

Evaluation of opioid substitution therapy in prisons

Pilot study in Kyrgyzstan



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ABSTRACT

The evaluation of the outcome of the pilot Opioid Substitution Therapy programme in Penitentiary Institution No. 47 in Bishkek (Kyrgyzstan) took place in 2009–2010. The programme's participants consisted of 84 patients enrolled in methadone maintenance therapy. Assessments were carried out at baseline and after 3 and 6 months. Instruments adopted by WHO, translated into Russian and applied in earlier opioid substitution therapy outcome studies, were used. They included the Opiate Treatment Index, the World Health Organization Quality of Life–BREF questionnaire, the Bloodborne Virus Transmission Risk Assessment Questionnaire, the Zung Self-Rating Depression Scale and others. Results of the study indicate the consistent improvement of health and quality of life among opioid substitution therapy patients, as well as the significant reduction of injecting risk behaviour in relation to transmission of HIV and other bloodborne viruses.

Keywords

OPIOID-RELATED DISORDERS – drug therapy METHADONE – therapeutic use PRISONS PROGRAMME EVALUATION KYRGYZSTAN

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Executive summary

Eighty-four inmates of Penitentiary Institution No. 47, who met the opioid substitution therapy enrolment criteria defined by the National Opioid Substitution Therapy protocol in Bishkek (Kyrgyzstan), were offered participation in opioid substitution therapy with methadone. Patients were carefully assessed clinically by a psychiatrist and/or narcologist, and informed consent was obtained from eligible patients. Study participants were interviewed by trained interviewers within the first 2 weeks of commencing opioid substitution therapy (baseline) and again at 3 and 6 months. The time frame of interview questions was 30 days prior to entering treatment, or 30 days prior to the 3- and 6-month interview. The measures used in this study, which were included in the WHO Collaborative Study on Substitution Therapy of Opioid Dependence and HIV/AIDS, included: the Opiate Treatment Index, the Bloodborne Virus Transmission Risk Assessment Questionnaire, the Zung Self-Rating Depression Scale, the WHO Quality of Life—BREF questionnaire, and the Severity of Dependence Scale. This study used WHO approved official Russian versions of the above-mentioned questionnaires.

The statistical analysis of data showed that, at 3 months, 84 patients continued opioid substitution therapy and, after 6 months, 55 continued therapy. Those dropping out of treatment and the study did so because of external factors (such as transfer to another prison or early release). The results of the study showed consistent, marked and statistically significant improvement, after 3 and 6 months, in the health status and quality of life of patients on opioid substitution therapy in prisons. It also showed a marked reduction of injecting risk behaviour and heroin use.

This evaluation study had several limitations. For example, the observational (cohort) study did not have a non-treatment control group. Nevertheless, as the baseline data reflect, the status of a heroin user not in treatment in a prison and the subsequent positive changes after 3 and 6 months in the quality of life, health or injecting drug use are likely to be positively associated with opioid substitution therapy. Another limitation was the issue of how openly inmates self-reported drug use and risk behaviour while in prison.

Notwithstanding these limitations, the findings of this evaluation study of programme outcome demonstrate that injecting drug users, while being on opioid substitution therapy in prison, underwent considerable and sustained positive changes in health and behaviour. These findings have important practical implications for expanding HIV prevention among injecting drug users in prisons through expansion of opioid substitution therapy availability in prisons. The sustained improvement of health and quality of life in patients on opioid substitution therapy also suggests potential cost savings, as injecting drug use patients on opioid substitution therapy are less likely to need (intensive) health care while in prison.

To expand opioid substitution therapy in prisons and maximize its impact on HIV prevention in Kyrgyzstan, the following is recommended.

