Key Perspectives on Opioid Substitution Treatment (OST) Programmes, Using Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons as a Case Study

A Thesis Submitted in Fulfilment of the Requirement for the Degree of Doctor of Philosophy
Faculty of Health Sciences and Sport

Rita Komalasari

April 2018
Declaration

I declare that none of the work contained within this thesis has been submitted for any other degree at any other university. The work was done under the guidance of Professor Sally Haw and Dr Sarah Wilson at the University of Stirling, United Kingdom.

Rita Komalasari
April 2018
Acknowledgements

This thesis would not have been possible without the continued support and guidance of my supervisors: Professor Sally Haw and Dr Sarah Wilson, throughout the thesis processes. Sincere thanks to all members in the Health Sciences and Sport particularly Dr Kathleen Stoddart, Dr Fiona Harris, and Dr Hannah Carver.

I would like to express appreciation to the Ministry of Justice Indonesia for supporting and allowing me to carry out this project, and to all participants who provided valuable input. I would also like to thank the Ministry of Finance Indonesia (Indonesia Endowment Fund for Education) for their generosity in providing funding for this PhD. I would also like to thank to Andrea, Stephen, Elena, and Lobone for their support, and friendship during this PhD.

A big thank-you to all my family members. A special thank-you to my husband Cecep and my children Salma and Akmal for their love, and emotional support that have made this completion possible.
### List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>Acquired Immune Deficiency Syndromes</td>
</tr>
<tr>
<td>ART</td>
<td>Antiretroviral Therapy</td>
</tr>
<tr>
<td>ASEAN</td>
<td>Association of Southeast Asian Nations</td>
</tr>
<tr>
<td>AusAID</td>
<td>Australian Agency for International Development</td>
</tr>
<tr>
<td>BBV</td>
<td>Blood-borne Viral</td>
</tr>
<tr>
<td>BNN</td>
<td>National Anti-Narcotics Agency of the Republic of Indonesia</td>
</tr>
<tr>
<td>CCTV</td>
<td>Closed-circuit Television</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GF</td>
<td>Global Fund</td>
</tr>
<tr>
<td>HCPI</td>
<td>HIV Cooperation Program for Indonesia</td>
</tr>
<tr>
<td>HIV</td>
<td>Human Immunodeficiency Virus</td>
</tr>
<tr>
<td>IDUs</td>
<td>Injecting Drug Users</td>
</tr>
<tr>
<td>MMT</td>
<td>Methadone Maintenance Treatment</td>
</tr>
<tr>
<td>MOH</td>
<td>Ministry of Health Indonesia</td>
</tr>
<tr>
<td>MOJ</td>
<td>Ministry of Justice Indonesia</td>
</tr>
<tr>
<td>NAC</td>
<td>National AIDS Commission</td>
</tr>
<tr>
<td>NASAP</td>
<td>National AIDS Strategy and Action Plan</td>
</tr>
<tr>
<td>NICE</td>
<td>National Institute for Health and Clinical Excellence, UK</td>
</tr>
<tr>
<td>NGOs</td>
<td>Non-Governmental Organisations</td>
</tr>
<tr>
<td>NSPs</td>
<td>Needle and Syringe Programmes</td>
</tr>
<tr>
<td>OST</td>
<td>Opioid Substitution Treatment</td>
</tr>
<tr>
<td>PLWH</td>
<td>People Living With HIV</td>
</tr>
<tr>
<td>PSGs</td>
<td>Peer Support Groups</td>
</tr>
<tr>
<td>Abbreviation</td>
<td>Full Form</td>
</tr>
<tr>
<td>--------------</td>
<td>-----------</td>
</tr>
<tr>
<td>TB</td>
<td>Tuberculosis</td>
</tr>
<tr>
<td>TC</td>
<td>Therapeutic Community</td>
</tr>
<tr>
<td>UNAIDS</td>
<td>Joint United Nations Programme on HIV/AIDS</td>
</tr>
<tr>
<td>UNODC</td>
<td>United Nations Office on Drugs and Crime</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
<tr>
<td>VCT</td>
<td>Voluntary Counselling and Testing</td>
</tr>
<tr>
<td>WHO</td>
<td>World Health Organization</td>
</tr>
</tbody>
</table>
Abstract

Background

Heroin dependence is associated with increased risk of the transmission of blood-borne viral (BBV) infections such as HIV, as a result of unsafe injecting practices. Opioid Substitution Treatment (OST) Programmes including Methadone Maintenance Treatment (MMT) programmes are a recommended way of addressing heroin dependence with the dual aims of reducing both heroin use and associated harms. However, OST programmes, particularly in prison settings, are often unavailable, in spite of large numbers of prisoners with heroin dependence and the high risk of HIV transmission in the prison setting.

Little is currently known about the delivery of OST programmes within prison settings. A systematic literature review conducted within this study revealed that there are only a small number of studies from middle and lower-income countries and the perspectives of the range of stakeholders are often underrepresented.

Aim and setting of this study

This aim of this study was to understand the role of Methadone Maintenance Treatment (MMT) programmes within the context of HIV prevention programmes and to identify barriers and facilitators that influence the implementation, routine delivery and sustainability of methadone programmes in Indonesian prisons.

Study design

Three prison settings were selected as part of a qualitative case study. These comprised: a narcotics prison that provided methadone, a general prison that provided methadone, and a general prison, where there was no methadone programme. This allowed the exploration of multiple perspectives of prisoners and the diverse range of staff involved in the implementation of programmes. Interview
and observational data were supplemented by data from medical case notes. Qualitative data underwent thematic analysis, with the help of framework analysis for data management.

**Principal findings**

This study found that there were many misconceptions about methadone programmes. HIV infection was not recognised as a problem and prison staff, healthcare staff and prisoners alike lacked understanding of the roles of methadone programmes. Prisoners participating in programmes were often stigmatised, while many prisoners believed methadone withdrawal was dangerous and could lead to death. These factors all contributed to low level participation, observed in both prisons with methadone programmes. Lack of confidentiality and associated stigmatisation as well as inappropriate assessment criteria also contributed to this, as did a lack of support systems.

A reduction in international funding and a shift in national drug policy priorities away from the provision of methadone to drug-free Therapeutic Community (TC) programmes, together with a failure to embed methadone programmes within the daily prison routine currently pose challenges to effective implementation, delivery and programme sustainability.

**Conclusion**

Educating policy makers and practitioners could improve understanding of the roles of methadone programmes and increase support for programme delivery within prisons. It is therefore recommended that Indonesian government and prison policy focuses on ensuring effective delivery and sustainability of methadone programmes for people with heroin dependence in the prison setting.
Table of Contents
Declaration......................................................................................................................... i
Acknowledgements........................................................................................................... ii
List of Abbreviations......................................................................................................... iii
Abstract ............................................................................................................................ v
List of Tables.................................................................................................................... xii
List of Figures................................................................................................................... xii
CHAPTER 1: INTRODUCTION AND BACKGROUND ................................................... 1
1.1. Introduction to the study ......................................................................................... 1
1.2. Heroin dependence, the impact, and the prevention approach......................... 1
    1.2.1. Heroin dependence......................................................................................... 1
    1.2.2. The impact related to injecting heroin use................................................... 2
    1.2.3. Opioid substitution treatment (OST)............................................................ 3
1.3. Sustainability of OST programs............................................................................... 5
1.4. The Indonesian context ......................................................................................... 6
    1.4.1. Country review overview............................................................................. 6
    1.4.2. Prison structure............................................................................................ 8
    1.4.3. Prison health services.................................................................................. 9
    1.4.4. HIV/AIDS in Indonesia................................................................................ 10
    1.4.5. The national drug and HIV/AIDS policies................................................ 11
    1.4.6. The national HIV/AIDS response................................................................. 13
    1.4.7. HIV/AIDS response funding........................................................................ 14
1.5. Introduction to the researcher............................................................................... 15
1.6. Thesis overview....................................................................................................... 16
1.7. Chapter summary..................................................................................................... 17
CHAPTER 2: A SYSTEMATIC REVIEW OF QUALITATIVE EVIDENCE
ON BARRIERS TO AND FACILITATORS OF THE IMPLEMENTATION
OF OPIOID SUBSTITUTION TREATMENT (OST) PROGRAMMES
IN PRISONS ...................................................................................................................... 18
2.1. Introduction .............................................................................................................. 18
    2.1.1. Research questions ..................................................................................... 20
    2.1.2. Definition of concepts: .............................................................................. 21
2.2. Methodology .......................................................................................................... 21
    2.2.1. Search strategy ......................................................................................... 21
2.2.2. Inclusion and exclusion criteria ................................................................. 23
2.2.3. Study selection for inclusion .................................................................. 24
2.2.4. Quality assessment .............................................................................. 25
2.2.5. Data extraction .................................................................................... 26
2.2.6. Characteristics of the studies in the review .......................................... 33
2.2.7. Method of qualitative synthesis ......................................................... 34
2.3. Findings ..................................................................................................... 35
2.3.1. Understanding OST programmes ..................................................... 35
2.3.2. Treatment processes ....................................................................... 40
2.3.3. Implementing OST programmes in prison systems ......................... 43
2.4. Discussion ................................................................................................. 46
2.5. Summary of the review findings ............................................................... 51
2.6. Implications for future study design ....................................................... 51
2.7. Gaps in the evidence base ...................................................................... 53

CHAPTER 3: THE RESEARCH METHODOLOGY AND METHODS .................. 54
3.1. Introduction ............................................................................................... 54
3.2. Aim and objectives of the study .............................................................. 54
3.3. Research Methodology .......................................................................... 55
3.4. Study design ............................................................................................. 56
3.5. Case selection .......................................................................................... 58
  3.5.1. The selection of prisons ..................................................................... 60
  3.5.2. Selection of study participants ......................................................... 61
3.6. Data collection methods ...................................................................... 68
  3.6.1. Interviewing ....................................................................................... 68
  3.6.2. Observation ....................................................................................... 70
  3.6.3. Audit of medical case notes .............................................................. 71
3.7. Data analysis ............................................................................................ 72
3.8. Methodological rigour ............................................................................ 82
3.9. Ethical considerations ............................................................................ 83
  3.9.1.Confidentiality and anonymity .......................................................... 83
  3.9.2. Informed consent ............................................................................. 84
  3.9.3. Protecting participants and researcher from harm ......................... 85
3.10. Researcher reflexivity .......................................................................... 85
  3.10.1. Reflection on the pre-research stage ............................................. 86
7.7.3. The irregularity of NGO support .......................................................... 184
7.8. Strength and limitation of the study......................................................... 184
  7.8.1. Study strengths ................................................................................. 184
  7.8.2. Limitations of the case study.............................................................. 184
7.9. Chapter summary.................................................................................... 187

CHAPTER 8: STUDY CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS .......................................................... 188
  8.1. Introduction .......................................................................................... 188
  8.2. Study conclusions.................................................................................. 188
  8.3. Implications of the study for research, policy and practice .................... 190
    8.3.1. Implications for research ............................................................... 190
    8.3.2. Implications for policy ................................................................. 191
    8.3.3. Implications for practice ............................................................... 193
  8.4. Recommendations ............................................................................. 195
    8.4.1. Future research into sustainability and delivery of programmes
           should.................................................................................................. 195
    8.4.2. The Directorate of Corrections should: .......................................... 195
    8.4.3. General recommendations for prison healthcare staff..................... 196
    8.4.4. Specific recommendations for the study prison healthcare staff..... 197
  8.5. Conclusion ........................................................................................... 198

APPENDICES ................................................................................................. 199

REFERENCES ............................................................................................... 279
List of Tables

Table 1 SPICE anatomy of OST programmes in prisons...............................20
Table 2. Papers included in the review of barriers and facilitators to the implementation of OST programmes in prisons.................................................27
Table 3. Key characteristics of the studies in high-and middle-income countries...33
Table 4. Themes of systematic review..............................................................35
Table 5. Sample structure................................................................................35
Table 6. Prisoner characteristics.......................................................................68
Table 7. Initial thematic framework................................................................74
Table 8. Thematic framework..........................................................................75
Table 9. Framework matrix.............................................................................76
Table 10. Final themes....................................................................................81
Table 11. Psychosocial support services..........................................................137
Table 12. Prison programmes..........................................................................149
Table 13. Structure of prisoners and prison staff in all three prisons............157

List of Figures

Figure 1. Maps of Indonesia........................................................................6
Figure 2. Search process used to identify papers within the review.............25
CHAPTER 1: INTRODUCTION AND BACKGROUND

1.1. Introduction to the study

This study aims to understand the role of Methadone Maintenance Treatment (MMT) programmes within the context of HIV prevention programmes, and to gain an in-depth understanding of the barriers to and facilitators of the delivery of programmes within a middle-income country setting, by examining a case study of three different Indonesian prisons.

This introductory chapter gives an overview of heroin dependence and the main harms associated with this. The justification for OST programmes is discussed. The concept of programme sustainability is presented. The context of Indonesia is then introduced, followed by a discussion of the extent of the country’s HIV-problem, the treatment response, policies, and funding issues. The Indonesian prison systems that form the basis of this study is also described. The chapter presents an outline of the thesis and then concludes with a summary of this chapter.

1.2. Heroin dependence, the impact, and the prevention approach

1.2.1. Heroin dependence

It is estimated that 250 million people globally used illicit drugs in 2015. Of these 17.7 million people used opioids (UNODC 2016). Throughout the Asian region, heroin is the most common cause of opioid dependence (UNODC 2008). Opioids are used therapeutically for pain-relief; however, in the absence of significant pain, opioids’ euphorogenic effects, particularly from heroin, can lead to their repeated use (Brown 2004).

Opioids consumption stimulates opioid receptors in the brain and then activates the opioid’s stimulation of the reward systems in the mesolimbic pathway which results in the production of brain chemicals such as dopamine which is commonly released as a natural response to pain. The release of this chemical in the brain leads to a pervading sense of relaxation. Continued use of increasing dosages results in opioid tolerance where there is need to take a higher dose to achieve the similar relaxation
effect. This can develop into drug dependence, with the conditions of susceptibility to withdrawal symptoms such as muscle cramps and diarrhoea. Drug addiction is associated with the condition of increasing drug craving and uncontrollable use of drugs. The process of drug addiction is more complicated than drug dependence and involves two factors. First, genetic brain abnormalities in the area of the prefrontal cortex (FFC), result in a reduced judgmental ability to restrain impulses to compulsive drug uses. Second, the interaction of environmental factors including stress and psychological conditions is involved (Kosten and George 2002).

Brown (2004) defines opioid dependence as a chronic relapsing condition linked to the obsessive use of opioids in spite of evidence of harm due to use. The commonly used criteria for opioid dependence from The World Health Organization's ICD-10 WHO (2016), are characterised by an intense desire to take opioids, the development of withdrawal symptoms, tolerance to the effects of opioids, neglect of other activities and persistent use despite knowledge of overtly harmful consequences. Although people who use heroin may not meet the full criteria for dependence, they may be engaging in the harmful behaviour which could result in damaging physical, psychological or social consequences, which makes them eligible for OST treatment (WHO 2016).

1.2.2. The impact related to injecting heroin use

The negative health impacts of heroin use are commonly linked to the method of drug administration. Compared to smoking or snorting, injecting heroin poses a much greater risk of transmission of blood-borne viral (BBV) infection such as hepatitis B and C and HIV, through unsafe injecting practice, and sharing needles and syringes (UNODC 2016). Globally, it is estimated that 1.55 million of the 12 million people who used illegal drugs in 2015, are HIV-positive (UNODC 2017), the majority of whom who use heroin. However, there is considerable variation between countries and regions. For example, in Southeast Asia HIV prevalence among injecting drug users ranges from less than 1.1 % in Bangladesh to as high as 28.76% in Indonesia (UNAIDS 2018).
A systematic review and meta-analysis indicate a significantly increased risk of death among people who inject opioids and other drugs, associated with the complication of HIV-infection, drug overdoses, and suicide (Mathers et al. 2013). People who inject heroin also have an increased risk of sudden death from respiratory failure (Nutt et al. 2007).

1.2.3. Opioid substitution treatment (OST)

Lenton and Single (1998) describe harm reduction as the intervention where the main goal focuses on the reduction of harm instead of merely the reduction of use for those who wish to continue to use drugs. Within this framework, OST programmes are regarded as an effective, evidence-based intervention to treat people with heroin dependence and to prevent HIV transmission among injecting drug users (IDUs), through the regular oral administration of a long-acting opioid agonist drug (WHO, UNAIDS and UNODC 2004). An opioid agonist drug such as methadone activates an opioid receptor in the brain resulting in similar opioid effects and leads to the relief of heroin craving and the blocking of the euphoric effect of heroin (Dole and Nyswander 1965). Alongside the drug treatment, it is also recommended that OST programmes include psychosocial support, and offer education, for example about how to manage withdrawal symptoms (Schuckit 2016).

Despite the United Nations’ (2006) recommendation that methadone should be considered as an ‘essential medicine’ as part of well-established treatments for treating heroin dependence, the availability of OST programmes remains limited for many people with heroin dependence worldwide. In 2016, only 80 out of 158 countries where injecting drug users have been reported have implemented OST programmes (Harm Reduction International 2016). Although Southeast Asia has amongst the highest number of people who inject drugs (PWIDs), together with Eastern Europe and North America (Larney et al. 2017), the provision of OST programmes in the Southeast Asia region was below 40% of PWIDs being treated with OST, at only 2% in Bangladesh and as high as 35% in Indonesia (UNAIDS 2016).

The relevance of OST programmes in prison settings

Prisoners are at a particularly high risk of HIV infection associated with risk factors both before and during their imprisonment (Larney et al. 2017). It is estimated that
around 10.35 million people are held in prison globally (Walmsley 2015), and people who inject drugs are over-represented (WHO 2017). In both Eastern Europe and Central Asia, injecting drugs is the primary cause of HIV transmission, and many injectors have been imprisoned (Altice et al. 2016).

Prisons are a high-risk environment for HIV transmission (WHO 2018), linked to continuing injecting drug use in prison and unsafe injecting practices (Izenbergh 2014), particularly where needle and syringe exchange programmes are not available (Wright et al. 2015; Jürgens et al., 2009). Given this, it is unsurprising that the levels of HIV infections are higher in prisoners compared to those in the general population (Schwitters 2016). Dolan et al. (2007) reported HIV prevalence among prisoners in middle- and low-income countries to be higher than 10%. For example, in Indonesia, the prevalence rates are 15% and in Estonia, up to 90%.

HIV infection is a critical issue in prison settings that calls for health interventions. Nevertheless, although WHO (2005) recommends the establishment of OST programmes in prisons to treat people with heroin dependence, their delivery faces many challenges linked to the perceived conflict with the drug-free oriented prison policies.

The justification for the provision of OST programmes in prisons is based on public health principles and human rights that deem that prisoners should have access to OST programmes equivalent to those available in the community. In the absence of such health interventions, HIV prevalence among people who inject drugs is likely to increase to more than 40% (WHO 2005).

1.3. Sustainability of OST programmes

Many international funding agencies have highlighted the importance of programme sustainability as a standard outcome of programmes. Sustainability refers to "the continued use of program components and activities for the continued achievement of desirable program and population outcomes" (Scheirer and Dearing 2011, p.2060). In 2016, the Global Fund (GF) included sustainability as one of the key
elements of programme design, when considering grant applications (The Global Fund 2017). Within the broader literature of HIV and AIDS programmes, funding, which was associated with the continued funding support from various sources, and political context, which was associated with authorities who remain committed to prioritising the programmes, have a critical role in programme sustainability (Oberth and Whiteside 2016).

Shediac-Rizkallah and Bone (1998) identified several problems associated with the lack of programme sustainability. First, the termination of programmes may increase the risk levels of disease, for example, from a preventable to an invasive stage of cancers. Second, there is a waste of the initial investment in resources, funding, and people where such programmes do not reach or maintain their desired outcomes. Finally, the communities where the intervention was introduced will likely display pessimistic attitudes when another new plan is introduced into that community.

Sustainability has been identified as a critical factor in health promotion (Pluye et al. 2004), primary health care (Pallas et al. 2013), and prevention of falls (in the elderly) literature (Hanson and Salmoni 2011). The importance of understanding the challenges of sustaining beneficial health promotion (Gruen et al. 2008) and HIV prevention programmes in the context of limited resources such as in low-and middle-income countries has also been identified (Olakunde and Ndukwe 2015; Torpey et al. 2010). However, there is a lack of studies focused on the sustainability of HIV prevention programmes, especially in prison settings.

1.4. The Indonesian context

1.4.1. Country overview

Indonesia is one of 10 Southeast Asian countries. It gained independence from the Netherlands in 1945. In 2016, the total population of Indonesia was estimated to be around 258 million. It has a Muslim majority and is the fourth largest country in the world. Indonesia has 34 provinces with multiple ethnic groups and languages. The total population of reproductive age over 15 years is around 125 million with a life expectancy rate at birth of 70 (Statistics Indonesia 2017). Java Island has the
highest population density and comprises approximately 57% of the total population. The capital city, Jakarta, where more than 10 million people reside, is located on Java; Java regions also have the highest concentration of HIV cases in the country (ibid).

The country's gross national income per capita in 2016 was $3,400 and it is categorised as a middle-income country (World Bank 2018). However, the country's health spending is the fifth lowest in the world as a percentage of gross domestic product (GDP), with the total health spend and the government health spend accounting for only 3% and 1% of GDP respectively (WHO 2014).

Figure 1. Maps of Indonesia

Source: Owl and Mouse 2018.

The role of family
Stigmatisation of drug use is linked mainly to negative perceptions of drug use, as being dangerous and integrally linked to violence and illegality (Ahern et al. 2007). Compared with other modes of drug administration, the stigmatisation of injecting drug use is much greater (Brener et al. 2017) as is the stigmatisation of people with HIV infection (Iskandar 2014). These attitudes can have a negative psychosocial impact on family members and experiencing sadness, embarrassment, and disappointment relating to drug use have been identified within the Indonesian
context (Ritanti 2017). As in many countries (Fotopoulou et al. 2015; Li et al. 2012; Salter et al. 2010), drug use by a family member is considered a family disgrace, and therefore it would not be disclosed to communities to maintain the family’s honour (Ritanti 2017). For example, in Balinese culture, many families tend to conceal drug users (Elena 2014).

However, despite the role of family as a source of stress and shame, families can also play a significant role in supporting drug users. Where there are strong family ties, families can provide moral and emotional, as well as financial support (Ritanti 2017). Putranto (2017) also recognised that Indonesian families are often deeply involved in decisions about the management of disease or health problems experienced by family members.

**Religion, sexual orientation, the notion of morality and how these influences the construction of drug problem and users.**

Indonesia is a predominantly Muslim country and Islam plays a central role in Indonesian culture and the development of social and health policies by influencing the construction of both drug problems and drug users. It, therefore, Islam can contribute to the stigmatisation of drug users (Mbonu et al. 2009). In Indonesia, like other Southeast Asian countries, there is less stigma attached to drug users compared to sexual workers or men who have sex with men (Kamarulzaman 2013; Unicef Indonesia 2012; Mesquita et al. 2007). The link between religion and how the communities respond to HIV prevention and treatment has also been identified in other contexts (Hasnain 2005). A Malaysian study, for example, indicated that Islamic teaching has a strong influence on how the government designs HIV prevention policies (Barmanian and Ajunid 2016).

As in Malaysia, the criminalisation of drug use remains the dominant response in Indonesia. However, there is a mixed response from religious leaders toward drug use and harm reduction approach (Kamarulzaman and Saifuddeen 2010). Many religious leaders believe that public health approaches to preventing HIV infection are consistent with the Islamic values of preserving and protecting faith, life, intellect, progeny and wealth. Therefore, within this perspective implementing harm reduction programmes and promoting protection is permissible (Saifuddeen et al. 2014). In
contrast, other religious leaders regard HIV infection as a result of deviant and immoral drug-taking and sexual behaviours and consider that the promotion of needle exchange and condom use will encourage these practices (Narayanan et al. 2011; Hasnain 2005). Therefore, they promote abstinence from illicit drug use and sexual fidelity to prevent HIV infection instead (Ansari and Gaestel 2010).

1.4.2. Prison structure

In Indonesia, prisons are divided into two structures based on their functions – prisons for individuals who have been punished by the court, and detention centres for individuals awaiting trial. The detainees may remain within detention centres for up to 6 months while awaiting trial. However, after sentencing, many of them remain in the detention centres particularly those with sentences of less than two years. Prisons are also classified by security levels - Class 1 is maximum-security level, Class 2 medium security level, and Class 3 is low-security level. Within each of these classes, prisons are further classified as male, female, youth, children's prisons as well as narcotics or non-narcotics prisons. There are only 33 narcotics prisons out of a total prison estate of 412 prisons in Indonesia.

Initially, all categories of prisoners were put in non-narcotics or general prisons, until 2003 when narcotics prisons were first established. However, although narcotics prisons are specifically designed for drug offenders, most of whom are drug users, due to the increasing number of drug offenders in particular in urban prisons, many drug offenders were also sent to general prisons. The overcrowding in some prisons reached as much as 260% capacity (Directorate of Corrections 2016). Generally, there were three types of units in prison: one, five and seven. However, a five-unit type designed for five prisoners, might actually house ten to twelve prisoners, and up to 25 prisoners could reside in a seven-unit type. Usually, prisoners are allocated to the unit based on their sentencing period and types of offences by the security department.

The MOJ oversees prisons through the Directorate of corrections. The general aims of the prison systems are to facilitate and develop the prisoners, so they can integrate with the community after they are released. A prison has three main
administrative departments: the security department including prison officers, the support department for staff including finance and administration units, and the prisoner service department which provides support for prisoners in admission, during imprisonment, and on release. The prisoner service department has three sub-departments in which each is responsible for managing prison work programmes, probation programmes, and healthcare services. Each department works in collaboration with other departments due to the crosscutting nature of the issues. For example, the security department's role is to create a safe prison environment for both staff and prisoners and therefore their role is to ensure every programme or activity is conducted inside the prison securely.

1.4.3. Prison health services

The combination of limited of resources in prisons and the low priority afforded health care by local prison stakeholders has resulted in health care provision being mainly focused on physical health with a corresponding lack of mental health services. Thus, the MOH and external agencies mainly support the delivery of HIV/AIDS programmes including MMT programmes.

The presence of healthcare staff in prisons has developed. Before the 2000s the MOH supplied the healthcare staff in prisons, but after this, the MOJ took over the administration of all prison healthcare staff following the growing concern about health issues in prisons. This meant that prison healthcare staff were funded through a different financial system and received lower salaries as a result.

1.4.4 HIV/AIDS in Indonesia

Southeast Asian countries are the second most significant contributor to the burden of HIV infection after sub-Saharan Africa, with around 3.5 million people living with HIV (PLWH). While HIV prevalence in other Southeast countries has remained stable or has declined, Indonesia has experienced a significant increase of PLWH aged 15 and over. Between 2011 and 2015 the number of PLWH increased by 28% from 540,000 to 690,000 (UNAIDS 2015). With this figure, Indonesia alone contributes 20% of the burden in the region (WHO 2016).
Indonesia first encountered HIV/AIDS cases in 1987, with the first cases diagnosed in Bali province (Ministry of Health Indonesia 2014). Since then, the HIV/AIDS epidemic has continued to spread. By 2016, 80% of the Indonesian districts reported cases (Ministry of Health Indonesia 2016). According to UNICEF (2012), a person is infected with HIV every 25 minutes in Indonesia. Between 2015 and 2016, there was a considerable increase in the incidence of HIV infections with around 10,315 new cases (Ministry of Health Indonesia 2016). Unsterile injecting drug use is among the most common route of HIV transmission in Indonesia. Nasir and Rosenthal (2009) found that socioeconomic disparities in the Indonesian context play a significant role in facilitating risky drug use behaviours among young drug users. In 2008 the National Anti-Narcotics Agency of the Republic of Indonesia (BNN) estimated the number of drug users to be around 3.4 million of which 7% injected drugs, mostly heroin (National Anti-Narcotics Agency of the Republic of Indonesia 2009). A large number of injecting drug users in Indonesia has resulted in it being a strategic transit country for trafficking drugs, including heroin.

The World Health Organization (WHO) (2018) classifies HIV infection as a concentrated epidemic when HIV prevalence in at least one key population group is more than 5%, but the prevalence in urban pregnant women is less than 1%. While a generalised HIV epidemic is said to obtain when HIV prevalence is more than 1% among pregnant women. In general, Indonesia is witnessing a concentrated epidemic within the Southeast Asia region together with China, Malaysia and Vietnam. The epidemic is confined to specific key groups accounting for 29% among injecting drug users, 26% among men who have sex with men, 25% among transgender persons, 5% among sex workers, and 3% among prisoners (UNAIDS 2018).

HIV prevalence in prisons
Prison settings where 224,032 prisoners reside account for a considerable number of people who use drugs as 90,606 (40%) are drug offending prisoners and of these, 964 were reported to be HIV-positive (Directorate of Corrections 2017). No records were kept of the number of drug injecting prisoners. There is variation in estimates of HIV prevalence in prisons. In 2010, the Ministry of Justice Indonesia (MOJ) found
that HIV prevalence rates in the prison population ranged from 8% in the general prisons to over 33% in narcotics prisons (Directorate of Corrections 2010). The difference in these prevalence rates seems to relate to the different categories of prisons being included in that study, which range from general to narcotics prisons both in a rural and urban area.

A study conducted in a narcotics prison found around 37.6% of HIV cases were associated with injecting drug use (Nelwan et al. 2010). The most recent study reported high-risk behaviour among male HIV-infected prisoners in two Indonesian prisons. This study found that 56% HIV-infected prisoners reported injecting drugs in prison with heroin as the only injected drug. Of these, 94.5% reported sharing injecting equipment, and 80% of these reported sharing the equipment with more than ten prisoners (Culbert et al. 2015).

1.4.5. The national drug and HIV/AIDS policies

National drug policy

Imprisonment as a response to drug use is common in many Asian countries (Degenhart et al. 2010). Although there was a Narcotics Law No. 35 of 2009 to support the provision of medical and social rehabilitation for people who use drugs, criminalisation of drug users continues after the government launched a new law in 2012 which imposed severe penalties on drug offenders.

Currently, the BNN has a vital role in supporting the implementation of national drug policy. BNN was established in 2002 to support the country’s response to drug use, including the provision of Therapeutic Community (TC) programmes as an alternative to imprisonment. However, the limited capacity within BNN to provide TC programmes means most of the drug users receive a custodial sentence. To overcome this problem, TC programmes were also introduced in several prisons.

National HIV/AIDS policies

The National AIDS Commission published a National AIDS Strategy and Action Plan (NASAP) for 2015-2019 which aimed to achieve the "three zeros" consisting of zero new infections, zero stigma and zero discrimination through strengthening the
The provision of HIV prevention, treatment, and support in health facilities (UNODC 2016). HIV prevention programmes on key population and harm reduction programmes appeared for the first time in the NASAP for 2007 – 2010 (National AIDS Commission 2008), while the need for scaling up the programmes has been stated in the NASAP for 2010-2014. Their proposed target is to achieve provision for 80% of key populations, with 60% engaging in safe behaviour (National AIDS Commission 2009).

The Ministry of Justice (MOJ) which oversees prisons was the first to respond to the call for a multisector response by launching its Master Plan for System Strengthening and Provision of Clinical Services Related to HIV and AIDS in Prisons and Detention Centres 2005-2009, and then in 2010-2014. This was followed by a guideline for methadone maintenance programmes in prisons and detention centres in 2007. Indonesia was the first country in Asia to include prisons within its Strategic Plan (Directorate of Corrections 2005).

1.4.6. The national HIV/AIDS response

Indonesia’s national HIV/AIDS response has developed since the first case of AIDS was reported. Initially, HIV/AIDS was considered as a health problem with the initial response involving the health sector through the Ministry of Health. In 1994, the National AIDS Commission (NAC) was established with the Coordinating Minister for People’s Welfare serving as chairperson to recognise the vital role of the multi-sector response to the epidemic. The NAC included the Ministry of Social Affairs, MOH, MOJ, and BNN (National AIDS Commission 2009).

The primary role and responsibilities of the MOH in the provision of HIV programmes in prisons is to supply Antiretroviral Therapy (ART), HIV testing kits and methadone as well as to provide incentive fees to health care staff for every prisoner being tested, healthcare staff training and health programmes monitoring. The MOJ has primary responsibility for implementing health services and allocating resources within prisons. The local non-governmental organisations (NGOs) provide treatment support for HIV-positive prisoners and prisoners with drug problems through the delivery of peer education programmes and aided referral back into community
treatment on release. While the MOH is responsible for the medical rehabilitation, BNN is responsible for psychosocial rehabilitation such as the delivery of Therapeutic Community (TC) programmes both in the community and prisons settings. TC consisted of psychosocial and cognitive-behavioural aspects for substance dependent and free from drug use including methadone.

HIV prevention programmes in prisons
Prison governors are responsible for the management of prisoners with drug problems and for the integration and delivery of HIV/AIDS programmes into prison system through (Hidayati 2007):

1. Guidance and law enforcement, provision of social, treatment and rehabilitation services
2. Prevention, care and treatment of HIV/AIDS
3. Research and development

Prisons adopted several HIV/AIDS programmes including information, education, and communication; Voluntary Counselling and Testing (VCT); screening and treatment of Tuberculosis (TB) and sexually transmitted infections (STIs); provision of masks and hand gloves to protect prison staff from hazardous material exposure and HIV prophylaxis post-exposure.

However, unlike HIV programmes in the community setting, which adopted the WHO's recommendation of the nine comprehensive harm reduction packages, Indonesian prisons did not adopt needle and syringe programmes (NSPs) on safety and moral grounds, while condom and bleach programmes are only available in one Indonesian prison in Bali. In 2010, the MOJ conducted research in three detention centres including in Jakarta, Surabaya, and Medan and three prisons in Tangerang, Bali, and Medan to assess the feasibility of providing NSPs and recommended making sure NSPs are available in those study sites; however, NSPs are still inaccessible in those detention centres and prisons. Therefore, only OST programmes, which are specifically for drug users, are available in Indonesian prisons.

In Indonesia, OST programmes take the form of Methadone Maintenance Treatment (MMT) programmes. The first MMT programmes were established in a community
hospital in Bali in 2003 (National AIDS Commission 2009). The first programmes for prisons were also introduced in Bali prison in 2005 (Ministry of Health Indonesia 2008). This was followed by the establishment of programmes in some prisons. By 2016, 12 MMT programmes had been established and of these, nine sites were in Java province. The main aim of MMT programmes as applied in prisons was to facilitate treatment for prisoners with heroin dependence while creating a safe prison environment to reduce crime and chaos and minimise HIV transmission in prison (Ministry of Justice Indonesia 2007). The MOJ proposed that programmes should cover approximately 5% of prisoners in 17 prisons by 2014 (ibid). Thus, by targeting prisoners, the Indonesian strategy may have played a significant role in preventing HIV transmission both inside prisons and after prisoner release back into the community. The Indonesian strategy of targeting prisoners might also determine the future development of the epidemic in the Southeast Asian region

1.4.7. HIV/AIDS response funding

Indonesia received both multilateral funding sources for HIV programmes such as The Global Fund (GF), and bilateral funding sources such as from The Australian Agency for International Development (AusAID), and the United States Agency for International Development (USAID). Since 2010 the GF is the most prominent external donor for funding HIV/AIDS programmes in Indonesia and provided 27% of funding for the period 2014-2016, followed by AusAID and USAID (Global Fund 2015).

According to the World Bank in 2012, the Indonesian government contributed 42% of the funding for national HIV/AIDS programmes, while international donors provided the remaining cost. The Government introduced universal health insurance in 2014; however, the scheme did not entirely cover health expenses for HIV infected people, for example, expenses to cover the cost of CD4 count tests in order to receive ART medication.

The GF has provided grant funding for HIV programmes to both the public and private sectors in Indonesia since 2002, through the MOH, NAC and NGOs. However, the funding available presented challenges for delivering harm reduction programmes in prisons, and therefore, from 2007, the AusAID through The HIV
Cooperation Programme in Indonesia (HCPI) also funded the harm reduction programmes in prisons to scale up harm reduction programmes in Indonesia including the provision of methadone maintenance programmes for the period 2008-2016 (Burnet Institute 2015).

1.5. Introduction to the researcher

I have worked as a doctor in Indonesian prisons since 2003. My interest in the HIV/AIDS area has developed gradually over a 10-year period. Writing a Masters dissertation on stigma and HIV/AIDS prisoners, this motivated me to focus on prisoners who inject drugs. Although prison authorities have helped heroin dependent prisoners through the provision of methadone maintenance programmes in several prisons, having personal experience of delivering health services within the prison system in Indonesia, I understand the limitations and constraints limited resources can have on the effective delivery of programmes to and support for prisoners with heroin dependence. I obtained an Indonesian government scholarship (the Ministry of Finance), which provided funding for this study, therefore enabling me to explore the delivery of the programme in prisons.

1.6. Thesis overview

The thesis comprises seven further chapters. Chapter 2 presents findings from a systematic literature review that examines the factors contributing to the OST implementation and delivery within prison settings.

Chapter 3 presents the study objectives and questions and provides a detailed description of the research methodology including the research protocol for the prisons and each group of participants, and my approach to data collection and data analysis. It also provides an overview of ethical issues and personal reflections on my experience of conducting the study.

The next three chapters present the study findings from interviews with prison authorities (prison governors), prison officers, healthcare staff, and prisoners.
conducted in the three study prisons. The key barriers to and facilitators of the delivery of methadone programmes are explored.

Chapter 7 presents critical insights from a synthesis of the findings, which are discussed with reference to the study aims and the broader literature on OST programmes. The strength and limitations of the methodological approach used are also identified and reflected upon.

Chapter 8 provides the conclusion to the study and the study's main contribution to knowledge. It then goes on to discuss the implications of the findings and concludes with a series of recommendations for research, policy, and practice.

1.7. Chapter summary

Southeast Asia has the second largest burden of HIV infection after sub-Saharan Africa associated with a significant heroin problem in that area. Indonesia contributes 20% of the burden in that region mainly as a result of the high HIV prevalence among injecting drug users accounted for 29%. A study in an Indonesian narcotics prison found 37.6% of HIV cases associated with injecting drug uses. Another study linked the high HIV prevalence in Indonesian prisons to heroin injecting use and sharing injecting equipment. The Indonesian strategy of responding to the HIV epidemic by targeting prisons where a higher risk of HIV transmission occurred might also determine the future development of the epidemic in the Southeast Asia region.

In the absence of needle and syringe programmes, methadone programmes have been the only harm reduction strategies in prison settings. Recently, the Indonesian government also introduced Therapeutic Community (TC) programmes as psychosocial and cognitive-behavioural aspects for substance dependence in prisons. The introduction of TC in prisons and the high reliance of HIV prevention programmes, particularly methadone programmes in prisons, on international funding, raise concerns over the continuity and sustainability of the programmes in prison settings.
Healthcare services delivery in prison settings face challenges because of a lack of prison resources. Although Indonesian prisons are divided between general and narcotics prisons, due to a lack of prison capacity, many prisoners with drug offences were also sent to a general prison instead of to a narcotics prison. These conditions might lead to difficulties in managing prisoners with drug use problems. Moreover, healthcare staff were funded through a different financial system and received lower salaries in prisons, which may negatively influence the delivery of health programmes in prisons.
CHAPTER 2: A SYSTEMATIC REVIEW OF QUALITATIVE EVIDENCE ON BARRIERS TO AND FACILITATORS OF THE IMPLEMENTATION OF OPIOID SUBSTITUTION TREATMENT (OST) PROGRAMMES IN PRISONS

2.1. Introduction

There have been numerous studies indicating that OST programmes in the community are effective at reducing needle and syringe sharing, which in turn is associated with a reduction in the transmission of HIV infection among injecting drug users. A systematic review and meta-analyses found a reduction in HIV infection of 54% among injecting drug users in OST programmes (Macarthur et al. 2012). A systematic review and meta-analysis by Zhang et al. (2013) also found after a 12 months follow-up of methadone-participants that there was a reduction in illicit drug use of 68%, in injecting drugs by 9.3%, and in needle and syringe sharing of 9%.

Other reported benefits of OST programmes from systematic reviews have included a better quality of life regarding psychological, physical, social, and environmental outcomes (Feelemyer et al. 2014), and a reduction in mortality rate by 24.8% (Sordo et al. 2017). In addition, integrating OST programmes with HIV services increased ART coverage and adherence by 54%, and 50%, respectively (Low et al. 2016).

Numerous studies also indicate the small potential for adverse pharmacological effects from the drugs prescribed in OST programmes. A systematic review reported no relation between higher methadone doses (Chou et al. 2014) and continued participation with increased risk or severity of side effects (Baldachino 2017). Gray (2007) also offered an explanation on reported side effects of OST programmes linking them to increased awareness rather than increased actual adverse effects. Another concern about OST programmes relates to the severity of methadone withdrawal. However, a review indicated low methadone doses of 30-40mg might reduce craving and most of the withdrawal symptoms. However, individual differences in drugs metabolisms rates also affect the occurrence of withdrawal symptoms (Kleber 2007).

Despite much evidence about the use of OST programmes in the community, there has been a limited assessment of the outcomes for drug dependent prisoners
participating in OST programmes with those who were not. Larney (2010) reported that benefits of OST programmes included a reduction of 62-91% in illicit opioid use, 47-73% in needle and syringe sharing, and 55% and 75% in injecting drug use. However, this review also found there was mixed evidence for the contention that the OST programmes reduced post-release offending and re-incarceration. The second prison review reported that benefits of OST programmes included increased engagement and retention in health services, by 70%, and 45%, respectively. This study also found that there were no HIV seroconversions (the time period of HIV antibodies to be detected) among OST prisoners who were not HIV-positive at baseline (Heidrich et al. 2012).

