committee aims to avoid duplication and redundant tasks in planning and reporting. A mechanism exists to promote interaction and collaboration among government, civil society, and private sector entities in implementing HIV-related programs and strategies in Iran which has resulted in the following achievements:

- Collaboration among various organizations in provision of services to most-at-risk populations which has resulted in increased coverage of harm-reduction services and information/education programs, enhancing these programs with greater variety;
- Establishment of provincial committees in 31 provinces in Iran;
- Coordination and cooperation among member organizations which has led to improved access to almost all of the most-at-risk populations;
- Implantation of most of the relevant programs by NGOs, private sector and PLWH;

It would seem that policies and legislation have been reviewed and revised against possible contradictions with national AIDS control policies. Some such revisions include:

- Decriminalization of addiction and non-incarceration of addicts on the mere grounds of addiction due to judicial exemption of addicts while receiving treatment
- Revision of penal responses to addiction by executive order of the former judiciary chief to all judges whereby cooperation with health sector programs (harm reduction interventions) for IDUs was recommended
- Modification of legislation on confinement of PLWH in prison
- Rectification of Welfare Organization's refusal to admit PLWH to services some years ago
- Legislation to extend public insurance coverage to PLWH
- Laying legal foundations for employment of PLWH
- Provision of suitable treatment services

Yet, there are also certain policies and laws in place that hinder the implementation of the National AIDS Plan. These are:

- Sever punishments for sex-workers and those with higher-risk sexual behaviour, which limits access to these populations in implementing harm-reduction interventions. Socio-cultural restrictions also seem to bear heavily on such legal restrictions.

On the whole, political support for HIV programs has been more-or-less satisfactory (with key persons' average score of 6 on a scale of 1-10). Hence, the minister of health officially expressed support for the National AIDS Plan and mentioned an increase in the figures for infection through sexual contact, including among sex workers, a topic which used to be a serious taboo for a Muslim nation like ours. Important achievements and progress made since 2009 includes:

- Approval of the Third National AIDS Plan by the Council of Ministers and the Supreme Health Council (SHC) as well as SHCs request that all line organizations submit their action plans for the implementation of the National AIDS Plan
- Laying the grounds for participation of relevant organizations and entities
- Increase acceptance of improved inter-sectoral cooperation
- Increased coverage of information programs on HIV/AIDS by the state broadcaster (IRIB) as well as other media outlets

Remaining challenger, however, include:

- Funds allocated continue to be short of resources required. Not all line organizations have received funding for HIV-related programs.
- Negative attitudes still exist toward PLWH in some policymakers and certain segment of the general public.
- There is serious social stigma associated with behaviours related to HIV which limits access to most-at-risk populations.
- Access to vulnerable women is limited
- Implementation of harm reduction programs for MSMs is seriously limited.

Assessment of Civil Society Participation based on NCPI(Annex 1)

Most key informants believe the role of civil society to have been small (with an average score of 2 on the scale of 1-5) in reinforcing political commitment of state authorities and in drafting and developing national policies. Religious groups, university centers and research institutes tend to have closer contacts with policymakers. Nevertheless representatives of PLWH and some bodies such as the Family Planning Associations are involved in some policymaking committees like the CCM. Furthermore it seems that academic participation in policymaking is of a significantly high level.

Even though civil society institutions have helped expand harm reduction programs through their support, on the whole, they have not been able to have much impact on the development of national policies.
Civil society could play a more effective role in advocacy for policy and legislation development. It is possible that the limited nature of their role in this regard may be the result of their infancy. These organizations need further knowledge and executive strengthening in order to be able to play a greater role. Training workshops could prove effective in this regard. The current qualitative and quantitative programs to further develop Positive Clubs as stipulated in the National Plan are intended to address this very challenge.
Utilization of competent PLWH in developing national and educational programs will be very helpful. An example of this may be seen in the development and revision of the operating guidelines of Positive Clubs, which has been a successful experience.
On the whole, efforts to increase participation of civil society received a medium score (average of 5 on the scale of 1-10).
Important achievements and progress made since 2009 include:
- The fact that HIV-related civil society organizations are now present in the CCM
- Increase in the numbers of a specific type of civil society entity, namely the Positive Clubs
- Efforts by MOHME, UNAIDS and the Welfare Organization to empower civil society
- Relegation of relevant projects to civil society entities on a massive scale across the country
-Training of PLWH and utilization of these individuals in the National Plan
- Increased role of civil society in harm reduction interventions
- Greater public sensitization, better undersigning in interacting with state entities, stipulation of the role of civil society in national legislation and greater emphasis on the concept of “Social Components of Health” across the national health management network.
Remaining challenges include:
- Insufficient number of competent NGOs
- Dearth of strong non-government entities at national and provincial level
- Negative attitudes among some policymakers vis-à-vis the role of NGOs
- Legal obstacles against supporting these organizations by government entities and offices
- HIV-related social stigma

Fiscal Expenditure

Total budgetary funding in various areas of HIV epidemic control across the country for the fiscal year from March 21st 2010 to March 20th 2011 amounted to 433455877 thousand rials (USD 40,761,320 based on an exchange rate of USD 1= 10634 rials). This represents a 23% increase over the previous report. Expenditure from the general government budget of the Islamic Republic of Iran amounted to 380,055,053 thousand rials, while funding from international

organizations in this regard totaled 48,400,523 thousand rials (see indicator 6-1 in the present report).

Best Practices

Regional Knowledge Hub for HIV/AIDS Surveillance

Existing evidence has shown that decision making – from clinical practice to policy making and management- has frequently taken place regardless of available scientific evidence, or such evidence has been applied without local adaptation; and so an appropriate application of health knowledge is of utmost importance to make the best use of projects' results.

Based on this problem, there was a need at national and regional level around the world to not only improve the basic level of knowledge among HIV experts and managers but also to enable a better application of scientific models and methods in controlling the disease and translating the available knowledge into practice.

Regional HIV knowledge hubs are established to promote scientific potentials and distribute HIV-related knowledge to the programmes of the World Health Organization (WHO) and other international organizations. Regional KHs are set up based on regional differences in the HIV epidemic and targeted capacity development. The experience of such KHs has shown that these regional agencies have a vital role to play in helping countries with shared languages, similar public health challenges and health and education systems, to swiftly build capacity towards the global goal of universal access to services for HIV prevention, care, treatment and support. It is also widely believed that regional advocacy and capacity development is the best guarantee that resulting services will be well-suited to various socio-political, cultural and epidemiological contexts and, ultimately, be sustainable.