- 1. An expanded opioid substitution therapy programme needs full legal approval. At the moment, the pilot programme is supported by a ministerial order. This makes the future of such treatment uncertain.
- 2. Efforts need to continue to further increase the access of injecting drug users to opioid substitution therapy in prisons. This would increase their chances of avoiding infections with HIV, hepatitis B and C, tuberculosis, and other sexually transmitted diseases. It is recommended that opioid substitution therapy be further expanded to all prisons and detention centres.
- 3. Comprehensive health care should be continuously available in health care settings in all prisons and should include infectious disease prevention and care and psychosocial support. Also, naloxone should be available at health care centres in prisons, to prevent patients from dying from an opioid overdose.
- 4. A plan to monitor and evaluate opioid substitution therapy treatment outcomes should be established in the country, and prisons should be included in this monitoring. Monitoring and evaluation activities should be an integral and continuous part of each opioid substitution therapy programme, as is indicated in the clinical protocol for health care organizations in the health and justice ministries. For monitoring, a short data collection tool (based on readily available methods) should be developed to follow changes in drug use, health, social integration and risk behaviour.
- 5. Opioid substitution therapy in police detention should be part of standard treatment, and prisoners on opioid substitution therapy do not need to be kept in special cells. Opioid substitution therapy should be viewed as standard treatment for a chronic disease.
- 6. Needle exchange systems function well in prisons, but there is still no access to this service in detention centres, including police detention. If possible, needle exchange systems should be established.
- 7. Generally, prisoners that use drugs lack information that focuses on harm reduction, opioid substitution therapy and diseases related to drug use. It would help considerably if the Ministry of Health and prison services were responsible for providing such information for example, in pamphlets and posters.
- 8. A system for securing the availability of methadone needs to be established, so that the situation that occurred in 2009, where methadone was difficult to provide, can be avoided in the future.
- 9. To avoid misconceptions about opioid substitution therapy at all levels, an information dissemination strategy on opioid substitution therapy should be developed among government employees, law enforcement officers and medical professionals.
- 10. Including nongovernmental organizations in the provision of social and legal support for opioid substitution therapy patients in prisons should be continued at all levels.
- 11. Antiretroviral (drug) therapy in prisons needs to be expanded, as no prisoner should have to wait for adequate HIV/AIDS treatment.

Introduction

The latest scientific research data suggest that opioid dependence is a chronic condition with frequent relapses. Nowadays, opioid dependence is often compared with other chronic diseases, such as hypertension, diabetes and asthma (McLellan et al., 2000; WHO, 2004a). Chronic diseases have no particular cures. Nevertheless, with appropriate long-term therapy and medical care (and also behavioural changes in patients), it is possible to eliminate or reduce symptoms of chronic diseases and obtain a high quality of life. In this context, opioid substitution therapy is recognized as a cost-effective strategy for achieving: high retention rates of injecting drug users in therapeutic programmes; a significant reduction of illegal opioid use; and a reduction of injecting risk behaviour. Both methadone and buprenorphine have been included in the 14th WHO model list of essential medicines (WHO Expert Committee on the Use of Essential Drugs, 2005).

Opioid substitution therapy has been recognized as an effective tool for preventing HIV among injecting drug users and for increasing adherence to antiretroviral therapy of eligible people with HIV/AIDS (WHO Regional Office for Europe, 1998; WHO, 2004b; Farrell et al., 2005; Wolfe, Carrieri and Shepard, 2010). Methadone and buprenorphine have proven to be highly effective in treating opioid dependence and preventing HIV (WHO, 2004c; WHO, 2009). The effectiveness of methadone and buprenorphine (in opioid substitution therapy) in reducing illegal opioid use and injecting risk behaviour, increasing the quality of life, improving health and reducing criminality was studied not only in high- and middle-income countries (Mattic et al., 2009; Gowing et al., 2011), but also in low-income countries and different cultures, such as China, Indonesia, the Islamic Republic of Iran, Lithuania, Poland, Thailand and Ukraine (Lawrinson et al., 2008; Schaub et al., 2009).

The new WHO guidelines for the psychosocially assisted pharmacological treatment of opioid dependence recommend that opioid substitution therapy with methadone or buprenorphine be used in preference to detoxification for most patients, that methadone is used in preference to buprenorphine, and that both methadone substitution therapy and detoxification services be made widely available, including in prisons (WHO, 2009).