The existing literature has recognised the effectiveness of the OST programmes both in the community and prisons. The WHO (1993) has also recommended that the programmes should be made available in prison settings. However, policymakers and prison systems have not been receptive to the delivery of OST programmes to prisoners (Chandler et al. 2009). Harden (2010) has highlighted the need for qualitative data within systematic reviews to provide sufficient evidence to inform policymakers and practitioners. Qualitative reviews also provide comprehensive data and a higher breadth and depth in understanding of the implementation of OST programmes in prison settings (Harden et al. 2004).

While many studies have focused on the effectiveness of OST programmes in prisons, little is known about how programmes are implemented and delivered in prisons. Therefore, this current systematic review of qualitative evidence attempts to address a paucity of knowledge of the OST field to inform both practitioners and policymakers by focusing on the barriers and facilitators associated with delivering OST programmes in prisons in different countries and to identify OST programmes in low-and middle-income countries. Accordingly, the objectives of this review are:

1. To provide an overview of understanding of implementing OST programmes in prison settings in different countries.
2. To identify barriers to and facilitators of the implementation of the OST programmes among policy makers, prison healthcare staff, prison officers, and prisoners.
3. To identify any studies that have been conducted that are particularly relevant to middle-income countries.
4. To explore institutional factors that aid or impede the delivery of OST programmes in prisons.
5. To identify methodological considerations for future study in the OST field.
6. To use the review findings to inform the development of the current study.

2.1.1. Research questions

The SPICE framework was used to formulate the research questions suited to a qualitative review. This framework is commonly used in public health research (Booth 2006) as it helps clarify the nature of the problem and provide a sound framework for systematic literature search. This is outlined below.

<table>
<thead>
<tr>
<th>S</th>
<th>Setting</th>
<th>prison</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>Perspective</td>
<td>different groups (policy makers, prison healthcare staff, prison officers, and prisoners)</td>
</tr>
<tr>
<td>I</td>
<td>intervention</td>
<td>OST programmes</td>
</tr>
<tr>
<td>C</td>
<td>Comparison</td>
<td>-</td>
</tr>
<tr>
<td>E</td>
<td>Evaluation</td>
<td>Perceptions and experiences of barriers and facilitators</td>
</tr>
</tbody>
</table>

The following research questions will be addressed by the review:

1. What are policy makers, prison healthcare staff, prison officers, and prisoners’ experiences of implementing and participating in OST programmes in prisons in different countries?
2. What do policymakers, prison healthcare staff, prison officers, and prisoners believe are the barriers to and facilitators of the existing practices of OST programmes in different countries?
3. What influencing factors associated with the implementation and delivery of OST programmes are specific to middle-income countries?
4. What institutional factors aid the implementation of prison-based OST programmes?
2.1.2. Definition of concepts:

Prisons: places for detaining people whether they are awaiting trial (detainees) or have been punished by the court (prisoners).
Policymaker: A person involved in some stage of policy-making, including designing or implementing policy.
Prison healthcare staff: A person who works in health within the prison setting, including doctors, physicians, nurses, counsellors, drug workers, psychiatrists, specialists.
Prison officer: A person who works on the front line of the prison system, including prison security but not administrative staff.
Prisoners: People resident in prison, whether on remand or as convicted prisoners.
Prison based-OST: OST is a drug treatment for opioid users that utilises any pharmacotherapy agents such as methadone, buprenorphine where this therapy is conducted within a prison setting. This included maintenance or detoxification programmes.

2.2. Methodology

The method for the review follows the National Institute for Health and Clinical Excellence (NICE), UK protocol for the development of the NICE Public Health Guidance, which highlights the importance of inclusion and exclusion criteria, data extraction, quality assessment, and data synthesis (National Institute for Health and Clinical Excellence 2012).

2.2.1. Search strategy

It is widely recognised that qualitative studies are challenging to locate. In particular, in the social science field, systematic searching may potentially result in omission of relevant literature (Papaioannou et al. 2010). Moreover, the different terms used to define ‘qualitative’ literature can make qualitative studies challenging to identify (Grant 2004). Therefore, a combination of database bibliography searches was used as the primary search method, with additional searches using reference lists from included studies.
Main search strategy

The literature of interest for this review comes from many different sources and a variety of disciplines, including health sciences, social sciences, education, and psychology and a comprehensive search strategy was conducted to locate relevant qualitative literature. The following electronic sources were searched to identify a wide range of the topics: ASSIA (Applied Social Science Index and Abstracts), CINAHL (Cumulative Index of Nursing and Allied Health Literature) via EBSCO Host, MEDLINE via Ovid, PUBMED, Social Science Citation Index via Web of Science, and PsycINFO via EBSCO Host.

A 'high sensitivity' search technique was employed to avoid missing relevant qualitative literature (Higgins and Green 2008). Search strategies were developed for each database using a combination of free text and thesaurus terms as appropriate to maximise the search performance. Concepts of the search terms were constructed based on the review questions.

Accordingly, the search terms were:
OST: opioid substitution, opioid, methadone maintenance, methadone, buprenorphine, narcotics antagonists, drug misuse, substance use, drug user, addict, heroin dependence.
Prison: custodial, detention, jail, remand, correctional facilities or services, prison, inmate, detainee, punish, imprison, incarcerate.
Qualitative studies: qualitative, meta-ethnography, thematic analysis, content analysis, focus groups, purposive sample, discourse analysis, perspectives, knowledge, experiences.

Supplementary search strategy

The protocol-driven search strategy is the foundation for a supplementary search strategy in qualitative studies (Pearson et al. 2011). The need for thorough, in-depth searching through additional searches may also provide relevant results; this is
important especially when searching diffuse topics such as health and social science topics (Papaioannou et al. 2010). The following additional searches were employed in this review including a general search on Google by using a combination of concepts included in the search terms, and reference lists identified in the previous literature by using Google search engines or Google Scholar to locate the papers. This is worthwhile, mainly where bibliography databases fail to find relevant studies (National Institute for Health and Clinical Excellence 2012).

As the study searches aimed to retrieve both qualitative and mixed studies, no study design filter was employed. The searches used the following limits: primary studies from literature published between January 2005 and 2015. This time frame was adopted for searching because this is the period during which the rights of prisoners to have proper access to healthcare services in prisons and the duty of prison healthcare staff to provide a range of healthcare services that equal to those provided in the community settings have been highlighted by the United Nations (WHO 2005). Languages were restricted to those understood by the researcher; English and Bahasa Indonesia. To ensure the review was transparent and reproducible, the search process has been documented in detail indicating the databases searched, the dates searched, the time spans searched, and the number of records retrieved (see Appendix A).

2.2.2. Inclusion and exclusion criteria

Type of participants

Studies were included that involved subjects from one or more groups of participants related to prisons. These included study participants such as policymakers (prison governors, government representatives), prison staff (doctors, physicians, nurses, psychiatrists, counsellors, drug workers, prison officers/security staff (not prison administration staff), and prisoners including detainees or prisoners. Studies that include policymakers and healthcare staff where these are not related to prisons were excluded.

Types of studies
Studies eligible for inclusion included any qualitative design, for example, ethnographic studies, and interview-based studies. The qualitative elements of mixed methods research were also screened for inclusion. Studies using only quantitative designs were excluded from this review.

**Types of outcomes**

Literature relating to a range of outcomes was considered relevant including perspectives and experiences of policy makers, prison officers, healthcare staff, and prisoners on the implementation and delivery of the programme. Also considered were their barriers to, and facilitators for OST programmes in prisons in different countries.

**2.2.3. Study selection for inclusion**

The records identified were saved as text files and identified literature imported into a reference manager database; RefWorks. Of the 3956 records imported, 1413 duplicated citations were detected and excluded. All titles and abstracts retrieved from the remaining 2543 database searches were screened for inclusion by the researcher according to relevance, with a minimum of 10% of the literature double screened by the supervisor. 29 records were considered potentially relevant, and full papers for these records were ordered. Of these, eight papers were identified as relevant to the review. Further papers were identified through additional searches described above. A total of 3 papers have been identified and examined in detail following initial screening. Overall, 11 papers were considered relevant and met the selection criteria and were included in the review. A detailed outline of this selection process is shown in the figure 2.

*Figure 2. Search process used to identify papers within the review*
2.2.4. Quality assessment

Literature that met the inclusion criteria was assessed for quality and methodological rigour using the quality appraisal checklist for qualitative studies developed by NICE (National Institute for Health and Clinical Excellence 2012). This quality appraisal checklist has been used extensively in public health research contributed to the assessment of the validity of qualitative studies. The checklist consists of 15 questions over seven sections including the: theoretical approach, study design, data collection, trustworthiness, analysis, ethics, and overall assessment. The details of these quality assessment processes are presented in Appendix B.

The following assessment papers were graded according to the following criteria.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
All or most of the checklist criteria have been fulfilled. Where they have not been fulfilled the conclusions of the study or review are thought very unlikely to alter.

Some of the checklist criteria have been fulfilled. Where they have not been fulfilled the conclusions of the study or review are thought unlikely to alter

Few or no checklist criteria have been fulfilled, and the conclusions of the study are thought likely or very likely to alter

| 2.2.5. Data extraction |

Data were extracted from each of the primary studies included in this review according to NICE guidelines for qualitative studies. The data are presented in an evidence table (see table 2.); this table consists of full details of the studies reviewed concerning consistency of the findings and the applicability of the evidence to the research questions.
### Table 2. Papers included in the review of barriers and facilitators to the implementation of OST programmes in prisons

<table>
<thead>
<tr>
<th>Reference</th>
<th>Aim(s) of the research</th>
<th>Participants</th>
<th>Country</th>
<th>Design</th>
<th>Barriers/facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awgu et al. 2010.</td>
<td>To increase knowledge of heroin-dependent individual. To identify individuals’ satisfaction with and perceptions of methadone vs buprenorphine treatment.</td>
<td>54 methadone patients and 60 buprenorphine heroin-dependent men at the Rikers Island jail.</td>
<td>USA</td>
<td>Mixed methods (unclear). The questionnaire collected primarily quantitative data; the participants’ responses were graded using a 5-point Likert scale from &quot;strongly agree&quot; to &quot;strongly disagree&quot;, but some open-ended questions were also included asking questions about a recommendation of buprenorphine and reasons for the recommendation. The study conducted as part of an exit interview with subjects immediately before their release from jail. Responses to the open-ended response questions were categorised and summarised using thematic coding.</td>
<td>Prisoners suggested that Buprenorphine had better pharmacological effects compared to methadone such as fewer side effects, cravings, withdrawal. Lining up in the dispensing process was identified as a potential barrier to participation as it exposed their drug status to prison staff and other prisoners.</td>
</tr>
<tr>
<td>Perkins and Sprang 2013.</td>
<td>To examine compassion fatigue, burnout and job satisfaction of substance abuse counsellors in relation to individual and workplace characteristics.</td>
<td>Ten counsellors (female and male) specialised in substance dependency treatment and who worked with offenders in prison.</td>
<td>USA</td>
<td>Mixed methods. Interviews with participants about how participants viewed themselves and their work as substance abuse counsellors. The participants also completed both the ProQOLIV Scale and the General Empathy Scale. Thematic analysis was used for data analysis.</td>
<td>Healthcare staff who had a family history of addiction or job satisfaction appeared to have positive attitudes towards OST prisoners.</td>
</tr>
</tbody>
</table>

Table 2. Continued…
<table>
<thead>
<tr>
<th>Reference</th>
<th>Aim(s) of the research</th>
<th>Participants</th>
<th>Country</th>
<th>Design</th>
<th>Barriers/facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heimer et al. 2006.</td>
<td>To describe and evaluate a pilot methadone maintenance programme for heroin-dependent inmates in Puerto Rico. To identify attitudes towards methadone and programme effectiveness.</td>
<td>60 participants.</td>
<td>Puerto Rico</td>
<td>Mixed methods. Quantitative data collection: rate prisoners' satisfaction and ask suggestions for its improvement. Qualitative data: open-ended interviews with the stakeholders. Interviews with correctional officers focused on their beliefs about methadone, the usefulness of the current programme and any positive or negative effects the programme might be having.</td>
<td>Lack of understanding about methadone diversion among prison stakeholders could be a barrier to implementation. Lack of funding and the community programmes are barriers to scaling-up and continuity of the programmes.</td>
</tr>
<tr>
<td>Stöver et al. 2006.</td>
<td>To examine practices and policies in place for the provision of substitution treatment in 18 European prisons.</td>
<td>15 EU countries involving ministerial representatives, professionals (i.e. service providers and security officials working in prison) and prisoners. 33 prisons across 17 countries with a total number of 184 prisoners (132 males and 52 female prisoners).</td>
<td>EU</td>
<td>33 focus groups. Guided interviewing ministerial and non-government representatives, and key informants in prisons or community healthcare services. The study was meant to be a first baseline study. The study was analysed using content analysis method.</td>
<td>Programme implementation was hindered by the lacked understanding of the OST programmes in prisons, stigma, limited treatment period, and the lack of access to the programmes for prisoner transfer and on release. Implementation facilitated by appropriate policy, monitoring, psychosocial services, increased privacy and sufficient methadone drug regime in prisons.</td>
</tr>
</tbody>
</table>

Table 2. Continued…

<table>
<thead>
<tr>
<th>Reference</th>
<th>Aim(s) of the research</th>
<th>Participants</th>
<th>Country</th>
<th>Design</th>
<th>Barriers/facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnstone et</td>
<td>To explore the experience of heroin-dependent inmates in the UK.</td>
<td>14 male opioid-dependent inmates</td>
<td>UK</td>
<td>Interviews were focused on the experience of heroin-dependent inmates in the UK.</td>
<td>Implementation was hindered by the lack of support and resources for OST programmes.</td>
</tr>
</tbody>
</table>
al. 2011.  

**Table 2. Continued…**

<table>
<thead>
<tr>
<th>Reference</th>
<th>Aim(s) of the research</th>
<th>Participants</th>
<th>Country</th>
<th>Design</th>
<th>Barriers/facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Al. 2011.</td>
<td>Use of Subutex (Buprenorphine) and its associated effects.</td>
<td>Dependent drug users who had experience of illicit drug markets within the prison system in seven Scottish prisons.</td>
<td></td>
<td></td>
<td>Contextual factors such as the availability of illicit drugs and stigma. Routine methadone clinic was viewed as a barrier to participation (methadone dependence). Prisoners reported better experiences with Subutex compared to methadone in reducing withdrawal and craving. Implementation facilitated by psychosocial services provision.</td>
</tr>
<tr>
<td>Asher 2013.</td>
<td>To evaluate some of the broader aims and potential consequences of maintaining remand and short-term prisoners on methadone.</td>
<td>63 drug-using male prisoners, and 11 prison drug workers in two local prisons in the North of England. Prisoners’ ages ranging from 22 to 53 with a mean age of 34.</td>
<td>UK</td>
<td>In-depth semi-structured interviews. The data were gathered between May 2010 and March 2011. No information about the methods of data analysis.</td>
<td>Prison staff viewed the programme aims were to control prisoners instead of part of a harm reduction strategy. This could be a barrier to implementation. Drug workers viewed a high dose prescription as a barrier to participation in other prison programmes and to continue the programmes after release, as well as leading to an increase in heroin tolerance.</td>
</tr>
</tbody>
</table>
**Carlin 2005.**  
To explore the perceptions of staff and prisoners about methadone maintenance programmes in prison settings.  

15 prisoners and 16 prison officers (Governor, deputy Governor, chief officer, nurse, medical orderly and 11 prison officers) in the Mountjoy Male prison, Dublin, Ireland.  

Ireland  
The study was exploratory. Purposive sampling and snowball sampling were conducted to recruit prisoners.  

31 individual semi-structured interviews with prisoners and prison officials including 7 interviews and 8 in focus group for prisoners.  

Thematic analysis was used to analyse data.  

Implementation hindered by limited understanding of the programmes, illicit drug use, the process of dispensing practices, lack of treatment coordination between prisons.  
Less stigmatised attitudes among prison staff could be potential facilitators of the programmes up-take and outcomes.

**Zamani et al. 2010.**  
To investigate the context in which methadone maintenance programme was provided for opioid-dependent prisoners, and to identify barriers to further scaling-up of methadone programmes.  

30 male prisoners, 15 staff including four physicians, two nurses, three psychologists, two prison managers and four health policymakers were interviewed.  

Iran  
This paper represents the qualitative phase of a longitudinal study incorporating both qualitative and quantitative methodologies.  

Participants were recruited through purposive sampling, seven focus group discussions with prisoners, in-depth interviews with staff.  

The analysis of this research was based on constructing a thematic framework.  

Benefits of OST programmes included a reduction in drug use, injecting drugs, financial support, and health improvement.  
Implementation was hindered by contextual and structural factors such as concerns about methadone side effects, stigma among both prison staff and prisoners, shortage of prison staff, methadone diversion, and the availability of treatment in the community services.

<table>
<thead>
<tr>
<th>Reference</th>
<th>Aim(s) of the research</th>
<th>Participants</th>
<th>Country</th>
<th>Design</th>
<th>Barriers/facilitators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moradi et al. 2015</td>
<td>To assess the advantages and</td>
<td>140 participants (Physicians,</td>
<td>Iran</td>
<td>Qualitative study. The participants were recruited via</td>
<td>Benefits of OST programmes included a reduction in drug use,</td>
</tr>
</tbody>
</table>

Table 2. Continued…
shortcomings of the methadone programmes from the perspective of people who were involved in the delivery of prison healthcare in Iran.

consultants, experts, directors and managers of prisons) from different prisons all around Iran (the number of prisons was not indicated).

purposive sampling. 14 focus group discussions (with seven to 11 participants each): seven FGDs among prisons’ directors and managers and seven FGDs among physicians.

Data were analysed via content analysis and thematic framework methods.

Wickersham et al. 2013.
To assess physician and prisoner experiences of methadone programmes in prisons.

72 HIV-infected male prisoners.

Malaysia

One-on-one-interviews and focus groups with prisoners before and after their release. The method of this study was not described explicitly.

Interviews with prison physicians prescribing methadone.

This study observed a pilot programme of 2 Malaysian prisons methadone programmes- for 12 months.

The method of analysing data was not described.

Sufficient medical guidelines and education sessions for prison staff and prisoners would facilitate raising awareness regarding sufficient methadone doses, methadone dependence, diversion, side effects and withdrawal.

Implementation was hindered by limited treatment period, lack of referral systems and the availability of community services.
The Qualitative element was conducted as part of exploring social–contextual factors that influence injecting drug uses in prisons. 

| Thematic analysis of interview transcripts. |
| consent for admission to programmes. |
2.2.6. Characteristics of the studies in the review

Of the 11 studies assessed, 7 were conducted in high-income countries. None of the studies met all 15 of the quality criteria. All studies employed either interviews or focus groups to collect data. One study indicated that it included both female and male prisoner participants (Stöver et al. 2006). The following table indicates key characteristics of the studies comparing high-and middle-income countries.

<table>
<thead>
<tr>
<th>Country classifications</th>
<th>Author</th>
<th>Method</th>
<th>Quality score</th>
<th>OST programmes</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>US</td>
<td>Awgu et al. 2010</td>
<td>Qualitative</td>
<td>(-)</td>
<td>MMT</td>
<td>PR</td>
</tr>
<tr>
<td></td>
<td>Perkins and Sprang 2013</td>
<td>Qualitative</td>
<td>(+++)</td>
<td>M/D</td>
<td>CS</td>
</tr>
<tr>
<td>Puerto Rico</td>
<td>Heimer et al. 2006</td>
<td>Mixed method</td>
<td>(+)</td>
<td>MMT</td>
<td>PM, PO and PR</td>
</tr>
<tr>
<td>EU</td>
<td>Stöver et al. 2006</td>
<td>Qualitative</td>
<td>(+)</td>
<td>M/D</td>
<td>PM, PA, PO, HS and PR</td>
</tr>
<tr>
<td>UK</td>
<td>Johnstone et al. 2011</td>
<td>Qualitative</td>
<td>(+++)</td>
<td>M/D</td>
<td>PR</td>
</tr>
<tr>
<td></td>
<td>Asher 2013</td>
<td>Qualitative</td>
<td>(-)</td>
<td>M/D</td>
<td>DW and PR</td>
</tr>
<tr>
<td>Ireland</td>
<td>Carlin 2005</td>
<td>Qualitative</td>
<td>(+)</td>
<td>MMT</td>
<td>PO and PR</td>
</tr>
<tr>
<td>Middle-income</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Iran</td>
<td>Zamani et al. 2010</td>
<td>Qualitative</td>
<td>(+++)</td>
<td>MMT</td>
<td>PA, PO, HS, and PR</td>
</tr>
<tr>
<td></td>
<td>Moradi et al. 2015</td>
<td>Qualitative</td>
<td>(+++)</td>
<td>MMT</td>
<td>PA and PH</td>
</tr>
<tr>
<td>Malaysia</td>
<td>Wickersham et al. 2013</td>
<td>Qualitative</td>
<td>(-)</td>
<td>MMT</td>
<td>PH and PR</td>
</tr>
<tr>
<td>Indonesia</td>
<td>Culbert et al. 2015</td>
<td>Mixed method</td>
<td>(+++)</td>
<td>MMT</td>
<td>PR</td>
</tr>
</tbody>
</table>

Note: Puerto Rico currently is classified as a high-income country.

MMT: methadone maintenance treatment; M/D: methadone/buprenorphine maintenance/detoxification programmes; Po: prison officers; PR: prisoners; PM: policy makers; PA: prison authorities; HS: healthcare staff; PH: Physicians; CS: counsellors; DW: drug workers.

2.2.7. Method of qualitative synthesis

Lack of transparency and clarity in synthesising data are a common criticism of systematic reviews of qualitative studies. Furber (2010) emphasises the real need for transparency in the synthesising process so that the derivation of findings is
explained. The synthesis method used followed guidelines for thematic analysis of textual data in the papers under review. The textual data in this review were the results of study findings based on the interpretation of the researchers of the literature reviewed, including the original quotations from their participants.

Coding of data began with a review of every line and paragraph of the contextual data guided by the review questions. The identified codes were entered into an Excel spreadsheet. This generated the initial list of codes. The similarities and differences between the codes were compared. Themes that were found to be conceptually related were grouped into categories leading to the development of three central themes emerging from the identified studies. Within each theme, barriers to and facilitators of the implementation of OST programmes were identified. The themes are:

1. Understanding OST programmes
2. Treatment processes
3. Implementing OST programmes in prison systems

The table below outlines the main emphasis of the 'categories':

Table 4. Themes of systematic review

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding OST programmes</td>
<td>Perceived risks in prison</td>
<td>• Access to illicit drugs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Inadequate harm reduction policy (provision of bleach)</td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
<td>• Understanding the roles of</td>
</tr>
</tbody>
</table>
### 2.3. Findings

#### 2.3.1. Understanding OST programmes

Some aspects of the prison environment may affect the delivery of OST programmes for prisoners. Prison authorities, prison staff including prison officers and healthcare staff, and prisoners may have different understandings of OST programmes in prison.

**Perceived risks in prison**

The availability of illicit drugs makes it difficult for prisoners to remain abstinent. For example, one of the UK studies reported that although many prisoners are

<table>
<thead>
<tr>
<th>harm reduction roles of OST programmes</th>
<th>OST programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Indicators of success</td>
</tr>
<tr>
<td>Understanding substitution drugs used in OST programmes</td>
<td>• Understanding and misperceptions of OST programmes</td>
</tr>
<tr>
<td></td>
<td>• Stigma concerning drug use and programme participation</td>
</tr>
<tr>
<td></td>
<td>• Perceived benefits of OST programmes</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment processes</th>
<th>Admission criteria</th>
<th>• Reliance on family consent for participation the programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dispensing practices</td>
<td></td>
<td>• Chaotic conditions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Lack of confidentiality</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Diversion of methadone</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Methadone prescription</th>
<th>• Methadone drug regimen</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Implementing OST programmes in prison systems</th>
<th>Prison policies</th>
<th>• Lack policy in prison and medical guidelines of OST programmes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disruption of programmes</td>
<td></td>
<td>• Limitation to programmes (length of treatment, forced withdrawal, lockdown period)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Continuity of programmes after prisoners’ transfer</td>
</tr>
</tbody>
</table>

| Limited resources | • Lack of training for OST programmes |
|                  | • Shortage of prison staff |
|                  | • Lack of psychosocial services |
attempting to be drugs-free (apart from drugs used in OST programmes), other prisoners using illicit drugs encouraged OST-prisoners to use the illicit drugs or made it difficult to reduce or completely stop illicit injecting drugs (Johnstone et al. 2011, ++). Studies in Iran and the UK found that there has been a progression of drug use from inhalation to injection in prisons to deal with increasing heroin tolerance (Zamani et al. 2010, ++; Johnstone et al. 2011, ++).

A lack of provision of bleach for cleaning injecting equipment can also contribute to a higher risk of HIV transmission in prisons. The Indonesian study suggested that poor bleaching practices among prisoners contributed to the higher risk of HIV transmission in the prisons (Culbert et al. 2015, ++).

Understanding harm reduction roles of OST programmes

Studies indicated that an understanding of the programme roles helps to determine whether the programmes are delivered as intended. Three studies from the UK (Carlin 2005, +), EU (Stöver et al. 2006, +), and Iran (Moradi et al. 2015, ++) found that many prisoners and prison officers thought that OST programmes aimed only to alleviate heroin withdrawal symptoms and failed to understand their role as part of a harm reduction principles to reduce blood-borne diseases associated with injecting drugs such as HIV infection.

In four studies (in the UK, EU, and Iran), many prison staff and prisoners associated the roles of OST programmes being introduced in prisons with the control and regulation of prisoners rather than health (Carlin 2005, +; Asher 2013, -; Moradi et al. 2015, ++). For example, studies in the EU and Iran found that methadone was used either as a reward (Stöver et al. 2006, +), or a punishment (Moradi et al. 2015, ++) in the prison systems.

The lack of understanding of programme roles was also linked to how success was measured. One of the Iranian studies found that prison authorities used programme uptake rates as an indicator of success, and therefore, the healthcare staff were often pressured by prison authorities to include all types of prisoners who were interested in participating, including non-opioid injecting drug users, to increase the uptake of methadone programmes (Moradi et al. 2015, ++). This suggests that the prison authority did not understand the primary roles of prison-based OST
programmes (Stöver et al. 2006, +). Both prison officers and prisoners who were not part the OST programmes in the UK and the Iran study, also used prisoners' engagement in other prison programmes such as group work as an indicator of success and regarded programmes to have failed because of low participation by methadone-prisoners in the other prison health programmes (Moradi et al. 2015, ++; Asher 2013, -).

Understanding substitution drugs used in OST programmes
Concern amongst prisoners about the side effects of methadone including the severity of methadone withdrawal was common and deterred participation. Studies in the US, UK, EU, Iran, Malaysia, and Indonesia all found that prisoners often viewed methadone withdrawal as being worse than heroin withdrawal (Johnstone et al. 2011, ++; Carlin 2005, +; Stöver et al. 2006, +; Zamani et al. 2010, ++; Wickersham et al. 2013b, -). Similarly, the Indonesian study found that messages passed to prisoners who were not in the programmes resulted in the shared perceptions that methadone withdrawal was dangerous and could lead to death (Culbert et al. 2015, ++).

Some studies also reported that there were misperceptions about the substitution drugs used in OST programmes. Studies in the EU with social workers and prisoners, and two UK studies of prisoners regarded methadone programmes as simply substituting one drug dependence for another (Stöver et al. 2006, +; Carlin 2005, +; Asher 2013, -). The fear of methadone dependency among many prison staff and prisoners in the Malaysian study might also have resulted in discouraging other prisoners from methadone participation (Wickersham et al., 2013b, -). Similarly, the Indonesian study found that prisoners’ family members shared these perceptions of methadone dependency and they prevented prisoners from joining methadone programmes (Culbert et al. 2015, ++). To reduce these misperceptions, the EU study suggested promoting understanding of drug dependence as a chronic disease among both prison staff and prisoners (Stöver et al. 2006, +).

Access to other treatment options such as Subutex and Buprenorphine was viewed more positively by both prison staff and prisoners. A UK study that interviewed prison
drug workers found that they viewed the use of methadone in prisons as outdated compared to the use of Subutex in the community (Asher 2013, -), while another UK study found that prisoners reported a more positive experience with Subutex compared to methadone in reducing withdrawal and craving from opioids (Johnstone et al. 201, ++). Similarly, a US study found that prisoners viewed Buprenorphine as having better pharmacological effects compared to methadone such as fewer side effects, and cravings compared to methadone (Awgu et al. 2010, -).

Many prisoners were concerned about stigma issues in relation to their identity as a drug user and an OST programme participant. The EU study found that many prisoners on admission to prison avoided being identified as a drug user for fear of being stigmatised and were therefore unable to access medical treatment in prison (Stöver et al. 2006, +). One of the UK studies reported many prisoners experienced a poor self-image resulted from a lack of confidentiality during methadone dispensing at a prison clinic (Carlin 2005, +). However, both UK studies found that prison officers held less stigmatised attitudes towards methadone-prisoners compared to heroin users (Johnstone et al. 2011, ++; Carlin 2005, +), by showing appreciation towards prisoners' participation in methadone programmes (Carlin 2005, +).

One of the Iranian studies found that admission criteria required by healthcare staff which required either a drug injecting or HIV-positive status had created unintended stigma. Therefore, those who participated were referred to by both prison officers and prisoners as homosexual, poor, and AIDS prisoners (Zamani et al. 2010, ++). Another study in Iran which involved directors and managers of prisons also associated poverty with participating prisoners (Moradi et al. 2015, ++). The Indonesian study indicated that many prisoners who were not in methadone programmes excluded prisoners who participated in methadone programmes and they perceived allocating methadone-prisoners within a specific unit as form segregation of methadone prisoners (Culbert et al. 2015, ++). The effects of stigma hindered prisoners from participation and the scaling-up the programmes within prisons (Culbert et al. 2015, ++; Zamani et al. 2010, ++)

A US study found that individual factors such as prison staff with a family history of addiction, and job satisfaction contributed to more positive attitudes among prison
staff towards addiction (Perkins and Sprang 2013, ++). They were able to empathise with the participants and to see things from their perspective. For example, one of the Iranian studies reported that an understanding of the prisoners’ background allowed the healthcare staff to value prisoners’ participation in OST programmes (Moradi et al. 2015, ++).

Despite the misunderstandings, misperceptions, and stigma concerning OST programmes in prisons by both prison staff and prisoners, these programmes were also perceived to be beneficial to prisoners, prisoners’ family members, and the prison systems by both prison staff and prisoners. Prisoner benefits were linked to reductions in the sharing of injecting equipment which reduced the risk of HIV infection, and improvement in the health of the prisoners (Zamani et al. 2010, ++); alleviating craving and heroin withdrawal symptoms (Stöver et al. 2006, +; Carlin 2005, +; Awgu et al. 2010, -; Moradi et al. 2015, ++, -); and improving the social lives of programme participants in prison (Carlin 2005, +; Moradi et al. 2015, ++).

Benefits for family members were talked about in terms of a reduction in prisoners’ need for financial support. Both an Iranian and a UK study found that prisoners’ participation in methadone programmes reduced their expenditure on illicit drugs (Zamani et al. 2010, ++; Carlin 2005, +), therefore prisoners had less debt and needed less financial support from their family members (Asher 2013, -).

Prison systems also benefited from providing OST programmes. Studies in the EU, UK, and Iran all found that there were reductions in the availability and consumption of drugs in prisons (Asher 2013, -; Stöver et al. 2006, +; Moradi et al. 2015, ++; Zamani et al. 2010, ++), while an Iranian study found that prison officers were no longer suspected of bringing drugs into prisons (Moradi et al. 2015, ++). The EU study found that overall, the provision of methadone programmes allowed for the better management of drug use prisoners, and increased uptake of other prison services (Stöver et al. 2006, +), including counselling, education sessions, and sports (Moradi et al. 2015, ++). Furthermore, a UK study found that prison conditions were also less tense and methadone-prisoners calmer (Carlin 2005, +). This resulted in fewer drug-related crimes committed in prisons (Moradi et al. 2015, ++; Asher 2013, -).
2.3.2. Treatment processes

Treatment processes in prison could also affect access to and participation in OST programmes.

Admission criteria
Restrictive admission criteria may affect the uptake of OST programmes. The Indonesian study, for example, found that the admission policy, which required family consent to participate in methadone programmes, prevented many prisoners from participating because they found it difficult to obtain consent either due to lack of family contact or rejection by their families or because of concerns about revealing their drug use status to the family (Culbert et al. 2015, ++).

Dispensing practices
Both prison staff and prisoners were concerned about dispensing processes. In the UK study the dispensing process was described as chaotic with, prison staff describing the situations as "lions around the carcass of a dead animal", while prisoners described their experience as being shepherded around like "cows or sheep" (Carlin 2005, p.412, +). The lack of flexibility in dispensing was also linked by both the UK and a US study to the requirement to attend a daily methadone clinic (Johnstone et al. 2011, ++; Awgu et al. 2010, -).

A major concern about the dispensing process in prisons was the lack of privacy. Studies in both the UK and the US found that prison staff and other prisoners were able to identify programme participants as drug users (Carlin 2005, +; Awgu et al. 2010, -). The EU study, however, found that giving methadone alongside other medication or allocating methadone-prisoners to one unit minimised the risk of breaching confidentiality (Stöver et al. 2006, +).

Methadone diversion in prisons was also associated with either giving or selling prescribed methadone by methadone-prisoners to non-methadone prisoners (Moradi et al. 2015, ++; Zamani et al. 2010, ++). One of the Iranian studies found that prisoners were motivated to sell their methadone as a way of getting money, and this diversion was possible where there was a lack of healthcare staff supervision (Zamani et al. 2010, ++). The EU study linked the methadone diversion with difficulty
in accessing treatment for heroin withdrawal in prisons (Stöver et al. 2006, +). However, although many prisoners in two studies (Moradi et al. 2015, ++; Zamani et al. 2010, ++) reported diversion issues, these aspects were often unrecognised by policy makers when they planned to scale–up prison-based OST programmes as reported in the Puerto Rican study (Heimer et al. 2006b).

Methadone prescription
The review studies presented different perspectives on the appropriate level of methadone doses in prisons. The EU study by Stöver et al. (2006, +) recommended a low methadone drug regime of 50 mg, providing that prisoners took their full doses and that the availability of illicit drugs in prisons was limited. One of the UK studies also found that prison drug workers regarded doses of 60-120 mg as too high and believed that low doses of methadone at 40-50 mg a day would be beneficial for reduction process and swapped to Subutex on release (Asher 2013, -). Similarly, findings in the Malaysian study indicated that both prisoners and doctors favoured low doses of methadone because of concerns relating to methadone dependence (Wickersham et al. 2013b, -).

Both prison drug workers and prisoners in one of the UK studies found that a high dose of methadone led to a lack of prisoner involvement in other prison programmes such as group work, and to increased heroin tolerance, thus increasing heroin use in prisons (Asher 2013, -). In contrast, studies in the US, EU, UK, and Iran all found that when prisoners took low doses of methadone, but their methadone doses failed to replicate the effects of heroin and caused methadone withdrawal, they took other illicit drugs (Carlin 2005, +; Asher 2013, -; Stöver et al. 2006, +; Moradi et al. 2015, + +), such as cannabis or benzodiazepine (Carlin 2005, +). Therefore, the Malaysian study recommended a high methadone dose of 80 mg which was also associated with a better 12 months post-release treatment retention rates; however, achieving this optimum dose at release often resulted in delays in prisoner release dates because of the time required to increase to 80 mg (Wickersham et al. 2013b, -).

Instead of focusing on whether the doses were too high or too low, the EU study indicated the need for individually tailored methadone drug doses (Stöver et al. 2006, +). Wickersham et al. (2013b), (-) also found that individualised methadone doses in
a Malaysian setting where some participants also took TB and HIV medications were essential to avoid methadone withdrawal symptoms. The combination of these medications with methadone resulted in a reduction by half of methadone blood levels. Thus, those who took another treatment alongside methadone required higher doses of methadone.

Prisoners also attempted to influence the dosage of drugs prescribed. One of the Iranian studies found that both prison staff and prisoners threatened healthcare staff to obtain their preferred dose (Moradi et al. 2015, ++). Similarly, a UK study reported that prisoners were often successful in persuading doctors to prescribe a higher dose of substitution drugs (Asher 2013, -).

The titration of methadone over a sufficient time has been found to help to reduce harmful experiences of methadone consumption. Findings from the EU study recommended a slower rate of dose reduction to minimise the risks of relapse (Stöver et al. 2006, +). The Malaysian study recommended a slower rate of increasing doses to minimise the risk of severe adverse effects such as severe vomiting, by increasing 5 mg methadone doses every seven days instead of every 3 to 4 days.

2.3.3. Implementing OST programmes in prison systems

Prison systems organisation and structures can also affect the delivery of OST programmes for prisoners by limiting participation in OST programmes and providing insufficient resources to support the programmes.

Prison policies
Prison policies have a significant influence on programme outcomes. Drug policies were often non-existent or variably interpreted within countries or prisons. The EU study indicated that in some prisons there was no prison policy about drug use and OST programmes, while those who had a policy differed in implementing the policy into practice. This study also highlighted the need for policies to address women prisoners because of the complexity and severity of their drug use (Stöver et al. 2006, +).
The availability of guidelines on clinical management and treatment of substance use were found to affect healthcare staff attitudes to delivering OST programmes positively. The Malaysian study indicated the provision of guidelines about methadone diversion and overdose could assist healthcare staff in delivering appropriate OST programmes and improve the programme's outcomes (Wickersham et al. 2013b, -).

Disruption of programmes
Aspects of prison organisation and structure could also disrupt the provision of programmes to prisoners. Findings from the EU study indicated that OST programmes varied in length between EU countries, with some countries limiting OST programmes for prisoners to a period between six and 12 months started either on admission or in the time leading up to release (Stöver et al. 2006, +). In the Malaysian study, the programme duration was even shorter and only started three to six months before prisoners' release (Wickersham et al. 2013b, -).

One of the Iranian studies found that access to methadone during OST programmes was sometimes interrupted by the prison authority as a punishment for prisoner indiscipline (Moradi et al. 2015, ++). The Malaysian study found that lockdown periods during the prison day could limit access to treatment. In this study, the healthcare staff overcame this by giving methadone directly to prisoners in their cells.

A lack of treatment continuity when prisoners were transferred between prisons was common. The EU study found that compared to the community-based services, the continuity of treatment in prisons was low (Stöver et al. 2006, +). One UK study found that OST programmes were not available in the prison that prisoners planned to transfer to (Carlin 2005, +).

Three studies (in the EU, Iran, and Malaysia) found that prisoners on release also faced problems in accessing the community OST programmes services. This was caused by inadequate prison referral systems to community services on release and/or the lack of community services. A lack of a shared information systems on prisoners' release dates between prison staff and prison healthcare staff was also
found in the Malaysian study to delay release dates to give time for healthcare staff to prepare paperwork for referral (Wickersham et al. 2013b, -). One of the Iranian studies also found that prison healthcare staff did not give referrals to community-based services (Zamani et al. 2010, ++). In response to inadequate referral systems, the EU study suggested conducting regular meetings among prison staff, and collaboration between institutional prisons and the community OST programmes services (Stöver et al. 2006, +), for example by completing and sending prisoners paperwork to the community services, followed by a phone call to confirm receipt as described by the Malaysian study (Wickersham et al. 2013b, -).

The lack of community-based services was also noted in three studies (Puerto Rico, Iran, and Malaysia). The Puerto Rican study by Heimer et al. (2006b, +) found that there were concerns about the numbers of OST prisoners being released when there were insufficient OST programmes provided in the community. The EU study also suggested that some prisoners were only offered detoxification or no opioid treatment in prisons because of a concern over the lack of continuity in treatment between prison and the community (Stöver et al. 2006, +). Studies in Iran and Malaysia found that the geographical imbalance in provisional OST programmes services, where most services were located in urban areas, also led to a high demand on the urban services because many ex-prisoners from rural areas also registered for OST programmes in urban areas which resulted in long waiting lists to join (Zamani et al. 2010, ++; Wickersham et al. 2013b, -).

**Limited resources**

Lack of resources was a common problem in prison systems. One of the Iranian studies (Moradi et al. 2015), (++) found that a lack of resources in prisons including those for prison staff, of equipment, space, and funding, serve as a barrier to continuing and to scaling-up OST programmes in prisons. The Puerto Rican study interviewed prison stakeholders (Heimer et al. 2006b, +) and found that in general prison systems experienced a lack of funding, and in such conditions, they felt pessimistic as to the scaling up of OST programmes in prisons.

The Malaysian study found that there was a lack of training for healthcare staff on why methadone programmes are introduced in prisons, on sufficient methadone
dosing, and on the possible severe adverse effects of methadone, and consequently recommended training periods of three to six months (Wickersham et al. 2013b, -). The EU study also highlighted the benefits of continuous training to increase healthcare staff’s capacities to work in a rapidly changing OST programmes environment (Stöver et al. 2006, +). Both the Malaysian and the EU studies found that periodic prison staff training and programme monitoring would benefit prison systems, particularly where the turn-over of the staff was high. The involvement of family members was also found to be a motivating factor that encouraged prisoners’ engagement. Many prisoners in a Malaysian study reported the benefit of participation of family members in attending culturally-specific education sessions about methadone programmes in reducing family conflict around drug use, and methadone participation in prison, as well as in supporting their resettlement after release (Wickersham et al. 2013b, -).