The Regional Knowledge Hub for HIV/AIDS surveillance, also known as the HIVHUB, is a knowledge centre affiliated with Kerman University of Medical Sciences, which is located in Kerman city, central Iran. This centre, established in 2009, has a collaboration agreement signed by WHO Eastern Mediterranean Regional Office (EMRO) and the Ministry of Health & Medical Education of I.R. of Iran. The HIVHUB also has a formal relationship with UNAIDS and has working collaboration with UNICEF, Zagreb Knowledge Hub, Iranian Research Center for HIV& AIDS, Pasteur Institute of Iran and a few more national institutes and research centers.

This Knowledge Hub is a training advisory centre for surveillance of HIV epidemic in Iran, Eastern Mediterranean region and countries with a similar status regarding HIV epidemic in the world.

HIVHUB mainstreams new concepts in innovation, science, technology, management development, and related fields for the region (i.e. EMRO). Promoting ways of exchanging data, information, and knowledge, this center builds institutional and organizational capacities within the EMRO region. It also provides decision makers in Iran and the region with updated knowledge products and services tailored to clients or regional needs.

Resulted from strong scientific links and its own capacities, this center has had some remarkable achievements in a short period after its establishment and has played a significant role in Eastern Mediterranean region by holding regional training workshops, producing training materials and factsheets, providing scientific advice, and supervising projects.
By contributing to a systematic data production HIVHUB assisted significantly to a more clarified picture of HIV epidemic in Iran. By now, HIVHUB has been the director of different national projects in Iran:

- *Modeling of HIV&AIDS in Iran*
- *National HIV Bio-behavioral Surveillance Survey (BSS) in prisoners (2009)*
- *National HIV Bio-behavioral Surveillance Survey (BSS) in Female Sex Workers (FSWs) (2009-2010)*
- *National HIV Bio-behavioral Surveillance Survey (BSS) in Injecting Drug Users (IDUs) (2009-2010)*
- *National HIV Bio-behavioral Surveillance Survey (BSS) in Partners of Injecting Drug Users (IDUs) (2010-2011)*
- Situation analysis of HIV/***AIDS*** status in Iran (2010-2011)
- *Mode of transmission project (2011)*
- *RDS study on sex workers (Kerman study- hidden population) (2009-2010)*
- *Develop an ongoing surveillance system for HIV: A Case-Control approach, easily integrated to the current Health system in Iran*
- *Improvement of STI surveillance and related researches*
- *Technical Support for improving HIV testing, A formative Assessment*

The HIVHUB provide technical guidance to development of surveillance system to some countries of the region. Up to know 5 international training courses were held by HIVHUB. The majority of participants were mostly from neighborhood countries in the region including Iran, Lebanon, Sudan, Somalia, Palestine, South Sudan, Afghanistan, Kenya, Iraq, Oman, Syria, Yemen, Pakistan, Libya, the United Arab Emirates, Jordan, Djibouti, Morocco, the south Sudan, India, Tajikistan, Lithuania, Georgia, Latvia, Germany and Azerbaijan.
HIVHUB has also had cooperation in designing a protocol for Afghanistan as a bio-behavioral study on Injecting Drug Users (IDUs) in 2010.
In 2011, HIVHUB has held a training workshop on HIV/AIDS surveillance in Iraq by contribution of WHO-Iraq. The participants recognized the importance of a well functioning HIV/AIDS surveillance system and the unique role it plays in the national HIV/AIDS response.
To provide technical assistance to other countries in the region to improve the second generation HIV surveillance system, HIVHUB has drafted a technical proposal for “Design and Implementation of a Bio-Behavioral Survey among Men at Higher Risk of HIV in Yemen”. As part of the pre-survey preparation phase, a training workshop has been done in 2011 at the Regional TB Centre, Aden, Yemen.
HIVHUB is also finalizing a methodology document on the feasibility and application of network scale-up for estimation of size of key population in 4 countries of the region, supported by UNAIDS.

The HIVHUB has also published books, Fact Sheets and Papers related to HIV/AIDS surveillance.
The most important challenges faced by the Hubs include a lack of stable, long-term financing and the Hub's lack of profile. Since, HIVHUB is an independent body; it has to continuously seek financial support from different grant-awarding bodies. Although such a system forces HIVHUB to constantly improve the quality of their activities in order to survive, it may introduce a sense of insecurity. A better understanding of their roles within a global picture could help to open up new opportunities in this regard.
Although HIVHUB is very young, it seems that it is playing an efficient role and using all their power to address its main objectives forcefully.[45]

Iranian National Center for Addiction Studies, a Regional Training Hub for Harm Reduction among IDUs

The Iranian National Center for Addiction Studies (INCAS) was initiated in 2004 by licensing agreement-in-principle from MOHME as a research institute within the Tehran University of Medical Sciences. It was at this center where Iran's first clinical studies of agonist maintenance treatment of substance dependence were conducted. The initial medication studied was methadone which was subsequently followed by studies of buprenorphine and opium tincture. INCAS has so far approved 105 research projects which have led to publication of about 200 papers.
A significant feature of INCAS is that its operations are not limited merely to research. It designs and implements evidence-based training courses to complement its applied research projects. Iran's first-ever training course for methadone maintenance treatment was held at INCAS in 2005. Since then, some 77 training courses with over 2500 participating physicians have been held at INCAS. Graduating physicians receive diplomas that allow them to launch MMT clinics. In this way INCAS has played an essential role in the development of the national network of addiction treatment and harm reduction clinics whose numbers now exceed 3370.
Other important functions of INCAS include designing and conducting Matrix Psychotherapy courses for treatment of stimulant dependence as well as various other educational courses in treatment of substance abuse/dependence and their effects and comorbidities. Such courses are attended by physicians, psychologists and other treatment professionals in the public and private sectors including those employed at various medical sciences universities and the Prisons' Organization.
With support from WHO, the Drug Control Headquarters and MOHME, INCAS has now extended its mission beyond Iranian territory, becoming a regional training hub for IDU harm reduction since 2007 when it became active in neighbouring countries such as Afghanistan and Pakistan.
Since 2007, the center has promoted the development of harm reduction programs, particularly agonist maintenance treatment, at the regional level through holding seven international workshops for participants from neighbouring

countries, organizing study visits of Iranian harm reduction programs for authorities and officials of these countries and dispatching teams of Iranian specialists to conduct training and counselling missions in Afghanistan and Pakistan. The success of such efforts was what led to a five-year (2012-2016) extension of Global Fund support for these programs. Further development of maintenance treatments in the countries of the region continues to face certain obstacles, a situation which should hopefully soon change for the better as a result of the continuation of these efforts.[46]