In recent years, methadone and buprenorphine maintenance therapy has been recommended increasingly to be part of HIV prevention strategies in prisons, being an important and highly effective public health intervention (WHO Regional Office for Europe, 2005). Opioid substitution therapy is included in a comprehensive harm reduction package of interventions for people who inject drugs and has been recommended as an appropriate intervention for prisons and other closed settings (WHO, UNODC and UNAIDS, 2009). Furthermore the principle of equivalency of care demands that prisoners are entitled, without discrimination, to the same standards of health care found in the outside community (UNODC, 2008). Practical guides for the introduction of opioid substitution therapy in prisons have been developed (Møller et al., 2007; Kastelic, Pont & Stöver, 2008; UNODC, 2008; WHO Regional Office for the Western Pacific, 2009).

In 2002, Kyrgyzstan became the first country in central Asia to initiate a pilot opioid substitution therapy programme. The first evaluation of the programme indicated that opioid substitution therapy was effective in reducing illegal drug use and increasing social integration of opioid substitution therapy patients (Asanov, unpublished observations, 2005). By 2006, the number of opioid substitution therapy delivery centres was low (two centres, in Bishkek and Osh) and the number of patients in opioid substitution therapy had actually decreased (to 145). Thus, opioid substitution therapy did not play a significant role in the prevention of HIV before 2006 (Subata & Pkhakadze, 2006). Nevertheless, the evaluation (Subata & Pkhakadze, 2006) concluded that, during the pilot phase of the opioid substitution therapy programme for the period 2002–2006, substitution therapy with methadone in the Bishkek and Osh drug treatment centres was implemented in a comprehensive way, in cooperation with other medical institutions and nongovernmental organizations. In implementing the opioid substitution therapy programme, local medical staff became experienced in providing opioid substitution therapy.

The evaluation also recommended expansion of opioid substitution therapy in a geographically decentralized way and with adequate capacity building of existing staff. Moreover, the evaluation mission paid specific attention to drug use and the HIV situation in the prison system. Its recommendations further included the introduction of the pilot opioid substitution therapy programme in the prison system. In addition, a descriptive model of opioid substitution therapy in prisons was included in the evaluation report (Subata & Pkhakadze, 2006).

In October 2008, a WHO Regional Office for Europe mission to Kyrgyzstan performed a follow-up evaluation of the development of the opioid substitution therapy programme since 2006. The evaluation report (Subata, Møller & Karymbaeva, 2009) stated that the Government of Kyrgyzstan in collaboration with United Nations organizations and international and local nongovernmental organization partners had significantly expanded opioid substitution therapy with methadone during the period 2006–2008. The number of drug service centres that provided opioid substitution therapy with methadone increased from 2 in 2006 to 13 in 2008. Also, the number of injecting drug users in opioid substitution therapy increased five times, from 145 in October 2006 to 729 in October 2008. In collaboration with family medicine centres, opioid substitution therapy was decentralized. Moreover, the evaluation study pointed out that many indicators of health and social well-being improved significantly after patients were recruited into opioid substitution therapy programmes across the country (Møller et al., 2009).

Methodology

Participants and procedure

In 2009, inmates of Penitentiary Institution No. 47 were offered the chance to participate in opioid substitution therapy with methadone. Before being accepted into opioid substitution therapy, patients were carefully assessed clinically by a psychiatrist and/or narcologist. If patients had an opioid dependence and met other criteria for opioid substitution therapy, as defined by the National Protocol (for example, at least 2 years of injecting use and unsuccessful

previous treatment attempts), they were offered the chance to participate in the opioid substitution therapy programme. In choosing a mode of treatment, patients also had other choices; for example, they could choose inpatient withdrawal treatment and also subsequent residential psychosocial abstinence-oriented treatment (the so-called Atlantis programme). Both treatment modes (withdrawal management and the Atlantis programme) have been available at the prison hospital of Penitentiary Institution No. 47 for a number of years.

All patients eligible for opioid substitution therapy were approached by staff and offered the opportunity to participate in the study of treatment outcome effectiveness. Informed consent was obtained from eligible patients; they were informed that their involvement in the study was voluntary and that withdrawal from the study would not result in negative consequences or affect their subsequent treatment or other conditions of detention. The study participants were assured that the study data would remain confidential and would not affect their stay in prison.