Studies in the UK, Puerto Rico, and Iran found that prison stakeholders and prison staff, including prison officers and healthcare staff, expressed their concerns about prison staff shortages. A UK study that interviewed prison officers reported a lot of pressure on and intimidation of prison staff while delivering the programmes by prisoners (Carlin 2005, +). Healthcare staff in one Iranian study indicated the effect of staff shortages on a low uptake of OST programmes which resulted in a long waiting list of prisoners to receive methadone, and inadequate implementation of psychosocial services for those methadone-prisoners (Zamani et al. 2010, ++). Therefore, prison stakeholders in the Puerto Rican and Iranian studies suggested increasing prison staff numbers, including psychosocial workers in response to this shortage (Heimer et al. 2006b, +; Zamani et al. 2010, ++). Another Iranian study also found that many of the prison staff also work for other institutions and therefore their job in prisons was not their primary job (Moradi et al. 2015, ++).

The provision of psychosocial services in prisons was often unavailable and not fully integrated into OST programmes in prisons. The EU study indicated the integration of psychosocial services involving psychologists, pedagogues, educators, and social workers to OST programmes as an essential component to support OST participants (Stöver et al. 2006, +). Impacts of the lack of such services in prisons were described by both the EU and one Iranian study as including the perceived need for
higher methadone doses (Stöver et al. 2006, +; Moradi et al. 2015, ++), and prisoner use of illicit drugs, for example, cannabis and benzodiazepines (Moradi et al. 2015, + +). The impact of providing such services for prisoners after release was indicated by one UK study regarding changes to a healthy lifestyle, increasing retention rates and reducing drug relapse after programmes completion (Johnstone et al. 2011, ++).

2.4. Discussion

To my knowledge, this is the first review to draw on qualitative studies in order to explore multiple perspectives and experiences (policymakers, prison officers, healthcare staff, and prisoners) of implementing and participating in prison-based OST programmes, and to identify the elements of such programmes that act as barriers or motivating factors for participation. These findings provide an insight into how prison-based OST programmes are delivered.

Although the cultural and policy contexts of countries differed, constraints on the delivery were very similar across different countries. However, this review also identified barriers relating to the specific contexts in which they operated. For example, most of the studies from high-income countries such as the US and the UK, were less likely to report barriers to resources in prisons as compared to studies from middle-income countries such as Malaysia and Iran, suggesting that the programmes had received more support in high-income countries.

The evidence from many of the studies reviewed indicated that prisoners’ attitudes to illicit drug use are governed significantly by factors in the prison environment, which are beyond the prisoners’ control both in high-and middle-income prison settings. However, the levels of risk of HIV transmission in prisons has increased in the middle-income countries, as reported by the Indonesian study. This is linked to the lack of other harm reduction programme strategies such as bleach decontamination programmes in that setting.

This review indicated that a lack of a clear understanding of the roles of OST programmes as part of harm reduction programmes among both prisoners and prison staff in middle-income prison contexts was similar to that observed in high-
income countries and these situations must, therefore, be linked to the perceived nature of prison as a place of incarceration rather than rehabilitation. The adverse effects of this lack of understanding in middle-income settings led to punitive practices by prison staff such as has been reported in one of the Iranian studies.

Both studies in the high- and middle-income countries reported issues of stigma in the programmes and associated it with preventing prisoners from participation and hindering scaling-up programmes, as indicated in a previous study (Gordis 1991). Stigmatising attitudes in relation to prisoner participation were indicated by prison authorities, healthcare staff, prison officers, and prisoners in the middle-income settings. This review found generally there was less stigma in the high-income countries concerning methadone participation, for example, prison officers showed appreciation of prisoners' participation (UK studies).

This review found that many prisoners in both higher and middle-income countries had doubts regarding whether OST programmes would be helpful to them. The OST programmes were often associated with severe side effects, withdrawal, and higher dependency compared to the use of illicit heroin. In contrast with studies in high-income countries (UK and US studies) which recommended providing alternative treatment options such as Buprenorphine to overcome these concerns, a study in a middle-income country, Malaysia, linked these concerns to the lack of ability of healthcare staff to provide sufficient information about OST programmes properties to prisoners, and therefore recommended in providing professional training lasting three to six months. This Malaysian study also indicated the educating prisoners' family members as potentially helpful to minimise conflict about methadone participation between prisoners and their family members.

In terms of treatment processes and human rights, the evidence suggests that OST prisoners would also benefit from privacy during dispensing practices thus reducing feelings of vulnerability and stigmatisation and increasing prisoners' desire to participate, as reported in high-income studies. The family-centred approach to healthcare services in prisons linked to requirement of family consent was also found in the Indonesian study. Methadone diversion was associated with prisoners'
financial motivation in the middle-income settings while in the high-income settings it linked to the difficulty of getting medical treatment for heroin withdrawal.

Providing methadone in sufficient dosages has significant implications both for the prisoner compliance and effectiveness of OST programmes. However, the studies reviewed found varied practices in methadone prescribing in prisons. Rather than viewing prescriptions as low or high dosages as is common, sufficient methadone prescription is best viewed as individualised doses. This is particularly relevant in middle-income countries such as Malaysia where a prisoner may also be taking TB and/or HIV medication. The Malaysian study also indicated that methadone doses of 80 mg on release was an essential factor for a better 12 months post-release treatment retention rate.

Prison systems’ organisation and structures can also affect the delivery of OST programmes in both high-and middle-income countries. The need for policy-related OST programmes to increase support for prisoner participants, including taking account of the different needs of women, was indicated in one EU study. The important role of the provision of guidelines on clinical management and treatment of substance such as on methadone diversion and overdose in the Malaysian study was associated with improving the programme’s outcomes. The disruption of programmes within prisons associated with the limited length of the treatment period; disruption of treatment processes; and prisoners transfer between prisons and after release were found particularly in middle-income prison settings.

Lack of resources is another problem particularly in middle-income countries such as in Iran and Malaysia. However, even in Puerto Rico, the UK, and EU countries a lack resources were identified. The prison systems in middle-income contexts have to contend with a lack of resources such as the lack of staff and funding to provide a range of services in prisons. At the time the studies conducted in the UK and EU indicated a problem at prison transfer because of the low coverage of OST programmes across prisons compared to those in the community. Puerto Rico also indicated a problem in accessing OST programmes after releasing due to a lack of treatment in community settings. However, these problems, together with a lack of referral systems, increase the transfer problem in the middle-income countries. The
need to provide and integrate psychosocial services to the OST (UK). In this review, the benefits of such services in setting where the services were lacking such as in limited prison resources, were also reported, for example in helping prisoners to overcome their drug use problems, achieve abstinence from drugs, as well as improving physical, and psychosocial health conditions (Jhanjee 2014).

**Strengths and Limitations**

While few of the studies reviewed focused specifically on the delivery of OST programmes in prisons, the strength of this review lies in its ability to reveal important barriers and provide a useful insight into some of the determinants of the successful delivery of the OST programmes from the different perspectives of prison authorities, healthcare staff, prison officers and prisoners. This provides a much more holistic and comprehensive view to inform the development of OST policies and practices.

Even though there are only 11 papers from 6 countries and one paper from a mix of EU countries which could limit the generalisability of findings, the themes developed from the review were based on in-depth conceptual analysis that could be applied consistently across different prison settings.

The researcher took steps to increase the transparency and reliability of the review to enhance quality and rigour. During the quality appraisal, five randomly selected papers were double checked with the primary supervisor, and both supervisors were involved in cross-checking codes and developing themes.

Concerning the search strategies, it is possible that some relevant studies were missed. The researcher mitigated this by selecting relevant references of included studies and then searching them. Although mixed methods papers were included in the review, the researcher found only a small number of qualitative studies which
met the inclusion criteria for the review. This reflects a lack of qualitative study regarding OST programmes in prisons.

The quality of papers included in the synthesis was of variable quality, with only five out of 11 studies graded as ++. The lowest scoring domain tended to relate to ethics and the researcher's role; this was due mainly to the insufficient explanation of either of these issues within the literature. The word limits of journals are a likely cause of the limited reporting.

This review relies on the researchers in the literature reviewed reports of the advantages and disadvantages of the OST programmes. Therefore, this could lead to limited or reduced versions of study participants' views and experiences. The researcher did not attempt to contact the authors for additional information. The review did not include non-English language papers and, therefore, the researcher cannot comment on the facilitators and barriers to OST programmes in non-English language journals.

2.5. Summary of the review findings

This chapter provides a contextual overview, by reviewing the studies that focus on implementing and delivering prison-based OST programmes. Prisons that were studied attempted to deliver OST programmes to address the needs of prisoners with opioid dependence. However, the review found that barriers to the implementation and delivery of OST programmes in prisons are linked to the high risk of HIV transmission in prisons, the lack of understandings of the concepts of methadone programmes, the concerns raised over the delivery of the programmes, and the limited support and resources within prison settings.

2.6. Implications for future study design

Method used in the studies reviewed

It has been suggested that the use of qualitative methods provide valuable insight into the understanding of the delivery of the OST programmes within prisons and therefore should be an essential consideration within prison-based OST programmes.
research (Awgu et al. 2010; Stöver et al. 2006). The lack of research employing qualitative methods within the existing evidence base may limit the understanding of the delivery of the programmes, since the adoption of qualitative methods, as supported by this review, offers an appropriate method for examination of the OST programmes within prison settings.

Country setting

The lack of studies from middle-income prison contexts within the existing systematic review of OST programmes may limit the understanding of the delivery within such settings, making this particularly relevant for further study. Four studies including two Iranian, one Malaysian, and one Indonesian study represent the middle-income prison contexts. The study from Indonesia employed mixed methods considering the social context of drug injecting prisoners who had HIV infection (Culbert et al. 2015) but OST programmes were not the study’s focus.

Involvement of multiple-perspective participant groups

This review identified that only two studies involved prison authorities, prison officers, healthcare staff, and prisoners (Zamani et al. 2010; Stöver et al. 2006), to explore the delivery of prison-based OST programmes. It has been suggested that future research should consider multiple-perspectives to promote comprehensives understanding of the programmes (Stöver et al. 2006).

Contextual issues

The contextual factors that may enhance transferability of findings were also lacking within the evidence base of this review. The majority of studies reviewed were of high-income settings origins (7 studies) such as the USA, EU, UK, Ireland, Puerto Rico, and middle-income countries (4 studies) such as Iran, Malaysia, and Indonesia origin. This raised questions as to the transferability of findings to the other middle-
and low-income settings where the cultural, social, and economic conditions may differ from high-income countries.

2.7. Gaps in the evidence base

This study was designed to address the following gaps in the evidence base:

1. The small number of good quality qualitative studies on OST programmes in prisons.
2. The lack of research examining prison OST programmes in middle-income countries.
3. The low representation of studies involving perspectives of multiple stakeholders.
4. Uncertainty about the extent to which research on OST programmes in high-income countries can be applied to their delivery in middle-income prison settings.
CHAPTER 3: THE RESEARCH METHODOLOGY AND METHODS

3.1. Introduction

This chapter describes the research methodology and the process of the study. It begins with a description of the general design of the research involving case study selection, sample selection, recruitment and consent, data collection methods, as well as data analysis. Finally, the discussion will consider methodological rigour, ethical considerations, and research reflexivity. Methadone Maintenance Treatment (MMT) programmes will be referred throughout the remainder of the chapters as methadone programmes.

3.2. Aim and objectives of the study

This study builds on the above review of OST programmes in prisons. This study aims to explore the barriers to and facilitators of the implementation, routine delivery and sustainability of the programmes within the case of Indonesia. As outlined in section 3.5, Indonesia was chosen for this study due to high prevalence of drug use and HIV in prisons. This study addresses a gap in the existing evidence base relating to the OST programmes in middle-income prison settings, as discussed in chapter 2. The research objectives and questions are as follows.

Research objectives:

To understand the role of methadone programmes within the context of HIV prevention programmes and to identify barriers and facilitators factors that influence the implementation, routine delivery and sustainability of methadone programmes in Indonesian prisons.

Research questions:

1. What is the role of methadone programmes within the context of HIV prevention strategies in Indonesian prisons?
2. What are the barriers to and facilitators (influences) of implementation, routine delivery, and sustainability linked to the prison organisation, the practicality of the programmes and the support provided?

3. What are perceptions and experiences of prison governors, prison officers, prison healthcare staff, and prisoners regarding the methadone programmes and their implementation across different prison settings?

4. How can the delivery of prison methadone programmes be improved to minimise HIV transmission in Indonesia?

3.3. Research Methodology

Discussions about research methods are linked to the ontological and epistemological assumptions that underpin research. Ontology refers to assumptions about what forms knowledge while epistemology refers to how knowledge can be acquired.

Two main ontological approaches to social enquiry are described as objectivism and constructivism (Bryman 2012). Objectivism sees social reality as independent of the researcher. This approach assumes that the researcher may study an object without being influenced by it and that the object would not be affected by the researcher. The objectivist approach requires quantitative methods as the way to "seek on a causal determination, prediction, and generalisation of findings" (Hoepfl 1997, p.48). This is the tradition on which the natural sciences mainly rely, where knowledge is seen as an objective and tangible object.

In contrast, the constructivist approach is a theoretical perspective that derives from the assumption that “the social world is interpreted, understood, experienced, produced or constituted” (Mason 2002, p.6). Adopting the constructivist approach supported the research objectives and underlying values of this study that focuses on interpretations of methadone programmes among different groups of participants. The constructivist perspective requires qualitative methods as the best way of exploring participants’ perceptions. Mason (2002, p.3) indicates that qualitative approaches are best suited to research problems that need to be understood by exploring “a wide array of dimensions of the social world including the texture and...
weave of everyday life, the understanding, experiences and imagining of our research participants, the ways that social processes, institutions, relationships work, and the significance of the meanings that they generate”. The use of qualitative approaches has been recommended in the OST literature for exploring barriers and facilitators linked to the implementation of OST programmes. According to Creswell, (2007) a qualitative approach is suited to exploring the programmes within particular settings. Thus, the researcher used qualitative methods to explore participants’ meanings and their perceptions of methadone programmes in prison settings.

3.4. Study design

A case study approach was used in this study to provide an in-depth exploration of the complexities of prison settings and their influence on the delivery of methadone programmes. Case studies can facilitate both qualitative and quantitative approaches (Yin 2014). The case study aims to gather comprehensive, systematic and in-depth information about each case of interest (Patton 2015). The importance of understanding particular cases within the specific context is the primary concern of case study (Stake 2005). A case study approach is suitable for programme exploration (Denscombe 2014), in particular, as it allows the development of an in-depth account of the perspectives and experiences of study participants to be captured, while at the same time, being sensitive to the meaning of the context and complexities of the issues (Yin 2014). Three prison settings were selected to construct the case study in Indonesia, thus allowing for an in-depth comparison between the settings and to highlight any essential differences. More than three prisons would not have been feasible within the study’s period.

The main disadvantage of a case study is the possibility for lack of rigour including lack of generalisability and researcher bias (Yin 2009). Therefore, the adoption of three different prison settings to construct this case study enhances the potential for the transferability of theoretical study findings. Providing Indonesia and Indonesian prison contexts, detail of study protocol including analysis processes and the researchers’ reflection throughout the research processes also enhance the study’s rigour and their relevance to other prison settings.
Integrating multiple data sources involving interviews, observations, and the audit of medical case notes provided a rigorous foundation of data to allow a comprehensive view of the case (Denscombe 2014); therefore, more robust conclusions can be drawn. This study was designed to provide multiple perspectives on the implementation, routine delivery, and sustainability of methadone programmes in prisons. Multiple perspectives involving different participant groups enable a range of perspectives to be explored in relation to methadone programmes in prison settings and supported the constructivist stance underlying the study. Data were collected from prison governors, prison officers, and healthcare staff and prisoners.

Face-to-face semi-structured interviews were the primary data source within this case study. This method provides in-depth insights and shortcuts to the prior history of situations and helps identify other sources of evidence (Yin 2003) and is widely used in healthcare research. Unlike structured interviews which have a set of predefined questions and unstructured interviews which have no predefined questions (Zhang and Wildemuth 2006), the semi-structured interviews consist of key open-ended questions which allow the interviewee to answer in their own words and to express their own feelings (Patton 2015; Arksey and Knight 1999) and respond to potentially sensitive questions. In this study participants were reflecting on the delivery of the methadone programmes and their relationship with each other and the prison authorities. The collection of data by focus groups was rejected because of the likely sensitivity of the issues being discussed and also the threat to confidentiality.

Observational data were also used, as these allow related behaviours, interactions and environmental circumstances to be described (Yin 2014). The observational data were particularly helpful, allowing the researcher to understand the process of the implementation of the methadone programmes in the study prisons and provided essential contextual information. The approach taken here was that of "fly-on-the-wall" observation. This approach helps minimise potential bias or behavioural influences that might result from engagement with participants (Hanington and Martin 2012).
Data from interviews and observation were supplemented by data on methadone dosage extracted from medical case notes. The notes are a valuable source of data, as they provide valuable insights into particular circumstances to facilitate the analysis process.

A deeper ethnographic approach, which would have been useful to understand participants’ cultural perceptions through interview and observation (Carter and Little 2007), was considered for this study but was rejected as observation was not feasible within the prison setting due to the security measures in place. Grounded theory, in which the study design emerges without predefined theories (Smith and Firth 2011), was also considered for this study but was inappropriate as the primary focus of this study was not building theory, and the data were collected with a-priori theories based on the systematic review in mind.

3.5. Case selection

Indonesia was chosen as a case study because:

1. Most studies of OST programmes in prison have been conducted in higher income countries. Indonesia is classified as a middle-income country (World Bank 2017), and therefore the selection of Indonesia as a case study offers the comprehensive view from which to study opioid substitution treatment in such a setting.

2. Indonesia has a large population. It is the fourth most populous country after China, India, and the United States with 258.7 million people in 2016 (Statistics Indonesia 2017). Although Indonesia had a low generalised epidemic figure which accounted for 0.4% in key Indonesian population in 2013 (National AIDS Commission 2014), the huge population of Indonesia means that it has a substantial number of HIV infected people in total.

3. Indonesia has the fastest growing HIV epidemic in Asia with between 390,000 and 940,000 people living with HIV (UNAIDS 2013). It is predicted that around two million people will be living with HIV by 2025 (Karts 2006). The rise is mainly influenced by the high risk of HIV transmission among key populations. In 2005 it was estimated that 0.16 % of a total 234 million Indonesian people were illicit opioids users (UNODC 2010) frequently administering drugs by
injection. The estimated number of Injecting Drug Users (IDUs) in Indonesia varies between 145,000 and 1 million (Pisani 2006). The Integrated Biological-Behavioural Survey in 2011 found that 36.4% of the IDUs tested were HIV infected (Ministry of Health Indonesia 2011).

4. Indonesia supports a harm reduction approach both in the community and in prison settings. Indonesia was the first country in Asia to include the prison setting in their Strategic Plan. The National Strategic Plan of HIV Prevention and Drug uses for Prison Settings was published in 2005 (Directorate of Corrections 2005). These prison policies theoretically are enabling environment supporting a harm reduction approach through the delivery of methadone programmes in prisons.

5. Methadone programmes which support the national harm reduction strategy have been established since 2005 in numerous Indonesian prisons, including detention centres, narcotics prisons (prisons established specifically for drug offence prisoners), and general prisons. This increased the national programme coverage among key populations including prisoners and IDUs (Directorate General PP&PL 2014).

6. Indonesia has the largest population in Southeast Asia and is located in a strategic location, which places it at the centre of drug trafficking, between the Indian Ocean and the Pacific Ocean. Indonesia was also a founding member of Association of Southeast Asian Nations (ASEAN). Given its strategic location, demographic size, and political role in ASEAN, harm reduction programmes in Indonesia may play a crucial role in determining the development of harm reduction programmes elsewhere in Asia.

Other considerations included whether Indonesian prisons were a hospitable place to conduct fieldwork to ensure the safety of the researcher. Indonesia matched all of these requirements.

3.5.1. The selection of prisons

Purposive sampling provides a strategic way of selecting study samples in order to obtain a variety of key characteristics that are regarded as relevant to the research questions (Bryman 2012). This approach was used to select the study prisons to
provide the greatest understanding of the implementation of the programmes in the
different prison contexts. The selection of prisons to construct this case study was
based on their relevance to the research questions and manageability given the
different administrative approval processes for research projects in the different
provinces of Indonesia.

In total there are around 412 Indonesian prisons including detention centres,
narcotics prisons, and general prisons. Prisons can be male, female or mixed
gender- with the exception of narcotics prisons which are male only. Methadone
programmes are available in 12 of the 412 prisons. These included three male
narcotics prisons; six general prisons (which included one female prison, two mixed
gender prisons, and three male prisons) and three detention centres.

To achieve the aims of the research, the study prisons were selected purposively to
represent the three types of prison in Indonesia – a narcotics prison with a
methadone programme; a general prison with a methadone programme; and a
general prison without a methadone programme. These prisons were selected in a
three-stage process: First, the prisons known to have the largest numbers drug
users were identified. This criterion was chosen as sharing of unsterile injecting
equipment is the most common mode of HIV transmission in Indonesia and to
ensure that the prison staff interviewed had the widest experience of implementing
HIV prevention policy in their prison. In the second stage, prisons were classified as
either having or not having methadone programmes, and those with a largest
number of HIV-infected prisoners were selected. In the final stage, prisons were
selected on the basis of both having a high number of HIV-infected prisoners and
being in an urban location. The sampling frame is given in Appendix C.

To identify prisons that fitted these criteria, an online database was used (Directorate
of Corrections 2015). This gives details of the number, types, location and
programmes of prison, as well as the number of drug users and HIV prisoners. In
this thesis, the name and exact location of each case prison have been kept
anonymous for ethical reasons. Accordingly, the prisons selected for the case study
will be discussed throughout the rest of the thesis as:

- Narcotics methadone prison
• General methadone prison
• General non-methadone prison

Detention centres were excluded from the study, as it was considered that the short period prisoners are held on remand and the resulting rapid turnover of prisoners, created a unique setting and was beyond the scope of this study. HIV prevalence in female prisons was much lower and were excluded in the first stage of screening.

3.5.2. Selection of study participants

Sampling approach

Purposive sampling was used to select all participant types based on characteristics and relevance to the research questions. In addition to purposive sampling, snowball sampling was also used to recruit participants. The snowball sampling was used as an effective strategy to gain access and to collect data from hard-to-reach groups (Noy 2008). This approach helped the researcher to recruit potential participants who might provide valuable insights and to minimise participant selection bias since the researcher was not relying exclusively on the chief of security staff and the healthcare staff to identify potential participants.

Study sample

The potential study participants were determined by their relevance to the research objectives. Therefore, four groups of participants were identified to answer the research questions: the drug injecting prisoners who potentially received the delivery of HIV prevention programmes including prisoners in methadone programmes and not in methadone programmes; the prison governors, prison officers, and healthcare staff, who were involved in, and who provided the HIV prevention programmes.

Although interviewing prisoners' family members might provide additional insights to this study, given the complexity of the recruitment process and the study time frame, the manageability of inclusion of family members was beyond the scope of this study.

Inclusion and exclusion criteria
Prison and healthcare staff

The selection criteria for prison staff was based on their roles and responsibilities. Prison governors were selected because of their significant role in the local implementation of national policies. Healthcare staff were potentially directly involved in the implementation of the HIV prevention strategies. Prison officers who had worked for 12 months or more were selected to ensure that they had sufficient knowledge of the prison situation. Prison healthcare staff and prison officers with less than 12 months’ work experience were excluded.

Methadone and non-methadone prisoners

Methadone-prisoners were included if they:
- Had participated in prison methadone programmes for more than six months
- Were of any nationality and sufficiently fluent in Indonesian or English language

Non-methadone prisoners were included if they:
- Were current injecting drug users and had been injecting drugs for more than six months
- Might or might not be participating in prison HIV programmes
- Were of any nationality and sufficiently fluent in Indonesian or English language

Methadone and non-methadone prisoners were excluded if they:
- Were not fluent in Indonesian or English language
- Had significant mental health disorders
- Might be released before the completion of data collection
- Were remand prisoners

Sample structure

Mason argues that the sample size is less valued in qualitative research than the richness, complexity, and detail of the data produced and analysed (Mason 2012). In purposive sampling no more interviews are conducted once the point of saturation is
reached, that is no new information is observed in the data. For example, in a study which involved the interview of 60 homogenous participants suggested that saturation of data was achieved after 12 interviews although the meaningful themes could also be identified at the sixth interview (Guest et al. 2006).

However, in practice, more interviews than this may be required depending on the design of the study. For the guidance at a practical level, the number of proposed participants was decided upon in the planning stage of the study. Creswell and Miller (2000) suggest a minimum of 3 to 5 interviews per case study, while Leech and Onwuegbuzie (2007c) suggest a minimum of 3 participants per sub-group. Given the fact that there were five types of sub-group participants across three types of prisons, a minimum sample size of 45 participants was planned. Table 5 below gives the planned and final sample structure.

<table>
<thead>
<tr>
<th>Prison name</th>
<th>Prison Governor Plan =actual</th>
<th>Plan</th>
<th>Actual</th>
<th>Healthcare staff Plan =actual</th>
<th>Plan</th>
<th>Actual</th>
<th>Prison officer Methadone Plan</th>
<th>Plan</th>
<th>Actual</th>
<th>Non-methadone Plan</th>
<th>Plan</th>
<th>Actual</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narcotics methadone prison</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>3</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General methadone prison</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>3</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General non-methadone prison</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>6</td>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3</td>
<td>9</td>
<td>10</td>
<td>9</td>
<td>12</td>
<td>16</td>
<td>12</td>
<td>19</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total number of the proposed participants: 45
Total number of the actual participants: 57

**Recruitment and Consent Process**
Prisons
There are no procedures for gaining ethical approval from the Indonesian prison service. Ethical approval was granted by the School Research Ethics Committee (SREC) in the School of Health Sciences, University of Stirling. Therefore, a letter of recommendation from the Ministry of Justice Indonesia together with full details of the study was sent to each prison selected as a potential study site. The outcome was an approval letter signed by each of the three prison governors to access their prison.

The researcher arranged individual meetings with the chief of security and senior prison doctor in each prison to gain permission to conduct the research. The researcher also gave out the details of the study including an explanation of intention to recruit study participants such as prison officers, healthcare staff, methadone and non-methadone prisoners that met the study criteria, the estimated data collection period in each prison, the purpose of the study, what participation in the study would entail, what questions would be asked, and the likely duration of an interview with all participants.

Prison governor
The researcher provided an information sheet about the study and consent form to each of the prison governors’ secretaries. The secretaries then confirmed their participation including a date for interview. At the beginning of each interview, the Governors’ verbal consent was obtained, and the purpose of the study was explained to avoid any misunderstandings that this study might be intended to evaluate their policy and programme in prison. Prison governor participation was particularly valuable to this study since this group is often difficult to access.

Healthcare staff
The recruitment process for healthcare staff differed in each study prison. In the narcotics methadone prison, the researcher had a meeting with three out of four doctors including the senior doctor, while a doctor who was responsible for the methadone programmes was on leave of absence. The researcher also had a group meeting with the five out of six nurses without the presence of the senior doctor. To
avoid the possibility of perceived coercion, at each meeting the researcher emphasised her role as a researcher, and informed the potential respondent that participation was voluntary. At the end of each meeting, the researcher gave out an information sheet to one of the doctors who was involved in the establishment of the methadone programmes, and two nurses who were responsible for the methadone programmes volunteered to participate in the study and then the researcher gave a consent form to the interested participants in the days following the meeting so they had several days in which to decide whether or not to take part.

In the general methadone prison, the senior doctor who was also responsible for the methadone programmes nominated one of four doctors who were knowledgeable about the programmes, and they agreed to participate. The senior doctor also identified one of six nurses who were responsible for the methadone programmes. They agreed to participate and then the nurse nominated a second nurse who also agreed to participate. After a meeting with each of the nominated participants, an information sheet and then a consent form was given by the researcher to each of the participants.

In the general non-methadone prison, the senior doctor who was also the doctor responsible for HIV programmes agreed to participate after the researcher explained the details of the study. Five out of seven nurses attended a group meeting, while others were on prison work. The researcher gave an information sheet to the interested participants and then a consent form.

**Prison officers**

The security chiefs called on three of the 30 prison officers in the narcotics methadone prison and introduced them to the researcher and left the room. The researcher conducted a group meeting with the nominated participants in the absence of the chief.

In the general methadone prison, the chief identified a prison officer and asked him to recruit other study participants that might be interested in participating. The researcher conducted an individual meeting with each of the nominated participants.
In the general non-methadone prison, the security chiefs called three of the 25 prison officers to his office and introduced them to the researcher. The meeting was conducted in the presence of the chief. All the potential participants agreed to participate.

At each meeting in all three prisons the researcher explained the study details including the voluntary nature of the study and gave an information sheet to the potential participants. Consent to participate was obtained prior to data collection.

**Prisoners**

In the narcotics methadone prison, the participant doctor gave the names of six methadone-prisoners, while in the general methadone prison the participant doctor identified three prisoners who worked at the clinic to participate. In the general non-methadone prison, a participant nurse gave the names of six prisoners either in HIV programmes or not in the programmes. In each prison the prisoners were then called into the clinic for a group meeting in the absence of healthcare staff and all agreed to participate. At the meeting, the researcher explained the detail of the research including informed that participation was voluntary and confidential. At the end of the meeting, an information sheet was distributed. A consent form was also given to the potential participants by the researcher in the days following the meeting.

The remaining prisoner participants were identified through snowball sampling with the help of other prisoner participants and then followed up by an individual meeting with each of these prisoners. The cells were unlocked with free movement within the prison from around 7 am to 12 pm, and therefore the prisoners could call other potential prisoners to the clinic. The interview dates were arranged either in person with the prisoner participants or over the phone with the prison staff participants.

**Dynamics of participants’ recruitment**

A total of 57 interviews including nine additional interviews in the narcotics methadone prison and three additional interviews in the general methadone prison were conducted. After reflecting on data collected in the general methadone prison,
the researcher returned to the narcotics methadone prison to seek additional
information.

Since snowball sampling was used to recruit some of the sample's members, the
criteria were not fully applied. For example, a prisoner who has been in the
methadone programmes for less than two months in the general methadone prison
and a prisoner who had been in the narcotics methadone prison for four months
were also included, because their perspectives and experiences provided insightful
data. A psychologist who was responsible for Therapeutic Community (TC)
programmes in the narcotics methadone prison was also recruited assuming her role
might enrich understanding of the study context. Table 9 below describes the
characteristics of prisoners who participated in the study.

<table>
<thead>
<tr>
<th>Table 6. Prisoner characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Characteristic</strong></td>
</tr>
<tr>
<td><strong>Age</strong></td>
</tr>
<tr>
<td>21 - 30</td>
</tr>
<tr>
<td>31 - 40</td>
</tr>
<tr>
<td>&gt; 40</td>
</tr>
<tr>
<td><strong>Length in prison (months)</strong></td>
</tr>
<tr>
<td>&lt; 6</td>
</tr>
<tr>
<td>6 - 12</td>
</tr>
<tr>
<td>13 - 24</td>
</tr>
<tr>
<td>25 - 48</td>
</tr>
<tr>
<td><strong>Methadone programmes</strong></td>
</tr>
<tr>
<td>Participated</td>
</tr>
<tr>
<td>Not-participated</td>
</tr>
<tr>
<td><strong>HIV diagnosis</strong></td>
</tr>
<tr>
<td>Diagnosed</td>
</tr>
<tr>
<td>Not diagnosed</td>
</tr>
<tr>
<td><strong>ART medication</strong></td>
</tr>
<tr>
<td>In ART</td>
</tr>
<tr>
<td>Not in ART</td>
</tr>
<tr>
<td><strong>Parental status</strong></td>
</tr>
<tr>
<td>With child</td>
</tr>
<tr>
<td>Without child</td>
</tr>
<tr>
<td><strong>Family contact</strong></td>
</tr>
<tr>
<td>In contact</td>
</tr>
<tr>
<td>Not in contact</td>
</tr>
</tbody>
</table>
3.6. Data collection methods

3.6.1. Interviewing

Data collection took place between December 2015 and March 2016. In total, 57 face-to-face semi-structured interviews, involving prison governors, prison officers, prison healthcare staff, and prisoners were conducted.

Four topics guides (see appendix D) were developed, one for each group to ensure that key themes were addressed relevantly and to allow comparison across sub-groups and prisons. These topics guides were developed based on a priori themes drawn from the research aims and objectives, as well as themes that emerged from the systematic review of the literature on the barriers and facilitators associated with delivering methadone programmes in prisons discussed in Chapter 2. During fieldwork, the topic guides were further revised based on emerging themes during interviews.

The researcher wrote the topic guides in English and then translated them to Bahasa Indonesia. All interviews were conducted in Bahasa Indonesia which was spoken by both the researcher and the participants. Most semi-structured interviews lasted for 45-60 minutes. The shortest lasted 30 minutes (interrupted by a regular security check), and the longest took 120 minutes.

The selection of interview locations was potentially problematic in the prison settings. The researcher's reflections on the interview are further discussed in section 3.10. The researcher spent most of her time in the small nurse office space in both prisons while setting up the processes for recruitment and the conduct of interviews. This way the researcher was able to become familiar with the setting and build rapport with most of the prison nurses.

After gaining permission from the participants, interviews were recorded digitally. Recording the interviews allowed the researcher to focus on what the participant was saying and helped with the process of data analysis (Bauer and Gaskell 2000). The
recording also helped the researcher to observe the participants and respond based on their needs and observed body language (Patton 2015). The researcher also took notes during the interviews to retain a further record of the interviews.

One of the prison officers in the narcotics methadone prison did not agree to the interview being recorded. Thus, detailed notes were taken during the interview and typed up as soon as possible after the interview. Although at the beginning of each interview, the participants had agreed to be recorded, several prison staff and prisoner participants looked anxious particularly at the beginning of interviews as they frequently looked at the device and tried covering their mouth with their hand while answering questions. When this occurred, the researcher re-confirmed participants’ consent to use the recorder and reassured them of the importance attached to confidentiality and the voluntary nature of this study. The participants were given the opportunity at the end of the interview to ask any questions or clarify any points raised in the interview. If concern was expressed, the interview transcripts were sent to them to be confirmed. The researcher sent the transcript to only one of the healthcare staff participants in the general non-methadone prison.

No monetary compensation was given to ensure that they took part voluntarily although there was no prison regulation about giving cash to participants. A small snack such as cookies and a bottle of water was given to prisoner participants at the beginning of interview as a mark of gratitude for taking part, although, some prisoners indicated they would have preferred cash to buy toiletries as toiletries were not routinely provided. No compensation was given to prison staff participants as this could have been construed as bribery.

3.6.2. Observation

Observational data from prison clinics were collected to understand the dynamics around the provision of methadone programmes within the prison settings. Observations only took place on the narcotics methadone prison and the general methadone prison where methadone was provided. The observational guide is presented in Appendix E.
In the narcotics methadone prison, observation took place in the first week of data collection when the researcher was setting up the processes for recruitment and the conduct of interviews. In the general methadone prison, the observation took place in the third week of data collection because permission was required for early prison access to be able to observe the dispensing practice in the methadone clinic.

The methadone clinic began between 9.30 and 10.30 am in the narcotics methadone prison, and 08.00 to 08.30 am in the general methadone prison. In each methadone clinic, there were three periods of observation each lasting from 30 to 45 minutes during the period of methadone dispensing.

The researcher's presence may have influenced the interactions between healthcare staff and prisoners. Therefore, to minimise this the researcher located herself in an unobtrusive position in the clinics in each prison. In the narcotics methadone prison, the methadone clinic was tiny (sized 1.5 m x 2.5 m). The researcher stood at the entrance next to the nurse while the nurse gave methadone through a small window to the prisoners. Unlike in the narcotics methadone prison that had a dedicated methadone clinic space, in the general methadone prison, the methadone clinic was squeezed into one corner of the healthcare staff office. The researcher sat in the chair next to the methadone table. The nurses had been expecting the observation, and other staff in the methadone clinic in the general methadone prison were aware of the observation as it occurred. During observation days it was noted that staff engaged in small talk with some prisoners, however, this was not always evident when the researcher visited the clinics on non-observation days.

Personal ideas, researcher impressions and feelings about the practices, the setting of the clinic, and arrangements for dispensing methadone were recorded in field notes. The researcher sought clarification from staff about clinic procedures immediately after the observations, but issues of interest that emerged from observations were asked about in the formal interviews with staff and prisoners.

3.6.3. Audit of medical case notes
In each of the methadone prisons, an audit of the medical case notes of all prisoners receiving methadone over the last three-months period from the beginning of data collection were collected to identify the distribution of dose including prisoners’ initial dose and titration interval. Due to a shortage of healthcare staff, it was common that prisoners were selected to help the healthcare staff in the clinic. Therefore, the researcher was referred to these prisoners who then extracted the data from medical notes. Although the researcher had requested aggregated data, individual anonymous data (date, age and dose) were provided for each participant.

3.7. Data analysis

Thematic analysis

Data analysis methods are chosen based on their appropriateness to the focus and aims of the study (Spencer et al. 2003). Discourse analysis explores the use of typical language within particular discourse (ibid); narrative analysis focuses on the way interviewees present their stories to construct their life histories (Denscombe 2014). In contrast, thematic analysis is "a method for identifying, analysing, and reporting patterns (themes) within data" that can be used by constructionists (Braun and Clarke 2006). The thematic analysis method was selected for use in this study as it enabled the researcher to explore the socio-cultural contexts and structural conditions (ibid). This method has been used widely in healthcare research such as in mental health (Gulliver 2010), psychology (Braun and Clarke 2006), and public health (Haw et al. 2006).

Reliable data analysis is essential to illustrate the trustworthiness of the evidence presented within case studies (Yin 2003). Framework analysis as defined by Ritchie et al. (2014) is a systematic data management tool involving the linkage between the analysis stages to facilitate the structuring of different data sets while allowing other readers to view and assess the data (Dixon 2011; Swallow et al. 2011). Framework analysis was adopted for this study because of its transparent approach to organising data, while further analysis involved thematic analysis. This approach helps to address some of the criticisms of thematic analysis as lacking structure and transparency and therefore facilitated more rigorous findings (Ward et al. 2013;
Attride-Stirling 2001). The five stages involved in data management for thematic analysis (Ritchie et al. 2014) are:

1. **Familiarisation**: the process of becoming immersed in the raw data involves transcribing and reading interviews to get an overview of the content and topics of interest.
2. **Construction of an initial thematic framework**: involves refining and sorting the a priori and emergent themes during the familiarising stage into a thematic framework.
3. **Indexing and sorting**: involves a systematic process of applying the initial thematic framework to the remaining data.
4. **Review of data extracts**: involves further refinement of the thematic framework to help produce coherent data extracts.
5. **Data summary and display**: data are summarised by case and theme on a matrix to help the researcher in interpretative analysis.

Throughout the data analysis process, each of these stages was applied. Familiarisation was undertaken throughout the transcribing process starting from transcribing interviews, reading transcripts, observation notes, and audit case notes. The researcher also highlighted initial impressions in the transcripts, for example where participants indicated contrasting views to other participants. This enabled the researcher to find meaningful content later in the analysis.

An initial thematic framework was created by identifying the key issues, concepts, and themes either from a priori issues informed by the research questions, topic guide, systematic review, or the emerging concepts from the particular views or experiences of the participants. Six interview transcripts were selected to develop an initial thematic framework based on their representativeness of the prisons and participants including one methadone and non-methadone prisoner from the narcotics methadone prison, one healthcare staff and methadone-prisoner from the general methadone prison, one prison officer and non-methadone prisoner from the general non-methadone prison. The researcher translated and coded these transcripts from Indonesian to English and conducted back translation from English to Indonesian. This process resulted in a set of themes and sub-themes that form the initial thematic framework.
Table 7. *Initial thematic framework*

<table>
<thead>
<tr>
<th>Initial themes</th>
<th>Initial sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics of prison staff</td>
<td>Role of the healthcare staff</td>
</tr>
<tr>
<td></td>
<td>Staff personal well-being</td>
</tr>
<tr>
<td></td>
<td>Characteristics of security staff</td>
</tr>
<tr>
<td></td>
<td>Relational work</td>
</tr>
<tr>
<td>Provision of drug use treatment</td>
<td>Methadone programmes</td>
</tr>
<tr>
<td></td>
<td>TC programmes</td>
</tr>
<tr>
<td></td>
<td>HIV programmes</td>
</tr>
<tr>
<td>Perception of service provision</td>
<td>Lack of information</td>
</tr>
<tr>
<td></td>
<td>Uncertainty of the services</td>
</tr>
<tr>
<td></td>
<td>Opening times</td>
</tr>
<tr>
<td></td>
<td>Demands of care</td>
</tr>
<tr>
<td></td>
<td>Outcome of the methadone programmes</td>
</tr>
<tr>
<td>Isolation and stigma</td>
<td>Lack of support</td>
</tr>
<tr>
<td></td>
<td>Fear of death, side effects, addiction</td>
</tr>
<tr>
<td></td>
<td>Stigma</td>
</tr>
<tr>
<td>Social features in prison</td>
<td>Motives to join the programmes</td>
</tr>
<tr>
<td></td>
<td>Heroin craving</td>
</tr>
<tr>
<td></td>
<td>Drug diversion</td>
</tr>
<tr>
<td></td>
<td>Drug demand</td>
</tr>
<tr>
<td></td>
<td>Social conditions</td>
</tr>
<tr>
<td>Treatment logistics</td>
<td>Lack of facilities</td>
</tr>
<tr>
<td></td>
<td>Lack of staff</td>
</tr>
<tr>
<td></td>
<td>Funding challenges</td>
</tr>
<tr>
<td>Factors influencing behaviour change</td>
<td>Motivation to change</td>
</tr>
<tr>
<td></td>
<td>Respect</td>
</tr>
<tr>
<td></td>
<td>Religious advice</td>
</tr>
<tr>
<td></td>
<td>Acceptance</td>
</tr>
<tr>
<td></td>
<td>Trust in the NGOs</td>
</tr>
</tbody>
</table>

72
Sources of support

- Compassion from staff
- Flexibility in treatment
- Connection
- Family education/support
- Withdrawal treatment
- Incentives programme for staff

At the indexing and sorting stage, the remaining data from each prison were coded using the initial thematic framework facilitated by Nvivo 11 and new codes developed and refined until no new codes were generated. Reviewing data extracts was undertaken by further refining the initial thematic framework which involved merging or splitting themes or sub-themes using Nvivo 11. For example, the sub-theme ‘fear of death, side effects, addiction’ was split into the theme ‘fear of withdrawal’. The refinement of the initial thematic framework is presented below.