Counselling Hotlines

Many individuals with high-risk behaviours tend to refrain from directly accessing counselling centers, laboratories, psychiatrists and other services because of certain existing social conditions such as scarcity of local population which implies individual familiarity and public identification. Furthermore, there remains much unknown about people's decision making process when facing a problem. Being unaware of existing services being delivered or insufficient knowledge thereof results in a sense of uncertainty with regard to potential outcomes and may convince an individual to cope anonymously with their problem without seeking help.

Counselling hotlines were initiated in Iran in 2006 as part of Global Fund activities. Since Iran is a large country with diverse cultures that differ from province to province and city to city, 10 provinces were selected to host the counselling hotlines where 18 counsellors are currently active. Counsellors are selected from the local population which means that they are familiar with local languages and dialects and with the local culture and environment. Client anonymity creates a sense of security for individuals with high-risk behaviours. Once confidence has been established, in the next stage, as the case may require, the counsellors are to encourage individuals to seek help at an authorized clinic or inform them of the services offered at behavioural disease counselling centers, laboratories, or other facilities.

Indeed, counselling hotlines with their relatively low cost (as compared to other preventive measures) and substantial level of delivery of services, have acted as bridges that connect individuals at high risk to the existing services in HIV/AIDS prevention, thus facilitating and expediting such individuals' access to the services.[47]

Positive Clubs

The formation of positive clubs in Iran dates back to 2006. The ongoing process has led to uniform standardized executive guidelines for their activities in 2011. Their mission is to empower people living with, and affected by HIV, to enable them to participate in HIV control and prevention programs and manage their lives and those of their families within the framework of social norms for a healthy life. There are currently 14 positive clubs active across the country. One such

club is the Tehran Positive Club which was established under supervision of Iranian Research Center for HIV/AIDS by HIV positive individuals in order to assist PLWH using a strategy of positive prevention and psycho-social support. The club welcomes people living with, and affected by HIV and is currently serving 400 members with some 20-30 persons utilizing the facilities each day. It is funded in part internationally by UNAIDS and GFATM. Based on the national guidelines, there are several types of activities undertaken by the club including the following:

1) Educational
   - -Organizing various training workshops on life skills and various reproductive health, hepatitis and HIV-related topics
   - -Peer education delivered by trained HIV-positive individuals
   - -Counselling hotlines that address questions on HIV/AIDS and related issues and refer individuals to behavioural disease counselling centers if needed
   - -Training courses for club officers on every aspect of HIV/AIDS, enabling them to provide proper counselling through telephone hotlines
   - -Holding HA (HIV Anonymous) classes where people share inner feelings as well as personal, family, social and financial problems and receive psychological and medical advice on compliance with treatment
   - -Launching a website where information is provided on the club itself as well as promoting greater awareness of HIV
   - -Holding vocational training courses for people living with, and affected by HIV in order to empower them and improve their occupational skills
   - -Publishing books, pamphlets, posters and banners

2) Treatment
   - - Face-to-face counselling to address personal, family and social problems
   - - Group therapy sessions facilitated by an expert psychologist
   - - Stress reduction classes based on consciousness and meditation
   - - Providing psychological, physical and material support and visiting HIV patients and their families
   - - Psychiatrist examinations for indicated cases

3) Cultural/recreational activities that include excursions and physical education classes

4) Support activities including provision of amenities and loans for members as well as nutritional assistance [48]

Counselling Centers for Vulnerable Women

Given the importance of paying special heed to HIV-vulnerable women as one of the most important most-at-risk populations, the Center for Communicable Disease Management launched a network of Vulnerable Women's Counselling Centers in 2008, for whose operations unique, standardized executive guidelines were compiled in 2010. The goal has been to improve access of vulnerable women to HIV/AIDS counselling and harm reduction services. The centers' target population includes wives of drug-users, wives of inmates, women injecting and

non-injecting drug-users as well as women of high-risk sexual behaviour. Currently, 21 such centers are delivering services to this high-risk population. The services are provided through the non-government sector with an all-female staff. The local medical sciences university deputy directorate of health is in charge of operations' oversight. Main services delivered include training of clients on HIV and HIV-related high-risk behavior as well as STD symptoms and prevention methods, distribution of free needles, syringes and condoms; routine check-ups against STDs and treatment of infected cases; provision of a warm meal, women's hygienic products and essential clothes to clients as well as bathing facilities for homeless clients. Outreach teams dispatched from the centers make rounds through high-risk areas to identify members of the target population in order to deliver education and harm reduction packages as well as introduce the centers and encourage utilization of their services. UNFPA and GFATM have been partners with the Center for Communicable Disease Management in launching and equipping these centers[49].

Iranian Research Center for HIV/AIDS

The Iranian Research Center for HIV/AIDS was Iran's first academic research institute for basic and community based HIV/AIDS research. Its activities began in 2005 and it received official approval for its operations from MOHME by 2007. Because of its valuable contributions in HIV/AIDS care and treatment, the WHO has recognized it as a center for HIV/AIDS care and treatment education in the MENA region.

Given the academic standing of the Center it was charged by the Center for Communicable Disease Management with the compilation and revision of the national guidelines for HIV/AIDS care and treatment through coordination and under the supervision of the National HIV/AIDS Care and Treatment Scientific Committee. The Center also undertakes holding of national and international training workshops. Such workshops include the countrywide training workshops on care and treatment for focal points and behavioral counselling centers as well as training workshops on care and treatment for physicians and health workers in Afghanistan and Syria. A number of research teams are involved in basic research as well as studies of substance abuse, high-risk behavior and HIV/AIDS care, treatment, epidemiology and prevention. A great number of papers have been published by the center in reputable scientific journals in Iran and abroad.