Study participants were interviewed by trained interviewers within the first two weeks of commencing opioid substitution therapy (baseline) and again at 3 and 6 months. The interviewers were not involved in providing treatment to patients. The study participants were questioned 30 days before entering treatment or 30 days before the 3- and 6-month interviews. The data were entered into a database and statistical analysis was performed by use of the SPSS Statistical Package.

Measures

Demographic data for the study subjects included employment and educational level; and data on previous medical treatment and history of drug use treatment were also collected. The same measures included in the WHO Collaborative Study on Substitution Therapy for Opioid Dependence and HIV/AIDS General Protocol (Lawrinson et al., 2008) were used for this study. The official Russian versions of the questionnaires were used.

The extent to which heroin, other opioids, cannabis, amphetamines, cocaine, benzodiazepines and tobacco were used, as well as symptoms experienced as health problems, were ascertained by the interviewers who administered the Opiate Treatment Index (Darke et al., 1992). ¹
Activities that involve the risk of exposure to bloodborne viruses – through injection, other skin penetration and unsafe sexual behaviour – were measured by a self-administered questionnaire: the Bloodborne Virus Transmission Risk Assessment Questionnaire – BBV-TRAQ (Fry, Rumbold & Lintzeris, 1998). If needed, the interviewers were available to assist study participants in filling out the questionnaire. Also, the Zung Self-Rating Depression Scale was used to measure depression levels among participants (Zung, 1965), and the WHO Quality of Life (WHOQOL)–BREF (WHO, 1993) – a short-form quality of life assessment tool – was used to ascertain the personal perception of well-being associated with physical health, psychological health, social relationships and the environment. Also, a five-item questionnaire, based on the

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¹ The Opiate Treatment Index is a structured interview designed to measure the effectiveness of drug treatments. It measures six treatment outcomes: drug use, HIV risk-taking behaviour, social functioning, criminality, health status and psychological functioning. In its complete form, the interview takes 20–30 minutes to complete.

Severity of Dependence Scale (Gossop et al., 1995), was used to measure the severity of dependence.

Statistical analysis

The SPSS Statistical Package was used to perform statistical analysis. The Friedman test – a nonparametric statistical test (similar to the parametric repeated measure ANOVA method) that detects differences in treatments across multiple test attempts – was used to compare mean indicators at baseline, 3 months and 6 months. Where a narrow range is researched and the results are not necessarily distributed normally, nonparametric statistical assessment methods are applied for statistical analyses. The Friedman test was used to test the null (H0) hypothesis. The Friedman test allows the assessment of disparity when parameters of the population researched are assessed more than two times.

Results

Demographic characteristics

All 84 patients enrolled in the study were male. The average age was 35.6 years. Of the 84 patients, 26 (30.9%) were HIV positive and 41 (48.8%) had participated in opioid substitution therapy sometime before prison, though they had to interrupt opioid substitution therapy after being imprisoned.

Treatment retention

After 3 months, all 84 patients (100%) remained in treatment and in the study. After 6 months, 55 patients (65.5%) remained in treatment and the study. The rest of the patients were either transferred to other prisons with no possibility to continue opioid substitution therapy or released from prison. The follow-up of these patients was beyond the scope of this study, but it should be stressed that continuity of care for prisoners on opioid substitution therapy after release from prison is of vital importance. While in prison, none of the patients refused to leave opioid substitution therapy or the study.

Changes in quality of life, risk behaviour, health status and drug use

The main results of the evaluation of the study outcome – indicating mean scores and standard deviations at baseline, 3 months and 6 months – are presented in Table 1.

Quality of life

Results, obtained with WHOQOL-BREF showed the marked and statistically significant improvement of the quality of life in all four domains (physical, psychological, social and environmental) after 3 and 6 months, compared with the baseline data shown in Fig. 1.