Table 8. Thematic framework

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Characteristics of prison environment</td>
<td>The use of illicit drugs</td>
</tr>
<tr>
<td></td>
<td>Drug availability</td>
</tr>
<tr>
<td></td>
<td>Characteristics of prisoners</td>
</tr>
<tr>
<td>Perception of service provision (HIV and methadone programmes)</td>
<td>Drug prescriptions</td>
</tr>
<tr>
<td></td>
<td>Dispensing practice</td>
</tr>
<tr>
<td></td>
<td>Urine testing</td>
</tr>
<tr>
<td></td>
<td>Drug diversion</td>
</tr>
<tr>
<td>Stigma</td>
<td>Methadone</td>
</tr>
<tr>
<td></td>
<td>HIV</td>
</tr>
<tr>
<td>Fears relating to methadone</td>
<td>Lack of support systems in prison</td>
</tr>
<tr>
<td></td>
<td>Fear of death</td>
</tr>
<tr>
<td></td>
<td>Traumatic experiences</td>
</tr>
<tr>
<td></td>
<td>Insufficient tannoy</td>
</tr>
<tr>
<td>Psychological support needs</td>
<td>Lack of care from security staff</td>
</tr>
<tr>
<td></td>
<td>Lack of trust in doctor</td>
</tr>
<tr>
<td></td>
<td>Family shame</td>
</tr>
<tr>
<td></td>
<td>Sources of support</td>
</tr>
<tr>
<td>Lack of resources</td>
<td>Lack of space</td>
</tr>
<tr>
<td></td>
<td>Lack of staff</td>
</tr>
<tr>
<td></td>
<td>Lack and insecurity funding</td>
</tr>
<tr>
<td></td>
<td>Lack of education and training</td>
</tr>
</tbody>
</table>

The data were summarised and displayed in a matrix for each theme and participant. The case and theme-based approach matrix consisted of one row per study prison.
and one column per sub-theme. The summary of the participant's views or experiences is inserted on the cell in the matrix. This process helped to reduce the amount of data to a more manageable amount and to extract data for later analysis. The example below is an extract from 'the Perception of service provision' matrix. Some abbreviation refers to PO: Prison officer; HCS: healthcare staff; Pm: Methadone-prisoner; Pnm: Non-methadone prisoner.
### Table 9. Framework matrix

<table>
<thead>
<tr>
<th>Study prison</th>
<th>Participant code</th>
<th>Sub-themes on the Perception of service provision</th>
<th>Drug diversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>narcotics methadone prison</td>
<td>PO2</td>
<td><strong>Drug prescriptions</strong> Tapering dose to nothing is employed for prisoners due for release. Acknowledging complications relating to combining methadone and other medication led to increased methadone doses.</td>
<td>Methadone was sold to some prisoners who were excluded from the programmes.</td>
</tr>
<tr>
<td>HCS 5</td>
<td></td>
<td><strong>Dispensing practice</strong> Prisoners were lack of discipline with some of them asking for getting methadone earlier. This chaotic situation particularly happened at weekend.</td>
<td>Lack of supervision from the healthcare staff associated with diversion.</td>
</tr>
<tr>
<td>HCS6</td>
<td></td>
<td><strong>Urine testing</strong> Flexibility of dispensing times (methadone was given in the morning and afternoon) for particular prisoners’ condition such as those with high methadone doses.</td>
<td></td>
</tr>
<tr>
<td>HCS7</td>
<td></td>
<td></td>
<td>Asking prisoners who work in prisons to supervise methadone-prisoners to prevent mixing illegal drugs.</td>
</tr>
<tr>
<td>Pm 9</td>
<td></td>
<td><strong>Drug diversion</strong> Prisoners who asked for dose reduction need to perform a urine test and if found to be positive the dose would be increased. Fear of the consequences of having a positive drug test and of being reported to the prison authorities.</td>
<td></td>
</tr>
<tr>
<td>Pm10</td>
<td></td>
<td><strong>Dispensing practice</strong> Daily clinic attendance is boring.</td>
<td></td>
</tr>
<tr>
<td>Study prison</td>
<td>Participant code</td>
<td>Sub-themes on the Perception of service provision</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Drug prescription</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Combination of drugs led to the daily dose (allowed by the doctor).</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm11</td>
<td>Craving prisoners (taking ART and methadone) were suffering from late opening times.</td>
<td></td>
</tr>
<tr>
<td>narcotics methadone prison</td>
<td></td>
<td>Reducing dose is being suspected of mixing drugs, so prisoners need to take urine test.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm12</td>
<td>Felt craving soon after waking up, so need to access the clinic earlier. Craving because taking ART and methadone.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm13</td>
<td>Lack of treatment options other than methadone such as buprenorphine compared with community treatment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm14</td>
<td>The opening times were late, more than 24 hours interval. Find it challenging to attend daily clinics with staff supervision.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm15</td>
<td>The daily increased dose of prisoner taking ART and methadone. Standard titration is 1-2 weeks.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm16</td>
<td>Lack of respect from the healthcare staff while attending methadone clinic.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm17</td>
<td>The staff leave the clinic before the official closing times.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inconsistency in methadone clinic opening times, mostly very late.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Being told by the staff to take a urine test if asking for dose reduction.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Repeating diversion because of lack of nurse’s supervision and then the methadone was sold to others.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of respect from the healthcare staff while attending methadone clinic.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>The staff came late while craving prisoners had been waiting since early morning. Need to gather all the prisoners before dispensing.</td>
<td></td>
</tr>
</tbody>
</table>

Table 9. Continued…

76
<table>
<thead>
<tr>
<th>Study prison</th>
<th>Participant code</th>
<th>Sub-themes on the Perception of service provision</th>
<th>Dispensing practice</th>
<th>Negative urine test issues</th>
<th>Drug diversion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narcotics methadone prison</td>
<td>Pnm18</td>
<td>Easy to increase methadone dose (daily).</td>
<td>Chose not to take methadone if come late because of the fear of urine test and physical punishment (push-ups). Craving prisoners would cause chaos in the clinic.</td>
<td>Urine test requirement before dose reduction preventing prisoners from reducing their dose of out of fear of the consequences (fine).</td>
<td>Methadone was given to methadone-prisoners in isolation cells without staff supervision.</td>
</tr>
<tr>
<td></td>
<td>Pnm19</td>
<td>Craving for methadone but the clinic still closed in the morning.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pnm21</td>
<td>Craving prisoners need the clinic opened in early morning.</td>
<td>No urine test encouraging participation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General methadone prison</td>
<td>HCS 30</td>
<td>Craving for methadone but the clinic still closed in the morning.</td>
<td>Care was taken to protect the methadone. Time for dispensing needs to be set up efficiently.</td>
<td>Prisoners with positive urine test were included in the methadone while prisoners with negative urine tests were less prioritised.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HCS 31</td>
<td>Doctors are hesitant to increase doses because of fears of the liability relating to complicated health conditions among prisoners.</td>
<td>Barriers to participation (opening time was too early, negative staff attitudes). Short duration of the clinic opening times, lack of time with healthcare staff to discuss some issues with the prisoners.</td>
<td>Need to show negative urine test for admission.</td>
<td>Take home dose of methadone is potentially being misused by prisoners.</td>
</tr>
<tr>
<td></td>
<td>PO29</td>
<td></td>
<td>Positive urine test requirement creates feeling of fear of the prison authority’s consequences.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm22</td>
<td></td>
<td></td>
<td>Sell the methadone because felt his high dose prevented him from working and a lack of supervision from the healthcare staff.</td>
<td></td>
</tr>
<tr>
<td>Study prison</td>
<td>Participant code</td>
<td>Sub-themes on the perception of service provision</td>
<td>Dispensing practice</td>
<td>Negative urine test issues</td>
<td>Drug diversion</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>General methadone prison</td>
<td>Pm33</td>
<td>Wishes to finish the methadone doses on release date out of a fear of dependency.</td>
<td>Punishment for late attendees (cleaning the toilet)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm34</td>
<td>Increasing methadone doses to hinder taking illegal drugs in prison. Wishes to finish the methadone on release date so able to work.</td>
<td>Punishment for late attendees (Methadone was given in the afternoon)</td>
<td>Prisoner believed that no urine test was encouraging participation. Reduction of dose no need for urine test in this prison.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm36</td>
<td>Selecting doctor to support his increasing dose (he takes ART and methadone, so he felt need to increase dose daily but rejected)</td>
<td>Weekend clinic opening times started 2 hours late. Daily attendance preventing participation because of conflict with visiting times.</td>
<td>Fear of being reported to prison authority if found to have a positive urine test.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pm37</td>
<td>Selecting doctor for approving dose reduction (some doctors approved the reduction if close to release date) Wishes to finish the methadone on release date (enable to work).</td>
<td>Daily attendance was frustrating because of long waiting times. Punishment for late attendants to methadone clinic (cleaning the toilet). Morning opening times were barriers to some prisoners (having insomnia). Late opening times at weekend.</td>
<td>Some doctors asked for urine testing if asked to reduce doses. If found to be positive the dose would be increased.</td>
<td></td>
</tr>
<tr>
<td>Study prison</td>
<td>Participant code</td>
<td>Sub-themes on the Perception of service provision</td>
<td>Dispensing practice</td>
<td>Negative urine test issues</td>
<td>Drug diversion</td>
</tr>
<tr>
<td>------------------------</td>
<td>------------------</td>
<td>--------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>General methadone prison</td>
<td>Pm38</td>
<td>Strategies to maintain low dose in prison by taking illegal drugs. Fear of the consequences of taking ART while in methadone (increase dose and cannot stop the methadone).</td>
<td>Early opening hours were preventing some prisoners to access methadone. Physical punishment for late attendance to the methadone clinic. Lack of fairness in establishing role for staff and prisoners. Lack of respect from staff.</td>
<td>Acceptance of positive urine test increased participation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pnm39</td>
<td>Fear of taking methadone at the same time with ART because it resulted in methadone withdrawal.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pnm40</td>
<td>The methadone clinic opening times were too early, so many prisoners missed it.</td>
<td></td>
<td></td>
<td>Given free methadone by methadone-prisoners but does not like it for its bitter taste.</td>
</tr>
<tr>
<td></td>
<td>Pnm41</td>
<td>Early methadone clinic opening times act as a barrier to participation for non-methadone participants (challenging to wake up early)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pnm44</td>
<td>Experiencing methadone withdrawal because they missed the dose (overslept).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General non-methadone prison</td>
<td>HCS52</td>
<td></td>
<td></td>
<td></td>
<td>Challenging to supervise prisoners; no need to provide methadone in prison.</td>
</tr>
<tr>
<td></td>
<td>PO49</td>
<td></td>
<td></td>
<td></td>
<td>Fear of the effects of methadone diversion in prison.</td>
</tr>
</tbody>
</table>

Table 9. Continued…
After entering the data into the matrix, the analysis focused on interpreting the data as a whole. The research questions and emerging concepts influenced the interpretation stage. The process of analysis also involved reviewing the observation, and case notes, to prevent loss of contextual factors in the indexing process. The analysis started with constructing a descriptive account by identifying similarities and differences across cases and within individual cases to identify how the programmes worked across systems. This was followed by seeking explanatory accounts by exploring relationships through mapping connections between categories and searching for an explanation within the whole data set. For example, the detailed analysis identified some less well functioning areas within prison systems that influenced the implementation of the methadone programmes. Following the analysis process, three final broad themes were identified as presented in the following table.

<table>
<thead>
<tr>
<th>Themes</th>
<th>Sub-themes</th>
<th>Categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Perceptions and experiences of methadone programmes</td>
<td>Perceptions of risk</td>
<td>Risk of HIV transmission</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Availability of drugs</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Drug availability as a driver for drug consumption</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other HIV risk behaviours</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Perceived solutions</td>
</tr>
<tr>
<td>Understanding of methadone programmes</td>
<td>Perceptions of the methadone programmes</td>
<td>Compliance with methadone programmes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fear of withdrawal</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Multiple burdens of stigma for methadone prisoners</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Measuring of success</td>
</tr>
<tr>
<td>Perceptions and experiences of the delivery of the methadone and HIV programmes</td>
<td>Methadone programmes in practice</td>
<td>Admission criteria</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Assessment processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Methadone prescribing regime</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dispensing practices</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delivery of HIV services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HIV testing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ART prescription</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low ART uptake</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ART adherence</td>
</tr>
<tr>
<td>Support systems within the methadone programmes in prisons</td>
<td>Lack of psychosocial support services</td>
<td>HIV support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Addiction support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family and peer support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General lack of resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>International, national and local funding issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Prison programmes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Staffing issues</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education and training</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Lack of facilities for prisoners</td>
</tr>
</tbody>
</table>
3.8. Methodological rigour

Trustworthiness
Guba and Lincoln (1994) suggested trustworthiness as a criterion for assessing a qualitative study. Trustworthiness is constructed by four criteria as follow:

Credibility
Within this study, strategies to promote credibility were adopted (Shenton 2004). These included: the development of familiarity with the potential participants to establish trust (the researcher made an initial contact with some healthcare staff in each study prison through text messaging and a preliminary visit to each prison), the development of topic guides which was theoretically informed by the systematic review, the involvement of a wide range of participants and multiple study sites, encouraging the honesty of participants’ responses by explaining their right to refuse to participate and to withdraw at any stage in the study, providing researcher reflections throughout the research processes, to both supervisors in order to mediate researcher bias in the interpretation of study findings.

Transferability
The analytic generalisation of the qualitative studies was possible through the rigorous inductive analysis of the phenomena under study (Polit and Beck 2010). Moreover, although the findings from case studies are often considered as having limited value in other settings, the detailed description of study context that is provided helps to enhance transferability of this study (Yin 2009). Detailed descriptions of the study prisons were supplemented by the researcher’s observations in the methadone clinics and through the audit of medical notes. For example, the interaction between the nurse drug dispenser and methadone participants differed when the researcher was known to be conducting observations, and the interviews with the prisoners provided an insight with which to contextualise the dispensing situation.

Dependability
Dependability refers to the fact that repetition of findings from the same context will lead to the same results, for example, by providing the detailed research design and its actual implementation (Shenton 2004). The initial plan of the sample structure and the final sample structure of this study were presented. According to Anney (2014) and Tobin and Begley (2004) some strategies helped to achieve dependability. In this study, the researcher demonstrated reflexivity and endeavoured to be self-critical during the research process. The supervisor team were also involved in the process of the cross-checking of codes and themes, from creating the initial thematic framework to the developing of the final themes and throughout the process of analysis.

**Confirmability**

Confirmability was achieved by demonstrating that the interpretations of the findings were derived from the data and not from the researcher's predispositions (Tobin and Begley 2004), by describing how the data were collected and analysed.

### 3.9. Ethical considerations

As mentioned, there are no procedures for gaining ethical approval from the Indonesian prison service. The ethical approval was granted from the School Research Ethics Committee (SREC) in the School of Health Sciences, University of Stirling. The following section explains some ethical issues that needed to be addressed in the design and conduct of qualitative studies (Hansen 2006). The ethical considerations of the study include informed consent, confidentiality and anonymity, the protection from harm of the participants and researcher.

#### 3.9.1. Confidentiality and anonymity

The perceptions and experiences of participants in this study might be sensitive discussion topics and they might fear that their opinions would be overheard or reported to the prison authorities. The priority of this study was to protect the anonymity of both study participants and the prisons involved in the study by giving a unique participant identification number. All interview transcripts and related field
notes were coded with this number. The data were shared with the PhD supervisors through password-protected email. All paper copies were kept in a locked filing cabinet. All electronic data were password protected. The digital recordings were disposed of once transcribed. The Nvivo transcripts were anonymised before being transferred into the software Nvivo 11. No identifiable information, which could lead to any potential harm to individuals or the reputations of the prisons, were disclosed in any reports, or to any other party including the prison authorities. A summary of the findings and recommendations will be sent to the Ministry and the representatives of each study prison.

All participants were made aware in advance that their participation was voluntary, meaning that they had the right not to answer any questions and to withdraw from the interview at any time without any penalties for such actions.

3.9.2. Informed consent

The researcher gave a consent form to each participant, so they could make an informed decision to participate in this study. The information sheets (see Appendix F) and consent form (see appendix G) were written in English, using simple language, and then translated them to Bahasa Indonesia and made specifically for each group of participants to provide the different relevant study information for each group. Prisoners are regarded as vulnerable populations due to their low socioeconomic and poor health status, as well as their restricted autonomy and liberty (Gostin et al. 2007). Therefore, the researcher read through the information sheet with each potential participant making sure they understood the study and what was involved. While study participants were often nominated by senior personnel, to avoid coercion as far as possible, the following points were emphasised:

- Participation in this study was voluntary and participants were free to withdraw at any time without giving a reason.
- Participants could refuse to answer any question.
- Their participation would not affect in any way their status in prison.
The researcher highlighted the use of audio-recorder during interviews and reassured the participants that the information would be kept confidential and anonymous.

Verbal consent for the clinic observations was sought from the charge nurse in the methadone clinic. Observations were made in open areas in the clinic. Therefore, individual prisoner consent was not sought. In addition, a flyer was displayed in each methadone clinic (Appendix H) to make prisoners aware of the ongoing study in that prison. Only anonymous data were collected from medical records.

3.9.3. Protecting participants and researcher from harm

The researcher's considerable work experience in a prison setting benefited the data collection process. For example, she was aware of how the legal and cultural context in that setting might affect the study. Care was taken to ensure that any potential harm or distress to the researcher was minimised by ensuring that all data collection was carried out in a safe location.

There were no direct risks from this study for the participants. However, the sensitive topics of this study might have caused anxiety and distress; exploitation; and misrepresentation (Richards and Schwartz 2002). An effort was made to reduce the risk. A prisoner in the general methadone prison considered the interview as a psychological session in which he could express his feelings. To avoid exploitation, the researcher stopped the interview after two hours and referred him to a doctor for further advice and support, but this was rejected.

3.10. Researcher reflexivity

Reflexivity is a process through which researchers come to understand the relationship between themselves and the object of research, in order to minimise their biases (Brannick and Coghlan 2006; Creswell and Miller 2000). Reflexivity also helped to develop an objective and critical view of the generation of data and conduct of the analysis and interpretation of findings.
3.10.1. Reflection on the pre-research stage

The researcher spent some time reflecting on her own professional background and its influence on the research process. Although methadone programmes are viewed as evidence based, and the gold standard for treating heroin addiction, these programmes are relatively new in Indonesia and have continued to be controversial. The researcher realised that there would be different levels of awareness about methadone programmes among prison staff. Staff might also feel conflicted about reporting activity in the prison as the national prison strategy is committed to the zero tolerance of drug use and drug trafficking in prisons.

The employment status of the researcher as a prison doctor might also have created a power differential in the research relationship with study participants, making the participants feel under pressure to participate and to answer questions. Therefore, the researcher emphasised the voluntary nature of this study.

3.10.2. Reflection on the data collection

This section reflects the difficulties posed by the researcher’s dual role and the gender differences between the researcher and most of the interviewees. Further challenges were posed by the effects of prison context for the health services and the interview challenges in the prison settings including location and interruptions, level of education of the prisoner, interviews under the influence of methadone, interview cancellation, recording and language.

Dual role of the researcher as both insider and outsider

The researcher’s professional status as a medical doctor proved helpful in gaining initial access to healthcare staff and prison officers and afforded the researcher privileged access to prison governors. Throughout interviews, the researcher introduced herself as a researcher. By using this identity, the researcher hoped that the participants felt able to talk freely and openly about the programmes. Despite this, the researcher felt some of the participants were trying to give positive reviews of the programmes. In contrast,
participants who knew I was also a prison doctor, talked openly and freely. Some of the prisoner participants also considered the interview session as a way of expressing their concerns at being imprisoned and how to fill their time in prison.

As an “insider”, the researcher could show some level of empathy when the participants indicated their challenges in providing and receiving the methadone programmes under prison conditions. This allowed the researcher to build trust with the study participants. However, being an insider did not mean we shared the same understanding of the language used, and further explanations were sought to ensure they understood the topics being discussed in interviews.

The gender differences
The researcher observed that many male prison staff seemed to feel obliged to demonstrate their authority throughout the interviews process by demonstrating a high level of confidence and a sense of control concerning their roles and responsibilities. For example, they reported the prison conditions were fully controlled although this was contradicted by other members of staff.

The effects of prison context for the prison health services
With regard to personal safety and health concerns, having the first interview with a methadone-prisoner in the closed, air-conditioned room, the researcher became aware of the risk of contracting TB which is very prevalent in this population. However, although the prison doctor told her that the prisoners were on TB medication, and transmission of infection was unlikely, the researcher still felt terrified since she would be exposed for four hours a day. This was at a time when my body was also weak because of the difficulty of adapting from Scottish to Indonesian weather conditions. In the following month, the researcher decided to have an X-ray as a precaution. The researcher saw many healthcare staff committed to working in this high-risk environment, although some of them seemed to have a different attitude. The researcher believes that the positive attitude of these staff contributed to the quality of the delivery of health service in prison.

Interview challenges
The researcher recognised that most Indonesian prisons have very limited space and efforts were made to conduct interviews in a private space. Lack of privacy was the case mainly when interviewing prisoners in the narcotics methadone prison. The interview room was in the unoccupied senior doctor’s office. However, it was also the location of the unit printer, so healthcare staff regularly came in and out of the interview room. In response to this, before the interviews, the participants were given an option not to conduct the interview or to move to another location. The interview room was convenient and had air conditioning, which might explain why the participants chose to continue the interview there despite the disruption. To maximise confidentiality, the researcher changed the topics that were being discussed to focus on general topics or stopped the interview when staff entered the room.

The interviews were scheduled after 11 am when the general clinic room was unoccupied in the general methadone prison. The late start caused some interviews to be interrupted due to a lockdown period between 12 pm to 1 pm, and also at the end of office hours at 4 pm. This caused two interviews to be stopped after around 30 minutes. In the general non-methadone prison, prisoners' interviews were conducted in the prison hall in the clinic area, and therefore there were no interruptions. However, given the closed-design of the hall with no visual access from outside the hall and poor ventilation, this made it difficult to breathe, so the small door was opened while conducting interviews for the security and health reasons.

In the general methadone prison, one prison officer interview took place in an office shared with another three officers. Despite the fact that the air conditioner was on; the office was full of cigarette smoke. Eventually, after 5 minutes interviewing, the two other officers left making the air feel breathable. Even though the interview was conducted in the presence of another prison officer, the researcher and the participant managed to have good interaction during the interview, and this resulted in insightful information. In the narcotics methadone prison, one prison officer interview also took place in the presence of another officer. Fortunately, the sound of the television in that room minimised the risk of being overheard.
Some prisoner participants found the questions confusing. Their educational backgrounds, which ranged from primary school to senior high school and degree level, posed problems on some occasions and it was necessary to rephrase questions and some explanation was needed before asking the questions. Emphasising the importance of what they were saying and that they had unique experiences helped the researcher to retain focus and enthusiasm during the interview process.

Although all identified prison officer participants took part in this study, some of the prison officer interviews were cancelled at the time of schedule without notice. In response to this, the researcher confirmed these participants consented to participate. A healthcare staff member also changed the interview schedule several times, and it seems she was reluctant to participate. The researcher politely told the participant that she had another participant and that she was not required to participate. A sense of duty might have been felt by the participants since the researcher is a prison doctor, but this also created disadvantages for the researcher since associated worries may have delayed the data collection process.

Interviewing the participants under the influence of drugs also raised some ethical issues. Some of the prisoner participants had dull expressions and looked tired in particular in the narcotics methadone prison. This might have been linked to the high dose regimen in this prison. Some healthcare staff and prisoners indicated that the maximum effects of methadone would be felt mainly between 12 pm and 1 pm; and therefore, the researcher arranged the interviews before and after that time.

Using a recording device during interviews did cause some concern about being reported to prison authorities. A prison officer in the narcotics methadone prison expressed that he felt more comfortable talking without being recorded; therefore, the researcher took notes during the interview. Another prison officer in the narcotics methadone prison also expressed relief when I commented on the audio recorder which seemed to have failed to record our discussion. One member of the healthcare staff in the general non-methadone prison asked for a copy of her interview transcript urgently to confirm whether what she had said was in line with the written transcript. Two healthcare staff in the narcotics methadone prison and the
general methadone prison, as well as some prisoner participants, also covered their mouths while being interviewed using the recording device. In response to this, the researcher confirmed they wished to continue and reassured them of their anonymity and confidentiality. The researcher also tried to build more rapport with the participants to reduce their nervousness by discussing their background or more general topics. Therefore, this did not stop participants from recounting their views and experiences on the programmes and the researcher was able to obtain genuinely open and in-depth data.

The researcher and some of the participants came from different cultures with different mother tongues. Given the fact that Bahasa Indonesia is Indonesia’s formal language, however, the participants were able to express their perspectives and experiences using Bahasa Indonesia.

3.10.3. Reflection on the data analysis stage

The funding for this study was provided by a scholarship scheme from the Ministry of Finance, Republic of Indonesia. This could have potentially led to researcher bias in the study design, data analysis and presentations of findings in the final report. However, it is important to note that the funder played no part in any of the study process with only the final thesis being submitted to them.

The differences in the cultural and institutional experiences of the researcher and her supervisors were identified at the analysis stage. Being an Indonesian prison doctor led the researcher to normalise some of what happens in Indonesian prisons and how prisoners are treated. However, following discussions with the supervisors the researcher revisited her interpretation of some of the data, for example, the issue of stigmatisation and the approach to death of prisoners.

3.11. Chapter summary

The study's objectives were to understand the role of methadone programmes within the context of HIV prevention programmes and to identify barriers and facilitators
factors that influence the implementation, routine delivery and sustainability of methadone programmes in Indonesian prisons.

This chapter discusses the research design and methods used in this study, explains the interpretative stance and the qualitative methods employed and justifies the adoption of a case study approach. Semi-structured interviews were the primary data source, together with observation and audit of medical case notes. Three prison settings were selected to construct a qualitative case study including a narcotics prison with a methadone programme, a general prison with a methadone programme, and a general prison without a methadone programme. Purposive sampling and snowball sampling were employed to select study participants. In total there were 57 interviews involving prison governors, healthcare staff, prison officers, and prisoners. The thematic analysis approach, with the help of framework analysis for data management, facilitated the data analysis process.
4.1. Introduction

Chapter 3 outlined the purpose of this study which was to explore the implementation of methadone programmes across three study prisons: a narcotics methadone prison, a general methadone prison, and a general non-methadone prison. The themes presented in the following three findings chapters are based on interviews conducted with four groups of participants. Interviews were conducted with three prison governors, nine prison officers, ten healthcare staff, and 35 prisoners (see table 5 for sample profile). It should be noted that the term prison staff refers to prison governors, prison officers, and healthcare staff; the term healthcare staff refers to doctors, dentists, psychologists or nurses; while the term prisoners refers to either methadone or non-methadone prisoners. The two main themes that presented in this chapter focus on perceptions of HIV risk and understanding of the methadone programmes in prisons.

4.2. Perceptions of risk

Many prison staff across all three prisons tended to talk about the risk of HIV transmission in ways that reflected a perception that the number of injecting heroin users was small, and that heroin was not widely available in prisons.

4.2.1. Risk of HIV transmission

Understanding prison staff and prisoners’ perceptions of risk of HIV transmission is an essential aspect that needs to be considered when developing any more HIV prevention programmes in prison settings. There was a general perception among the prison staff across all three prisons that the risk of HIV transmission between prisoners was not as great in prison settings as it once had been. A member of the healthcare staff from the general non-methadone prison suggested as evidence to confirm this:
"For the last two years, we have conducted the HIV test every year with the help of an NGO and found no one got a new HIV infection here, but if there is a new infection, we should start raising concern about what may happen inside the unit" (General non-methadone prison, Doctor, female)

Many prison staff attributed this low-level of HIV transmission to the perceived small number of injecting prisoners, lower heroin availability, and greater awareness among prisoners of injecting as a risk behaviour for HIV transmission. It appears that prison staffs' understanding of HIV transmission risk is mainly limited to injecting drug users – specifically heroin, as one prison governor put it:

“What I have heard is that the number of people who inject heroin has decreased. It (injecting drugs) is an unpopular method among drug users because they know the risks of doing it. They also say heroin is very rare nowadays" (Prison governor)

Similarly, a healthcare staff member from the narcotics methadone prison believed that since there was no heroin in prison during a period; therefore, there was no potential risk of HIV transmission through the sharing of injecting equipment.

"Most of the prisoners have not used heroin for six months even though they are still using methamphetamine. It means the problem of HIV transmission is not linked to injecting heroin “(Narcotics methadone prison, Healthcare staff, female, early 30's)

Many prison officers also believed that the number of heroin injecting prisoners coming into prison was small, and they understood the risk of injecting drugs.

"Only 10% of new incoming prisoners are injecting heroin users, most of them are methamphetamine and cannabis users. Those prisoners have realised the danger associated with needles, and that is why they do not take injected heroin here. So, I can say the HIV transmission is low here" (General non-methadone prison, Prison officer, late 20's)

However, some healthcare staff were less confident that injecting drug use had been eradicated: "It would be difficult always to keep our eyes on drugs and syringe needles here, and we will never find them because they (prisoners) are tricky" (General methadone prison, Healthcare staff, female, mid 30's)

"If I get prisoners with negative HIV test, I would ask them to come after three months. If they were not involved in new risk behaviours, they would remain
clean, but we cannot control it. That is why we conduct a second test” (General non-methadone prison, Healthcare staff, female, early 30's)

However, prisoners from across all three prisons did not perceive a low risk of HIV transmission. A prisoner from the narcotics methadone prison suggested why the number of drug injecting prisoners is perceived to be low:

"Only the small number of prisoners in the methadone programme are known to the health staff as injecting heroin users, but most of the people who use heroin are unidentified here" (Narcotics methadone prison, Non-methadone-prisoner, early 30's)

A prisoner from the narcotics methadone prison also explained: “You can mix and inject everything here including cold and flu medicines” (General methadone prison, Non-methadone prisoner, early 30's)

It appears that knowing the risk associated with injecting was not sufficient to prevent prisoners from injecting drugs. The degree to which injecting drugs was perceived as a priority over the risks involved was described by a prisoner from the general non-methadone prison:

" The most important thing people will look for in prison is drugs. It is my greatest need to inject drugs, so I cannot hold back, even though I know the risks of injecting drugs" (General non-methadone prison, Non-methadone prisoner, late 20's)

Another prisoner from the narcotics methadone prison described injecting drugs as a way dealing with craving:

"I could not refrain from taking heroin. I did not care about the risks they had told us about in the education session. We were just injecting the drug, and that was it" (Narcotics methadone prison, Non-methadone prisoner, late 20's)

4.2.2. Availability of drugs

Despite prison staff’s perceptions of the low availability of heroin in prison, prisoners, and some prison governors were aware that there is a supply of both heroin, and other drugs in prisons: “There is much heroin…moreover, the price of heroin is much lower than methamphetamine" (Narcotics methadone prison, Methadone-prisoner,
early 30’s). “My friends told me it is easy to get illegal drugs in prisons. In every unit, you can find them” (General non-methadone prison, Non-methadone prisoner, mid 30’s)

A prison governor explained:

“Prisoners have different ways of getting drugs. Sometimes they go to the prison clinic and ask for general medication but then they mix them, or they smuggle drugs from outside the prison; although the drugs are on G list (need a doctor’ prescription, for example Tramadol (pain relief) and antibiotics), but their relatives can get them easily from the community pharmacy without any prescription from a doctor” (Prison governor)

The same prison governor went onto say:

“We conduct raids, but as the staff are also human beings, they are tempted by the prisoners. The most challenging task here is to supervise staff. If some staff get tempted, they can smuggle drugs into the prison easily despite our advice” (Prison governor)

At the time of the study, prison officers, healthcare staff and visitors related to work such as NGOs were never searched when entering the prisons. The prison governor commented that those members of staff, who were involved in drugs, would be punished and already some had been charged with drug use and had been dismissed from the prison.

4.2.3. Drugs availability as a driver

Drug consumption is influenced by the availability of drugs; therefore, supply is a major driver of drug use in prison, as one prisoner from the general non-methadone prison put it: "Several people are taking illicit drug (heroin) here, so I started craving, but for example, if there were no drugs here, I would forget about taking them" (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

Similarly, a non-methadone prisoner described his reason to take drugs: "To deal with craving for heroin was difficult particularly when you saw your cellmate taking those drugs" (Narcotics methadone prison, Non-methadone prisoner, late 20’s)
Many prisoners across all three prisons also suggested that drug availability was a significant driver for prisoners’ initiation into use or relapse back to drug use: “We did not take heroin outside just a kind of cannabis, but when coming into prison, we started using it” (Narcotics methadone prison, Methadone-prisoner, early 30’s)

The majority of prisoners linked the reason for taking drugs with the stress of imprisonment. A non-methadone prisoner from the narcotics methadone prison illustrates the point:

”People are always thinking about going home. Unfortunately, the due date for the parole programmes to get their reductions in sentence is not always clearly stated. So, some of them missed the date, and they became so stressed that they started taking illicit drugs” (Narcotics methadone prison, Non-methadone prisoner, early 40’s)

Another prisoner from the general methadone prison said:

”The reasons of people on methadone taking illicit drugs are because they were stressed. You know that it is difficult to have this kind of conversation with the healthcare staff, I cannot discuss my problem with them” (General methadone prison, Methadone-prisoner, early 30’s)

A range of other drivers was also identified: “Sometimes I have a strong feeling to take drugs because I have no activities here” (General non-methadone prison, Non-methadone prisoner, late 20’s)

Although many prison staff believed that injecting drug use was rare, many prisoners from across all three prisons gave multiple examples of risky injecting and poor cleaning practices. The following quote from a methadone-prisoner in the narcotics methadone prison explains and justifies why risky injecting practices occurred:

“I shared payment to buy heroin with an injecting drug user- IDR. 20.000 (£ 0.59) each since I thought we would divide the drug. However, then he put all the drugs into the syringe, so I should also inject the drug. It went to my blood directly, so it gave longer effect for about 10 hours, but when you sniff it you should take drugs every 2 hours, so it is much more expensive. You know life in prison is difficult and generating income is even more difficult, so I don’t have many options here” (Narcotics methadone prison, Methadone-prisoner, early 30’s)
On the same issue, a prisoner from the narcotics methadone prison said:

“For example, in this prison only two needles were available, and they were shared when in a state of withdrawal; people just rush to use them even if there is blood inside” (Narcotics methadone prison, Methadone-prisoner, early 30’s)

Another said: “One needle could be used by thousands of people because in a single day hundreds of people would use it here” (General methadone prison, Non-methadone prisoner, early 30’s)

The following quote from a methadone-prisoner in the narcotics methadone prison explains how prisoners cope with the lack of availability of needle:

“I used to ask my friends from the community to bring needles in here. It is not that hard particularly if they are women. It could be put in their body so that they could pass the security post” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

Some prisoners from both methadone prisons reflected on the poor needle cleaning practices. A prisoner from the general methadone prison illustrates this point:

“On one occasion, I tried to clean a syringe needle by putting it in warm water for 7 minutes without any detergent because I do not have any detergent” (General methadone prison, Non-methadone prisoner, early 30’s)

4.2.4. Other HIV risk behaviours

In addition to injecting drug use, other HIV risk behaviours such as tattooing and same-sex relationships were also recognised by some prison staff and prisoners. The issue of tattooing was raised mainly by prison officers and prisoners from the general methadone prison. “The HIV transmission routes here are common through sharing injecting equipment for drugs and tattooing” (General methadone prison, Prison officer, late 20’s).

In the same prison, a prisoner confirmed unsafe practices of tattooing:

"I used to do tattoos and get some payment here, but it has been stopped because sometimes I could not get a needle. It can be done using acupressure needles or simply just soaking a needle in warm water for 2-5 minutes" (General methadone prison, Non-methadone prisoner, late 20’s)
Same-sex relationships were also indicated by some prison staff in particular from the general non-methadone prison. However, there were different views about whether prisoners did have sexual relationships with other prisoners. Some prison staff believed that this simply did not happen while some healthcare staff and prisoners believed that it was a possibility. A prison governor felt confident that sexual relationships do not happen in this era:

"I am sure that with good supervision and safety measures we can minimise that potential problem (HIV transmission in prisons) including abnormal sex. People said that homosexual relationships are in the nature of prison life, but I think that while that has been so in colonial culture. This is very different to the situation now" (Prison governor)

In the same vein, a prison officer from the general non-methadone prison said: "Thank God there are only male prisoners here, so no sexual HIV transmission" (General non-methadone prison, Prison officer, late 20’s)

While some prison staff did not believe the existence of same-sex relationships in prison, a member of the healthcare staff from the general non-methadone prison suggested that sexual transmission posed a risk in the general non-methadone prison.

"In the prison, the risk factor for HIV has recently changed from injecting drug use to homosexuality, even though there are still some injecting users here. Some of the gay prisoners are HIV positive. So, our concern is for homosexual prisoners" (General non-methadone prison, Healthcare staff, female, early 30’s)

Later, in the interview, she went on to describe the multiple risks of getting HIV infection in the prison setting:

"Can you imagine this, those gay prisoners are at risk because of their sexual preference? Moreover, they are also taking drugs, so they are involved in multiple risk behaviours here" (General non-methadone prison, Healthcare staff, female, early 30’s)

Similarly, a prisoner from the narcotics methadone prison indicated that same-sex relationships have occurred: “The new incoming prisoners could be involved with sex
or anything. You know that this is a prison, and everything is possible here”  
(Narcotics methadone prison, Non-methadone prisoner, late 20’s)

4.2.5. Perceived solutions

Since many prison staff believed that there were low levels of risk associated with injecting behaviour and same-sex relationships, many also believed needle and syringe programmes (NSPs) and the provision of condom in prison was not desirable. Many prison staff were concerned that NSPs would conflict with the Ministry’s drug strategy which focused on reducing availability of illicit drugs, and that needles could potentially be used as weapons. They were also worried about being accused of bringing drugs to prisoners. A member of the healthcare staff from the general non-methadone prison illustrates the point:

“I do not agree with needle and syringe programmes as we should aim for getting to zero drugs here. It means we would legalise heroin use by providing the programmes” (General non-methadone prison, Healthcare staff, female, early 30’s)

A prison officer from the general methadone prison also said: “We have a rule that sharp equipment is forbidden here because people may use them as a weapon including those needles” (General methadone prison, Prison officer, late 20’s)

Another officer from the general non-methadone prison said:

“My concern is where they get the drugs; it could be someone who smuggles the drugs. We know that we have checked all the prisoners strictly but why are there drugs here? So, there would be some suspicion towards prison officers. People (other prison staff) will point out it must be prison officers who smuggle the drugs” (General non-methadone prison, Prison officer, male, mid 30’s)

Some prisoners from across all three prisons were concerned that NSPs would also encourage injecting behaviour and would have the potential to transmit HIV infection, as it would be difficult to supervise needle use. A prisoner from the general non-methadone prison noted:

"It is not good because prisoners may misuse the needles. Those prisoners who have stopped taking heroin would be tempted to retake heroin if they see
Another prisoner said:

"I am scared if there are needles in prison, they will make HIV transmission much faster. It is good to provide needle syringes, but my question is whether the prison officers would check how prisoners use the needles. No one can guarantee whether the needles are being sold or shared with others" (Narcotics methadone prison, Non-methadone prisoner, mid 30’s)

Although many prison staff perceived NSPs as undesirable, several prison staff believed NSPs were accepted in a high-risk categorised prison. As a healthcare staff member from the general non-methadone prison put it:

"The Directorate of Corrections prohibits needle and syringe programmes and condom programmes in other prisons, except in Bali prison because there are many foreigners there. So, the prison provides a box of needle syringes and a bleaching corner. I was wondering how they could have those kinds of programmes while other prisons could not" (General non-methadone prison, Doctor, female)

Some prison staff indicated that they would comply with any policies introduced by the Directorate of Corrections.

“Currently, the Ministry has no programmes of condom or a needle exchange provision because they have been viewed as a controversial idea if they are applied in prison settings. But if they produce the programmes then we will comply with that" (Narcotics methadone prison, Psychologist, female)

In contrast to many of the prison staff, some prisoners indicated NSPs would be beneficial to prevent HIV transmission, as a prisoner from the general non-methadone prison put it:

“I know that the main cause of HIV infection is because of sharing needles here. This happens because needle exchanges are not allowed in prisons, but it has been widely known that drug injecting prisoners are using shared needles because of the restriction here” (General non-methadone prison, Non-methadone prisoner, late 30’s)
There was particular unease about issuing condoms in the prison settings despite the fact that it is a recognised medical intervention to prevent HIV transmission, as one healthcare staff member put it:

"I think the prison authority would not allow distributing condoms in the prison even though from a health perspective it may be beneficial in preventing HIV transmission. One or two prisoners became HIV-positive here, but it was because of homosexual relationships and not because of sharing needles since we have no needles here. It is our dilemma since we have no condom programme here; therefore, we have no preventative measures" (General non-methadone prison, Healthcare staff, female, early 30’s)

Many prison staff perceived that condom provision conflicted with Indonesian social norms and supported same-sex relationships: "It is not good as it has legalised the deviant sexual practices here" (Prison governor)

"What are condoms for here? sorry but I think that same-sex relationships do not exist here. If we provide condoms, other prisoners who have normal sexual preferences will try to use them with other prisoners" (General non-methadone prison, Prison officer, mid 30’s)

Interestingly, the same member of the healthcare staff who suggested that condom provision could be beneficial as a preventative measure, later on, countered her earlier argument.