Current research projects being conducted at the Center's laboratory include: implementation of the HIV drug resistance prediction system, and comprehensive identification of genotypes of Iranian HIV samples together with their genetic tree and genetic changes of the full HIV genome sequence over treatment duration. All these are firsts for both Iran and the region.

Other objectives of the center include development of national, regional and international communications for scientific exchanges, inter-sectoral research projects and cooperation on national development plans. The Center

collaborates closely with international and domestic organizations on research and educational issues.
A well-equipped laboratory based on immunological techniques was established at the Center in 2009 which is specifically dedicated to various HIV/AIDS-related research projects. ELISA and Western Blot testing, virus load measurement, PCR and CD4 count tests as well as lymphocyte cultivation are among the types of tests available. In addition, more specialized tests to determine HIV genotype and phenotype and drug resistance prediction tests have been initiated at this laboratory.[50]

HIV/AIDS and HIV/AIDS-related Behaviour Information and Education for Inmates

In a study that was part of the biologic-behavioural survey of 2009 in Iranian prisons, only 15% of male inmates and 10 of female inmates responded correctly to all questions on HIV modes of transmission, prevention and misconceptions. Understanding the importance of education and information for high-risk inmates and their particular needs, the Prisons' Organization has adopted novel educational methods for inmates which are discussed below:
1) Peer-Education on HIV
Peer education has already been recognized as one of the most effective educational methods for certain population groups throughout the world. In the particular case of inmates, who are generally mistrusting of state authorities and official institutions, peer education could prove to be very effective.
The program was implemented in an innovative manner which comprised of three layers: incarcerated inmates, released inmates and families of inmates. Advantages of the new method as compared with conventional peer-education programs include:
- Low cost of project implementation,
- Increased levels of behavior change through education,
- Peer monitoring capacity,
- decreased involvement of prison staff,
- Continuation of the program even after inmate transfers and releases,
- Creation of a sense of educational competition inside prison wards,
- Preservation of the spirit of fraternity among peers,
- Software-based nature of the project, thus requiring less human resources, and
- Aptness of the program to precise monitoring and evaluation.

The project has trained 21941 persons in the target populations over the course of five months using this new method. Inmates receive education on the inside and their families receive them on the outside of prisons, which helps reinforce the effects of the training.
2) Indirect Information and Education

By now, the key role of indirect education as in art or film festivals has certainly been well established. Hence, the Prisons' Organization held a short-film festival on HIV throughout the national prisons' network.

A) The Prisons' Short Film Festival on HIV

Audio-visual apparatus are generally available at Iranian prisons at inmate visiting areas and induction (quarantine) halls. Hence it seems useful and effective to use these settings to present short educational films on HIV/AIDS, behavioural disease, modes of disease transmission, prevention methods and de-stigmatization and discrimination-reduction regarding PLWHA.

The festival comprised of 13 short films which were produced by various prisons and submitted. Best films were selected by a board of judges and awarded prizes. All submissions were aired through the prisons' audio-visual systems, making use of this new method in improving inmates' knowledge on HIV.

B) Drawing Contests on the subject of HIV:

Two nationwide drawing contests have been organized at Iran's prison network. The first addressed HIV education and comprised the under-eighteen-year-old juvenile detainees at correctional disciplinary centers in 2010. The second was held among women inmates in women's' wards in 2011. The topics covered included HIV/AIDS, modes of transmission, HIV/AIDS in prisons, HIV/AIDS and women, HIV/AIDS and discrimination/stigma as well as HIV/AIDS and the family.

3) Special Attention to Women Inmates on Education and Health Improvement

At present, some 4% of the total inmate population in Iran is comprised of women. Given the differences that exist between women and men in terms of the problems they face during incarceration, with higher levels of health and hygiene problems faced by women, the necessity of gender-specific programs for women seems clear. Thus, the Prisons' Organization has undertaken certain measures to improve staff and inmate awareness in this regard. These include:

A) The first meeting of heads of women's wards of Iran's prisons

B) Special workshops for women's wards' staff on reproductive health and VCT

C) Women's peer education projects at Tehran and Mashhad prisons

D) Drafting the protocol and guidelines for women's issues to be used by women's wards' staff

E) In-depth individual and group interviews with women inmates to determine their problems and needs

F) Organizing drawing contests and festivals on HIV/AIDS for women inmates [51]

Major challenges and remedial actions

Challenges

As the national response to HIV/AIDs increases in a country, more major challenges confront with it. The challenges that usually have not their solutions at the time we encounter them.
It is very important to forecast probable challenges facing in the future and having realistic solutions for them.
The major challenges can be categorized as:

Challenges in the field of access to Most at Risk Populations (MARPs)
O Although access to MARPs in the field of injecting drug users and even sex workers in large cities with scaling up of drug abuse treatment programs and also implementation of Vulnerable Women Counselling Centers improved indubitably, but still there are some major gaps in access to the other categories of MARPs such as MSM that are due to cultural barriers and heavy stigma that surrounded such behaviours.
O Decrease in expansion of coverage of harm reduction programs in open and closed settings that in recent years had a suitable scale up. Decrease in the numbers of drop in centers in current fiscal year at MOHME and not increase in annual budget for each DIC while the costs increase yearly are alarming signs .It is very important that scale up of harm reduction programs in the closed settings and prisons also stopped because of limitation of budget and human resources.
O Change in patterns and type of psycho stimulant drugs. After rapid scale up of outpatient clinics and reaching to more than 500,000 ex-drug users under maintenance treatment, nowadays Iran has a new challenge in the field of psycho stimulant drugs which is producing and consumption of amphetamine type stimulants among current or ex drug users. Seizure report of ATS in Iran reported more than 800 kg in first 9 months of 2010 comparing with zero in 2005.It has been estimated that about 3.6 % of those who were under treatment have concurrent use of ATSs. This change in pattern can reduces the effectiveness and increases failure of maintenance treatment and increase in sexual related risky behaviours under effects of ATS.
There is also another concern among some experts, and it is probable appearance of new drugs with preferred route of injection which may put all success of Iran harm reduction programs in a great challenge and one should be ready to detect its occurrence and its management.
O Serious inadequacy of treatment services for psychoactive and methamphetaminic drugs across country

Challenges in the field of general population:
O Young people are still one of the dominant groups of the population. Different studies show HIV related knowledge of youth. If this problem stay for a long time due to cultural limitations and barriers can increase sexual transmission.
O Increase in divorce rate in recent years is one of the other challenges that engage young population and could be a potential cause for increase in sexual partners.
O Rural population with more than 30% proportion of the population and urban population in small towns had not easy access to appropriate HIV prevention services.