Table 1. Changes in quality of life, risk behaviour, health status and drug use

	Mean value	an value and standard deviation		Friedman test	
Category	Baseline	3 months	6 months	X ²	P value
WHOQOL-BREF					
Physical domain	27 ± 15	72 ± 14	92 ± 9	223	< 0.001
Psychological domain	30 ± 14	58 ± 15	67 ± 10	163.6	< 0.001
Social domain	24 ± 18	36 ± 17	49 ± 14	101.821	< 0.001
Environmental domain	34 ± 13	55 ± 17	63 ± 11	223	< 0.001
WHOQOL total	114 ± 49	222 ± 54	271 ± 30	223	< 0.001
BBV-TRAQ					
Sex	0.07 ± 0.70	0.01 ± 0.11	0.07 ± 0.26	219.018	< 0.001
Skin penetration	2.7 ± 2.2	1.3 ± 1.5	1.8 ± 1.9	4.356	0.037
Injection	21.3 ± 16.0	0.48 ± 2.10	0.40 ± 1.20	13.376	< 0.001
Total risk	24.0 ± 18.0	2.0 ± 3.0	2.0 ± 2.0	2.020	0.155
Zung Depression Scale					
Depression	59 ± 9	42 ± 9	31 ± 7	223	< 0.001
Opiate Treatment Index			-		
Criminality Scale					
Total crime results	1.4±1.5	0.21 ± 0.56	0.07 ± 0.42	91.653	< 0.001
Opiate Treatment Index					
Health Scale					
Total health results	27 ± 6	12 ± 8	3 ± 2	100.660	< 0.001
General	7 ± 2	4 ± 3	0.95 ± 1.1	23.925	< 0.001
Injection problems	2.2 ± 1.1	0.39 ± 0.93	0.02 ± 0.13	22.447	< 0.001
Cardiorespiratory	5.7 ± 1.9	3 ± 2	0.78 ± 0.87	7.220	0.007
Genitourinary	2.06 ± 1.5	0.85 ±0.95	0.27 ± 0.45	48.091	< 0.001
Musculoskeletal	2.05 ± 0.47	0.52 ± 0.79	0.04 ± 0.19	10.580	< 0.001
Neurological	5.5 ± 1.6	2.0 ± 1.6	0.60 ± 0.60	1.887	0.170
Gastrointestinal	2.7 ± 1.1	1.2 ± 1.2	0.27 ± 0.76	4.592	0.052
Opiate Treatment Index Drug					
Use Scale: Q scores					
Heroin	0.3	0.1	0.1	221	< 0.001
Other sedatives, hypnotics	0.10	0.04	0.01	223	< 0.001
and tranquillizers					
Cannabis	0.11	0.00	0.00	222	< 0.001
Severity of Dependence Scale					
Total	11 ± 2	4.0 ± 1.5	3.0 ± 1.3	129.310	< 0.001

Fig. 1. Quality of life, as measured by WHOQOL

WHO QOL total: *P* < 0.001.

Health status

Perception of personal health

The perception of personal health, as measured by the Opiate Treatment Index, had also significantly improved in patients on opioid substitution therapy (Fig. 2). In general, patients indicated significantly fewer health problems and/or symptoms (including less fatigue and more energy, better appetite and increased body weight), fewer health problems due to injecting drugs and fewer problems in all body systems after 3 months of treatment. Health problems continued to decline after 6 months of treatment.

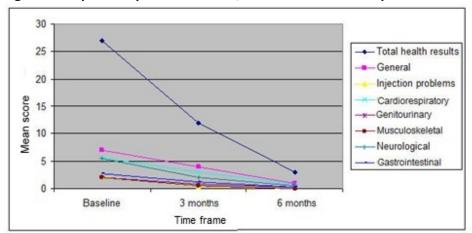


Fig. 2. Perception of personal health, measured with the Opiate Treatment Index

Total health results: P < 0.001.

Level of depression

There was a statistically significant reduction in the level of depression, as measured by the Zung Self-Rating Depression Scale, with the mean score declining from 59 ± 9 at the baseline to 31 ± 7 at 6 months (Fig. 3).

70
60
850
40
30
20
10
0
Baseline 3 months 6 months
Time frame

Fig. 3. Zung Self-Rating Depression Scale

P < 0.001

Severity of dependence

The Severity of Dependence Scale allows the measurement of the extent to which a person feels symptoms of dependence, including loss of control on opioid use, withdrawal states and craving for opioids. The minimum result of the Scale is 0 and the maximum is 15. As measured by the Scale, the severity of dependence has also declined significantly (Fig. 4).