"Prisons will end up like a brothel. We provide not only law awareness but also give spiritual, and health guidance here. We have religious programmes for Muslims, Christians, and Buddhists. If we give condoms, it would mean we have failed spiritually. What we can do as a prevention measure is to provide information sessions to tell gay prisoners about the dangers of their high-risk behaviours. An NGO specialising in that area could arrange those sessions" (General non-methadone prison, Healthcare staff, female, early 30’s)

Similarly, providing HIV prisoners with a condom was considered less of a priority than telling them to seek HIV medication. A prison officer from the general non-methadone illustrates the point:

"I am not agreeable to giving condoms to gay prisoners as it has let them do bad things. I think the most important thing is that we should emphasise to them that if you get an infection (HIV), you should look for medication (ART) so you will not transmit the disease to others" (General non-methadone prison, Prison officer, late 20’s)

100
4.3. Understanding of methadone programmes

The levels of understanding about the methadone programmes differed across groups and prisons and there were different perceptions about what constituted a successful programme. Many prisoners also expressed concerns about compliance, fear of withdrawal, and stigma associated with participating in methadone programmes.

4.3.1. Perceptions of the methadone programmes

The narcotics and the general methadone prison recruited to this study were amongst the first wave of methadone prisons to be established. Therefore, the majority of the healthcare staff and some prison officers in these two prisons showed a relatively good understanding of the aims of the programmes. Most believed that the methadone programmes could help to prevent HIV transmission in the prisons by reducing injecting drug use among prisoners. A member of the healthcare staff commented:

"Methadone programmes are effective programmes considering its aims since previously there was much heroin and the number of heroin users was up to 20%. The low level of injecting drug users has only happened recently. I think it is better for them to use methadone instead of injecting heroin" (Narcotics methadone prison, Doctor, female)

And another said: “Prisoners who use heroin typically inject the drug. That is why we have methadone to prevent diseases related to unsafe injecting practices including HIV/AIDS” (General methadone prison, Doctor, male)

This contrasts with the views of many healthcare staff in the general non-methadone prison who seemed not to recognise the potential risks associated with injecting behaviours in prison. Instead, methadone was considered a lower priority than achieving a drug-free state.

"Some prisoners who took methadone in other prisons and they were being transferred to this prison, could cope with the methadone withdrawal
symptoms and have a normal life without methadone and illegal drugs here"
(General non-methadone prison, Healthcare staff, female, early 30's)

A prison officer also noted:

“70% of prisoners recover from heroin addiction without methadone. As long
as they have self-determination, frequent showers, and positive activities such
as sports” (General non-methadone prison, Prison officer, late 20's)

Despite this, one prison officer from the general methadone prison highlighted the
potential risks when the prison system failed to respond to signs of the potential risk
behaviours among prisoners in the absence of the methadone: “If some prisons had
no methadone programmes, the prisoners’ health needs might be neglected. So,
they might take injected drugs again” (General methadone prison, Prison officer,
early 20's)

In contrast to many of the healthcare staff who understood the aims of methadone
programmes, many of the non-methadone prisoners, prison officers, and prison
governors from across all three prisons did not fully understand that methadone
programmes had been implemented in Indonesian prisons as part of an HIV
prevention strategy. Instead they believed that methadone was used merely to treat
cravings for heroin: “I think methadone cannot prevent HIV transmission, and it is
only a drug to prevent people from heroin withdrawal” (Narcotics methadone prison,
Non-methadone prisoner, mid 30's)

There was also the common misconception among some prison staff that providing
methadone was equivalent to providing an illegal drug. Rather surprisingly as one
doctor put it: “If we provide methadone, it means we provide illegal drugs since
methadone is a heroin replacement” (General non-methadone prison, Doctor,
female). Similarly, a prison governor said: “Methadone was not good as it means
letting the prisoners use illegal drugs” (Prison governor)

Prisoners from the prisons where there were methadone programmes but who were
not themselves enrolled in them often thought that methadone was a “harder” drug
than heroin and believed that methadone could cause them harm, even death. This
suggests that there is a lack of information about methadone as a medical treatment
to support heroin dependence: "Methadone is pure heroin, so its effects are
devastating, while our heroin is only dregs of heroin" (General methadone prison, Non-methadone prisoner, early 30's). "No, I am not interested in taking methadone as it leads to greater damage to health and makes death come even faster" (Narcotics methadone prison, Non-methadone prisoner, late 20's)

Although many non-methadone prisoners attributed severe adverse effects to methadone, some methadone and non-methadone prisoners across the three prisons believed that the programmes could bring benefits in reducing injecting equipment, improving quality of life including physical and mental health, social conditions; and financial aid.

Generally, prisoners involved in prison programmes were allocated in specific units such as methadone and religious units. A non-methadone prisoner in the narcotics methadone prison who participated in the religious programmes commented on reduced injecting equipment:

“They used to share syringe needle that is causing HIV transmission, and I used to worry about stepping on needles, but now I feel no worries since I do not see any syringe needles here. I do not worry about getting HIV infection, and I felt more relax and more safety being around by them" (Narcotics methadone prison, Non-methadone prisoner, mid 30's)

Methadone-prisoners from both methadone prisons also noted benefits: "We can build a better familial relationship; my family members used to hate me, but now we are tight as a family" (Narcotics methadone prison, Methadone-prisoner, mid 30's)

" My friends told me it is better to join the methadone programmes since it is free, so I would not spend money to buy heroin or ask my family for financial support" (Narcotics methadone prison, Methadone-prisoner, early 40's)

“Initially it was hard to believe that I was dependent on methadone support but then I found out that it brings positive effects to my life -physical and emotional- so there were no reasons why I should decline the methadone” (General methadone prison, Methadone-prisoner, late 30’s)

For many prison officers across all three prisons, the benefits of the programmes included a reduction in the number of heroin users that typically inject the drug and help with managing prisoners.
“Since we have been giving prisoners methadone, they do not need heroin anymore. As far as I know, HIV infection is caused by unsterile needles and syringes when using heroin and, so, HIV transmission was reduced here” (Narcotics methadone prison, Prison officer, late 20’s)

“Prisoners withdrawing from heroin can be a source of disturbance to others and can cause chaos in their cell because of the need for drugs. Being on methadone make them less tense” (Narcotics methadone prison, Prison officer, mid 20’s)

4.3.2. Compliance with methadone programmes

Prisoners who did not comply with the programme regulations were given several verbal warnings before dismissed from the programmes. Their dose was reduced gradually, and they were re-assessed to participate in the programmes.

Non-compliance fell into a number of categories if they were found to be threatening prison staff or the safety of others or were found to be abusing methadone use or were found to have a positive urine test. When talking about the methadone diversion, the prisoners and prison staff often referred to a lack of healthcare staff supervision. A prisoner described:

“Yes, it was so hilarious that he sold part of the methadone after taking methadone. After taking methadone, he went to the toilet in the clinic to spit out the methadone. It is just occasionally, and the staff did not watch over us, so you can always play these kinds of trick” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

A healthcare staff member explained:

“It is a repetitive job, and so the staff sometimes get bored and become careless. We have a rule saying that dispensing methadone should be supervised, for example, after drinking methadone we should talk to them or ask them to open their mouth. This is to make sure that they have swallowed it, but yes… sometimes the staff forget that. It was a methadone diversion; he spat it out into a container and sold it, but it was a long time ago” (Narcotics methadone prison, Doctor, female)

Urine testing was also used to assess compliance. It would be conducted at least once throughout the programmes. If prisoners from the Narcotics prison tested
positive for any illicit drugs and, particularly, heroin, there were some consequences which might be financial, physical or administrative in nature. A healthcare staff member commented:

"What we can do to prevent them from mixing drugs is by threatening them with a fine if they are found to be positive because, if it happened (mixing drugs), methadone could not work effectively" (Narcotics methadone prison, Healthcare staff, female, early 30’s)

The healthcare staff with the help of prisoners' family members emphasised the fine, as one prisoner put it:

"A healthcare staff also talked about the consequences (a fine) when my family signed the consent. So, my family will also be responsible for paying the fine and therefore my family also told me not to break the rules" (Narcotics methadone prison, Methadone-prisoner, early 40’s)

However, prisoners indicated that there was often no follow through.

"Sometimes they threaten by saying 'if you do not comply with our rules you will get fined up to IDR.600,000 (£ 30)', but no one got the fine. They (Healthcare staff) said the fine would be used to buy syrup and urine test strips" (Narcotics methadone prison, Methadone-prisoner, early 40’s)

One of the healthcare staff recognised the problem and suggested that it would be better to withhold methadone from non-compliant prisoners.

"It is common practice to give a punishment (a fine) here and I have tried that (did not give methadone). So, they are wary of using illicit drugs while on methadone. But sometimes there is a conflict with the doctors who still give methadone to those non-compliant prisoners" (Narcotics methadone prison, Healthcare staff, male, mid 30’s)

Non-compliance might also affect chances of getting parole as a representative of the healthcare staff would be involved in the review board for the parole programmes: "They (healthcare staff) would get mad, and you would not get a pass for parole if you get caught with a positive urine test on three occasions" (Narcotics methadone prison, Methadone-prisoner, early 40’s)
4.3.3. Fear of withdrawal

The majority of prisoners in all three prisons expressed concerns about methadone dependency and withdrawal symptoms, which were often regarded, to be more severe than heroin dependency and withdrawal. Perceptions of severity were often influenced by family members and healthcare staff. Many prisoners also believed that methadone withdrawal could result in death. This belief arose from the experience of seeing many methadone-prisoners die and seeing dead bodies in prison. Perceived lack of support and access to methadone in the prisons also increased fear of withdrawal among prisoners.

Methadone dependency and withdrawal symptoms

Many prisoners believed that methadone dependency was more severe than heroin. A non-methadone prisoner from the general methadone prison said:

"I feel sorry for my parents for (me) being heroin dependent, and if I take methadone it means I have become a very naughty boy since the methadone causes heavy drug dependency compared to heroin" (General methadone prison, Non-methadone prisoner, mid 20’s)

Concerns about methadone dependency were also reported by some healthcare staff from the general non-methadone prison.

"We (healthcare staff and prison authorities) had a meeting about methadone, and we (healthcare staff) claimed that the methadone programmes are useless because it makes the prisoners become drug dependent on methadone" (General non-methadone prison, Healthcare staff, female, early 30’s)

Concerns about the difficulty of coming off methadone seem to have contributed to the negative view of methadone dependency, as indicated by a prisoner from the narcotics methadone prison:

"It is difficult to stop methadone because the methadone has been in our body for too long, so it needs time to neutralise the methadone. My friend was at 5 mg methadone, but still found it hard to stop. After the regime was finished, he had a sleep problem, so he had to take codeine and tranquilisers. I do not know what would happen to me later on" (Narcotics methadone prison, Methadone-prisoner, mid 30’s)
The views of family members contributed to their concerns.

"My family is concerned about the methadone because it is like heroin, so that I will end up as methadone dependent. So, I planned to take methadone for only three years, but it has been five years now, and I cannot stop using it" (General methadone prison, Methadone-prisoner, early 30’s)

Interviews suggest that fear of methadone withdrawal was a major reason for not participating in the programmes across a group of participants in all three prisons. For the methadone-prisoners these issues increased the perceived degree of risk in their participation, as one prisoner from the narcotics methadone prison put it:

“Many prisoners were afraid to watch the effects of methadone withdrawal on their fellow prisoners. Even if they took 10-20 showers, the symptoms were not reduced for two months. This is quite different with heroin withdrawal effects which are over within a week, and we were able to have a good sleep and a good appetite. We were terrified of the effects of methadone withdrawal “(Narcotics methadone prison, Methadone-prisoner, mid 30’s)

The fear seems to be increased by a lack of medical support during withdrawal.

“I would experience methadone withdrawal symptoms alone at night because the cell was locked. Other prisoners and the prison officers considered it as an unthreatening condition, so we should wait until the following morning to increase our methadone dose” (General methadone prison, Methadone-prisoner, mid 20’s)

Another concern about methadone withdrawal is a lack of access to methadone while in the segregation unit and limited access to methadone in other prisons:

“Some methadone-prisoners had experienced severe methadone withdrawals because there is no methadone in this prison, and then they were being sent back to their original prison” (General non-methadone prison, Non-methadone prisoner, early 30’s)

" It was a suicide case by hanging that happened a long time ago. It used to be that methadone was given to the prisoner in the segregation unit, but this prisoner sold the methadone while he was in isolation cell, so he got a physical punishment. He wrote a letter and then hanged himself because he
was also disappointed that on that day, he did not receive any methadone” (Narcotics methadone prison, Methadone-prisoner, early 30’s)

Despite the concern about the methadone dependence and withdrawal, some prisoners continued to take part in the methadone programmes out of fear of HIV infection.

"A doctor said it is difficult to stop with methadone and told me it was better to resist the symptoms rather than being a methadone addict, but I do not mind because I cannot stand experiencing the heroin withdrawal symptoms over and over again and I am afraid of getting the disease (HIV) here” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

Fear of death
One perception, voiced by the majority of prisoners in both methadone prisons, was the belief that methadone withdrawal can result in death. A prisoner from the narcotics methadone prison described: “Nine out of 10 prisoners would encourage us to stop attending the programme and warn about painful methadone withdrawal symptoms that lead to death” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

This belief stems from either personal or others experience of seeing prisoners, friends and relatives die. Indeed, most of the prisoners, whether they were taking methadone or not, expressed concern about dying from methadone.

“One of the prisoners died the following day after taking methadone, and that traumatised me. Most of my friends who come together to this prison have died in this prison because of that methadone. All of them died here. Thanks to God I am still alive (because I do not take methadone)” (Narcotics methadone prison, Non-methadone prisoner, early 30’s)

While many prisoners thought methadone was the cause. Some attributed death to an underlying disease:

“If our bodies are healthy while withdrawing, we will be fine, but if our bodies are weak because having some kind of diseases while withdrawing then we might die” (Narcotics methadone prison, Methadone-prisoner, early 40’s)
Healthcare staff from the narcotics methadone prison also indicated that HIV was often the underlying cause of death: "I think many methadone patients die because of their opportunistic infections related to HIV, so it is not because they take methadone" (Narcotics methadone prison, Healthcare staff, male, mid 30’s)

The sight of corpses in the clinic corridor in the narcotics methadone prison and the emotional reactions of bereaved family members, heightened fears however. A methadone-prisoner described a traumatic scene:

“I feel afraid because I have seen too many dead bodies. It frightened me. You know that it was like yesterday, they put the deceased outside (in the clinic corridor), so we could see him, and his relatives came and how they reacted on to that. I do not know how to describe my feelings at that time” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

Apparently, the corpse was that of an HIV patient who had been hospitalised in the clinic treatment room. The staff who were less considerate of prisoners’ experience of seeing this, had moved the corpse to the corridor to be taken by his family member since the prison has no specific room for placing corpses. A non-methadone prisoner also described how tannoy announcements might evoke fear:

“Did you ever hear how the reminder is? Calling all methadone patients, attention all methadone patients. Please come to the clinic. There is a sentence like ‘those who do not must accept all responsibility’ or something like that. Those sentences create a feeling of fear; you take all the risks that might include death” (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

4.3.4. Multiple burdens of stigma for methadone prisoners

It appeared that levels of perceived stigma relating to HIV were high, and those with HIV experienced greater discrimination both from prisoners and prison staff in all three prisons. Many methadone prisoners reported the impact of multiple burdens of stigma on their participation in methadone programmes and on the common perceptions that they are also HIV-positive prisoners.
A lack of confidentiality in delivering the programmes

Prisoners in both methadone prisons expressed concerns about a lack of confidentiality linked to their attendance at the methadone clinic at the weekend. At the weekend, other prisoners were locked up, and therefore a prisoner who passed the security post to access the clinic was likely to be a methadone-prisoner.

For some prisoners, the fears of being identified as methadone-prisoners stemmed from a specific methadone uniform. The uniform was intended to inspire a feeling of togetherness, and they were free to choose either to wear the methadone or the prison uniform. However, they had to wear the methadone uniform when their prison uniform was being washed, since every prisoner was given only one prison uniform during their period of imprisonment. Although there was a fear among prisoners of being recognised as a methadone participant, many prison officers believed that the methadone uniform could help them to recognise those who need access to the methadone clinic:

"It is important for methadone participants to use their uniform, so we can differentiate with non-methadone prisoners for security reasons. So, we (prison officers) will open the gates and they can access the methadone clinic" (Narcotics methadone prison, Prison officer, mid 40's)

The identity of the methadone-prisoners can also be revealed from the size of their medical records. A non-methadone prisoner from the narcotics methadone prison described: “People can spot the difference from their records… a methadone-prisoner has a big medical record while others have small ones” (Narcotics methadone prison, Non-methadone prisoner, early 40’s)

In the general methadone prison, the methadone clinic was located altogether with the staff room, while in the narcotics methadone prison the methadone clinic was located in a single long corridor consisting of other health sections. A methadone-prisoner from the narcotics methadone prison raised the issue of clinic location, and he also offered a solution.

" I felt very uncomfortable when my friends who are from the same village saw me in that methadone clinic. I think they should locate the methadone clinic at
the end of corridor” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

One healthcare staff from the general methadone prison, who recognised the issue of stigma for methadone participations, commented:

"I know the methadone clinic should be in a separate place, and the recent clinic arrangement might make the prisoner uncomfortable, but we have no other space" (General methadone prison, Healthcare staff, female, mid 30’s)

However, many healthcare staff believed that concerns about disclosing status was attributed to the presumption of an HIV-positive status and not to their methadone status.

"I think the methadone-prisoners do not mind even when we have no private clinic, but I think it might be that some of HIV patients do not want to be known as HIV-patients. I know that some of them were not ready to disclose their (HIV) status" (Narcotics methadone prison, Doctor, female)

Negative perceptions of people in the programmes

Methadone participants were perceived by prisoners and prison staff as the kind of people who were similar to those taking an illicit drug. They were also seen poor, and they were HIV-positive, as indicated by a non-methadone prisoner from the general methadone prison:

"I think cameras highlight that kind of people (methadone-prisoners). There are cameras (CCTV) here (the clinic) and throughout the prison. It is easy to identify them as they are lethargic. I am afraid of being misidentified as a drunk person and involved in illegal drugs and then of getting punished by the prison authority” (General methadone prison, Non-methadone prisoner, late 20’s)

Non-methadone prisoners from the general non-methadone prison also said:

“Drug dealers and those (drug users) who have money would not take methadone; methadone is only for prisoners who have no financial support from their family” (General non-methadone prison, Non-methadone prisoner, early 30’s)

"There is some stigma towards people who are injecting drugs in the prison - they are a dirty people and a source of disease. So fellow prisoners and
prison staff think those prisoners in the methadone programmes are HIV-positive prisoners" (General non-methadone prison, Non-methadone prisoner, late 30’s)

In contrast with the stereotyped beliefs about all the methadone-prisoners being HIV-positive, a methadone-prisoner from the narcotics methadone prison described: “People point out that methadone-prisoners were HIV-positive people, even though not all methadone-prisoners have HIV infection” (Narcotics methadone prison, Methadone-prisoner, early 40’s).

Many prisoners reported high levels of stigma and discrimination in prisons associated with a lack of education and awareness about HIV prevention, as indicated by one non-methadone prisoner: “I think stigma is a normal thing in the prison and everywhere, I think because people do not know what HIV is and how it could be transmitted” (General non-methadone prison, Non-methadone prisoner, late 30’s)

Many methadone prisoners described their experience of stigma from healthcare staff at the methadone clinic. Methadone-prisoners from the general methadone prison said:

"All the healthcare staff must have known our HIV status, so when we stand in the clinic corridor waiting for the methadone, they walk cautiously because they feel disgusted being close to us. I think it was not a good example from the healthcare staff to others, so the prison officers also acted like that" (General methadone prison, Methadone-prisoner, early 30’s)

In contrast to prisoners, some healthcare staff from the general methadone prison believed that such actions were justified and not discriminatory: "I do not think there is a discrimination problem. It is just the matter of health concerns. Their hygiene was lacking so we liked to stay away from them" (General methadone prison, Doctor, male)

The consequences of stigma may prevent the prisoners from seeking treatment (ART) and support (counselling) even when they were severely ill as one non-methadone prisoner from the narcotics methadone prison put it:
”I am HIV-positive and thus have made my family ashamed. I even get deeply involved in drugs here because I cannot step back, and I have lost hope. So, it is no point looking for help here” (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

The effects of stigma can sometimes lead to mental health problems and suicide. A methadone-prisoner from the narcotics methadone prison explained:

"Having the disease (HIV), he was being ostracised, separated, and mocked. This is common practice, but not everyone can handle those attitudes. You know that some people turned to depression and chose to commit suicide here" (Narcotics methadone prison, Methadone-prisoner, early 40’s)

However, rather than addressing the issues of stigma, some prison staff suggested that HIV-positive prisoners should be segregated:

"I think if we find HIV-positive prisoners we should separate them, but the doctors said HIV-positive prisoners could not be separated. Honestly, if I have space, I will separate them, but according to the law, it is not allowed" (Prison governor)

Regardless of concerns about their experiences of stigma, some of methadone prisoners used the fear of getting HIV infection among some prison officers as a way of hindering security procedures. A methadone-prisoner from the narcotics methadone prison described:

“I just pretended to use a mask and to cough, so they did not enter our cell. Mobile phones and that sort kind of thing were possessed by most of the people here. Once they wanted to take our rice cooker, but we said, ‘sorry sir, it belongs to the methadone-prisoners, and we are all sick here’. Thus, they took others' rice cookers, but they gave us ours back. You must already have known that kind of discrimination here” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

4.3.5. Measuring of success

In the community, measuring the success of methadone programmes is based on the percentage of participants who have a positive opiates drug test, which is less than 30% and on improving the participants’ health status (Ministry of Health Indonesia 2008). The healthcare staff in the two prisons with methadone programmes used urine testing to measure the success of the programmes. In
addition to the urine testing, prison staff and prisoners in both methadone prisons talked about success in terms of self-care and behavioural measurements such as improving their hygiene, showing respect to staff and participating in prison programmes.

In the narcotics methadone prison, success was based on the absence of heroin, even when prisoners attending the programme tested positive to other illicit drugs.

“We carried out urine drugs tests to assess methadone-prisoners for heroin. Even though not all the prisoners showed negative urine test for all drugs, all of them showed negative urine test for heroin” (Narcotics methadone prison, Doctor, female)

In contrast, many healthcare staff in the general methadone prison felt that their programme had failed as drug testing indicated a positive result for almost methadone participants. A member of the healthcare staff noted:

"I think the programme has not succeeded here, and the indication was that every urine test on all methadone-prisoners was positive for heroin. Last year, 16 out of 17 patients were positive from more than one type of drug, including heroin" (General methadone prison, Healthcare staff, female, mid 30’s)

The same staff member linked the failure of the programme partly to a lack of a role for the Directorate of Corrections in monitoring and evaluating the programme, while at the same time the role in monitoring of the core hospital was stopped.

"The representatives of the core hospital used to come every three months to evaluate the programme that is why the outcome of the programme was good, but since their funding was stopped in 2012, they hardly come. We have a problem with the report now. I hope the Directorate can sufficiently monitor the programmes” (General methadone prison, Healthcare staff, female, mid 30’s)

Despite their role in protecting and guiding prisoners, some prison staff held stereotypical beliefs about methadone-prisoners' behaviour such as persistent drug-seeking behaviour. This might have undermined the prisoners' chances of recovering. These staff members were also uncertain about what level of improvement might be expected from the methadone-prisoners. Some non-
methadone prisoners and prison staff believed that the methadone-prisoners have pathetic personalities and were unhygienic; therefore, they felt the programmes were unsuccessful: "I think they were similar though, whether they are in the programmes or not. We should be aware that drug addicts will always look for drugs here" (Prison governor)

"The speaker from X organisation said the people who are involved in drugs will find it difficult to recover since the drugs have damaged their brain, so even people who take methadone will at some point return to drugs again" (Prison governor)

"I think the methadone-prisoners are lazy. They do not want to do anything even a small thing like taking care of themselves. They are dirty, and it seems they never take a shower" (Narcotics methadone prison, Prison officer, late 20s)

In contrast, some prison officers and prisoners in the two prisons with methadone programmes also believed the programmes had resulted in some improvements. One prison officer from the narcotics methadone prison put it: "The methadone-prisoners are more able to take care of themselves, I can see their bodies are cleaner compared to other drug using prisoners" (Narcotics methadone prison, Prison officer, early 20's)

A prisoner from the general methadone prison described: "I think heroin users who are not in the programmes are lazy, but we (methadone-prisoners) still can take care of ourselves by taking a bath and eating" (general methadone prison, Methadone-prisoner, 20s)

4.4. Chapter summary

Many prison staff in all three prisons including some healthcare staff in the general non-methadone prison thought that the risk of HIV transmission was low which was mainly attributed to perceptions of a low level of heroin availability and of low numbers of injecting heroin users. This was not consistent with prisoners' perceptions that heroin remained widely available and that there were a large number of people who injected drugs in the study prisons. Although other risk behaviours such as tattooing were sometimes recognised, the idea that there was
sexual transmission was often rejected. Many prison staff believed the provision of NSPs would conflict with the Ministry’s drug strategy which focused on reducing availability of illicit drugs in prisons while issuing condoms in the prison settings conflicted with Indonesian social norms and supported same-sex relationships.

There were different levels of understanding about the role of methadone programmes as part of a harm reduction strategy; methadone was commonly regarded as simply another form of illegal drug among all groups of participants in all three prisons. This influenced the low priority accorded to the implementation of methadone programmes in the general non-methadone prison.

Non-compliance with the methadone programmes was mainly linked to methadone diversion or to a positive heroin urine test and a range of sanctions such as a fine, withholding methadone or denying access to the parole programmes might be applied, although these were not consistently applied within the same programme or between prisons.

The majority of prisoners in all three prisons expressed fear of methadone withdrawal which was thought to be severe and could in some cases result in death. The fear was influenced by several factors including the perception that methadone use resulted in higher dependency, a lack of treatment support for methadone withdrawal from prison staff, and a lack of methadone access. These fears were also affected by the negative message received from healthcare staff and the influence of family members. The fear of death, linked to the severity of methadone withdrawal and the experience of seeing death in prisons, was mentioned by prisoners in both methadone prisons, particularly in the narcotics methadone prison.

Many methadone prisoners reported experiencing a high level of stigma as a result of their treatment by prison staff and prisoners. This was related their participation in the prison methadone programme and their HIV-positive status. Difficulties in maintaining privacy in prison settings fuelled the stigmatisation of prisoners participating in the programmes. Methadone participants were often associated with drug use, poor and HIV prisoners. Fear of stigma potentially discouraged prisoner participation and compromised prisoner access to both HIV and methadone
programmes. However, the healthcare staff in the narcotics methadone prison believed there was less stigma associated with a prisoner’s methadone status compared to HIV positive status. In contrast with prisoners, healthcare staff in the general methadone prison reported their concern about a lack of methadone prisoners’ hygiene rather than their health status (HIV or methadone status).

Many healthcare staff particularly in the general methadone prison indicated the methadone programmes were failing following the high number of methadone prisoners with a positive heroin urine test. Although all groups of participants recognised the perceived benefits of the methadone programmes, many prison staff and non-methadone prisoners considered the programmes had failed since they expected immediate behavioural changes including abstinence from illicit drug use rather than measuring outcomes on the basis of methadone-prisoners’ more achievable aims such as improving their hygiene and taking into account the limited resources available in the prison environment.
CHAPTER 5: PERCEPTIONS AND EXPERIENCES OF THE DELIVERY OF THE METHADONE AND HIV PROGRAMMES

5.1. Introduction

Chapter 4 analysed participants’ understandings of the risk of HIV transmission and their perceptions and experiences of the methadone programmes. This chapter begins with a discussion of aspects of the delivery of the methadone programmes by the healthcare staff including admission criteria, assessment processes, methadone prescribing regimen, and methadone dispensing practices, and how prisoners perceived these practices and problems associated with them. The policy context for each of these aspects is provided to understand the practices of the programmes. This is followed by a discussion of the delivery of HIV services in the prisons studied.

5.2. Methadone programmes in practice

5.2.1. Admission criteria

The National Prison Guidelines used the ICD-10 classification of opioid dependence and set out criteria for entry into methadone programmes. Applicants must be: 18 years or older; have been opioid-dependent for a minimum of six months; must have at least three months of their sentence left to serve. Prisoners are excluded if they have mental health problems or severe health problems (Ministry of Justice Indonesia 2007).

However, the inclusion of a requirement of opioid dependence for a minimum of six months on admission makes it difficult for prisoners as they may have spent a period in a police cell, or detention. This, together with additional waiting times for health screening in prison can result in enforced abstinence from heroin during that period. In response to this, in the general methadone prison, all prisoners were included on admission regardless of their heroin-free period. However, in the narcotics methadone prison, prisoners who reported that they had been heroin-free for more than three months were ineligible to qualify for admission since the healthcare staff
thought they had fully recovered from drugs dependence, although there was some flexibility in the application of this criterion. A member of the healthcare staff from the narcotics methadone prison described this flexibility in its application:

"If they have stopped taking heroin for around three months and then they ask to join the methadone programmes, I would encourage them to continue not taking heroin and say they had no need to take methadone, but if they said that they had just stopped a month ago then I would give them methadone" (Narcotics methadone prison, Doctor, female)

In the narcotics methadone prison, one additional criterion needed to be satisfied for entry into the programmes; this was family consent. The guidelines described that information about the methadone programmes could also be given to a prisoner's family members to allow for better understanding of the programmes, since the members were also expected to provide support. In particular, in the referral process back to community-based treatment, families have to accept responsibility for take-home doses before the prisoner can access a methadone programme in the community. The guidelines also suggest that a representative of NGOs could replace family members in the referral process. However, in practice, the role of family members in the programmes has been translated into a requirement for family consent in the narcotics methadone prison. Most of the healthcare staff in the narcotics methadone prison also required family consent to help prisoners to complete methadone programmes in prison.

"We are afraid the methadone-prisoners will misuse the methadone. We believed that the requirement of consent makes them more responsible throughout the programmes since their family is also involved in this to supervision" (Narcotics methadone prison, Healthcare staff, male, mid 30’s)

Some flexibility in the consent requirement was also given for specific types of prisoners: “If their sentencing period is less than one year, we can give them methadone without family consent. Our prediction is they can finish their methadone dose here” (Narcotics methadone prison, Doctor, female)
A member of staff who did not consider that a representative from an NGO could substitute for family in assisting prisoners to access the programmes on release said:

"The prisoners who bring their family members to consent convince us that they could continue their methadone on release since the community hospital also asks for family consent. We give the family member a reference letter for the community hospital altogether with take-home dose for weekends on release" (Narcotics methadone prison, Healthcare staff, female, early 30's)

However, many prisoners attributed the requirement for family consent as a way of avoiding legal liability.

"The doctors asked to meet family of the methadone applicants because the doctors were afraid that something bad might happen to them (methadone patients), so their family need to be aware of their condition" (Narcotics methadone prison, Non-methadone prisoner, late 30's)

The requirement for family consent could also have some negative consequences and potentially act as a barrier to enrolment on the programmes. Some prisoners had difficulty in contacting their family members, while others were afraid of revealing their HIV and heroin use status: “It is an obligation to bring our family member here if we want to join the programmes, but this is hard since we are unable to contact them” (Narcotics methadone prison, Non-methadone prisoner, late 20's)

“They do not want their family members to know they are taking heroin. You know that they will think you are sick (HIV). They (my family) only knew I sold drugs other than heroin" (Narcotics methadone prison, Non-methadone prisoner, early 30's)

Similarly, a member of healthcare staff from the general methadone prison also recognised the problem of contacting family members.

“We need more flexible regulation in the methadone programmes. If they are rejected for the programmes because of lack of family consent, then they become more deeply involved in drugs, that would cause harm for other prisoners” (General methadone prison, Doctor, male)

A prisoner from the narcotics methadone prison who used to work for an NGO offered a solution:
"It is hoped that an NGO representative could take the family's role and sign the consent, so many of the prisoners could join the methadone programmes, and that those NGOs could also assist the prisoners to take their take-home doses later on. This practice has been applied in the community hospital" (Narcotics methadone prison, Methadone-prisoner, early 30’s)

5.2.2. Assessment processes

In Indonesian prisons, when prisoners enter prison for the first time either from police custody or after sentencing, they are assessed by prison officers for general screening, including health screening. Those who need immediate health care are directly referred to the prison clinic. Prisoners are then placed in the orientation unit for about one month, where they are introduced to the prison rules before being moved to the general units.

The healthcare staff are expected to complete this general health assessment during this orientation period. However, healthcare staff often did not have contact with heroin dependent prisoners during this period. At the general health assessment on entry to prison, prisoners identified as heroin users are informed about the methadone programmes and those who expressed interest were referred to be assessed by a doctor responsible for the programmes. The assessment process for the referral prisoners could be directly conducted following the referral; however, because of restricted access to the orientation unit and the lack of staff (see section 6.3.3), the assessment is likely to be carried out after they have moved in the general unit. Prisoners could also refer themselves to the clinic after they are moved from the orientation unit to the general units.

The standard assessment for entry onto methadone programmes is conducted by a doctor who assesses the medical status of patients to determine their level of opioid dependence and any related risk behaviours. The assessment typically involves interviews, and a physical examination to identify opioid use through the presence of heroin withdrawal symptoms and/or track marks, as well as a positive urine test. A positive urine test was regarded as validation of opioid dependence.
Although some healthcare staff indicated that they considered risk behaviours in their assessment, in practice priority was given to prisoners with positive drug tests in both prisons with methadone programmes.

“We prioritised the prisoners with a positive urine test result. We could not give methadone to those with the negative result since we supposed that they had been clean, so it is pointless to give it to those people” (General methadone prison, Doctor, male)

Paradoxically, this could have the effect of increasing the use of illicit drugs in prison. As one prisoner from the narcotics methadone prison explained:

"The effects of illegal drugs disappear after 3-4 days, so if you want to join methadone programmes then you should take heroin every 1-2 days before visiting a doctor" (Narcotics methadone prison, Methadone-prisoner, mid 30’s)

Many prisoners in both methadone prisons felt that the assessment practices which included sensitive questions on risk behaviours and urine drug testing during the programmes would be reported to the prison authorities. Some prisoners believed that omitting the sensitive questions and urine drug testing would encourage many prisoners to apply to the programmes:

"Healthcare staff used to ask prisoner applicants when they took drugs for the last time and they were frightened. I told them do not be afraid that they would not report to prison authorities" (General methadone prison, Methadone-prisoner, late 30’s)

"I think many people would join methadone programmes if there was no urine test requirement" (Narcotics methadone prison, Non-methadone prisoner, early 30’s)

Although the purpose of the assessment is to validate patients' dependence on opioid, many prisoners particularly in the general methadone prison, thought that the assessment process failed to identify prisoners with opioid dependence accurately.

"I think the healthcare staff should explore more carefully what a prisoner's intentions are when joining the programmes. Do not let those kinds of prisoners who did not use heroin to join methadone. The staff seemed just to agree because they did not care what will happen to us (methadone patients). The potential participants should be selected carefully, for example, the staff
just asked us very quickly, just asked our name and identity” (General methadone prison, Methadone-prisoner, early 30’s)

There was also concern about the quality of information provided about methadone at assessment and then a lack of follow up for prisoners referred by the healthcare staff.

“A healthcare member staff asked how long I have been using heroin, but just that, nothing more. He did not explain anything about methadone adverse effects. So, I am surprised with what is happening to me (experiencing methadone physical adverse effects) and I want to quit taking methadone” (General methadone prison, Methadone-prisoner, early 30’s)

"It was a complicated process to join the programmes here. I told a nurse that I did methadone while I was in detention, but I did not have any reference letter (from the detention centre). I did not understand what kind of letter she expected. So, she said ‘OK it is fine and just waited then we will call you’ but I never got the confirmation” (General methadone prison, Non-methadone prisoner, mid 20’s)

The assessment process provides an opportunity to explain the detail of the programmes to prisoners. However, although in the narcotics methadone prison many healthcare staff recognised the importance of providing information to prisoners, many prisoners in this prison believed that the messages they received from the staff focused on reinforcing the severity of methadone withdrawal symptoms. Indeed, a healthcare staff member described:

“In the assessment process, we also told prisoners that methadone withdrawal is more severe than heroin withdrawal, so they are aware of the methadone withdrawal effects later, so they do not regret the decision to join the methadone” (Narcotics methadone prison, Healthcare staff, female, early 30’s)

5.2.3. Methadone prescribing regime

Evidence suggests that a combination of some antiretroviral therapies with methadone results in a reduction in methadone plasma concentration by more than half. Therefore, this drug combination results in methadone withdrawal symptoms and increases the methadone dose required (Clarke et al. 2001).
It emerged that there were difficulties in prescribing methadone since there was a lack protocol for therapeutic methadone doses within prison guidelines and that there was a lack of additional protocols relating to particular medical conditions, such as for prisoners who take antiretroviral therapy (ART) alongside methadone. Many prisoners with these conditions indicated a significant degree of tolerance to methadone, therefore some doctors adapted their prescription to take account of these conditions. A prisoner from the narcotics methadone prison illustrates the point:

"My initial dose was 20 mg and now is getting higher to 110 mg because I take ART. Whenever I felt my body was not right, my dose increased 5 mg each day until my body felt better. The doctor allowed me to increase the dose every day" (Narcotics methadone prison, Methadone-prisoner, early 30’s)

The different approaches to prescribing methadone resulted in a wide variation in the doses given to prisoners with specific health conditions in the two prisons with methadone programmes. Data collected from medical case records indicated that the average dose across all prisoners was high in the narcotics methadone prison (114 mg/day) while in the general methadone prison the average dose across all prisoners was much lower (47 mg/day).

The combination of prescribed medications increases the complexity of management of methadone-prisoners including raising clinical problems in treatment. One of healthcare staff also suggested that these differences (average methadone dose) could be a failure of services to respond to signs of the need to adjust the dose.

"12 out of 17 methadone patients were also HIV-infected patients, so a doctor should know that their methadone dose would need to increase but the doctors were hesitant to increase their dose. Some patients have already complained of some adverse effects either from ART or methadone. So, I think that the doctor does not want to bring more problems by having that kind of prisoner (prisoners who take methadone and ART)" (General methadone prison, Healthcare staff, female, mid 30’s)

In response, some prisoners from the general methadone prison with health conditions such as TB or HIV infection adopted strategies to deal with the situation, as one prisoner from the general methadone prison explained:
"I am on TB drugs and ART, so most of the time I felt methadone withdrawal effects. I should wait until another five days to increase my dose, but I cannot wait too long. Fortunately, some of the doctors are good, but some are not. So, when I want to increase my dose, I will wait until that good doctor is in charge" (General methadone prison, Methadone-prisoner, late 30’s)

Apart from particular health conditions, the decision to increase the methadone dose for a prisoner often related to concerns about them taking illicit drugs after their prison methadone regime finished. As one prisoner from the general methadone prison put it:

"I miscalculated my release date. Although I felt fine with a 40 mg dose, I was afraid I would retake heroin if I stayed here. That was why I increased my dose to 50 mg “(General methadone prison, Methadone-prisoner, mid 30’s)

However, the drive to be drug-free on release was almost universal in both prisons with methadone programmes, therefore doses were tapered so that prisoners would be methadone-free by their release dates. Another prisoner described: “I want my methadone regime to be over on my release date” (General methadone prison, Methadone-prisoner, mid 30’s)

The aim of coming off methadone by their release date was linked to a lack of access to methadone in the community. A methadone-prisoner from the narcotics methadone prison emphasised the point:

“No way would I go for methadone treatment in the community hospital. There are some problems if I go for methadone treatment outside. I could not go anywhere even when I insisted on celebrating a religious festival out of town because it is not easy to get the methadone in another town” (Narcotics methadone prison, Methadone-prisoner, mid 30’s)

Concern about methadone withdrawal and the need to increase methadone dose for prisoners with specific health conditions in both prisons with methadone programmes explained why those prisoners continued taking illegal drugs while on a low methadone dose. However, some prisoners failed to consider the potential danger to other prisoners of exposure to HIV. A prisoner from the general methadone prison illustrates the point:
"When I am on ART, I will do anything to maintain a low methadone dose by taking other drugs. I do not want to increase my dose like everybody did. In fact, I want to reduce my dosage to zero. I am frightened of death like what happened to others if my dose is increased, but I do not worry about other things (sharing needle) since I am already HIV-positive" (General methadone prison, Methadone-prisoner, early 30's)

Similarly, such concerns also led some prisoners to consider ART to be less of a priority than taking methadone. A prisoner from the narcotics methadone prison illustrates this point:

“If I am on both methadone and ART, I would experience methadone withdrawal symptoms because I would need a higher methadone dose. Personally, I would not take that kind of risk, and would not take ART. While methadone is a must for me so what I can do is postpone ART until everything is fine" (Narcotics methadone prison, Methadone-prisoner, early 40's)

While reducing their methadone dose was not a concern for many prisoners in the general methadone prison, the majority of prisoners in the narcotics methadone prison felt subject to scrutiny if they wished theirs to be reduced. As one prisoner explained:

“If you want to reduce your dose, a doctor will question you and take a urine test because you are suspected of mixing methadone with other illicit drugs” (Narcotics methadone prison, Methadone-prisoner, early 30's)

5.2.4. Dispensing practices

Two healthcare staff members (nurses) in both prisons with methadone programmes were responsible for the dispensing of methadone with the support of other healthcare staff. Their role in dispensing was secondary to their primary role in the clinic. This affected the opening times of the methadone clinic in both methadone prisons.