Challenges in substructures:
The challenges ahead of the 3rd National Strategic Plan (NSP) are at most similar to the first and second NSPs in some fields;
O- Delay in approval and conveying of 3rd NSP to responsible organizations.
O- Insufficient participation of all stakeholders in different levels of government and ministries that are involved with implementation and evaluation of the NSP.
oInadequacy of systematic coordination between “HIV/AIDS” and “drug abuse” related programs at the national level.
O- Insufficient programs for capacity building and empowerment of NGOs and civil societies that lead to human and social resources limitation.
O- Insufficient participation and involvement of private sectors in HIV/AIDs related programs.
O- Insufficient focus on rural population in drug abuse related programs.
O- Risk of reduction or interruption of GFATM fund that can cause discontinuation of some important programs, especially those that cannot get sufficient budget from national resources.

Some Suggested remedies

• Many of the challenges cited in substructures section, can be reformed by strengthening National AIDS Committee Secretariat as a national coordinator.
• Facilitating the registration process of NGOs and civil societies working in the field of HIV and empowerment of these groups by the most available and cost effective methods.
• Establishing encouragement mechanisms for involvement and participation of private sectors in HIV/AIDS programs
• Integration of harm reduction programs and voluntary counselling and testing programs in primary health care system in
• Reviewing of the protocols for detection of PLWH in places where using whole blood is not easy.
• Compiling strategic plan for drug abuse prevention, treatment and harm reduction programs for increasing coverage of the programs. Until that sufficient budget should be available to achievement to the minimum coverage required.

• Compiling and integrating ATS harm reduction programs in current harm reduction programs.
• Compiling post divorce education curriculum as well as pre marriage education for at risk couples
• Implementation of need assessment, and feasibility study for establishment of centers especially designed for providing services and facilities for MSMs
• More advocacy for implementation of skill based education focused on HIV prevention in the curriculum of students in high schools and universities.
• More informational and general population education using mass media and especially national radio and television networks.

Support from the country's development partners

- ✓ The share of development partners in funding needed for HIV/AIDS prevention and control has improved since the previous report, a trend that is expected to continue. Rejection of Iranian proposals due to new Global Fund classification of recipient countries may hurt this trend and stop certain current projects for which government funding is not possible. The termination of international assistance will most particularly hurt harm reduction interventions since such services are generally offered by NGO and the private sector and the government would face both funding deficiencies and legal restrictions if it were to outsource these services.
- ✓ Support in terms of planning, implementing, and monitoring HIV/AIDS control activities including technical and logistic supports have improved as well and expected to be continued.
- ✓ Facilitation for the country in order to increase access to less priced ARVs is expected to be improved.
- ✓ Providing opportunities for sharing experiences among countries with same social, economical and geographic context is expected to be continued and improved.
- ✓ Assessment of the activities by international consultants and technical support on removing weaknesses is expected to be continued.
- ✓ Giving support to develop a network at regional level for NGOs to empower their better participation in planning and implementing HIV services expected to be improved.
- ✓ Encouraging international companies (especially those produce objects for adults) for involvement in communication and delivering messages related to HIV prevention is expected.
- ✓ Assisting coordination between all partners of HIV prevention programs is expected.

Monitoring and evaluation environment

M&E Committee Structure

The Committee was formed in 2003 and was originally comprised of experts and professionals not necessarily affiliated with the Strategic Plan partner organizations. In 2007 the structure of the National M&E Committee was fundamentally revised to comprise representatives of partner organizations including those of the Iranian Blood Transfusion Organization, Prisons' Organization, State Welfare Organization, National Organization for Youth, NGOs, Iranian Red Crescent Society, Ministry of Interior, Ministry of Education, Ministry of Science, Ministry of Welfare and Social Security, Military and Law Enforcement Forces, Islamic Republic of Iran Broadcasting, Imam Khomeini Relief Fund, Drug Control Headquarters, UNAIDS, relevant research institutes and the Ministry of Health and Medical Education (with individual representatives from the Center for Disease Management, Network Development & Health Improvement Center, Office for Population and Family Health, Office for Social & Mental Health, MOHME Research Affairs Deputyship as well as select representatives from medical sciences universities). These representatives are active at national and provincial levels. (52)

A. Monitoring and Evaluation Committee at the National Level(52)

The National M & E Committee was formed to develop protocols, determine major and ancillary indicators, identify indicator measurement and calculation methods, set the implementation process, and collect, analyze and report on data from across the country. Since the committee was technical and professional in nature, the following three levels of sub-groups were set up for it to function

- **Level1: Working Group:** A group of 4-6 experts and specialists who develop the technical drafts needed for the monitoring and evaluation plan at various levels, including stages of indicator definition, identification of needed data, data collection modes and methods of data analysis and reporting.
- **Level2: Technical Group**: It comprises technical experts from partner organizations and the Working Group which evaluate the drafts developed by the Working Group against corresponding needs and implementation capacities of their respective organizations. This group has a total of 21 members, representing partner organizations and ministries. From among them, those organizations responsible for calculating the greatest number of indicators have been selected as the Supervisory-/Executive Core Team to lead the implementation of monitoring and evaluation plans. The Core includes representatives from MOHME (Offices for AIDS Control and Substance Abuse Prevention), MOE, Prisons' Organization, State Welfare Organization, and the Red Crescent. Additionally a representative from the Ministry of Interior has

been made a member of the Core Team because of the key coordination role played by the ministry and its affiliated province governorship generals.

- **Level3: Monitoring and Evaluation Committee**: This level of the Committee is the main policymaking body in the M&E plan. Its members are senior officials from partner organizations. All drafts developed by the technical subgroups in various areas of monitoring and evaluation shall be considered and approved at this level.