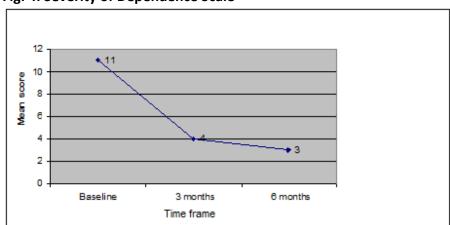


Fig. 4. Severity of Dependence Scale

P < 0.001.

Bloodborne virus risk-taking behaviour

Significant changes in injecting practices were evident among patients undergoing opioid substitution therapy in prison. The change in injecting risk-behaviour, measured by BBV-TRAQ (maximum value 100 points), is shown in Fig. 5. Sexual risk behaviour (maximum 40 points), however, was poorly reported. Skin penetration risk behaviour (maximum 30 points) also declined significantly. Moreover, the total risk behaviour score (maximum 170 points) declined.

Thus, the main decline in bloodborne virus risk behaviour could be attributed to the decline in injecting risk behaviour.

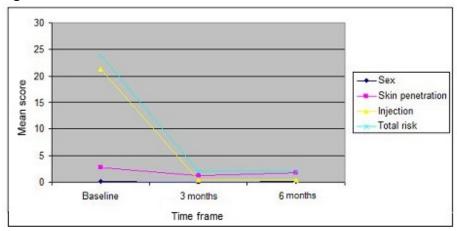


Fig. 5. Bloodborne virus risk behaviour

Sex risk behaviour: P < 0.001; skin penetration: P = 0.04; injection: P < 0.001.

Psychoactive substance use

The self-reported use of heroin, sedatives and cannabis after 3 and 6 months on opioid substitution therapy showed a marked reduction (Fig. 6); however, the data available on the use of other substances was insufficient for the statistical analysis. The level of psychoactive substance use was assessed by the Opiate Treatment Index and the calculation of Q scores – the average amount consumed per day. Abstinence from substance use corresponded to a Q score of zero; once a week or less frequent drug use corresponded to a Q score of between 0.01 and 0.13; more frequent drug use than once a week corresponded to a Q score of between 0.14 and 0.99; everyday use corresponded to a Q score of between 1.00 and 1.99; more frequent use than once a day corresponded to a Q score of 2.00 and more.

The data for evaluating the study outcome show that, prior to opioid substitution therapy, heroin use under prison conditions was at a low level (several times a week, Q = 0.3). During opioid substitution therapy, it declined (once a week or less). The use of other sedatives was also of low intensity (once a week or less, Q = 0.1) and declined. Also, the use cannabis in opioid substitution therapy dropped to zero.

Criminal behaviour

Criminal behaviour (such as theft, selling drugs and fraud) was still prevalent in prison settings. Criminal behaviour was measured by the self-reported Opiate Treatment Index Criminality Scale, which attempts to assess a subject's involvement in recent criminal activity. The data for evaluating the study outcome indicated a reduction in criminal behaviour (Fig. 7).

0.35 0.3 0.25 Heroin Mean Q score 0.2 Other sedatives, hypnotics and tranquillizers 0.15 Cannabis 0.1 0.05 0 Baseline 3 months 6 months Time frame

Fig. 6. Use of psychoactive substances

Heroin: P < 0.001; Other sedatives: P < 0.001; Cannabis: P < 0.001.

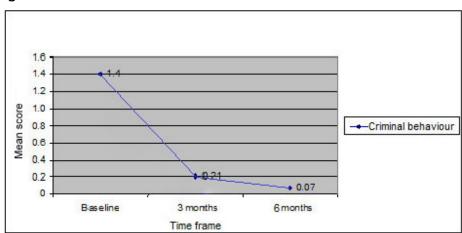


Fig. 7. Criminal behaviour

P < 0.001.

Discussion

The aim of this study on evaluating the outcome of the pilot opioid substitution therapy programme was to see if it was effective in prison settings in Kyrgyzstan. The findings presented in this report demonstrate that implementing opioid substitution therapy in prison was associated with highly significant positive changes in key health areas – such as quality of life and injecting risk behaviour – of inmates who received methadone.