In the general methadone prison, the clinic would usually open at 8.30 am or 9 am and finish about 30 minutes later. In the narcotics methadone prison, despite the clinic opening times being given on a sign on the wall as 9 am to 11 am, the clinic
would usually open at 10 am. In both prisons, for safety reasons, the dispenser would not stay at the clinic until the closing time. Instead the staff required all methadone patients to be gathered together before dispensing started. As a doctor from the General prison explained:

“The methadone bottle should be secured in a private place. If the nurse is putting it in and out of the cupboard for each prisoner coming to the clinic, it (the bottle) might be broken so we required them (prisoners) to be gathered. If a bottle is broken it would be a hassle for us since we have to send an official letter to explain the accident to the core hospital” (General methadone prison, Doctor, male)

Most of the methadone-prisoners in the general methadone prison had concerns about the early 8.30 clinic opening times: “My friend did not get methadone because he overslept and then found that the clinic was already closed” (General methadone prison, Non-methadone prisoner, mid 20’s)

In contrast, in the narcotics methadone prison, the methadone-prisoners expressed concern at the late 10 am opening times, especially for those who had different health needs, for example, prisoners who had HIV or TB. “I hope the opening hours can be moved earlier to 8.30 or 9 am. I am also taking ART so when I wake up, I feel pains” (Narcotics methadone prison, Methadone-prisoner, early 30’s)

Late opening times at weekends were of concern for prisoners from both the prisons with methadone programmes. A methadone-prisoner from the general methadone prison described: "At the weekends, the healthcare staff are often late, so the methadone clinic opens at 11 am instead of 9 am" (General methadone prison, Methadone-prisoner, mid 20’s)

Mostly this was not recognised as a problem, but one member of the healthcare staff from the general methadone prison thought this might explain the low number of participants in the programmes.

"We can see that most of the methadone participants were the referred patients from methadone programmes in detention centres, only a few of the patients were originally from this prison. I do not know whether the issues are in the opening times, staff attitudes or something else" (General methadone prison, Healthcare staff, female, early 30’s)
Concern about daily attendance at the clinic was described both by prisoners who had decided not to join the programmes and methadone-prisoners. A prisoner from the general methadone prison raised two issues: boredom and the need to raise income:

"I felt bored at having to come to the clinic every day and to wait longer before all getting together to get the methadone. I am a recidivist, and no one supports me financially. I have to focus on generating income as well" (General methadone prison, Methadone-prisoner, early 30's)

Many methadone-prisoners were critical that while the dispensing practices were not organised around their needs, there were still consequences if they came late, which included carrying out unpleasant menial tasks, delaying their methadone, and urine drug testing. Prisoners from the general methadone prison described

"We should come at 09.00 am sharp. If we came at 09.01, we were told to clean the toilets. I do not know why the clinic opens at 9 am. Sometimes if we were late the staff had gone" (General methadone prison, Methadone-prisoner, early 30's)

“Their methadone was given in the afternoon as a punishment, so the methadone-prisoners could feel the withdrawal symptoms first before getting their methadone dose” (General methadone prison, Methadone-prisoner, mid 30’s)

Another methadone-prisoner from the narcotics methadone prison recounted:

“Once we came late, my friend was questioned and threatened his urine would be tested. I was afraid, so I just turned around and returned to my cell, and I chose not to take methadone that day" (Narcotics methadone prison, Methadone-prisoner, early 30's)

5.3. Delivery of HIV services

The theme of HIV treatment also emerged, particularly in the general non-methadone prison. Many prisoners were concerned about a lack of confidentiality within the service. This section also discusses the challenges faced by both the staff and prisoners in HIV services delivery regarding HIV testing, ART prescribing, uptake, and adherence.
Since 2010, the standard practice of HIV-testing in all three prisons is based on Provider-Initiated HIV Testing and Counselling (PITC). This approach is considered beneficial in prison settings as it increases the number of prisoners screened and therefore the number of HIV-positive prisoners identified. The healthcare staff conduct the PITC test during the general health assessment on entry to prison or while the prisoners are in the orientation unit. Prisoners who refuse to take part in the PITC can later refer themselves to the clinic to get an HIV Voluntary, Counselling, and Testing (VCT) after they are removed to the general unit. However, prisoners who had experience of being tested recognised a lack of confidentiality:

"It is easy to know whether a prisoner is HIV-positive or not here. If prisoners enter that room, they must be going to get their HIV test result. So eventually, we will know their result sooner or later" (General methadone prison, Methadone-prisoner, early 30’s)

These conditions led some prisoners to refuse to be tested, as one prisoner from the general methadone prison put it: “I did not take my HIV-test because I was afraid of the result and what people’s reactions to me might be if I am positive” (General methadone prison, Non-methadone prisoner, mid 30’s)

Prisoners’ adherence to ART is an essential aspect of effective HIV/AIDS treatment. However, it appeared that adherence is low across all three prisons. Prisoners linked this to structural factors such as the difficulties posed by daily clinic attendance, the HIV clinic opening times and the lack of information.

The practice of prescribing ART differed between healthcare staff across all three prisons. Some healthcare staff in the general methadone prison prescribed ART only to those prisoners with CD4 cell counts of less than 350 cells/mm3, which followed the 2011 MOH guidelines. In contrast, the narcotics methadone prison and the general methadone-non-prison followed the recent guidelines from MOH and would give the ART as soon as prisoners received a positive HIV test regardless of their CD4 cell count (Ministry of Health Indonesia 2013). There were also different beliefs among the HIV prisoners about when to start taking ART, as one healthcare staff member from the general non-methadone prison emphasised: "Many of HIV-prisoners are in the early stage of HIV, thus they think they are still healthy and have
no need to take medication yet" (General non-methadone prison, Healthcare staff, female, mid 30's)

The problem of low ART-uptake was associated with a lack of awareness of the risks of HIV transmission. A prisoner from the general methadone prison described:

"It is difficult to ask prisoners to take ART because many of them are denying their HIV status. I do not want to argue with them even though I know many ways to get drugs here and they forget that they had rented the needles from me" (General methadone prison, Methadone-prisoner, early 30's)

Many prisoners also linked the low uptake with concerns about ART adverse effects, lack of confidentiality, and lack of drug treatment options. Prisoners from the general non-methadone prison described: "I am not ready to take ART because of the severe drug side effects, and I do not want to be seen in the clinic" (General non-methadone prison, Non-methadone prisoner, early 30's)

“I don’t want to take ART here because they will give the same kind of ART to all prisoners” (General non-methadone prison, Non-methadone prisoner, late 30’s)

Another prisoner described a message received from the healthcare staff about negative effects of HIV medication contributed to the low uptake:

"When I got opportunistic infections, the doctor said you should take ART and emphasised this is a lifetime-medication and should not be interrupted otherwise I will have severe health consequences. That kind of negative messages (a lifetime-medication and the severe health consequences) made me rethink taking ART since it can make my illness worse (from the severe health consequences of stopping taking ART)” (General non-methadone prison, Non-methadone prisoner, late 20's)

Other institutions also expressed concerns about the low uptake of ART in prisons. However, instead of considering prisoners’ explanations as discussed above such as prisoners who denied their HIV-positive status or who were afraid of the side effects of ART, a healthcare staff member from the general methadone prison reported that:

"The representatives of the MOH in the district office questioned the ART coverage that only reached 30 out of 100 HIV-patients. They blamed us for the low coverage" (General methadone prison, Healthcare staff, female, mid 30's)
Although ART commonly was given on a daily basis, there was some flexibility in the general methadone prison for prisoners who had adhered to the medication for an extended period. These prisoners could receive ART weekly or monthly. In general, however, concern about the daily clinic attendance in all three prisons was raised by many prisoners, as one from the general non-methadone prison highlighted: “We should come to take ART every day. I wish I could take it weekly” (General non-methadone prison, Non-methadone prisoner, late 20’s)

In the general non-methadone prison, there was also concern about the inconsistency of the HIV clinic opening times. A prisoner from the general non-methadone prison described: “Sometimes they change the opening of the HIV clinic from Tuesday to Wednesday, so we often miss it” (General non-methadone prison, Non-methadone prisoner, early 30’s).

Concern about a lack of information about how to take their ART was also raised, in particular in the general non-methadone prison. A prisoner described:

"The doctor just said that I should take medicine at the same time every day, so when I missed the time, I did not take my medicine anymore. I never confirmed what the doctor meant because there is not enough time to ask. Then I got the information from an NGO representative that I can continue even if I missed the exact time to take my medication, so I continue my ART now” (General non-methadone prison, Non-methadone prisoner, early 30’s)

Like the prisoners, the healthcare staff also linked the lack of adherence to medication to structural factors. For example, concern about a lack of supervision was highlighted by healthcare staff from the general methadone prison:

"I do not know what happens with their ART inside the unit. I want them taking ART with staff supervision, but we could not do that since we have so few staff. They used to take ART regularly but then disappeared within 1-2 months, but if I remembered I would call them to take their ART” (General methadone prison, Healthcare staff, female, mid 30's)

Another member of staff from the general non-methadone prison also expressed her concern about time constraints: "Every Wednesday the HIV-patients come to the clinic, and we feel rushed while checking them because there is a long queue of prisoners” (General non-methadone prison, Doctor, female)
5.4. Chapter summary

Many prisoners though that some of the practices of the methadone programmes discouraged prisoner participation and that programme practices did not accommodate methadone participants’ needs. Overall, there were four main issues in the implementation of the methadone programmes; admission criteria, assessment process, dose titration, and dispensing practice.

The methadone prisons differed in their admission criteria. While the general methadone prison had no specific requirement for family consent or for a heroin-free period, the narcotics methadone prison required both family consent and a minimum of three months heroin-free. Many prisoners could not meet these criteria because of difficulties in getting family support and the consequences of revealing their HIV status to family members. The restrictive criteria for admission might also cause those who are ineligible to relapse, leading them to take illicit drugs and therefore increasing the risk of HIV transmission.

In both prisons, a positive drug test at assessment could lead to increased use of illegal drugs to meet the programme entry criteria. Many prisoners also felt that the assessment process which included sensitive questions on risk behaviours and urine drug testing might result in their heroin use being revealed to the prison authorities. In addition, many prisoners, particularly those in the general methadone prison, expressed concerns about the lack of accuracy in identifying opioid-dependent prisoners, the quality of information provided, the lack of follow up for referred prisoners, and the discouraging messages they received from healthcare staff. The latter point related primarily to the narcotics methadone prison.

Methadone prescribing practices differed between the methadone prisons, resulting in a much higher average dose for some prisoners in the narcotics methadone prison compared to those in the general methadone prison. This was caused by the absence of an explicit protocol for therapeutic doses in the national prison guidelines, particularly in relation to co-infection with HIV. Some healthcare staff in the general methadone prison also linked these differences to a failure of services to
respond to signs of the need to adjust the dose, while many prisoners in the narcotics methadone prison linked these differences to healthcare staff’s response to requests to reduce doses of methadone. Many prisoners with specific health conditions in both methadone prisons continued taking illegal drugs while on a low methadone dose over concerns about methadone withdrawal and the need to increase methadone dose.

Many prisoners in both methadone prisons perceived the opening times of methadone clinic as inflexible, as either too early or too late and as not meeting their needs such as allowing for visiting time, or for participating in work programmes to generate income in prisons. Late opening times at the weekend and the punitive consequences of being late to the methadone clinic also caused problems.

The HIV services were mostly discussed in the general non-methadone prison. Overall, there was concern about a lack of confidentiality within the services and lack of support for HIV-infected prisoners. The practice of ART prescribing differed across all three prisons and there were also different beliefs among the HIV prisoners about when to start taking ART. Low awareness about illness, medication and the lack of drug treatment options contributed to low ART-uptake in prisons. Both prisoners and healthcare staff linked the low-adherence to ART to structural factors, including the requirement for daily clinic attendance, the inconsistency of HIV clinic opening times, of accurate information, and of supervision and problems posed by time constraints.
CHAPTER 6: SUPPORT SYSTEMS WITHIN THE METHADONE PROGRAMMES IN PRISONS

6.1. Introduction

Chapter 5 discussed the participants’ perspectives and experiences of the implementation of the methadone and HIV programmes. This chapter discusses a lack of support and resources across all three prisons. The lack of support systems within prisons makes the delivery of methadone programmes much more difficult for prison staff, and compromises prisoners’ ability to participate or remain in the programmes.

6.2. Lack of psychosocial support services

In all three prisons, psychosocial support services for HIV, drug addiction, as well as general support services, were provided to some extent. The kind of support available to prisoners is described in the following table:

Table 11. Psychosocial support services

<table>
<thead>
<tr>
<th>The type of services and the responsible person</th>
<th>Availability of service</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Narcotics methadone prison</td>
</tr>
<tr>
<td>HIV services organised by a VCT counsellor and a prison case manager</td>
<td>x</td>
</tr>
<tr>
<td>HIV Peer Support Groups organised by an NGO’ representative with the support of healthcare staff</td>
<td>x</td>
</tr>
<tr>
<td>Addiction service organised by an addiction counsellor from prison healthcare staff</td>
<td>x</td>
</tr>
<tr>
<td>Addiction support group organised by an addiction counsellor from an NGO</td>
<td>x</td>
</tr>
<tr>
<td>General psychosocial service organised by a prison psychologist</td>
<td>±</td>
</tr>
</tbody>
</table>

X: available; -: unavailable; ±: hardly available
After three months, a prisoner with a negative HIV-test in the PITC at the general health assessment on entry to prison (see section 5.3.) is referred to a Voluntary, Counselling, and Testing (VCT) counsellor. The role of VCT is to help them make an informed choice about being tested for HIV combined with personalised counselling to provide psychosocial support before and after testing.

In the general non-methadone prison, prisoners with an HIV-positive test would be referred to a doctor in an HIV-clinic to get HIV medical provision. In both methadone prisons the prisoner would be referred to the general health clinic to get HIV medical provision together with prisoners with other health conditions. In all three prisons, a doctor would also refer the prisoner to an HIV case manager for treatment support. A case manager coordinated a medical treatment plan for HIV-positive prisoners. This included dealing with adherence issues and providing long-term psychosocial support to help the prisoner through different stages of his disease. This support was available on a weekly basis although the prisoner could also request a separate appointment.

Although some psychosocial support services were provided in all three prisons, many prison staff and prisoners expressed a greater need for HIV psychosocial support. A prisoner from the general non-methadone prison linked this need to the stigma they endured:

"We need the HIV emotional supports because HIV stigma is so dominant around us. People who have stopped taking drugs would become addicts again as the stigma makes their mental health go down again" (General non-methadone prison, Non-methadone prisoner, mid 30’s)

Other needs were related to the effects of long-term medication combined with a loss of hope, child relational problems, and lack of family supports. A prisoner from the general non-methadone prison expressed his feeling of hopelessness: "I felt very exhausted taking ART every day, and I reached a point when I did not care about death, and it lasted for more than one month" (General non-methadone prison, Non-methadone prisoner, late 20’s)
Another non-methadone prisoner from the general methadone prison also said:

"I have lost hope since I have been living in this prison. I know there is nothing I can do about the disease, so it is pointless to take ART. I do not care what will happen to me. It is difficult to fight against the disease here while I receive no support" (General methadone prison, Non-methadone prisoner, early 30’s)

A prisoner from the narcotics methadone prison related his lack of motivation to worries about his children:

"I have many things going on in my mind lately…my children have not been going to school …these kinds of the problem make me unmotivated to do anything…I do not care about taking medication (ART) for myself" (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

In the Indonesian prison context, family members play an essential role in supporting prisoners. For example, at the time of the research, a prisoner's family members were expected to pay for X-rays and for some medication for opportunistic infections because of limited resources in the prisons. Some prisoners also expected their family members to provide financial support. Consequently, the many HIV-positive prisoners who have been rejected by their family members face problems, as one prisoner from the general methadone prison put it:

"I want the doctors to provide emotional support to boost our motivation to take ART or to join the methadone programmes, since we have no families to support us here" (General methadone prison, Methadone-prisoner, mid 20’s)

Rather than increasing support for HIV-prisoners, a healthcare staff member from the general non-methadone prison encouraged the disclosure of the prisoners' HIV-status to their family members to get support.

"Being open about their HIV status to their family members is important because this is a long-life treatment and their health condition may deteriorate at any time here. We encourage them to disclose their HIV status at some point, so their family will aware of their conditions and then give them support" (General non-methadone prison, Healthcare staff, female, mid 30’s)

Another problem was trust. Although some services for HIV-infected prisoners were provided, some healthcare staff recognised prisoners' feeling of insecurity in talking about sensitive issues with them.
"I used to ask psychology students who had an internship programme here to talk to the HIV-positive prisoners. I realised there would be some barriers when we talked to them because we wear this uniform... they were afraid if they were honest with us that they would receive the consequences from the prison authority, but they would feel safe talking with those students" (General non-methadone prison, Doctor, female)

In response to this issue, Peer Support Groups (PSGs) have been established in all three prisons to provide support for HIV-positive prisoners and to try to fill the gap in support from family and alleviate feelings of insecurity. The PSGs were guided by various NGOs in all three prisons and focused on providing psychosocial support and on sharing practical knowledge and experience. The PSGs were conducted every week or month depending on the availability of the NGOs. In the general methadone prison, many prisoners who felt the PSG sessions were beneficial, suggested increasing the number of sessions.

"The session was only every Thursday, but sometimes the NGOs did not come. I want the session more frequently such as twice a week with more NGOs getting involved" (General non-methadone prison, Non-methadone prisoner, early 30's)

Many prisoners and healthcare staff believed that these programmes were an essential source of psychosocial support because of the similarity of the NGO staff members' experience with those of the prisoners. However, there were some concerns about group-based counselling in the prisons, as one prisoner from the general methadone prison put it:

"I do not like having a session in a big group, especially as it takes place in open area in the clinic corridor, so I could not talk freely, and sometimes they just talked about certain topic (lecturing), so there was no room for me to express my concerns" (General methadone prison, Methadone-prisoner, early 30's)

Some prisoners in all three prisons were also critical about a lack of variety in content, and therefore a prisoner from the general non-methadone prison offered a solution.

"The PSGs were boring. It is good if they have a different activity in each session, for example, teach about acupuncture in the first week and a game in another week" (General non-methadone prison, Non-methadone prisoner, early 30's)
While some HIV psychosocial support services were provided in all three prisons, psychosocial support for drug addicted prisoners was rarely provided. In the narcotics methadone prison, initially addiction support services were regularly provided to all methadone-prisoners by a nurse or doctor qualified as an addiction counsellor, but since a change in management of methadone programmes, the services were provided irregularly and were only for methadone-prisoners who had a positive urine test. In the general methadone prison, addiction support services were unavailable although most of the doctors were certified as addiction counsellors. In the general non-methadone prison, there was no addiction counsellor among the healthcare staff.

There were different views among healthcare staff about the provision of addiction support services in prisons. Some healthcare staff believed in the importance of providing such services to help addiction prisoners, while some healthcare staff believed such provision was less important. A healthcare staff member from the general methadone prison who believed in the benefits of the services to support management of drug use and HIV-positive methadone-prisoners said:

"Many prisoners who take methadone together with ART find it difficult to take both drugs. Many of them choose to stop their ART over methadone. I think the counselling session would have a better outcome for dealing with such issues" (General methadone prison, Healthcare staff, female, mid 30’s)

Other benefits of such counselling were seen as helping prisoners to understand their methadone treatment plan, to manage drug craving, and to prevent relapse. A healthcare staff member from the narcotics methadone prison said:

"I think prisoners need a counselling session to convince them that their methadone doses are sufficient. Methadone is only given in the morning, but they used to get drugs (heroin) around three times a day and, so, in the afternoon and at night they look for illicit drugs" (Narcotics methadone prison, Healthcare staff, female, early 30’s)

In contrast, a member of healthcare staff from the general methadone prison believed that problems involving addiction prisoners were insignificant and they are not the right person to provide such support:

"Some methadone-prisoners sometimes take illicit drugs to dealt with their personal problems, but that kind of situation only occurred occasionally, and
mostly they would hesitate to talk about that problem with us" (General methadone prison, Doctor, male)

In contrast to these views, many prisoners expressed their need for support with relationship problems. A prisoner from the narcotic prison described:

"I think they do not take care of us although we have a lot of personal problems such as being divorced. It is no wonder that many methadone-prisoners still mix methadone with other illicit drugs because the healthcare staff do not address our underlying problems" (Narcotics methadone prison, Methadone-prisoner, mid 30’s)

Another prisoner from the general methadone prison also recognised the need to deal with traumatic experiences. “I have traumatic experiences of friends and family deaths related to methadone withdrawal and I need to talk about these problems” (General methadone prison, Methadone-prisoner, early 30’s)

To fill the gaps in addiction services in all three prison, a healthcare staff member suggested that addiction prisoners could refer themselves to a doctor in the general health clinic as part of their regular clinic attendance. However, many prisoners and healthcare staff indicated that the services provided were failing to provide support for the addiction prisoners because of a lack of time and privacy, as one methadone-prisoner from the general methadone prison put it:

"It is difficult to talk about our psychological problems with doctors here. I have a traumatic experience, so I want a personal in-depth counselling session, not like one in the general health clinic here. For example, they only examine us for general health problem for three minutes, so we could say nothing even just for describing our disease" (General methadone prison, Methadone-prisoner, early 30’s)

Another problem was a lack of staff expertise. A methadone-prisoner commented: "It is better if there is an addiction counsellor to deal with our problems properly" (General methadone prison, Methadone-prisoner, early 30’s)

In response to the perceived failure of service provision, a healthcare staff member from the general methadone prison recommended a more proactive approach during
the dispensing, although she also recognised there was no time during the dispensing as currently organised:

“...I think we can give five minutes of our time to each methadone-prisoner in the methadone dispensing to ask about their recent conditions or their problem. But the clinic is closed after only 30 minutes after opening, so how can prisoners get the support they need?” (General methadone prison, Healthcare staff, female, mid 30’s)

Some NGOs also provided an addiction support group weekly to provide psychosocial support for drug use prisoners. The addiction support group was also available on a weekly basis in the narcotics methadone prisons, and on a monthly basis in the general methadone prison. This service was accessible to all drug use prisoners. However, the support from NGOs was discontinued three months before the start of the study after losing their funding.

Many healthcare staff and prisoners appreciated the support provided by the NGOs. Sometimes a member of the healthcare staff assisted the support group in the absence of the NGOs. However, many healthcare staff from the two prisons with methadone programmes expressed concern about a lack of capability to deal with addiction issues because of lack of training. A healthcare staff from the narcotics methadone prison described:

“...Our methadone knowledge is limited. I think the NGOs representatives have more knowledge about this since they have experienced heroin addiction and they are taking methadone as well, so it is the case that the prisoners easily accepted their messages” (Narcotics methadone prison, Healthcare staff, female, early 30’s)

Many prison staff in all three prisons also recognised the greater need for the psychosocial support services for all prisoners, not only for HIV-positive or methadone -prisoners. They related this need to a lack of family support and financial problems. A prison officer from the general methadone prison described:

"...I have a good relationship with prisoners, many of them call me to talk about their problems. I try to be sympathetic by listening to their problems. They talk about their wife, children, or work. Sometimes they ask my advice about how to collect their debts from other prisoners" (General methadone prison, Prison officer, early 20’s)
6.3. General lack of resources

This section focuses on the general lack of resources and how the impact this has on the implementation of the methadone programmes in the prison settings. The resources discussed include funding, prison programmes (excluding health programmes), staffing, health education and training, and facilities for prisoners.

6.3.1. International, national and local funding issues

Funding was regarded as a critical factor in the implementation of prison health programmes across all three prisons. Inadequate funding related to the reduction and withdrawal of international funding supports, in particular for methadone programmes (see section 7.3.1) and was often seen as a barrier to programme delivery. Moreover, it appeared there was fragmentation in the management of funds in each prison.

In the narcotics methadone prison, the prison authority has allocated specific funding for HIV and methadone programmes. However, many healthcare staff here were concerned about the limitations of the funding allocation for food set up by the Directorate of Corrections. The importance of providing food has previously been suggested in the light of many prisoners' lack of support from their families. Therefore, staff were concerned that:

“It was a shame that the funding scheme from the Directorate of corrections would not cover an additional meal for prisoners in education sessions because the prisoners had had their meals already (from prison)” (Narcotics methadone prison, Healthcare staff, female, early 30’s)

Similarly, another healthcare staff member reported the effects of the fund restrictions on the attendance rates for education sessions: “Many prisoners attended the education sessions if there were meal or snacks at the sessions, but only a few prisoners come if there were no snacks” (Narcotics methadone prison, Doctor, female)

The importance of providing food in education sessions is also linked to concerns about food quality and distribution in all three prisons. Many prisoners reported that
the food was unappetising as it was mainly fried or steamed. A methadone-prisoner in the narcotics methadone prison described:

"I remember a PSG session with Dr X and Y NGOs. Lunch with rice and chicken curry was provided (by the NGO). That is why all members were in at that time" (Narcotics methadone prison, Methadone-prisoner, early 40’s)

Some prisoners in all three prisons expressed concern about not getting a meal if they were not in their unit when food was being distributed. This might explain why many prisoners complained about daily methadone clinic attendance and education sessions. A prisoner in the general non-methadone prison described his experience:

"Sometimes the rice is not enough because they put the rice for each prisoner in one container, and then give the container to each unit, but the rice is not that much, so we get small amount only. If I am not in the cell during meal times, sometimes the rice is finished. It is a real mess during the meal times" (General non-methadone prison, Non-methadone prisoner, early 30’s)

Nutritious food is also of particular concern of many prisoners in light of prisoners taking medication. While some prisoners were getting food from their family members, a prisoner without family support might decide not to take methadone or ART in prison, as one non-methadone prisoner in the general methadone prison put it:

"I feel a lack of vitamins and fruits intake while in prison. Methadone is a hard drug, so it should be consumed with vitamins and fruits. I am afraid my health conditions would drop dramatically without those supplements" (General methadone prison, Non-methadone prisoner, mid 20’s)

Some prisoners from all three prisons also believed ART would not be effective without nutritious food. A prisoner from the general non-methadone prison illustrates this belief:

"I want the prison to take more care of the HIV-patients. They should be concerned about the balance of nutrition in our meals. I think the medicine does not work without proper nutrition. For example, they could give us milk or green bean porridge as a dessert once or twice a week" (General Non-methadone prison, non-methadone prisoner, mid 30’s)
Another staff member emphasised that the lack of funding for the methadone programmes led them to rely on other funding sources including the doctors’ own money:

“The MOH distributes methadone for free, but we need to collect it from the branch office of the MOH. Even though we used to have a small amount of money from an NGO for the cost of collecting methadone, if the funding runs out the doctor contributes to the cost of collecting methadone using his own money” (Narcotics methadone prison, Healthcare staff, male, mid 30’s)

Similar to the narcotics methadone prison, the local prison authority in the general methadone prison allocated specific funding for both the HIV and methadone programmes. However, it seemed there were internal debates as to how to prioritise spending here. A healthcare staff reported:

“Since some NGOs stopped their programmes, we (healthcare staff) had to demand that funding for the health programmes be taken seriously. Eventually they (local prison authority) gave the funding although it was not that much. For example, for HIV programmes it was only around £600 annually” (General methadone prison, Healthcare staff, female, early 30’s)

Another health staff member described her concern about the timing of funding allocation:

"The funding was given in the last two months before the end of the year. I think this may relate to administrative stuff, so we had to fit everything (our programmes) within that timeframe" (General methadone prison, Healthcare staff, female, mid 30’s)

Many healthcare staff were also concerned about the Directorate of Corrections’ withdrawal of funding for healthcare staff bonuses.

"I think it is good if the Directorate of Correction also gives incentives for us to increase our morale, especially for a weekend job like the one given by X agency… unfortunately, this agency has stopped supporting the programmes" (General methadone prison, Healthcare staff, female, early 30’s)

In contrast, in the general non-methadone prison there was no specific budget for HIV programmes; however, the healthcare staff were uncertain why. With the limited
funds available, healthcare staff prioritised spending on general medicines over HIV programmes.

"The funding from the local prison authority is not that much and it is for all health programmes. So, we prioritise the funding to buy general medicine only" (General non-methadone prison, Healthcare staff, female, early 30’s)

A real sign of the shortage of funds for HIV programmes in this prison, which also illustrates healthcare staff’s commitment to HIV programmes in the prison was suggested by one doctor:

“Healthcare staff receive a personal fee IDR.5000 (30p) as a service fee for each HIV-tested prisoner from the MOH, but then we collect the money together, so we can buy tubes and syringe needles (a needle price was IDR. 2500 (15p)) for HIV-testing” (General non-methadone prison, Doctor, female)

Some healthcare staff were also concerned about the funding allocation policy of the X international agency for prison officers’ training:

“We use funding from X agency to buy snacks for prisoners’ education sessions in the induction programmes, and the general HIV education sessions, but that funding does not cover snacks for prison officers’ training” (General non-methadone prison, Doctor, female)

Many healthcare staff members indicated the importance of incentivising staff attendance at training sessions:

"If we have sufficient funding, we can conduct training for the prison officers and provide a meal for them. It is not possible to conduct training without some incentives because [otherwise] they would not turn up to the session” (General non-methadone prison, Healthcare staff, female, early 30’s)

6.3.2. Prison programmes

Prison authorities are responsible for promoting the physical and psychosocial well-being of prisoners and for supporting them in a way that benefits them after release and helps them to reintegrate into society. They provide a range of prison programmes in collaboration with other Ministries, NGOs, and private bodies. Participation in some of the prison programmes was also required to get a recommendation for parole programmes. A prisoner could apply to the parole programmes after serving two-thirds of their sentence. A prisoner who is granted
parole can serve the last one-third of their prison sentence in the community under prison supervision. Thus, the number of participants in each programme was, therefore, very dependent on whether this was a pre-condition for eligibility to participate in the parole programmes. Thus, there were only between 18 and 25 participants in methadone programmes, which did no impact on parole eligibility compared with between 30 and 90 participants in therapeutic community, which did. The range of prison programmes aims at promoting the physical and psychosocial well-being of prisoners is described in the following table:
<table>
<thead>
<tr>
<th>Type of prison programmes</th>
<th>Name of programmes</th>
<th>Type of programmes</th>
<th>Eligible for recommendation for Parole programmes</th>
<th>Number of participants</th>
<th>Inclusion</th>
<th>Exclusion</th>
<th>External support</th>
</tr>
</thead>
</table>
| Health and well-being/ drug | Methadone | Medical treatment and psychological supports | - | - | 18-25 | • Prisoner with heroin dependence in both methadone prisons  
• Abstinence less than three months in the narcotics methadone prison  
• Family consent in the narcotics methadone prison  
• Positive urine test for heroin in both methadone prisons | Non-heroin dependent prisoners | MOH and NGOs |
| Health and well-being/ psychosocial | Peer support groups | Psychological support | x | x | 10-20 | HIV-positive prisoners | HIV-negative prisoner | NGOs |
| | Therapeutic community (TC) | Psychosocial and cognitive behavioral | x | x | 30-90 | Prisoners who are categorised as drug users that have less than five years sentencing and are within three months of their release date | • Prisoners who are categorised as drug dealers that have more than five years sentence  
• Prisoners who take drugs including within methadone programmes | The National Anti-Narcotics Agency of the Republic of Indonesia (BNN) |

Table 12. Prison programmes

Table 12. Continued…
<table>
<thead>
<tr>
<th>Health and well-being/psychosocial</th>
<th>Religious activities</th>
<th>x</th>
<th>x</th>
<th>400</th>
<th>All prisoners within any stage of their imprisonment period.</th>
<th>-</th>
<th>Other ministries or community providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Others</td>
<td>Skill development (bakery, furniture, craft)</td>
<td>x</td>
<td>x</td>
<td>300</td>
<td>Prisoners who have served one-third of their imprisonment period.</td>
<td>Poor health status</td>
<td>Ministry of Religious affairs, private bodies, and community providers</td>
</tr>
</tbody>
</table>
With the aim of getting a recommendation for parole programmes, many prisoners apply to participate in a work programme. In all three prisons, there was a concern about high demand for participation, as demand exceeded capacity, as a prison governor described:

"The work programmes can only accommodate up to 400 people, for example, we have ten sewing machines, but 100 people are queuing for that, so the problem is lack of capacity. So, what can we do?" (Prison governor)

Another prison governor also recognised the effects of this high demand:

"I received many complaints about bribes in the parole processes and prison work programmes because some staff were unfair (bribery), but complaints have reduced since I acted upon the reports. However, even though the reports (of bribery) have reduced, I have informants to up-date me on the current situation in the prison related to that problem" (Prison governor)

A prisoner from the general non-methadone prison’s account suggested that bribery was however normalised within the prison. Once again, those prisoners without family, and therefore financial support were disadvantaged:

“The prison officers are kind, but I feel hesitant about talking to them to ask for a job (a work programme). I have no family to give me funding support (give a bribe) to participate” (General non-methadone prison, Non-methadone prisoner, early 30’s)

Some prisoners also valued participating in work programmes to develop their skills. A methadone-prisoner from the general methadone prison expressed his feeling: “I hope I can get proper work skills by joining a work programme here, so when I am released, I have an option to work” (General methadone prison, Methadone-prisoner, late 30’s)

However, some prisoners felt the work programmes lacked a choice of options, as one prisoner from the general non-methadone prison put it:

“I am not joining a work programme because it is not interesting, handicraft made from newspapers, sewing skills. I would like something such as mechanical work because I have experience working as a car mechanic” (General non-methadone prison, Non-methadone prisoner, late 20’s)
Although many prisoners and prison staff in both prisons with methadone programmes suggested that a work programme could provide support for methadone-prisoners, they also highlighted that prisoners with poor health conditions, methadone, and HIV-positive prisoners, were unable to participate in work programmes, as one prison officer from the narcotics methadone prison put it:

“All prisoners are equal here since they can join any work programmes with no prohibition, but physically they should be able to perform well, and they should know their capacities at work (physically demanding job)” (Narcotics methadone prison, Prison officer, late 20’s)

Many healthcare staff and prisoners pointed to being under the influence of methadone as a reason a methadone-prisoner had limited access to a work programme. A healthcare staff member from the narcotics methadone prison described:

“Most of the prison work programmes would not accept methadone-prisoners. I think it was because after taking methadone, they look sleepy and unstable” (Narcotics methadone prison, Healthcare staff, female, early 30’s)

Unlike other prison courses, the methadone programmes were not currently considered to be ‘prison programmes’ in either of the methadone prisons. However, in the past, in the narcotics methadone prison the methadone programme was classified as a prison programme as medical treatment was combined with sports activities and educational sessions. At this time a methadone-prisoner could therefore be granted a recommendation letter to apply for the parole programmes. However, this is no longer the case. However, in 2015, the prison programme classification was withdrawn as prisoners participating in the methadone programme were not thought to be actively involved in any activities. As one methadone-prisoner put it:

“Many methadone-prisoners do not get involved in the social activities such as sports and only a few of them joined the educational session. They just go back directly to their unit to sleep after taking their methadone, so the staff think we are lazy” (Narcotics methadone prison, methadone-prisoner, early 30’s)
This new policy has in effect barred some prisoners from being eligible for parole. This is a very serious issue since for many methadone-prisoners, a letter of recommendation from the methadone programmes is their only chance to get on to the parole programmes.

“I used to be able to get a reference letter to apply to the parole programmes by joining methadone programmes, but since they changed the designation of the methadone programmes (from a ‘prison programme’ to a ‘health programme’) I cannot get the letter, so it has lost its appeal. But I cannot apply either to Peer Support Groups (PSGs) since I am not HIV-infected or to the Therapeutic Community (TC) programmes since they are drug-free programmes (including from methadone). So, I want methadone to be regarded as a prison programme again” (Narcotics methadone prison, methadone-prisoner, early 30’s)

The fact that a ‘shorter stay’ work programme was unavailable made the work programme inaccessible for the methadone-prisoners, as one prisoner from the narcotics methadone prison put it:

” I want to join a prison work programme, but the greatest effects of methadone are felt by 1-2 pm, and in the work programmes we have to work all day” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

Many prisoners also linked their limited ability to work to the effects of high doses of methadone. A prisoner described: “I think that those people with HIV infection and who take a higher methadone dose have no power for work” (Narcotics methadone prison, Methadone-prisoners, early 30’s)

Another prisoner said: “I take 270 mg of methadone, so I lack concentration after taking my methadone, I do not want to go anywhere but just want to sleep” (Narcotics methadone prison, Methadone-prisoner, early 40’s)

However, some methadone-prisoners on low methadone doses linked the limitation of their work options to the stigma relating to their participation on methadone programmes.

“It was a shame that I could not join the work programmes because of my participation in the methadone programmes. I wanted to work so that I did not feel lonely. I know people see us as failures. The methadone effects would make others perceive us as being lazy, but I think if I push our limits, I can
work now to sell ice cubes” (General methadone prison, Methadone-prisoner, early 40’s)

Another methadone-prisoner also related this stigma to their HIV-positive status: “I felt quite different since being in the methadone programmes and being infected with HIV. The staff said I cannot go for any work programmes here” (Narcotics methadone prison, Methadone-prisoner, mid 30’s)

However, religious programmes in all three prisons accepted prisoners regardless of their drug use or HIV status. The participants could be in these programmes up to their release date. Religious leaders from the general community came into the prison to teach. Prisoners in the religious programmes were also allocated to a specific unit for prisoners who joined the prison programmes. The programmes ran from 9 am to 7 pm with a lunch break for 2 hours between 1-3 pm daily.

Many prisoners and prison officer participants believed that the busy nature of religious programmes helped them to gain perspective on taking drugs and to provide emotional support. However, only a few methadone-prisoners participated in these programmes. As one methadone-prisoner from the general methadone prison explained:

“It is good for methadone-prisoners if they are involved in the religious programmes since they are full day programmes, so they will not think about taking drugs. I think it is good if the drug use prisoners listen to sermons to give them the motivation to change (stop from taking illegal drugs), but nowadays only one methadone-prisoner is in the religious programmes. I also stopped going when my health conditions deteriorated drastically (because of HIV)” (General methadone prison, Methadone-prisoner, early 30’s)

The Therapeutic community (TC) programmes were established in Indonesian prisons in 2013 to rehabilitate people who use drugs including within the prison settings (see section 7.3.3). The BNN provided financial and technical support to deliver these programmes in prisons that include psychological support from psychologists and psychiatrists. Many prisoners expressed interest in participating in the TC programmes since their participation would also be ‘counted’ for the parole programmes; however, prisoners with a sentence of 5 years or longer would not be eligible for parole.
“I am not interested in participating in the TC programmes. What is the point for me since I got five years’ imprisonment meaning I will not be on parole programmes” (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

Although these are relatively new programmes, many prison staff and prisoners appreciated the TC programmes because they are drug-free programmes, which were perceived as more acceptable programmes in prison settings and were perceived to result in significant behavioural changes in their participants. Other benefits of the programmes were linked to access to emotional supports. A non-methadone prisoner said: “I like the TC programmes since their participants can talk and discuss all their problems in prison with the experts (psychologists)” (Narcotics methadone prison, Non-methadone prisoner, early 30’s)

Another non-methadone prisoner valued the meals provided within the TC programmes as much better than the meals provided by prison authorities.

"TC is a good programme since it is making their members healthy. They fulfilled our needs including by giving nice regular meals. It is because they have their funding. Frequently I saw them get snacks, curry chicken rice that sort of healthy nice food" (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

However, many prisoners expressed their concerns about participating in the TC programmes. For a non-methadone prisoner, such concerns related to trust:

“Rumours say the programmes are a way for police to recruit informants to collaborate with the police after we are released to the community. No… I cannot do that” (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

Some drug users found TC-programmes too demanding, as one non-methadone prisoner put it:

“The BNN supervised the programmes, and the prison staff keep an eye all the times, so somehow it causes psychological burdens for us. We are injecting drug users, while many of TC participants are non-injecting users” (Narcotics methadone prison, Non-methadone prisoner, early 30’s)
The TC programmes were also seen as too restrictive. A prisoner commented:

“I want to join with a more flexible programme, but within the TC we should obey them (prison staff) for the entire three months. TC-participants started at 7.30 am doing sport, having a shower and at 9.30 am have some class activities then followed by evening prayer, and at 1.30 pm, they have another class. They have been allocated to a separate unit, so they cannot go to play around with other units” (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

6.3.3. Staffing issues

This section discusses the significant lack of prison staff in the three prisons and how the relationship between the healthcare staff, and the healthcare staff and other prison staff affects both the care of prisoners and security.

Lack of staff

Staffing issues were talked about across all three prisons in relation to limited numbers of prison staff including prison officers and healthcare staff. There were four work shifts in each prison. For example, in the narcotics methadone prison, each work shift had 28 prison officers. This means the ratio of a prison officer to prisoners in that prison was around 1:105, as described in the following table

<table>
<thead>
<tr>
<th>Prison</th>
<th>Methadone prisoners</th>
<th>HIV-positive prisoners</th>
<th>Drug dealers</th>
<th>Drug users</th>
<th>Total prisoners</th>
<th>Prison officers</th>
<th>Health care staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Narcotics</td>
<td>25</td>
<td>169</td>
<td>2899</td>
<td>37</td>
<td>2936</td>
<td>112</td>
<td>18</td>
</tr>
</tbody>
</table>

Table 13. Structure of prisoners and prison staff in all three prisons
<p>| | | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>18</td>
<td>76</td>
<td>1298</td>
<td>1107</td>
<td>2405</td>
<td>140</td>
</tr>
<tr>
<td>methadone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>General</td>
<td>-</td>
<td>94</td>
<td>1629</td>
<td>18</td>
<td>1647</td>
<td>100</td>
</tr>
<tr>
<td>non-methadone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Directorate of Corrections 2016.
Drug users: drug possession; drug dealers: drug possession with intention to supply and drug supply.