B. Monitoring and Evaluation Committees at Province Level[52]

The Province Committee should be made up of local heads of corresponding national partner organizations. In practice, the implementation of the M&E plan at province level is largely handled by a supervisory/executive core team that includes representatives from organization responsible for tabulating the greatest numbers of indicators in the Strategic Plan. Thus the core teams include local representatives from the State Welfare Organization, the Red Crescent Society, Prisons' Organization, Ministry of Education and the local medical sciences university and are headed by representatives of governors general. Province core team members receive the training required to implement the National Plan through educational/briefing workshops.

It has been decided that province committees shall be headed by heads of social affair offices of each governorship general, while the deans of health at each province's medical sciences university shall act as committee secretary.

Measures to define HIV epidemic

In order to clarify situation of HIV epidemic and in line recommendation of WHO, activities are ongoing to implement the second generation of surveillance system in Iran. Components of this system incude: [52]

1.Routine Reporting System:

Case registry System:: once the first cases of HIV infection were identified in Iran, case recording and reporting processes began. Cases identified and confirmed through ELISA and Western Blot tests by medical sciences universities are reported to the Center for Contagious Disease Management. The files are collected and kept by the AIDS Control Office. Each case report includes such information as gender, age, mode of transmission, and whether or not the AIDS stage of the disease has been entered and whether or not the patient has died. The system was reviewed in 2004 and case report forms revised. A summary report is produced every three months. The system is currently being reviewed once again.

ART Registry System: All cases receiving ARV drugs including ART, PEP, PMTCT are reported by universities of medical sciences to Center of Communicable Disease Management and registered in data bank. Reporting intervals are every 3 months and reporting variables include demographic characteristics (age, sex and marital status), disease related variables (date of HIV diagnosis, the date and criteria of ART initiation, changing or interruption ART regimen and its causes) and drug regimen. The data of this system were used in this report and several other national reports.

2. Sentinel sites: Surveying among different population groups to monitor the changes of HIV prevalence within these groups began in 1997 in Iran and is continuing at this time. This program is ongoing in most provinces. It is conducted in the different population cohorts including injecting drug users, inmates, sex workers, truck drivers, sailors, soldiers, people with STDs, workers working far from home and pregnant women. In some provinces more than one group in included. There is a national guideline to implement sentinel sites. This guideline was produced in 2004 and revised in 2005. The guideline is currently under revision. Regarding different procedure in implementation of these sentinel sites; analysis of its results should be cautious. The data of this system were used in this report and several other national reports.

3. Bio-Behavioral Surveillance System: The first survey among IDU entitled as HADI was conducted in Tehran. Afterward the first integrated biobehavioural survey in IDUs was implemented in 10 provinces in 2007. The second biobehavioural survey in IDUs was conducted in 2009. Using experiences of the first round, some modification was considered, but it was tried to be at a minimal level. In 2008 a pilot of biobehavioural survey was conducted in 2 prisons, based on its results the first biobehavioural survey in prisoners was implemented in 2010. A preliminary qualitative study was conducted in female sex workers in 2 provinces and based on its results the first nation ward biobehavioural survey in this group was implemented in 2010. A preliminary study was conducted in street children in 2010. The data of these surveys were used in this report and several other national reports.

4. Estimation of the Number of PLWH: Since 2003, attempts have been made by the experts and directors of the national AIDS program to calculate the number of HIV infected cases in the country through applying special software; the results show an estimated 30,000 to 40,000 HIV infected cases in the country. In 2005, the same basis was used and the estimate was 60,000 to 70,000. In 2009, the latest estimation was conducted by the Regional Knowledge Hub for HIV/AIDS Surveillance (at Kerman University of Medical Science). Its tried to use the best available data about size of different at risk groups and HIV prevalence among these groups, and probability to be infected. This estimation used PEP and Spectrum softwares and tried to extend its estimation to 2014. In spite of very valuable information provided, its constraints should be considered because of shortage of input data. The data of this report were used in this report and several other national reports.

5. Size estimation: There is not any well-organized size estimation at national level, at this time except for IDUs. There is a size estimation conducted in Kerman city conducted recently.

6. STI reporting system; STI reporting system was established in country since 1998, based on etiologic and syndromic case reporting and syphilis screening in certain groups as well. Based on a study in Bandar Abbas and Dare-Gaz its sensitivity was estimated to be about 25%. Two third of reported cases has been from public sector. This system was revised in 2006 and reporting was limited to

urethral discharge and genital ulcer and 3 etiologic agent including Gonococcus, Chlamydia and syphilis.

7. Other studies: Two situation and response were conducted in 20067 and 2009. The second one used as a bsis for developing the third national strategic plan.

Methods of Assessing the Response to the HIV Epidemic in Iran

In the Third National Strategic Plan, the Plan itself and its M&E component were developed simultaneously. The latter comprised the following items: [52]

National Plan M&E Indicators: the M&E Committee approved the M&E indicators for the plan including the components as follows:

Identifying Plan Indicators: M&E indicators for the plan were identified and divided into the three categories of Impact Indicators, Outcome Indicators and Output Indicators.

Identifying Indicator Characteristics: Program partners agreed on definition of indicators; specification of data required for calculation and standard-setting for numerator/denominator data; specification of sources of data extraction; and frequency of indicator calculation.

Developing Data Collection & Indicator Measurment Tools: This included setting of tools; developing identical data collection forms for all program partners; developing filling-guides for report forms; designing the data entry software; and designing the software used for data quality control.

Measuring the Indicators: Indicators were calculated at province level as itemized by program partners for each strategy together with provincial aggregate indicators as well as district level indicators (for certain indicators). Indicators have also been calculated at national level with breakdowns by program partners in each strategy together with national aggregate indicators itemized by province.

Implementing Stages of Indicators Measurement

Stage 1- Establishment of Province-Level Executive Structures: At province level, M&E subcommittees are set-up corresponding to the national-level subcommittee. In addition to their role in facilitating the implementation of the strategic plan, they also undertake data collection and other M&E activities at province level.

Stage 2- Training the Operational Staff: This includes development of a training module as well as annual training workshops conducted for province-level executive/supervisory core teams on M&E overview, principles, National Plan M&E implementation and data entry/analysis software.

Stage 3- Data Collection: Starting in April of each year, the trained executive/supervisory core teams begin collecting data needed for previous year's plan evaluation through standardized forms.

Stage 4- Data Collection Quality Control: National-level representatives of organizations represented at the executive/supervisory core teams

supervise the data collection process for their respective organizations at province level. Using software designed for this purpose, data collection quality control is achieved during program implementation.