This evaluation of programme outcome had several limitations. For example, an observational (cohort) study design was utilized without a non-treatment control group for comparison. Nevertheless, as the baseline data reflect, the status of a heroin user not in treatment in a

penitentiary institution and the positive changes in the quality of life, health or injecting drug use are likely to be positively associated with opioid substitution therapy.

Another limitation was the validity of self-reported drug use and risk behaviour by inmates in prisons – that is, how openly inmates self-reported it. For example, some inmates might underreport their drug use, fearing that this information could leak from the confidential study documentation and affect their status in prison, such as early release. Although it is difficult to avoid this situation, staff and interviewers assured patients during the study of the ultimate attention being given to confidentiality. Thus, this bias was minimized in the most effective way possible.

The retention rate of patients in opioid substitution therapy – normally a key outcome indicator in the public health care sector – was not that applicable in this prison study. In the study situation, where only a limited number of prisons offered opioid substitution therapy, the transfer to other prisons meant the termination of opioid substitution therapy for a patient and their classification as drop-out. The release of the inmates was also categorized as drop-out, as following up on them outside prison was beyond the scope of this study.

Notwithstanding these limitations, the findings of this outcome evaluation study demonstrated that injecting drug users while being on opioid substitution therapy in prison showed a very marked decrease of injecting risk behaviour. If opioid substitution therapy programmes in prisons could be expanded, this modified behaviour offers a very good chance of preventing HIV. The sustained improvement of health and quality of life in patients on opioid substitution therapy also suggests potential cost savings, as injecting drug users on opioid substitution therapy are less likely to need (intensive) health care while in prison.

Recommendations

To expand opioid substitution therapy in prisons and maximize its positive effect on preventing HIV in Kyrgyzstan, the following is recommended.

- 1. An expanded opioid substitution therapy programme needs full legal approval. At the moment, the pilot is supported by a ministerial order. This makes the future of such treatment uncertain.
- 2. Efforts need to continue to further increase the access of injecting drug users to opioid substitution therapy in prisons. This would increase their chances of avoiding infections with HIV, hepatitis B and C, tuberculosis and sexually transmitted diseases. It is recommended that opioid substitution therapy be further expanded to all prisons and detention centres.
- 3. Comprehensive health care should be continuously available in health care settings in all prisons and should include infectious disease prevention and care and psychosocial support. Also, naloxone should be available at health care centres in prisons, to prevent patients from dying from an opioid overdose.

- 4. A plan to monitor and evaluate treatment outcomes should be established in the country, and prisons should be included in this monitoring. Monitoring and evaluation activities should be an integral and continuous part of each opioid substitution therapy programme, as is indicated in the clinical protocol for health care organizations in the health and justice ministries. For monitoring, a short data collection tool (based on readily available methods) should be developed to follow changes in drug use, health, social integration and risk behaviour.
- 5. Opioid substitution therapy in police detention should be part of standard treatment, and prisoners on opioid substitution therapy do not need to be kept in special cells. Opioid substitution therapy is a standard treatment for a chronic disease.
- 6. Needle exchange systems function well in prisons, but detention centres, including police detention, still lack access to this service. If possible, this service should be established.
- 7. Generally, prisoners that use drugs lack information that focuses on harm reduction, on opioid substitution therapy and on diseases related to drug use. It would help considerably if the health ministry and prison service were responsible for providing this information for example in pamphlets and posters.
- 8. A system for securing the availability of methadone needs to be established, so that the situation that occurred in 2009, where methadone was not available for all users, can be avoided in the future.
- 9. To avoid misconceptions about opioid substitution therapy at all levels, an information dissemination strategy on opioid substitution therapy should be developed among government employees, law enforcement officers and medical professionals.
- 10. Including nongovernmental organizations in the provision of social and legal support for opioid substitution therapy patients in prisons should be continued at all levels.
- 11. Antiretroviral (drug) therapy in prisons needs to be expanded, as no prisoner should have to wait for adequate HIV/AIDS treatment.

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