Many prison officers were critical of the low number of prison officers and believed that this contributed to problems with prison security. A prison officer from the general methadone prison illustrates:

“The availability of drugs in prisons is influenced by the availability of drugs in the community market, though we have tried our best to prevent them from arriving here. Their availability here might also link to a lack of prison officers. In total there are around 30 officers for 3000 prisoners. Therefore, in one unit there are 320 prisoners with two officers” (General methadone prison, Prison officer, late 30’s)

The prison governor had a different explanation:

“The BNN has sophisticated tools to detect phone numbers and conversations, so in the absence of technology drugs can enter the prison. I hope we can get technology as the technology cannot be bribed, for example, police dogs. We just do manual searches, so even when we have confiscated phones in the next raid, we still find other phones” (Prison governor)

Many healthcare staff in all three prisons also expressed their concern about a lack of healthcare staff. A healthcare staff from the general methadone prison reported:

“We need more healthcare staff since we have four programmes including methadone, TB, HIV and TC programmes”. While we only have a few healthcare staff here” (General methadone prison, Doctor, male)

The problems of translating policy into practice in such an under-staffed setting led to a lack of healthcare staff to dispense methadone at the weekend in both methadone prisons. A member of the healthcare staff from the narcotics methadone prison emphasised:

“There were 60-65 methadone-prisoners, and they were fighting for such simple things such as arranging their medical files. I was the only woman in
the clinic that weekend and, so, I locked the door and called the security staff" (Narcotics methadone prison, Healthcare staff, female, early 30’s)

Another concern about effects of the lack of staff and the lack of qualified staff related to the quality of dispensing practices. As a member of the healthcare staff from the general methadone prison illustrated:

“We have 12 staff (non-pharmacists) who are responsible for the dispensing here, so each person might have a different dose measurement, therefore, some mistakes occur during that process here. While in the community hospitals, a pharmacist is responsible for methadone dispensing and therefore fewer mistakes are made" (General methadone prison, Healthcare staff, female, mid 30’s)

Despite the concern about a lack of healthcare staff in all three prisons, all the healthcare staff in the general non-methadone prison were also expected to act in a security role which had a knock-on negative impact on the quality of the HIV services:

"The doctors and nurses have to do a shift at the entrance door to do manual searches of visitors. It becomes a new burden on us and this has great effects on the health programmes since many health staff cannot do their jobs properly. Many prisoners who are eligible for ART are neglected because the counselling sessions (VCT) are postponed. So, the quality of HIV-programmes and our motivation to work is also reduced accordingly” (General non-methadone prison, Healthcare staff, female, early 30’s)

In all three prisons, all the healthcare staff come to the prisons for daily morning work schedules alongside their night shifts schedule. Those in the night shifts would come to the prison based on a call from a prison officer and would have to return the following morning. This arrangement had severe effects on the prisoners’ health. A prison officer from the general non-methadone prison described the gravity of this situation:

"There is no healthcare staff at nights, so many prisoners died here because of a lack of treatment. We could do nothing because we have no idea how to deal with prisoners who are withdrawing from drugs" (General non-methadone prison, Prison officer, early 30’s)
Coordination at work

Coordination at work was also seen as a barrier to delivery of the methadone programmes. Many healthcare staff, in particular those from the general methadone prison, were critical about their work relationships and in particular a lack of shared responsibility for the methadone programmes. A member of the healthcare staff complained:

"I feel overwhelmed by the tasks as I am responsible for three programmes. The task distribution among us (prison nurses) is not clear although we have 13 healthcare staff (including four doctors) here. A prison doctor only comes if it is his shift. That is quite different from doctors in the narcotics methadone prison (they come every day), so this may influence the quality of our service"  (General methadone prison, Healthcare staff, female, mid 30’s)

Another linked a lack of coordination to a lack of planning within the methadone programmes:

"By this time, we should already have an annual plan for the methadone programmes, but in fact we do not have any. I have reported some issues regarding the programmes to the coordinators, and he just simply referred this to another person but then nothing happened. It is really frustrating"  (General methadone prison, Healthcare staff, female, early 30’s)

Another healthcare staff also related a lack of coordination to a lack of accountability:

"Without supervision, training or monitoring within the programmes those people (healthcare staff) who are involved in the programmes become indifferent"  (General methadone prison, Healthcare staff, female, mid 30’s)

In the Indonesian prison system, a prison clinic is under the supervision of prisoner service department of the prison. In all three prisons, there was also concern among healthcare staff about demoralisation related to the feeling of being less supported by other prison staff. A healthcare staff from the narcotics methadone prison illustrated:

“A person from the prisoner service department visited us once. Although we know that they did not know anything about the methadone programmes, but we were too lazy to talk to them because we thought it was pointless”  (Narcotics methadone prison, Healthcare staff, female, early 30’s)

A healthcare staff from the general methadone prison also commented:
"The prison's service department should give us support as we are under their supervision, for example, a psychologist who works in their department should be delegated to help us in the clinic, but no changes have been made to support us delivering the programmes" (General methadone prison, Healthcare staff, female, mid 30's)

While healthcare staff viewed prison staff as unsupportive, prison officers thought that healthcare staff did not provide information or discuss things. A prison officer from the general methadone prison emphasised:

"I used to ask prisoners about the methadone programmes, but I did not ask the healthcare staff. If I ask the prisoners, they will answer me. However, in the clinic, most of the healthcare staff are senior staff, and I am afraid that I cannot understand if they use difficult terms (language), especially those doctors who have a star rank (higher grade)" (General methadone prison, Prison officer, early 20's)

It appeared that there was a lack of understanding roles and responsibilities among prison staff concerning national programmes. A member of healthcare staff from the general methadone prison illustrated:

"Many prison officers think the methadone programmes are only part of health (clinic) programmes instead of seeing them as a prison strategy for managing prisoners with heroin dependence. Collaboration between the prison officers and us (the healthcare staff) is difficult. For example, last week some of the methadone-prisoners said that some of the officers had discouraged them from continuing their methadone" (General methadone prison, Healthcare staff, female, mid 30's)

An example of the advantages of greater prison officer understanding of the programmes was provided by a healthcare staff from the narcotics methadone prison:

“Prison officers used to prevent prisoners coming to a methadone clinic, but we informed them that methadone programmes were not only a clinic programme but, also, a national programme. So, now, they help us by opening the methadone cell earlier than others" (Narcotics methadone prison, Doctor, female)

6.3.4. Education and training
Prisoners’ education

In all three prisons, when prisoners came to prison for the first time, they were placed in the orientation unit to get an overview of life in prison including rules and regulations, health information about the types of health programmes available in prison, and an introduction to TB/HIV issues. However, since the induction was delivered to a large number of prisoners at the same time, many prisoners commented on their confusion about health messages delivered during this programme. A prisoner from the general methadone prison emphasised the problem of noise: “I could not catch what they were saying as there were so many voices around in the orientation unit” (General methadone prison, Methadone-prisoner, early 30’s)

The induction programmes were followed by general education sessions for all prisoners every two or three months. However, it seemed the number of the session was variable and was sometimes unavailable with the content delivered limited to TB issues. A prisoner from the narcotics methadone prison reported:

"They are rarely gathering all prisoners for the general education session, the last time I had attended the session was about TB, and it is rarely about HIV or methadone" (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

Interviews suggest that specific HIV education was given to HIV-positive prisoners in all three prisons, however many prisoners expressed concern about content and the lack of emphasis on practical issues of HIV. As one prisoner in the narcotics methadone prison put it.

“I do not fully understand about medication for HIV-positive people. For example, how to protect my family, and my wife. They said to use condoms and ask your wife about taking ART, but the information was not clear” (Narcotics methadone prison, Non-methadone prisoner, late 20’s)

The provision of education sessions specifically for methadone-prisoners seemed to be lacking. A prisoner from the general methadone prison indicated: “I think the prison has no education session for methadone-prisoners” (General methadone prison, Non-methadone prisoner, mid 30’s)
It appeared that information about methadone was given as an addition to education sessions for HIV-infected prisoners.

"I got two HIV education sessions while I was here. They also talked a little bit about the aims of methadone, but it was not clear for me about everything related to the methadone programmes" (General methadone prison, Non-methadone prisoner, early 30's)

Therefore, many HIV-negative prisoners in both prisons with methadone programmes were unaware of the methadone programmes. A non-methadone prisoner from the general methadone prison said: “I do not know about the availability of methadone programmes here. My friends also did not tell me anything about that” (General methadone prison, Non-methadone prisoner, mid 30's)

In all three prisons, peer support groups (PSGs) provided some source of practical information to address HIV-related issues and substance use concerns in addition to providing emotional support (see section 6.2). Some prisoners indicated that health information through leaflets provided by an NGO was valuable to support them disseminating information on HIV to other prisoners.

"I told my cellmates that HIV would not spread easily, and they believed me more after reading the leaflet. I got a leaflet from an NGO and put it in my cell so that others could read it. It was a long time ago, but I cannot find any flyers now" (General non-methadone prison, Non-methadone prisoner, early 30’s)

Problems with confidentiality issues in HIV education sessions were highlighted by many prisoners. A methadone-prisoner from the general non-methadone prison described:

"It is difficult to find a proper place for education sessions here. On Thursdays sometimes, the place is used for other activities, so we move to the corridor (open space) on the second floor. It is disturbing because we talk about private issues" (General non-methadone prison, Non-methadone prisoner, early 30’s)

Another issue with education sessions related to ill prisoners needing help to attend: “I did not want to go since I felt sick and I could not manage to walk to the second floor” (General methadone prison, Non-methadone prisoner, mid 20’s)
Training for prison staff

In all three prisons, both healthcare staff and prison officers complained about a lack of health training. Healthcare staff in both methadone prisons received training about methadone from the MOH during 2007 and 2008, soon after the establishment of the programmes in these prisons. However, there has been no subsequent methadone training. In contrast, HIV training for healthcare staff is provided two to three times annually by either the MOH or MOJ. Many prison officers in all three prisons also commented on a lack of training in health-related issues. A prison officer from the narcotics methadone prison described: “I did not get any TB or HIV information sessions from the MOJ. HIV related issues were only discussed with other prison officers or prisoners” (Narcotics methadone prison, Prison officer, late 20’s)

Interviews suggest the MOJ or the MOH provided bi-annual or annual training in health-related issues for some prison officers. Healthcare staff in all three prisons also provided monthly education sessions for prison officers. However, it appeared that many prison officers indicated a lack of interest in attending healthcare staff's sessions:

"I think it would be difficult if it was the healthcare staff here who conducted the training. We (prison officers) might not be interested in coming since we also have other tasks. But if the invitation came from institutions (MOJ, MOH) that the prison governor officially gave orders to attend that training, we would come" (General methadone prison, Prison officer, late 20’s)

6.3.5. Lack of facilities for prisoners

A lack of resources in prisons also affects the provision of facilities for prisoners, including unit conditions and water in all three prisons. The study prisons are operating at much as 260% overcapacity (see section 1.5). Many prisoners also expressed concern about a lack of water in their cell. Running water was limited to a water drum in each toilet cell with water available for one to two hours either in the morning or afternoon. This could also explain why some methadone-prisoners did not take a shower as they ran out of water in their units.

A prisoner from the narcotics methadone prison described:
"I hope they give more attention to our cell conditions, for example, we used
to sleep very close to each other without space for moving; there was no
water in the toilet inside our cell and, so, we had to take water from a tap
outside our cell every day" (Narcotics methadone prison, Non-methadone
prisoner, late 20’s)

Despite overcapacity across the two methadone prisons, all methadone-prisoners in
the narcotics methadone prison were allocated to one unit. Many prison staff
described the benefits of this allocation to helping them manage methadone-
prisoners. A healthcare staff member described:

"I think it is good for them to have a separate unit, otherwise they will take
drugs if they are in general unit and it is much easier if we call them for
education session" (Narcotics methadone prison, Healthcare staff, Male, mid
30’s)

A prison officer also noted:

“Putting methadone-prisoners in a particular unit is a good idea, so there is no
physical contact between them and other prisoners. If they mixed with other
prisoners, we were afraid that they would take other illegal drugs as well"
(Narcotics methadone prison, Prison officer, mid 40’s)

Many methadone-prisoners also described the different kinds of care received by
inhabiting this unit: “I think people care for each other. If one overslept, then others
would remind him to take methadone” (Narcotics methadone prison, Methadone-
prisoner, early 30’s). “I think the environment plays a great role here because it can
induce craving. I feel fine with only taking methadone since I am living in the unit”
(Narcotics methadone prison, Methadone-prisoner, mid 30’s)

" On national holidays, they opened our unit and asked us to take methadone
while other units were locked. It was a special treat that they prioritised us
over others" (Narcotics methadone prison, Methadone-prisoner, early 40’s)

Unlike in the narcotics methadone prison, in the general methadone prison, there
were no specific units for methadone-prisoners. Many prison staff in that prison
indicated that the allocation of specific units would be problematic on the grounds of
lack of space. A prison governor from the general methadone prison commented:
"It is difficult here since we have 3000 prisoners while prison capacity is only for 900, so what kind of strategies for the prisoners then? We even had to modify the sports hall into a place for prisoners to sleep" (Prison governor)

A prison officer also noted: “I think it is better if those in methadone are given separate units, but we have no more space” (General methadone prison, Prison officer, late 30’s)

6.4. Chapter summary

Many prisoners and prison staff in both prisons with methadone programmes faced challenges in delivering the methadone programmes, particularly where the support systems were lacking. Alongside the psychological distress of imprisonment, methadone-prisoners also experienced higher levels of stress compared to other prisoners caused by stigma in relation to HIV status and their participation in methadone programmes and this put them at higher risk of experiencing both physical and mental health problems including suicide. However, psychosocial support services for drug addiction were rarely available.

Participation within one of the prison programmes is essential to qualify for prison parole programmes, however, many prisoners indicated there were barriers in accessing the prison work programmes which included a lack of capacity, bribes surrounding the programmes, and issues relating to specific health conditions including being HIV-positive or a methadone participant. Therefore, prisoners with a lack of family support and methadone participants found it difficult to access these programmes. This problem was compounded in the narcotics methadone prison by the change in classification of the methadone programme.

Sufficient resource is the primary condition required for prison systems to operate efficiently. The availability of sufficient funding from international funding and support from local prison authorities in managing the funding was essential for delivering the HIV prevention programmes. The limited funding available ultimately compromised the programmes available, reducing the extent of training provided for both prison staff and prisoners, which lead to a lack of awareness about the availability of
methadone programmes and the lack of understanding about the methadone programmes.

The lack of prison officers could lead to a lack of control over prison conditions and treatment for methadone withdrawal after office hours. The lack of programme supervision from the Directorate of Corrections led to the lack of prison staff coordination at the prison level.

Many prisoners and prison staff also indicated the benefits of the provision of specific units for methadone-prisoners in the narcotics methadone prison. The fact that prisoners' basic needs may not be being met in prison meant that they had to focus on satisfying them leading to a loss of motivation to participate or to remaining in any health programmes offered in prisons, and to an increase in emotional distress.
CHAPTER 7: DISCUSSION

7.1. Introduction

This study aims to understand the role of methadone programmes within the context of HIV prevention programmes and to identify barriers and facilitators that influence the implementation, routine delivery and sustainability of methadone programmes in Indonesian prisons. It does so through an exploration of the perceptions and experiences of prison staff and prisoners regarding the implementation of methadone programmes in three study prisons. This chapter synthesises the findings presented in Chapters four, five and six in order to address the aims of this study. Each section is discussed in the context of the broader literature. In this chapter five main point are discussed. These are: barriers to the sustainability of methadone programmes; the lack of recognition that HIV is a problem; the lack of resources for the programmes; the lack of an embedded approach to the introduction of methadone programmes; and the lack of support systems outside and inside the prison settings. The strengths and limitations of the study are also considered.

7.2. Key findings

Perceptions of the implementation of the programmes within prison settings:

- HIV infection was not recognised as a problem, therefore, methadone programmes delivered within the prison settings were not regarded as a high priority or relevant by many prison staff including some healthcare staff in the general prison without methadone programmes.
- There was a lack of understanding of the primary roles of methadone programmes among many prison staff, healthcare staff, and prisoners in all study prisons.
- Misperceptions of methadone programmes, such as the belief that the programmes were equivalent to providing prisoners with an illegal drug, were common among some prison staff, healthcare staff, and prisoners in all study prisons.
• Many prisoners in the two prisons with methadone programmes believed methadone withdrawal was dangerous and could lead to death. This was particularly the case in the narcotics methadone prison.

• Participation in the methadone programmes was stigmatised. This is because participants were believed to be drug use, HIV-positive and poor by many prison staff, healthcare staff, and prisoners in all three study prisons.

• Methadone programmes were considered to have failed by many prison staff and prisoners not participating in the programmes in both methadone prisons, because methadone participants lacked hygiene, did not participate in other programmes, and showed a lack of respect for prison staff.

Barriers to the implementation of the programmes:

The level of programme participation by prisoners was found to be relatively low in both methadone prisons. Notably, for example, the rate of methadone participation was 0.8% in the narcotics methadone prison (25 participants: 2936 drug use prisoners). Barriers to participation included:

- Restrictive admission and assessment criteria particularly in the narcotics methadone prison. These criteria have the potential to increase the risk of HIV transmission in prisons because those ineligible for the programmes may relapse into taking illicit drugs.

- The lack of specific medical guidelines on methadone prescriptions in prison settings led to too high doses in the narcotics methadone prison and to too low doses in the general-methadone prison, both of which had negative impacts on prisoners.

- Many prisoners also highlighted the lack of flexibility during the methadone clinic opening times in both methadone prisons. This was problematic since they sometimes clashed with for example, work timetables or family visiting times.

Barriers relating to a lack of support systems within the programmes:

- The limited psychosocial support services for addiction in both methadone prisons led to a lack of understanding of methadone treatment plans, of
support for stigmatised-prisoners, and difficulties in managing the effects of long-term medication on HIV-positive prisoners.

- The reduction in international funding, concerns about managing funding for the programmes in local prisons and the introduction of Therapeutic Community (TC) programmes all limited the effective implementation and sustainability of methadone programmes in prisons.
- The lack of resources within local prisons posed a further challenge for the effective delivery of the programmes.
- The lack of integration of methadone programmes into the daily organisation of prisons had negative impacts on prisoner participation in prison work programmes or parole programmes.
- Programme participants required financial support from their family members to support additional medical expenses, food, and sometimes their participation in prison work programmes or parole programmes.

7.3. Barriers to the continuity and sustainability of programmes

7.3.1. The reduction of international resources

Indonesia has been dependent on funding from the Global Fund (GF) to support harm reduction programmes in prison settings. The GF is the largest multilateral international funder of HIV programmes in middle-and low-income countries. However, the level of funding for middle-income countries decreased by about 7% between 2015 and 2016 and resulted in the lowest level of funding for HIV since 2010 (UNAIDS 2017). Indonesia, in particular, experienced a 20% decline in external funding for HIV programmes for the period 2009-2014 compared with 2005-2010 (Choi et al. 2010). Furthermore, the reduction of general funding for HIV programmes was also reflected in reduced of the GF harm reduction funding, and the withdrawal of funding from some middle-income countries (Bridge et al. 2016). The HIV Cooperation Programme in Indonesia – Australia Aid (HCPI–AusAid), the largest bilateral external funding for harm reduction programmes in Indonesia, also withdrew their support at the end of 2015 (Ratri 2016). Healthcare staff, in particular, expressed concerns about the reduction of funding from these donors in relation to
the sustainability of methadone programmes in both study methadone prisons. They also highlighted a decline in support from NGOs since these organisations are also reliant on external funds.

It has been suggested that increasing domestic funding could make programmes more sustainable in middle-income countries (Olakunde and Ndukwe 2015). However, middle- and low-income countries have insufficient resources, and particularly those with a higher burden of HIV infection may be unable to sustain HIV programmes without international funding (UNAIDS 2013). Moreover, although private funding for HIV programmes in Indonesia is set to increase by 23.4% between 2017 and 2020, the allocation of domestic funding is mainly for HIV treatment and care. Thus, external funding continues to be essential to support HIV prevention programmes, for key populations in Indonesia (Baran 2017).

7.3.2. Challenges in managing HIV prevention programme' funding in prisons

Many healthcare staff indicated difficulties in managing the budget for methadone programmes in prisons following the decline of international funding and limited local budget allocation for the implementation of methadone programmes in prisons. The local prison authorities received funding for health services including for HIV prevention programmes and methadone programmes from the Directorate of Corrections and then distributed the funding to prison healthcare staff. The misallocation of funding (Sander et al. 2016; UNAIDS 2016) and the susceptibility to corruption among Indonesian junior staff (related partly to low pay) (Bureau of International Narcotics and Law Enforcement Affairs 2015) have also been identified as important factors in limiting available resources and affecting the delivery of HIV prevention programmes in prisons.

This study found that although the supply of methadone was distributed for free by the Ministry of Health (MOH), prison healthcare staff were required to collect it from the branch office of MOH. However, within the limited budget, healthcare staff needed to find an alternative source of support to pay for cost of collecting methadone, as mentioned by healthcare staff in the narcotics methadone prison. Healthcare staff in the general methadone prison identified that the amount of
funding they received was also often unpredictable and only available in the short
term which resulted in fragmentation of the delivery of methadone programmes in
prison. Many healthcare staff also indicated the withdrawal of incentives for those
who were involved in methadone programmes resulted in poor staff commitment to
methadone programmes in prisons. Similar factors alongside low pay of healthcare
staff has been recognised in the context of Brazil as a significant barrier to the
management of the implementation of health programmes (Mendes et al. 2017). In
this study, the lack clarity of ring-fenced funding for HIV prevention programmes
resulted in low funding priority for HIV programmes in prison as mentioned by the
healthcare staff in the general non-methadone prison.

7.3.3. Barriers relating to tensions between national policies

Many healthcare staff in the two methadone prisons identified changes in national
policies on the management of drug use in prisons as being problematic. The focus
has shifted from the provision of methadone programmes to TC programmes. This
has resulted in a reduction in the allocation of resources, healthcare staff and prison
staff to methadone programmes. The changing priorities for drug dependence
treatment were influenced by the results of at the publication from the National Anti-
Narcotics Agency of the Republic of Indonesia (BNN) and the University of
Indonesia’s Centre for Health Research (2009) which estimated a significant
increase in people who use drugs in Indonesia from 3.4 million in 2008 to 4.6 million
people in 2013, of whom 1.8 million people were categorised as people with non-
injection drugs dependence and 313,909 people with injecting drugs dependent
(referred to as to heroin injectors). However, a subsequent study has criticised the
method used arguing that its validity was unclear. For example, the definition of
people with drug dependence used was inconsistent with standard criteria for drug
dependence (Irwanto et al. 2015). However, to meet a 2015 target to rehabilitate
100,000 drug users, BNN established 60 TCs inside prisons in 2017, in addition to 6
TCs in communities (National Anti-Narcotics Agency of The Republic Indonesia
2017). However, the duration of TC programmes varied considerably from 3 to 24
months. At the time of this study, the TC programmes in the study prisons lasted
only three months. The short duration of these TC programmes has been identified
in a previous systematic review on the effectiveness of TC programmes as a key factor contributing to increased substance use after leaving TC programmes (Malivert et al. 2012). More recently, in late December 2017, the provision of TCs in Indonesian prisons was temporarily halted after the BNN found evidence that the provision of TCs in prisons was ineffective and wasted resources as they found persistent high levels of illicit drug use in prisons. In addition, they found some prisoners were controlling the drugs supply to the community (Sukmana 2017).

7.3.4. Barriers relating to a lack of resources in prison

The current study found that in all study prisons the ratio of prison officers to prisoners was around 1:100. A shortage of prison staff shortage has also been reported in other middle-income countries (Wickersham et al. 2013b; Zamani et al. 2010). The prison officer: prisoner ratio is considerably lower than that observed in richer countries. For example, the ratio in the UK is 1:21 (Prison Reform Trust 2017). Moreover, some prison officers were also involved in drugs smuggling into prisons, as mentioned by one prison governor and some prisoners. Many healthcare staff in both methadone prisons also pointed to the effects of a lack of qualified healthcare staff, such as pharmacists, on the quality of dispensing practices. At the same time, the shifting role of healthcare staff to more of a security role to fill the gap in the shortage of prison officers was also reported by many healthcare staff in the general non-methadone prison. This also had a negative impact on the quality of the HIV services in prison.

7.4. Barriers posed by the lack of recognition that HIV is a problem

7.4.1. Perceptions that heroin availability had fallen and-so the problem has disappeared

The current study found that most prison staff including healthcare staff in all three study prisons consistently thought that HIV was no longer a problem in prisons because of their perception of the limited availability of heroin and the low number of
heroin injectors. However, figures from the United Nations Office on Drugs and Crime (UNODC) in 2015 reported that around 70% of heroin seizures worldwide were in Asia which indicated that a concentration of heroin production and market in that area. Although heroin accounted for only 13% of drug use in Indonesia, ranked fourth after cannabis (64%), amphetamine-type stimulants (ATS) (38%), and ecstasy (18%) (National Anti-Narcotics Agency of The Republic Indonesia 2011), an increase in the consumption of opioids in Asia, including heroin, was also reported (UNODC 2017(3)). Moreover, the availability of street grade heroin “putaw” at a lower price compared to ATS (heroin: ATS = £2 (IDR. 50.000): £90 (IDR. 1.800.000)), has made heroin more accessible to people who use drugs in Indonesia. Therefore, it would be surprising if heroin were not available, as suggested by many prisoners, in all three study prisons. Unlike staff, the prisoners stated that heroin remained widely available and that there were a large number of drug injectors in prisons.

Many prison staff did recognise the risk of HIV infection caused by heroin injection in theory. However, although they recognised the availability of other drugs including ATS in prisons, they did not link these drugs to the risk of HIV infection. In fact, the availability of other drugs is likely to contribute to a significant share of the burden of HIV transmission in prisons. For example, a study in Japan indicated that up to 50% of ATS users are likely to inject (Koto 2016). Moreover, it has been found that injecting in prison settings is often more associated with HIV transmission than in the community since it is often linked to a much higher frequency of sharing injecting equipment (Culbert et al. 2015; Indig et al. 2010; Jürgens et al. 2009), as was also reported by prisoners in the current study. This situation is also worsened by the absence of needle and syringe programmes (NSPs) in all three study prisons. The current study also found that other risky behavioural practices such as unprotected sexual activity, which contributed to the risk of HIV transmission in prisons, as has been reported by the previous study of former Swedish prisoners (Lindbom et al. 2017), were also present in the prisons studied. Furthermore, the association of increased risk of HIV transmission in prison settings has also been reported in the previous literature (Dolan et al. 2015) for both prisons situated in high-income countries (Lindbom et al. 2017) and middle-income countries including Indonesia (Sawitri et al. 2016).
7.4.2. Lack of flexibility towards and stigmatisation of methadone-prisoners

Lack of flexibility
This study found that the lack of recognition that HIV is a problem led to the lack of willingness to consider prisoners’ circumstances and needs, resulting in an inflexible approach in delivering the methadone programmes. Many prisoners in the current study indicated difficulties in participating in the methadone programmes given the lack of flexibility in methadone clinic opening times, which were either too early or too late, as reported in previous studies (Sander et al. 2016; Mukherjee et al. 2016). Moreover, many methadone prisoners also indicated that long waiting times and early morning dispensing created difficulties since they also often have mental health problems including anxiety and insomnia (also see Ross et al. 2015). Inflexibility in clinic opening times was particularly problematic when prisoners needed to make money through working, especially when they had little family support. This made it difficult for methadone-programme participants who needed either to comply with a prison work programme requirement or the clinic opening times. Greater flexibility in clinics’ opening times would have the potential to address prisoners’ competing time-related needs and would also protect their identities (Yarborough et al. 2016). Many prisoners in both methadone prisons indicated that restricted methadone administration contributed to methadone diversion and to high-risk behaviours, since those who missed the methadone clinic opening times would ask for methadone from other methadone-prisoners or just take illicit drugs, leading to an increased risk of deaths from methadone overdose (Strang et al. 2005). Furthermore, the inflexibility of methadone programmes was also illustrated in the narcotics methadone prison, for example, by the prerequisite of family consent. As many drug users are estranged from their families, this requirement suggests a lack of recognition of the circumstances of prisoners who use drugs, and that greater flexibility might maximise participation.

Stigma
In this study, institutional stigma relating to methadone participation, refers to policy, culture, or practices within organisations that suggested negative beliefs and attitudes with regard to methadone participation. Such stigma has been indicated by
Harris and McEwan (2012) to lead to low level of accessibility to and service usage of methadone programmes, as well as to the development of general health, and mental health problems. Many prisoners indicated that they had experienced stigma relating to their participation in methadone programmes in both methadone prisons. This was confirmed by some healthcare staff in the general methadone prison and has also been recognised in other studies (Woo et al. 2017; Brinkley-Rubinstein 2015). Prisoners are usually members of vulnerable groups that are less likely to receive emotional support in prisons. This, together with overcrowding and insular prison environments in middle-income prison contexts, can provoke strong adverse emotional reactions to stigma. For example, prisoners in the narcotics methadone prison reported that some participants in methadone-programmes had committed suicide as a result of stigma they experienced from their participation.

This study, like the other few studies in middle-income countries, identified a high level of stigma concerning participation in methadone programmes among prison staff including healthcare staff, and prisoners in all three study prisons (Moradi et al. 2015; Zamani et al. 2010). These findings contrast with those of studies in richer countries where a low level of expressed stigma in relation to methadone participation has been observed (Carlin 2005).

This study also supports previous literature in community settings that healthcare staff did not seem to fully understand the breadth and scope of stigma against opioid-dependent clients (Deering et al. 2011). For example, healthcare staff in the narcotics methadone prison thought that there was less stigma attached to methadone status compared to HIV status, even though many methadone participants were also HIV-positive prisoners. The stigma concerning people who use drugs has also been identified within community dental settings in Canada which suggest the need to increase healthcare staff's social awareness about patients’ conditions (Brondani et al. 2017). However, this study indicated much greater discrimination towards methadone-prisoners. For example, many prisoners, particularly in the general methadone prison, reported hurtful comments such as being told that they were ‘dirty people’ by healthcare staff. Moreover, a study indicated that difficulties in accessing medical treatment for methadone withdrawal symptoms in prisons, as mentioned by some prisoners in both methadone prisons,
may be linked to stigmatising attitudes among prison healthcare staff towards methadone participation (Mitchel et al. 2009).

The majority of prison staff and prisoners in both methadone prisons considered that segregated units for methadone-participants, as observed in the narcotics methadone prison, increased methadone compliance and abstinence from illicit drugs. However, negative effects have been also recognised that may potentially deter prisoners from participation (Culbert et al. 2015).

7.4.3. Lack of general care shown to prisoners who participated in the methadone programmes

Prisoners in all three study prisons routinely reported overcrowding and a lack of access to water. Poor prison conditions, including a lack of healthcare services linked to an increased risk of HIV infection, have also been reported in a low-income prison context, Zambia (Simooya 2010). It has been suggested by the Office of the High Commissioner for Human Rights (United Nations) (2018), that an unfavourable prison environment and a lack of access to health services might constitute a breach of a prisoner’s human rights. Many prisoners, particularly in the general non-methadone prison, also expressed concerns about the lack of nutritious food while taking ART. Adequate nutrition is known to support the effectiveness of ART (Somarriba et al. 2010), while inadequate food and nutrition has been associated with poor ART-adherence in settings where resources are limited, for example Ethiopia (Berhe et al. 2013). Elsewhere, improved management of prison facilities has long been associated with improved efforts to promote a supportive environment for prisoners’ health and to protect prisoners’ human rights (Baybutt et al. 2014; WHO 2005).

This study also found a lack of "inherent dignity and value as human being" accorded to prisoners who participated in methadone programmes, which has also been noted by the United Nations (Office of the United Nations High Commissioner for Human Rights 2018). Many prisoners in both methadone prisons expected to have a reasonable level of privacy in relation to dispensing practices and their
medical records. The association between a lack of privacy and lower participation has been reported by other studies (Awgu et al. 2010; Carlin 2005).

In Indonesian society death is often very visible. However, the practice of leaving corpses temporarily in the prison clinic corridor, often for reasons linked to a lack of prison resources, troubled many prisoners greatly. Prisoners in all three study prisons spoke about the trauma of seeing the death of other prisoners and their families’ grief and associated it with their own eventual deaths. This has also been reported by Loeb and colleagues (2014). Many prisoners in both methadone prisons mistakenly associated these deaths with methadone withdrawal although healthcare staff indicated that they were caused by opportunistic infections related to HIV positive status.

7.5. Lack of resources applied to methadone programmes

7.5.1. Lack of training

Many healthcare staff in this study commented on the lack of education and training on harm reduction programmes for prison staff and on the absence of monitoring and evaluation of these programmes. This was attributed to the fall in levels of funding. This resulted in different understandings of the principal roles of methadone programmes as a harm reduction strategy among both prison staff and prisoners in all three study prisons, in common with a previous study (Stöver and Kastelic 2016). Although Corkery et al. (2004) found that a risk of death within methadone participation was linked to interactions and to multiple illicit drug use rather than to methadone withdrawal, many prisoners in both methadone prisons indicated that they feared methadone withdrawal intensely and considered it much more dangerous than heroin withdrawal, and potentially fatal.

Findings from studies in community settings, have also emphasised the importance of providing prisoners with adequate information about methadone side effects, withdrawal symptoms, and the consequences of multiple drug use (Greer et al. 2016). The link between insufficient information on methadone and low satisfaction
with methadone programmes has also been reported previously in community settings in Vietnam, another middle-income country (Tran et al. 2012). However, the lack of staff as indicated above (see section 6.3.3) together with the shortage of prison officers and particularly those with sufficient drug use training, while there was also lack of healthcare staff after office hours, contributed to and reinforced the aforementioned fear of methadone withdrawal among prisoners. Furthermore, although information about the availability of methadone programmes was provided in prison receptions, this study also found that many prisoners in both methadone prisons were not aware of them, as has also been reported by a Malaysian study (Mukherjee et al. 2016).

7.5.2. Lack of coordination among prison staff and aftercare for prisoners on release

Lack of coordination of programmes was often reported, particularly by healthcare staff in the general methadone prison. This often resulted in the programmes not being sufficiently planned and inconsistently and ineffectively implemented. Many healthcare staff in this prison considered the methadone programmes had failed, as a significantly higher level of methadone participants had positive opioid tests in urine drug screening. The lack of coordination among healthcare staff may reflect a lack of close monitoring and supervision of methadone programmes by the Directorate of Corrections, as was mentioned by some healthcare staff in the general methadone prison. This may also have resulted in increased tensions among and between healthcare staff as they tried to deal with a significant workload, an unclear role and responsibilities, and a hierarchical work structure (WHO 2003) in prisons.

Another issue identified by the study was the lack of continuity of care when prisoners were transferred to other prisons or released into the community. This resulted from a lack of coordinated communication of health information both between prison healthcare staff and prison officers and healthcare staff in the community, as has been reported in Malaysia (Wickersham et al. 2013b). The improvement in institutional management of prisoners’ transfer to community treatment has been associated with better retention in community treatment (Larney et al. 2016), and a reduction in the risk of deaths-related to drug overdoses (Schwitters 2014) after release.
7.6. Lack of embedded approach to the introduction of methadone programmes

7.6.1 Conflict between methadone programmes and prison ethos

The strong views held about methadone, and notably the view that methadone is simply another type of illicit drug, were identified among prison staff and some healthcare staff in all three study prisons, a perception also found in other prison-based studies (Carlin 2005; Asher 2013). Moreover, as indicated in this study, opioid dependence was often regarded as a non-medical and highly stigmatised condition (Chandler et al. 2009). In line with findings from another study (Stöver and Kastelic 2016), methadone programmes were perceived as less appropriate in prison settings, since they were seen as conflicting with prison ethos, where the underpinning policy priority of the organisation is one of control (Mear et al. 2003). Rieckman et al. (2010) report a link between better understandings of methadone programmes and reduced institutional resistance to prison-based methadone programmes. Similarly, the current study indicated that a lack of support for methadone programmes from many staff members in both methadone prisons was also associated with their perceived failure in prisons. While the main aim of methadone programmes relates to harm reduction, many staff expected methadone participants' behaviour to improve and that they would subsequently abstain from illicit drug use in prisons.

In the general methadone prison, in particular, there was also evidence of poor relationships between the prison officers and healthcare staff which made the implementation of the programmes even more difficult. For example, the prison officers discouraged prisoners from continuing their methadone, as mentioned by some healthcare staff. This is consistent with findings from another middle-income prison study in Iran (Moradi et al. 2015). These difficulties appeared to be linked to poor communication of what was expected of prison officers' roles. In addition, there was inadequate information about the process of participation in methadone programmes, for example, prisoners' need to access the prison clinic daily. These prison officers' reactions may also be linked to a lack of understanding about
methadone programmes and stigmatisation of methadone prisoners, as indicated in section 7.4.2.

In sharp contrast, at the time of this study, the delivery of TC programmes in prisons was thought to be much more acceptable in a prison context by many prison staff and prisoners as it is a drug-free programme and aims to reduce re-offending rates (Miller and Brown 2010). In 2013, TC programmes were introduced into Indonesian prisons and focused on cognitive behavioral and psycho-educational sessions (Sacks et al. 2012). Their much better fit with the ethos underpinning the prison system seems to have allowed them to fit much more easily into the Indonesian prison system. For example, TC participants also received a guaranteed place on the parole programmes. However, many prisoners who injected drugs indicated that the TC programmes were too demanding.

7.6.2. Healthcare processes do not reflect harm reduction principles

Assessment processes

The assessment processes, like the admission criteria identified in this study (as discussed in 7.4.2) do not reflect harm reduction principles. Notably, the requirement for less than a three-month opioid-free period in the narcotics methadone prison, and for positive opioid drug test in the two methadone prisons are problematic. Bruce and Schleifer (2008) have also noted the link between the inaccessibility of methadone in prisons and higher risk behaviours, a link that may reflect a lack of awareness of the evidence base regarding the effectiveness of methadone programmes in preventing HIV transmission (Gowing et al. 2011).

It was particularly striking in this study that there was a lack of balanced information which discussed both the risks and benefits of the programmes during assessment processes in both methadone prisons. Furthermore, prisoners also feared that the associated behavioural risk assessments might affect their eligibility for parole programmes. This was the case in both methadone prisons and resulted from a lack
of assurance from healthcare staff that the information they provided would be treated as confidential.

**Dosage**

The lack of specific guidance on therapeutic doses particularly for participants with co-infection was found to be problematic in both methadone prisons. However, although the prison guidelines indicated general methadone doses of between 60 and 120 mg/day (Ministry of Justice Indonesia 2007), there was a low mean methadone dose of 47 mg/day (range 15-104 mg/day) in the general methadone prison. Many prisoners in that prison believed that lower methadone doses would be helpful to finish their methadone regime and to avoid being dependent on methadone (Asher 2013; Xu et al. 2012; Yin et al. 2010). However, the potential for low methadone doses to act as a contributing factor in methadone diversion and the use of illicit drugs to augment sub-optimal methadone doses were also indicated in this study (Stöver 2011; Hayashi et al. 2017).

In this study, the practice of giving low doses of methadone was associated with doctors’ fears of liability relating to the severe side effects of methadone which were also linked to the difficulties in dealing with the complex healthcare needs of prisoners who take multiple prescribed medications in limited prison healthcare services. Similar to findings in another study in community settings, this study also identified that low methadone doses were linked to low awareness among healthcare staff of the long-term nature of harm reduction approaches, and to a lack of communication with patients to discuss potential side effects (Lin and Detels 2011). Therefore, doctors may be failing to provide sufficient doses based on the individualised treatment needs of prisoners, as has also been reported by Stöver et al. (2006). In contrast, in the community context of high-income countries such as Canada, the benefits of a high methadone dose of more than 100 mg/day have been linked to improved ART adherence (Lappalainen et al. 2015), while this study found that prisoners who received high doses of methadone also tended to delay taking ART. This was partly associated with the fear of methadone withdrawal in a context of limited healthcare resources.

In contrast with the general methadone prison, a high mean methadone dose of 114 (range 5-335 mg/day) was found in the narcotics methadone prison. In line with other
studies in Vietnamese and Malaysian prison settings, many prisoners in this study prison linked the needs of high methadone doses to TB and HIV co-infection, as was also confirmed by healthcare staff (Trinh et al. 2015; Wickersham et al. 2013b). The interactions between methadone and anti-retroviral treatment (ART) have been associated with a reduction of more than half in methadone serum concentration (Clarke et al. 2001) thus requiring an increase in methadone dosage of between 20% and 50% to maintain the therapeutic effects (Maas et al. 2006). However, the fact that the methadone dosage in these prisons was so high also indicates a lack of psychological support to help methadone participants understand what constitutes an optimum dose (Trujol et al. 2017). In addition, a scrutinised process for reduction of methadone doses which involved an opioid urine test contributed to the high mean of methadone dose in this study prison.

This study also found that high methadone doses among participants also had negative implications for prisoners’ eligibility for parole programmes. The work programmes were oversubscribed in all three prisons; however, access to parole programmes is dependent on prisoners’ participation in a prison work programme. Many methadone prisoners who had high methadone doses found accessing a prison work programme challenging since some of them reported that the high doses made them sleepy. The difficulties in accessing work programmes were also associated with stigma relating to HIV-positive status and methadone participation.

7.7. Lack of support systems outside and inside the prisons for prisoners

7.7.1. Family support

This study found that in the Indonesian context, family support plays an essential role in shaping programme effectiveness. Family support is needed to support additional medical expenses incurred through participation in the methadone programmes and in securing financial support for prisoners throughout their imprisonment. In addition, a prisoner may be unable to maintain abstinence from illicit drugs without strong psychological family support. Moreover, access to the parole programmes is dependent on participation in a work programme. However, it was reported that prisoners could not access prison work programmes without
financial support from family members. The low pay of prison staff has led to a system of approval for access to prison programmes based on bribes. This was mentioned by some prisoners in all three study prisons and confirmed by one prison governor.