Stage 5- Finalization of Collected Data: Province level data is summarized. Validity of data is ascertained by comparing with similar data at the national-level executive/supervisory core team member organizations. Unreliable data is discarded.

Stage 6- Analysis of Summarized Data: Input and Output Data agreed upon by the national-level committee at provincial and national levels is calculated as itemized by organization-in-charge and target populations of the program

Stage 7- Analysis of Indicators and Drafting of the Report: The indicators calculated are analyzed by the working group. Through comparisons with results of other studies, an attempt is made to draw a profile of the national response. In order to prepare draft national and provincial reports, the technical committee appraises the results. Taking into account the expert opinions of program partners, the working group drafts the aforementioned report which is then delivered to the National M&E Committee for final approval.

Stage 8- Report Publication Results of the Plan M&E will be utilized and published in the following formats:

- The Comprehensive Handbook of Annual Results of Monitoring and Evaluation of the National AIDS Control Plan
- Summarized of the report for decision maker
- Summarized of the report for annual revision of strategic plan

Assessment of Monitoring and Evaluation based on NCPI(annex2)

Most key persons believe that a national monitoring and evaluation plan does exist, even though its development and implementation faces certain challenges which may be summarized as follows:

- Large number of indicators considered
- Limitations in reaching all populations for data collection
- Systemic flaws preventing the proper and accurate recording of data
- Massive human resources requirements

It would seem that program coverage started in 2007 which means that the program has run for 4 years. Most experts agree that almost all key stakeholders have aligned their M&E needs with those of the National M&E Plan.

The M&E plan and the Third National Plan have both been developed by the national M&E subcommittee which includes representatives from all program partner organizations. The M&E plan was developed simultaneously with the National Plan. Information needed for the implementation of the program is collected from different source which requires collecting reports from different organizations as well as conducting special studies. The information collected at provincial level is reported to the central bodies of each organization or

institution. These indicators are summarized into national reports by the M&E Committee which includes representatives from all of the different organizations.
Province coordination workshops have been held that included program partners as participants. All program partners have reached a single set of guidelines with corresponding committees formed at provincial levels. It would seem, however, that because of lack of an accurate system of data recording in some organizations, the data collected has not been sufficiently reliable.
According to many key persons the M&E plan contains a data collection strategy that includes: behavioral studies, research projects, continuous program monitoring, data analysis strategy, data publication and utilization strategy and a set of indicators with standardized definitions comprising breakdowns by sex and age and guides for using data collection, information / education and HIV care and treatment tools.
Some 3-5% of the total funding for the National HIV Plan has been allocated to the M&E program. It must be noted that each of the member organization has their own health budget, a portion of which is directed to M&E measures.
Most key persons concur that there is a unit active in implementing the national M&E program. A committee has been set up at national level comprising representatives from National Plan partner organizations which is called “AIDS Monitoring & Evaluation Committee.” Committee members actually act as committee focal points within their respective organizations, implementing programs approved by the committee.
Most key persons believe that the main obstacles and problems in the M&E program are:

- Large number of indicators considered
- Excessive variety of data collection for each indicator
- Operational complications in reaching hidden populations to be studied
- Absence of certain basic data needed to calculate certain indicators, such as the size of various at-risk populations
- Lack of specific funding allocations for M&E measures within some organizations
- Inability of some organizations in accurate and proper data recording
- The fact that the organizational structure of some program partners does not allow for the establishment of a separate unit for national monitoring and evaluation within those organizations

The program M&E Unit is located at the National Plan Secretariat at MOHME. Permanent staff members include:

- MOHME M&E expert officer who has been engaged full-time since about 4 years ago
- MOHME epidemiological care expert officer who has been engaged full-time since about 4 years ago
- Additionally, there are other officers which monitor the activities they are involved in implementing. These include officers from associated organizations, HIV reporting system’s data collection officer and the STD expert officer.

Most experts and key persons agree that there is a mechanism to ensure conveyance of all information and reports needed to be examined and included in the national system, whether from the M&E program or other programs being implemented, to the M&E unit through meetings of the M&E Committee which are held for coordination between members.
In short, the mechanism for conveyance of data is as follows:
Data is delivered from field organizations to the provinces and from there to the headquarters. Province level information must first be confirmed by the provincial committee then sent back to each organization which in turn re-checks it at its national headquarters.
In the opinion of most key persons the M&E Committee does hold regular meetings to coordinate M&E activities.
There is also a central national databank that contains HIV-related data. It resides at the Center for Disease Management and is run by M&E and the care system units of MOHME AIDS Control Office. The information stored pertains to target populations; geographic distribution of the disease; number of those infected; treatment service provision centers; and results from recording identified cases, surveys of sentinel sites, biologic-behavioral surveys and other discrete studies.
Scope of utilization of information acquired through monitoring and evaluation includes:

- Use in program improvement
- Use in development and revision of the National HIV Plan
- Use in resource allocation and standardization

Information acquired through monitoring and evaluation is also used in determining goals and objectives for the National Plan, regular revision of the Plan and advocacy.
Main Challenges are:

- Resources are limited for much needed studies
- Given the taboo associated with the disease, at times publication of information faces certain obstacles.

Over the past year, there have been training workshops at national level on monitoring and evaluation, whereby some 200 individuals from different provinces have been trained (there were representatives of five organizations from each province). There were also about 100 individuals representing civil society who received training.
Some of the key persons believe that in addition to training programs, there have been other M&E-related empowerment activities that include:

- Development of the relevant checklist
- Extension of technical and monitory support for proposed applied research projects within the care system
- Development of a unified set of guidelines

Most key persons believe that measures in HIV program M&E have been acceptable in 2011 (with an average score of 7 on a scale of 1-10).
Progress made and achievements since 2009 have been significant and include:

- Formation of the expert M&E committee at national and provincial levels
- Simultaneous development of M&E framework with the Comprehensive National Plan
- Launching of software reporting HIV/AIDS cases and services delivered
- Reinforcement of the care system program and systemization of behavioural surveys
- Improved coordination in the M&E Committee with more meetings
- Promotion of participation for partner organizations in providing data
- On the whole, the M&E Committee is one of the more active committees.
- Formation of corresponding committees at provincial level is among its most important achievements

Remaining Challenges Include:

- Unnecessarily large number of indicators and organizations involved in the program
- Weakness of the system of data collection for program M&E
- Absence of and integrated and coordinated system for M&E
- Failure to use a proper computer software for data collection and recording

Annexes

Annexx 1: Preparation Process of the Report

With the establishment of the Working Group on the report, its work began on January 2012.

Data Collection Methods: In order to obtain the data required to monitor national programme activities, extensive correspondence took place with medical universities and governmental organizations (the Prisons Organizations, State Welfare Organization, Blood Transfusion Organization, Ministry of Education, and departments within the Ministry of Health and Medical Education, such as the Drug Abuse Prevention and Treatment Office). Existing data in the Centre for Diseases Control was also brought together. Further, in order to complete and triangulate some data, key informants were interviewed and the information so obtained was compared with that from other sources and eventually finalized.

To obtain biological and/or behavioural data, often generated as part of projects either directly commissioned by the CDC or developed in close association with this institution, the principal investigators of these studies were contacted directly to access data or else to speed up completion of the projects and release of results.

Studies were identified by searching Farsi and foreign-language databases and contacting medical universities and organizations active in the field of HIV/AIDS. Studies providing data deemed useful in the development of the report were selected, and their principal authors contacted to obtain the raw data needed to calculate the indicators.

In order to compile the second indicator (National Composite Policy Index), key individuals from the governmental and non–governmental sectors as well as from among PLHIV were identified and interviewed using the questionnaire accompanying the UNAIDS guidelines.

Data classification, summary and analysis: All the studies obtained were reviewed, and the data needed to produce the DoC indicators extracted, summarized and stratified, compared with each other and analyzed and presented as descriptive indicators as relevant.

Finalizing the report: Over the duration of drafting of the report, program partners have been involved in preparing various parts, with each part of the text being discussed, reviewed and approved by program partners via email. Prior to submission, program partners reviewed the draft of the report in a meeting.The report was finalized after discussion and revision of the initial draft.

Annex 2: NCPI

This indicator is based on a standard UNAIDS questionnaire and is designed in the framework of interviews with key informed persons in HIV/AIDS. The interviewees included 8 representatives of government organizations, 7 representatives of civil society, international organizations active in AIDS-related issues and a representative of PLWH. Selection of interviewees was based on the opinion of the main committee of the study. This is a qualitative study aiming

to find and identify the views and opinions of officials and key persons. Given the specific goals of the project, an attempt was made to have a wide range of program partners, stakeholders and key persons with experience in HIV/AIDS represented in the study.

Procedure: the following stages comprised the interviewing process for the key persons:

A- Prior to the Interview
- Interviewees were each called and informed of a brief description of the project and its objectives and were told that they were among the informed, key persons selected for data collection in the project.
- During the telephone conversation the interviewees were told that electronic and hard copies of a questionnaire (in both English and Farsi) would be emailed and snail-mailed to them to be read carefully and answered subsequently.
- The interviewer provided respondents with his/her contact number in case of possible questions.
- The respondents were asked to send back the completed questionnaires.
- Upon careful examination of the completed questionnaires, the interviewer contacted the interviewees in order to set up face-to-face interview dates, in cases where there were unfilled or unclear responses.

B- During the Interview
- Once again a brief description was given on the project and its objectives.
- While reviewing the completed questionnaire, the interviewer tried to fill-in the unclear or unfilled points.

C- After completion of the questionnaires, data was extracted and qualitatively analyzed. Results were reported based on views of key persons and analysis of commonalities and differences among these views. For those questions which the respondents had been asked to quantify their responses on scales of 0-5 (0 for very poor and 5 for excellent) or 0- 10 (0 for very poor and 10 for excellent) average scores were calculated and reported. For items where there was no agreement among the interviewees and no core consensus, the differing views were all reported. Finally, in addition to completion and submission of the standardized tool a narrative text was also prepared and used in various parts of this report in order to better explain the state of Iran's national response.

Annex3: Table of retention on ART

Table 1: Retention rate 12 months after ART initiation in PLWH disaggregated by age and sex[19]

Period	Age Group	Number of Patients that initiated ART			Number of Patients who were still alive and known to be on treatment 12 months after initiation after ART			Percentage of Patients who were still alive and known to be on treatment 12 months after initiation after ART		
		F	M	T	F	M	T	F	M	T
OCT2005-SEP2006	<15	1	0	1	1	0	1	100.0	-	100.0
	+15	29	189	218	26	142	168	89.7	75.1	77.1
OCT2006-SEP2007	<15	5	4	9	5	4	9	100.0	100.0	100.0
	+15	45	284	329	39	227	266	86.7	79.9	80.9
OCT2007-SEP2008	<15	8	3	11	6	3	9	75.0	100.0	81.8
	+15	63	386	449	52	290	342	82.5	75.1	76.2
OCT2008-SEP2009	<15	13	9	22	13	8	21	100.0	88.9	95.5
	+15	102	487	589	93	387	480	91.2	79.5	81.5
OCT2009-SEP2010	<15	11	6	17	9	2	11	81.8	33.3	64.7
	+15	131	534	665	119	430	549	90.8	80.5	82.6

Table 1: Retention rate 12, 24, 36, 48, 60 months after ART initiation in PLWH [19]

Period	Number of patients that initiated ART in the period	patients who were still alive and known to be on treatment 12 months after initiation of ART		patients who were still alive and known to be on treatment 24 months after initiation of ART		patients who were still alive and known to be on treatment 36 months after initiation of ART		patients who were still alive and known to be on treatment 48 months after initiation of ART		patients who were still alive and known to be on treatment 60 months after initiation of ART	
		N	%	N	%	N	%	N	%	N	%
OCT2005-SEP2006	219	169	77.2	159	72.6	151	68.9	140	63.9	129	57.5
OCT2006-SEP2007	338	275	81.3	250	74.0	219	64.8	200	51.5	------	------
OCT2007-SEP2008	460	351	76.3	307	66.7	274	59.9	-------	-------	-------	-------
OCT2008-SEP2009	611	501	82.0	443	72.5	-------	-------	-------	-------	-------	-------
OCT2009-SEP2010	682	560	82.1	-------	-------	-------	-------	-------	-------	-------	-------

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