7.7.2. Psychosocial support

A number of studies (European Monitoring Centre for Drugs and Drug Addiction 2016; Jhanjee 2014) have reported negative impacts, such as a lack of identification by prisoners about their drug problems, a lack of commitment to changing their behaviour, difficulty in either drugs reduction or abstinence, deterioration in mental and health conditions, caused by a lack of psychosocial support for methadone-prisoners. In this study, some doctors were reluctant to manage psychological problems in methadone programme participants for a variety of reasons. First, they felt they lacked the necessary expertise in mental health problems. Second, they often thought that the stress prisoners experienced was unrelated to their participation in the methadone programmes. Finally, they also considered that the responsibility for addressing mental health issues lay with psychologists, but unfortunately, these staff members were rarely available in the prison clinics. Ross et al. (2015) has also suggested that health care staff have negative attitudes towards both substance use and mental health issues.

7.7.3. The irregularity of NGO support

This study found that NGOs played an essential role in providing psychosocial support for drug users through the provision of Peer Support Groups (PSG) in all three prisons. This chimes with findings from Nigeria, where a greater reliance on NGOs for support in prisons was observed (Imhabekhai 2002). Other studies in the community settings indicated the benefits of PSG for people living with HIV resulting in an increased quality of life and a reduction in morbidity and mortality (Bateganya et al. 2015), and for people who use drugs a reduction in drug use, risk behaviours, craving, and increased treatment engagement (Tracy and Wallace 2016). However, the higher reliance on these NGOs is problematic since their support can be
unpredictable and is often not sustained, as they are also reliant on external funding and particularly susceptible to any reductions in funding (see section 7.3.1).

7.8. Strengths and limitations of the study

7.8.1. Study strengths

The unique access
The involvement of prison staff in varying levels of seniority, including prison governors, prison doctors and nurses, as well as prison officers was particularly valuable to this study since these groups are often difficult to access, especially in studies related to exploring sensitive issues such as problem drug use in prison settings.

The use of multiple perspectives
The use of multiple perspectives involving those of prison governors, healthcare staff, prison officers, and prisoners from three different study prisons has allowed a much more holistic understanding of the delivery of methadone programmes within middle-income prison settings.

The number of interviews
The sample size of this study was relatively large for qualitative research with 57 participants being interviewed. This allowed the production of rich and in-depth data on the complex nature of middle prison contexts.

Consistency of findings within groups
This study generated similar findings within the different study group participants, and surprisingly consistent findings were also found across the three study prisons.

Transparency of research protocol
The involvement of supervisors throughout the analysis process provided further credibility and mediated potential researcher bias to the research process given the effects of different cultural and institutional experiences and the assumptions that the

181
researcher and supervisors brought to the process. For example, the critical role of family for prisoners in Indonesian prisons was not immediately obvious to the supervisors and taken for granted by the researcher.

**Transferability of the findings**

Although the findings of this qualitative case study are not intended to be generalizable to methadone programmes in other prison settings, it would be useful to consider whether critical findings of this study may be transferable to other Indonesian prison contexts, and to other middle-and low-income prison contexts.

### 7.8.2. Limitations of the case study

**Low number of study prisons**
The selection of the study prisons to construct the case study was based on the pragmatic reasons within the time and resource constraints of the current study. Thus, it was decided to select prisons which had the highest HIV prevalence, and which are the primary target of the methadone programmes. This resulted in the selection of a small number of prisons (3 out of 412 prisons) which were located in the same geographic area (one province) and excluding women prisons. However, this is not necessary limit the value of this study given the depth, breadth and insightfulness of the data collected by this study.

**Bias in the selection of participants**
The reliance on prison healthcare staff and chief of security staff in selecting some prison staff and prisoner participants is another potential limitation of the study. This reliance was inevitable given the difficulty of recruiting participants in prison settings. However, the use of snowball sampling together with purposive sampling in recruiting the study participants allowed access to different groups of respondents and potentially reduced selection bias.

**Response bias**
Another potential limitation of the study could have arisen from researcher bias. The researcher's status as a member of prison healthcare staff was likely to impact on
the collection and interpretation of data findings. Although the researcher's status as an insider (prison healthcare staff) was valuable in establishing credibility with both prison staff and prisoner participants, it may also have resulted in a tendency for participants to provide a positive view about the prison conditions, particularly among prison officers. Despite the potential of response bias, however, the interview content also suggests a high level of openness among prison officer participants. Furthermore, supervisory feedback and researcher reflexivity helped the researcher to mitigate bias in analysis and interpretation throughout the study process as discussed above.

Confidentiality and anonymity
The interviews were audio-recorded and conducted in a less than confidential environment. For example, healthcare staff sometimes came in and out of the interview room while the researcher was interviewing prisoner participants, and therefore the researcher had to stop the interview such times. Although assurances of confidentiality and anonymity were given to all the participants and efforts to promote privacy protection were attempted, it is possible that these circumstances may have influenced participants' responses to questions. In the final report, no personally identifiable information appears to protect participant identities.

7.9. Chapter summary

Discussions within this chapter have focused on five themes. The first theme looked at the barriers to the continuity and sustainability of programmes in prisons, discussing the challenges linked to a reduction of international support, a shift in national drug policy priorities from the provision of methadone to drug-free TC programmes, and a lack of resources in local prisons contexts. The second theme identified the barriers posed by the lack of recognition, particularly among prison staff, that HIV is a problem in prisons. The third theme discussed the lack of resources applied to methadone programmes within prisons which posed challenges to their delivery. The theme then discussed the failure to embed methadone programmes within the daily prison routine. The final theme discussed the challenges prison staff and prisoners experience in delivering methadone programmes, specifically linked to lack of support systems inside and outside prisons.
for prisoners. Overall multiple intersecting issues were identified. The chapter concluded with a reflection on the study strengths and some of the limitations of the study.
CHAPTER 8: STUDY CONCLUSIONS, IMPLICATIONS, AND RECOMMENDATIONS

8.1. Introduction

The final chapter (Chapter 8) provides study conclusions, consideration of the implications of the study for research, policy, and practice, concerning the implementation, routine delivery and sustainability of methadone programmes in prisons. A series of recommendations supported by the findings are outlined.

8.2. Study conclusions

OST programmes target opioid dependence through the prescribing of an oral opioid drug substitute such as methadone. This minimises the harmful health effects associated with injecting opioid drugs such as heroin. The WHO recommends OST programmes as an effective health intervention for opioid dependence in prison (WHO, UNAIDS and UNODC 2004).

The focus of this study is on OST programmes in prisons and exclusively on methadone programmes in Indonesian prisons. Three different prison settings in Indonesia were selected to construct a qualitative case study that investigated the role of methadone programmes within the context of HIV prevention programmes and to identify barriers and facilitators factors that influence the implementation, routine delivery and sustainability of methadone programmes in Indonesian prisons. The case study approach allowed for the exploration of multiple perspectives among prisoners and diverse prison staff involved in the implementation and delivery of methadone programmes. This has helped address areas of investigation that are currently under-represented in the qualitative study on the implementation, delivery and sustainability of OST programmes in prison.
The qualitative approach used in this study was also helpful in developing an understanding of how these groups perceived and/or experienced the methadone programmes within their particular prison settings. The framework analysis approach facilitates the data analysis process.

Data were collected approximately seven years after the establishment of the methadone maintenance treatment programmes in two of the study prisons and 10 years after a programme was first initiated in an Indonesian prison. The study was also conducted during a period of substantial change in the provision of methadone programmes in prisons due to the reduction of international funding and shifts in national drug policy from methadone to drug-free TC programmes in 2013. The impact of these changes has demonstrated that a positive interaction between international funding support and a supportive national context associated with support to prisons environment and the programmes, is a critical requirement for programme’ continuity and sustainability within prisons in middle-income countries.

The current study is unique in that it adds to the existing knowledge base about the delivery of OST programmes in prisons in a middle-income country from the perspective of prison governors, prison officers, healthcare staff, and prisoners in middle-income prison contexts. The lack of resources applied to the programmes and a lack of support systems for prisoners have been shown to be similar to those in other middle-income prison settings, presenting multiple barriers to the delivery of programmes within prisons.

The original contribution of this study to knowledge lies in its insights into the implementation, delivery, and sustainability of methadone programmes in a large and highly complex middle-income country, within which there are huge cultural and economic disparities and where the family plays a crucial role in getting by. In part this original contribution arises from the use of qualitative methods which allow for the exploration of multiple perspectives in a field which has hitherto been dominated by survey research. The study highlights the fact that a lack of focus on programme continuity and sustainability at the international and national levels may critically impede the development of continuity and sustainability of prison programmes in middle-income countries.
The study has also identified that when HIV is not recognised as a problem in prison settings, this may have negative implications for further facilitating the provision of harm reduction including OST programmes in prisons. Failure to embed the principles and processes necessary for the introduction of methadone programmes within the prison system caused by considerable conflict between the principles of control that underpin prison ethos, and the principles of harm reduction that are central to methadone programmes, have also been identified as a significant barrier to the coverage and effectiveness of programmes in prisons.

8.3. Implications of the study for research, policy and practice

This section explores the implication of the study findings for research, policy, and practice. The study findings and implications will be disseminated to the Ministry of Finance of the Republic of Indonesia, Ministry of Justice, prison authorities and to the prison governor and chief doctor in each prison. The focus of the recommendations on prison healthcare staff. However, this needs to be translated into national policies and to be disseminated at local prison level.

8.3.1. Implications for research

The systematic review conducted as part of this study revealed that most research to date has been conducted in high-income countries and that there is variation in the delivery of methadone programmes in prison settings between middle- and high-income countries. Therefore, it was concluded that further research needed to be conducted in middle- and low-income countries, where the burden of opioid dependence and HIV infection is often greatest.

Research on the implementation of methadone programmes has traditionally focused on quantitative measures including assessing satisfaction with the programmes (Aziz 2015; Tran et al. 2015). However, survey results may be less useful for exploring the working of methadone programmes within prison settings. Given the critical role of prisons in implementing harm reduction principles for injecting drug use as part of the global effort to reduce the spread of HIV and other
blood-borne infections, a greater understanding of the complexities relating to the implementation, delivery, and sustainability of methadone programmes is needed to encourage the transfer of knowledge and skills across middle-income countries. Therefore, there needs to be more qualitative and mixed methods research that takes context into account.

Similarly, the study contributes to the overall evidence base for OST programmes and programmes’ sustainability, addressing, in particular, the lack of research in middle-income prison contexts. The existing literature has focused on the delivery of OST programmes. However, understanding of the relationship between context, sustainability and delivery, particularly in middle-income prison contexts, remains limited.

8.3.2. Implications for policy

The influence of international and national contexts on the sustainability and delivery of programmes

These study findings suggest that international funding and national policy contexts play a significant role both in the continuity and sustainability of prison methadone programmes, particularly when prison resources are limited as they are in middle-income country contexts. While NGOs currently fill the gaps in addiction services in all three prison, their support can be unpredictable and is often not sustained, as they are also reliant on external funding and therefore susceptible to any reductions in funding. Therefore, prison policy makers need to facilitate the development of collaborations among international and national agencies, ministries, NGOs, and community providers to increase the capacity for programme’ continuity and sustainability.

Incorporating programmes into prison priorities

As the roles of prison mainly focus on the safety and security of their prisoners, at the time of the study, health services, and notably methadone programmes, appear to be a lesser priority for prison authorities. The study findings reaffirmed the existing literature in pointing to the prison environment as a contributory factor to a high-risk environment for HIV transmission. Better understanding of prisons as high-
risk settings, particularly among prison staff, together with affording equal priority to prisoner health, may facilitate a better environment for delivering harm reduction strategies including methadone programmes. One potential mechanism might be to open discussions exploring current understanding of risk for HIV transmission and OST programmes among stakeholders (national policymakers, Ministry of Justice policymakers, prison governors, and prison healthcare staff) at both national and local prison levels. This should include local stakeholders from middle-income country prisons to encourage sharing of experiences in relation to the implementation of methadone and HIV programmes.

The apparent lack of success in integrating harm reduction principles underpinning methadone programmes into prisons’ organisational processes and procedures has also made the programmes less sustainable in a prison context. Therefore, it may be prudent to consider reviewing the existing guidance on methadone programmes in prisons. The admission criteria and assessment processes could be modified to offer more support for harm reduction approaches among opioid-dependent prisoners. For example, prison guidelines should include guidance on the clinical management of participants in methadone programmes with explicit advice on the management of patients with co-infections (HIV, TB). The existing practices with respect to methadone participants' privacy should also be modified to offer a reasonable standard of confidentiality, for example by giving methadone doses alongside other medication (Stöver et al. 2006).

These study findings also suggest that many prisoners across all three prisons had unidentified and unsupported mental health needs associated with imprisonment and illicit drug use. The prison authorities should collaborate with psychological services from the MOH that can address the gaps in health service provision within prison settings. Assessment of mental health problems could be conducted on admission to prison, and again during assessment for opioid dependence.

8.3.3. Implications for practice

Provision of education and training
This study identified a critical need for training on the role of harm reduction in methadone programmes in order to raise awareness about HIV transmission in prison settings, and to challenge stigmatising attitudes in prisons. The association of training with improved knowledge, skills, and attitudes has been suggested in the previous literature (Deering et al. 2011).

Health training should be compulsory for all prison staff. This should include training in the recognition of severe opioid withdrawal symptoms and drug overdoses, and suicide prevention. Specific training for healthcare staff should promote understanding of the evidence base for substitution treatment (Thomas and Miller 2007), drug dependence and mental health problems (Ross et al. 2015). This study also identified the need for healthcare staff to have access to clinical support systems such as drug use consultants to help deal with complex methadone cases (Turner et al. 2004), particularly in middle-income prison contexts. All prison staff should be given clear information about the economic benefits of providing MMT programmes in prisons. An Indonesian study, for example, indicates that cost-effectiveness of providing MMT programmes is US$ 7000 per HIV infection averted (Wammesa et al, 2012).

This study also identified the importance of prisoner education sessions to promote their understanding of factual issues related to HIV infection and its' transmission, drug use treatments, and to challenge their stigmatising attitudes in a meaningful and socially and culturally relevant way. Meanwhile, the element of education for methadone prisoners should also include methadone side effects, withdrawal symptoms, and the consequences of multiple drug use. An essential element of education for HIV-infected prisoners should be to raise their awareness of the illness, and medication, and other issues such as sexual life for HIV-infected people.

Although prisoners’ family members are often seen in negative terms by prison staff and are associated with an increasing in the illicit drug supply in prisons, prisoners’ family members have a potential role in enhancing the effectiveness of methadone programmes and in supporting implementation and delivery efforts in prisons. This could be done by increasing their capacity through educating family members during
visiting times about the problem of illicit drug use in prisons, and the benefits of participation in methadone programmes.

The varied response from both prison staff and prisoners across all three prisons on condom provision within prisons may also explain limited discussion about same-sex sexual activity in Indonesian prisons. Furthermore, it would be appropriate to develop a record system to make sure that all prisoners receive such education by keeping an educational record for each prisoner, and to address the need for material in the many different languages of Indonesia and for recognition that some prisoners cannot read.

**Involvement of the Directorate of Corrections in programmes monitoring**

As suggested by some healthcare staff, involving the Directorate of Corrections in effective monitoring and evaluation processes of methadone programmes in prisons would provide feedback and encourage healthcare staff to maintain the quality of their programmes. This is particularly relevant where issues of staff capacity and prison resources have a more significant influence on delivery. For example, the introduction of medical reviews at least every six months, to review treatment plans and assess methadone prisoners' treatment progress concerning their dose, and, would assess effectiveness of the programmes. Furthermore, greater flexibility in giving methadone doses both in the morning and afternoon for prisoners on high methadone doses in the narcotics methadone prisons would also assist in supporting the programmes' effectiveness. The evidence from elsewhere suggests that it is possible to achieve this flexibility across prisons in limited healthcare resources settings.

### 8.4. Recommendations

The following recommendations are made based on the findings of the study.

**8.4.1. Future research into sustainability and delivery of programmes should:**

- Undertake further qualitative studies to explore the multiple perspectives on delivering OST programmes in prisons particularly in middle- and low-income
countries that takes into account the context of limited resources, changing national policies, and changing international funding schemes.

- Undertake cross-cultural research to identify and clarify assumptions about the delivery of OST programmes.
- Review the measures used to assess outcomes of methadone programmes and add to the existing guidelines for methadone in prisons.
- Explore the co-occurring problem of drug use prisoners with mental health problems within middle-income prison contexts.
- Explore the breadth and scope of prejudice of prison staff against methadone prisoners.

8.4.2. The Directorate of Corrections should:

- Open a discussion involving national policymakers, Ministry of Justice policymakers, and prison governors and healthcare staff at the prison level to address the mismatch between prison and health service priorities and to determine how best to co-ordinate them.
- Employ efforts to address the prioritisation of methadone programmes in prison settings by educating national policymakers, Ministry of Justice policymakers, prison governor, prison officers, and healthcare staff at the prison level.
- Promote efforts to ring-fence the funding provided to HIV programmes including methadone programmes in prisons.
- Ensure all prisoners have equal access to all prison programmes including work programmes and parole programmes without having to pay for them.
- Develop medical guidelines to support healthcare staff in dealing with managing complex health problems of prisoners who use drugs including methadone doses for co-infection.
- Review the existing guidance on the methadone programmes to help prisoners abstain from illicit drugs, to promote privacy, and to develop efforts to tackle stigma.
- Integrate psychosocial support services into the existing healthcare services within prisons.
• Integrate drug use health-related issues modules into national prison officers’ training and also into psychological modules in healthcare staff training to facilitate better support for prisoners who use drugs.

• Provide access for healthcare staff to professional advice or consultants including psychiatrists to address challenging cases among prisoners.

• Integrate anti-discrimination policies for prisoners with specific health conditions such as HIV-positive or methadone-prisoners in prison settings into national human rights legislation.

8.4.3. General recommendations for prison healthcare staff

Prison healthcare staff was:

• Promote efforts to raise prison governors’ and prison officers’ awareness about methadone programmes as part of national HIV prevention programmes.

• Promote efforts to raise prisoners’ awareness about the availability of methadone programmes within prisons and to promote their understanding about the programmes.

• Review the practicality of programmes to promote harm reduction approaches in prisons including assessment criteria processes and add to existing guidelines.

• Make appropriate use of assessment processes that support participation to avoid misinterpretation and alleviate anxiety among potential participants.

• Screen all prisoners for mental health problems on admission, and then again as part of the assessment process for methadone for opioid-dependent prisoners and refer those who need further assessment to a consultant.

• Promote efforts to protect the confidentiality of prisoners and to alleviate stigma concerning HIV and methadone status through education of prison staff and prisoners.

8.4.4. Specific recommendations for the study prison healthcare staff

Prison healthcare staff in the narcotics methadone prison should:

• Review the requirement of family consent for admission.
• Extend the flexibility of dispensing times to all methadone-participants.
• Extend provision of addiction counselling to all methadone-participants.

**Prison healthcare staff in the general methadone prison should:**
• Provide more flexibility in clinic opening times for methadone dispensing.
• Promote efforts to address the need for addictions counselling.
• Promote efforts to address the lack of coordination among and between healthcare staff and prison staff.
• Allocate space for the delivery of methadone clinics to increase privacy of participants.
• Provide a separate methadone unit for methadone participants to promote the programme’s effectiveness.

**Prison healthcare staff in the general non-methadone prison:**
• Adopt harm reduction principles to support prisoners who use opioids and to guide local decisions regarding appropriate strategies to reduce drug-related harms in prison.
• Promote efforts to increase support for HIV-positive prisoners including safeguarding confidentiality and providing sufficient education sessions.

**8.5. Conclusion**

It is essential that low-and middle-income countries respond effectively and efficiently to the global HIV/AIDS challenge as they contribute most to global HIV prevalence. There is a lot of evidence about the positive effects of OST programmes in prison settings as part of HIV/AIDS prevention strategies in high-income countries. These include the reduction of illicit drugs use, of sharing injecting equipment, and an increase in physical, and mental health (Zamani et al. 2010; Carlin, 2005; Moradi et al. 2015). However, evidence about OST programmes in prisons in middle-and low-income countries remains limited. This raises questions as to the implementation of OST programmes in middle-income countries. Furthermore, most such studies have employed quantitative methods.
This study explored barriers to and facilitators of the implementation, delivery, and sustainability of methadone programmes in middle-income prison contexts. The findings have identified multiple challenges to the programmes in such contexts. The international and national contexts increased pressure on already limited prison resources for the continuity and sustainability of the programmes in prisons. The low priority accorded to the risk of HIV transmission, and to the adoption of harm reduction principles particularly for methadone programmes in prisons together suggest that ongoing international support and national drug policies are vital to the continuation and sustainability of methadone programmes in prisons.
APPENDICES

APPENDIX A. Search strategies of six databases

1. Medline database

<table>
<thead>
<tr>
<th>#</th>
<th>Search Inquiry</th>
<th>Results</th>
<th>Search Type</th>
<th>Actions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>(search strategy 1)</td>
<td>1963</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>2</td>
<td>(search strategy 2)</td>
<td>161</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>3</td>
<td>(search strategy 3)</td>
<td>370</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>4</td>
<td>(search strategy 4)</td>
<td>193</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>5</td>
<td>(search strategy 5)</td>
<td>94</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>6</td>
<td>(search strategy 6)</td>
<td>3676</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>7</td>
<td>(search strategy 7)</td>
<td>2133</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>8</td>
<td>(search strategy 8)</td>
<td>686</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>9</td>
<td>(search strategy 9)</td>
<td>5481</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>10</td>
<td>(search strategy 10)</td>
<td>1402</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>11</td>
<td>(search strategy 11)</td>
<td>1904</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>12</td>
<td>(search strategy 12)</td>
<td>7157</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>13</td>
<td>(search strategy 13)</td>
<td>185763</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>14</td>
<td>(search strategy 14)</td>
<td>23952</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>15</td>
<td>(search strategy 15)</td>
<td>9293</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>16</td>
<td>(search strategy 16)</td>
<td>2481</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>17</td>
<td>(search strategy 17)</td>
<td>1386</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>18</td>
<td>(search strategy 18)</td>
<td>1598</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>19</td>
<td>(search strategy 19)</td>
<td>118132</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>20</td>
<td>(search strategy 20)</td>
<td>13033</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>21</td>
<td>(search strategy 21)</td>
<td>1679</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>22</td>
<td>(search strategy 22)</td>
<td>241</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>23</td>
<td>(search strategy 23)</td>
<td>1763</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>24</td>
<td>(search strategy 24)</td>
<td>4686</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>25</td>
<td>(search strategy 25)</td>
<td>763</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
<tr>
<td>26</td>
<td>(search strategy 26)</td>
<td>1208</td>
<td>Advanced</td>
<td>Display, Share</td>
</tr>
</tbody>
</table>
2. Pubmed database

<table>
<thead>
<tr>
<th>Search builder</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Search ((((((&quot;opioid peptides&quot;[MeSH Major Topic]) OR opioid&quot; AND substitution[Title/Abstract]) OR &quot;methadone&quot;[MeSH Major Topic]) OR buprenorphine[Title/Abstract] OR narcotic antagonists[Title/Abstract]) OR &quot;substance abuse&quot;[Title/Abstract]) OR (&quot;heroin&quot;[MeSH Major Topic]) AND ((abuse'[Title/Abstract] OR depend'[Title/Abstract] OR addict'[Title/Abstract] OR use'[Title/Abstract] OR misus'[Title/Abstract])) OR (&quot;heroin&quot;[MeSH Major Topic]) AND (inject'[Title/Abstract] OR intravenous[Title/Abstract])) OR (((abuse'[Title/Abstract] OR depend'[Title/Abstract] OR addict'[Title/Abstract] OR use'[Title/Abstract] OR misus'[Title/Abstract])) AND (substance'[Title/Abstract] OR drug'[Title/Abstract])))) AND (((((&quot;prisoners&quot;[MeSH Major Topic]) OR prison[Title/Abstract]) OR ((custodial[Title/Abstract] OR detention[Title/Abstract]))) OR ((remand[Title/Abstract] OR jail[Title/Abstract])) OR (correctional facil'[Title/Abstract] OR correctional service'[Title/Abstract])) OR (((imprison'[Title/Abstract] OR incarcerat'[Title/Abstract])) OR (punish'[Title/Abstract] OR inmate'[Title/Abstract])) OR ((detain'[Title/Abstract] OR confin'[Title/Abstract] OR offend'[Title/Abstract])))) AND (((&quot;qualitative research&quot;[MeSH Major Topic]) OR (mixed stud'[Title/Abstract] OR mixed method'[Title/Abstract])) OR &quot;purpos sampl&quot;'[Title/Abstract]) OR &quot;focus group'[Title/Abstract]) OR ((knowledge[Title/Abstract] OR view'[Title/Abstract] OR perspective'[Title/Abstract] OR attitude'[Title/Abstract] OR experience'[Title/Abstract])) OR (((content[Title/Abstract] OR thematic[Title/Abstract])) AND analysis[Title/Abstract]) OR qualitative[Title/Abstract])) AND (&quot;2005/01/01&quot;[PDat] : &quot;2015/12/31&quot;[PDat]) AND English[lang]) Filters: Publication date from 2005/01/01 to 2015/12/31; English</td>
<td>663 19:16:06</td>
</tr>
</tbody>
</table>
3. ASSIA database
<table>
<thead>
<tr>
<th>Page</th>
<th>Abstract</th>
<th>Applied Social Sciences Index and Abstracts (ASSIA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>525</td>
<td>200</td>
<td>2512* Actions</td>
</tr>
<tr>
<td>524</td>
<td>200</td>
<td>2014* Actions</td>
</tr>
<tr>
<td>523</td>
<td>200</td>
<td>5168* Actions</td>
</tr>
<tr>
<td>522</td>
<td>200</td>
<td>31585* Actions</td>
</tr>
<tr>
<td>521</td>
<td>200</td>
<td>4011* Actions</td>
</tr>
<tr>
<td>520</td>
<td>200</td>
<td>2409* Actions</td>
</tr>
<tr>
<td>519</td>
<td>200</td>
<td>21514* Actions</td>
</tr>
<tr>
<td>518</td>
<td>200</td>
<td>1991* Actions</td>
</tr>
<tr>
<td>517</td>
<td>200</td>
<td>3190* Actions</td>
</tr>
<tr>
<td>516</td>
<td>200</td>
<td>5433* Actions</td>
</tr>
<tr>
<td>515</td>
<td>200</td>
<td>715* Actions</td>
</tr>
<tr>
<td>514</td>
<td>200</td>
<td>5744* Actions</td>
</tr>
<tr>
<td>513</td>
<td>200</td>
<td>3014* Actions</td>
</tr>
<tr>
<td>512</td>
<td>200</td>
<td>29115* Actions</td>
</tr>
<tr>
<td>511</td>
<td>200</td>
<td>27710* Actions</td>
</tr>
<tr>
<td>510</td>
<td>200</td>
<td>1009* Actions</td>
</tr>
</tbody>
</table>

http://search.proquest.com/apps/asy/sjav/to/abstractsearchs?account=414755
<table>
<thead>
<tr>
<th>#</th>
<th>Query</th>
<th>Database</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>ab(&quot;substance use&quot; or drug&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>58</td>
<td>ab(&quot;abuse&quot; or depend or addict or use or misuse&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>57</td>
<td>ab(&quot;substance abuse&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>56</td>
<td>SU.EXACT.EXPLODE(&quot;Heroin&quot; OR &quot;Narcotics&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>55</td>
<td>ab(&quot;opiates&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>54</td>
<td>ab(&quot;methadone maintenance&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>53</td>
<td>ab(&quot;opiod&quot; substitution)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>52</td>
<td>SU.EXACT.EXPLODE(&quot;Methadone&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
<tr>
<td>51</td>
<td>ab(&quot;opiod&quot;) AND SU.EXACT.EXPLODE(&quot;Opioid&quot;)</td>
<td>Applied Social Sciences Index and Abstracts (SSAI)</td>
</tr>
</tbody>
</table>

* Duplicates are removed from your search, but included in your result count.
* Duplicates are removed from your search and from your result count.

http://search.proquest.com/apprxystar.ac.uk/asia/whatsearches?accountid=14795

Contact Us | Privacy Policy | Cookie Policy | Accessibility | Sitemap
---|---|---|---|---
Copyright © 2015 ProQuest LLC. All rights reserved. Terms and Conditions

201
### 4. Cinahl database

**Sunday, March 29, 2015 8:56:48 AM**

<table>
<thead>
<tr>
<th>#</th>
<th>Query</th>
<th>Limiters/Expanders</th>
<th>Last Run Via</th>
</tr>
</thead>
<tbody>
<tr>
<td>S33</td>
<td>S22 AND S31</td>
<td>Limiters - Published Date: 20050101-20151231; English Language Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S32</td>
<td>S22 AND S31</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S31</td>
<td>S27 OR S28 OR S29 OR S30</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S30</td>
<td>S25 AND S26</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S29</td>
<td>S24 AND S26</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
</tbody>
</table>

http://link.ebscohost.com/ezproxy.slu.ac.uk/ehost/searchHistoryPrintSearchHistory?sid=5f760a4b-414b-47f6-a9ed-5d98c919c40e&vid=4&hid=37628
<table>
<thead>
<tr>
<th>Search Key</th>
<th>Search Mode</th>
<th>Search Text</th>
<th>Interface</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>S28</td>
<td>Boolean/Phrase</td>
<td>AB &quot;observational study&quot; or &quot;purposive sample&quot;</td>
<td>EBSCOhost</td>
<td>12,501</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or &quot;purposive sample&quot;</td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td>CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S27</td>
<td>Boolean/Phrase</td>
<td>AB knowledge or view&quot; or perspective&quot; or attitude&quot; or experience&quot;</td>
<td>EBSCOhost</td>
<td>242,716</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or &quot;perspective&quot; or &quot;attitude&quot; or experience&quot;</td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td>CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S26</td>
<td>Boolean/Phrase</td>
<td>AB method&quot; or study&quot; or design&quot;</td>
<td>EBSCOhost</td>
<td>746,662</td>
</tr>
<tr>
<td></td>
<td></td>
<td>or &quot;design&quot;</td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td>CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S25</td>
<td>Boolean/Phrase</td>
<td>AB mixed</td>
<td>EBSCOhost</td>
<td>15,919</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S24</td>
<td>Boolean/Phrase</td>
<td>AB qualitative</td>
<td>EBSCOhost</td>
<td>40,684</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S23</td>
<td>Boolean/Phrase</td>
<td>(MH &quot;Qualitative Studies&quot;)</td>
<td>EBSCOhost</td>
<td>73,410</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S22</td>
<td>Boolean/Phrase</td>
<td>S14 AND S21</td>
<td>EBSCOhost</td>
<td>1,447</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Databases</td>
<td></td>
</tr>
<tr>
<td>Search ID</td>
<td>Search Expression</td>
<td>Search Terms</td>
<td>Search Mode</td>
<td>Search Description</td>
</tr>
<tr>
<td>-----------</td>
<td>-------------------</td>
<td>--------------</td>
<td>-------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>S21</td>
<td>S15 OR S16 OR S17 OR S18 OR S19 OR S20</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>Research Databases, Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S20</td>
<td>AB punish* or detain* or confin* or offend*</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>Research Databases, Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S19</td>
<td>AB inmate* or incarcerat*</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>Research Databases, Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S18</td>
<td>AB correctional facilit* or correctional service*</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>Research Databases, Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S17</td>
<td>AB remand or jail</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>Research Databases, Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S16</td>
<td>AB prison* or detention* or custodial</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>Research Databases, Search Screen - Advanced Search Database - CINAHL with Full Text</td>
</tr>
<tr>
<td>S15</td>
<td>&quot;prison&quot;</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>2,252</td>
</tr>
<tr>
<td>-----</td>
<td>----------</td>
<td>-----------------------------</td>
<td>-------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>S14</td>
<td>S7 OR S9 OR S12 OR S13</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>64,426</td>
</tr>
<tr>
<td>S13</td>
<td>S10 AND S11</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>51,368</td>
</tr>
<tr>
<td>S12</td>
<td>S8 AND S10</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>1,509</td>
</tr>
<tr>
<td>S11</td>
<td>AB substance* or drug*</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>76,433</td>
</tr>
<tr>
<td>S10</td>
<td>AB abuse* or depend* or addict* or use* or misuse*</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>471,629</td>
</tr>
<tr>
<td>S9</td>
<td>AB &quot;substance abuse&quot;</td>
<td>Search modes: Boolean/Phrase</td>
<td>Interface - EBSCOHost</td>
<td>4,980</td>
</tr>
</tbody>
</table>

http://ebscohost.com/agency/stride/mediasearchhistory/PrintSearchHistory?sid=072034-448b-475e-9d5b-5c31d86f4d4e&sid=0000&vl... 14/14
<table>
<thead>
<tr>
<th>Search ID</th>
<th>Search Term</th>
<th>Search Mode</th>
<th>Database</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>S8</td>
<td>AB heroin</td>
<td>Search modes -</td>
<td>Interface - EBSCOHost</td>
<td>1,575</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boolean/Phrase</td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Database - CINAHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with Full Text</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>S1 OR S2 OR S3 OR S4 OR S5 OR S6</td>
<td>Search modes -</td>
<td>Interface - EBSCOHost</td>
<td>15,604</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boolean/Phrase</td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Database - CINAHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with Full Text</td>
<td></td>
</tr>
<tr>
<td>S6</td>
<td>(MH &quot;Narcotic Antagonists&quot;) OR &quot;narcotic antagonists&quot;</td>
<td>Search modes -</td>
<td>Interface - EBSCOHost</td>
<td>2,847</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boolean/Phrase</td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Database - CINAHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with Full Text</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>AB buprenorphine</td>
<td>Search modes -</td>
<td>Interface - EBSCOHost</td>
<td>627</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boolean/Phrase</td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Database - CINAHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with Full Text</td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>AB &quot;methadone maintenance&quot;</td>
<td>Search modes -</td>
<td>Interface - EBSCOHost</td>
<td>565</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boolean/Phrase</td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Database - CINAHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with Full Text</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>AB opioid * substitution</td>
<td>Search modes -</td>
<td>Interface - EBSCOHost</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Boolean/Phrase</td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Database - CINAHL</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>with Full Text</td>
<td></td>
</tr>
<tr>
<td>Search</td>
<td>Search Criteria</td>
<td>Search Modes</td>
<td>Interface</td>
<td>Results</td>
</tr>
<tr>
<td>--------</td>
<td>----------------</td>
<td>--------------</td>
<td>-----------</td>
<td>---------</td>
</tr>
<tr>
<td>S2</td>
<td>(MH &quot;Methadone&quot;) OR &quot;methadone&quot;</td>
<td>Boolean/Phrase</td>
<td>EBSCOHost</td>
<td>2,825</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Database - CINAHL with Full Text</td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>(MH &quot;Analgesics, Opioid&quot;)</td>
<td>Boolean/Phrase</td>
<td>EBSCOHost</td>
<td>14,170</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Research Databases</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Search Screen - Advanced Search</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Database - CINAHL with Full Text</td>
<td></td>
</tr>
</tbody>
</table>
### 5. PsycInfo database

<table>
<thead>
<tr>
<th>#</th>
<th>Query</th>
<th>Limiters/Expanders</th>
<th>Last Run Via</th>
<th>Results</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>S29</td>
<td>S22 AND S27</td>
<td>Limiters - Publication Year: 2005-2015; Language: English</td>
<td>Interface - EBSCOHost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>1,259</td>
<td><img src="edit.png" alt="Edit" /></td>
</tr>
<tr>
<td>S28</td>
<td>S22 AND S27</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOHost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>2,062</td>
<td><img src="edit.png" alt="Edit" /></td>
</tr>
<tr>
<td>S27</td>
<td>S23 OR S24 OR S26 OR S26</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOHost Research</td>
<td>986,499</td>
<td><img src="edit.png" alt="Edit" /></td>
</tr>
<tr>
<td>S26</td>
<td>AB knowledge or view* or perspective* or attitude* or experience*</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>964,358</td>
<td>Edit</td>
</tr>
<tr>
<td>S25</td>
<td>AB &quot;purpos* samp&quot;* or 'focus group'</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>14,340</td>
<td>Edit</td>
</tr>
<tr>
<td>S24</td>
<td>AB mixed method* or mixed stud*</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>14,736</td>
<td>Edit</td>
</tr>
<tr>
<td>S23</td>
<td>DE &quot;Qualitative Research&quot; OR DE &quot;Grounded Theory&quot; OR DE &quot;Content Analysis&quot; OR DE &quot;Discourse Analysis&quot;</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>18,372</td>
<td>Edit</td>
</tr>
<tr>
<td>S22</td>
<td>S16 AND S21</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research</td>
<td>7,709</td>
<td>Edit</td>
</tr>
<tr>
<td></td>
<td>Search terms</td>
<td>Search modes</td>
<td>Interface</td>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---------------------------</td>
<td>----------------------</td>
<td>----------------------------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>S21</td>
<td>S16 OR S17 OR S18 OR S19 OR S20</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>75,222</td>
<td></td>
</tr>
<tr>
<td>S20</td>
<td>AB punish* or inmate* or confin* or offend*</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>56,671</td>
<td></td>
</tr>
<tr>
<td>S19</td>
<td>AB correctional service* or correctional facilit*</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>1,440</td>
<td></td>
</tr>
<tr>
<td>S18</td>
<td>AB remand or incarcerat*</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>8,244</td>
<td></td>
</tr>
<tr>
<td>S17</td>
<td>AB prison* or detention* or jail or custodial</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost Research</td>
<td>22,029</td>
<td></td>
</tr>
<tr>
<td>S16</td>
<td>DE &quot;Prison Personnel&quot; OR DE &quot;Corrections Officers&quot; OR DE &quot;Prisoners&quot; OR DE &quot;Criminal Record&quot; OR DE &quot;Institution Visitation&quot;</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>10,395</td>
<td>&quot;Edit&quot;</td>
</tr>
<tr>
<td>-----</td>
<td>---------------------------------------------------------------</td>
<td>-----------------------------</td>
<td>-----------------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>S15</td>
<td>S6 OR S8 OR S12 OR S13 OR S14</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>154,021</td>
<td>&quot;Edit&quot;</td>
</tr>
<tr>
<td>S14</td>
<td>S10 AND S11</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>16,728</td>
<td>&quot;Edit&quot;</td>
</tr>
<tr>
<td>S13</td>
<td>S9 AND S10</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>144,057</td>
<td>&quot;Edit&quot;</td>
</tr>
<tr>
<td>S12</td>
<td>S7 AND S9</td>
<td>Search modes - BooleanPhrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>6,470</td>
<td>&quot;Edit&quot;</td>
</tr>
<tr>
<td>ID</td>
<td>Term(s)</td>
<td>Search modes</td>
<td>Interface</td>
<td>Results</td>
<td></td>
</tr>
<tr>
<td>----</td>
<td>---------</td>
<td>--------------</td>
<td>-----------</td>
<td>---------</td>
<td></td>
</tr>
<tr>
<td>S11</td>
<td>AB inject* or intravenous</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>3,039</td>
<td></td>
</tr>
<tr>
<td>S10</td>
<td>AB (substance* or drug*)</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>265,909</td>
<td></td>
</tr>
<tr>
<td>S9</td>
<td>AB (abuse* or depend* or use* or misuse* or addict*)</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>1,303,410</td>
<td></td>
</tr>
<tr>
<td>S8</td>
<td>AB &quot;substance abuse&quot;</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>24,144</td>
<td></td>
</tr>
<tr>
<td>S7</td>
<td>AB heroin</td>
<td>Boolean/Phrase</td>
<td>EBSCOhost</td>
<td>6,941</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>S1 OR S2 OR S3 OR S4 OR S5</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>7,308</td>
<td></td>
</tr>
<tr>
<td>S5</td>
<td>DE &quot;Methadone&quot; OR DE &quot;Methadone Maintenance&quot;</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>4,355</td>
<td></td>
</tr>
<tr>
<td>S4</td>
<td>AB buprenorphine</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>1,815</td>
<td></td>
</tr>
<tr>
<td>S3</td>
<td>MM &quot;Narcotic Antagonists&quot;</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>1,069</td>
<td></td>
</tr>
<tr>
<td>S2</td>
<td>AB &quot;methadone maintenance&quot;</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>2,518</td>
<td></td>
</tr>
<tr>
<td>S1</td>
<td>AB &quot;opioid substitution&quot;</td>
<td>Search modes - Boolean/Phrase</td>
<td>Interface - EBSCOhost Research Databases Search Screen - Advanced Search Database - PsycINFO</td>
<td>215</td>
<td></td>
</tr>
</tbody>
</table>

Save
Cancel
6. Web of Science database
<table>
<thead>
<tr>
<th>Set</th>
<th>Results</th>
<th>Search History</th>
<th>Edit</th>
<th>Combine Sets</th>
<th>Delete Sets</th>
<th>Select All</th>
<th>Set Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>#29</td>
<td>1,075</td>
<td>(K21 AND K27) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#28</td>
<td>1,130</td>
<td>K7 OR K9 OR K23 OR K40</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#27</td>
<td>1,395</td>
<td>&quot;(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#26</td>
<td>42,341</td>
<td>((T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English))</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#25</td>
<td>47,782</td>
<td>&quot;(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#24</td>
<td>71,115</td>
<td>(K21 AND K22) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#23</td>
<td>7,883</td>
<td>&quot;(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#22</td>
<td>8,934</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#21</td>
<td>5,914</td>
<td>(K7 OR K9 OR K23 OR K40) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#20</td>
<td>50,364</td>
<td>(K7 OR K9 OR K23 OR K40) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#19</td>
<td>191,882</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#18</td>
<td>11,491</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#17</td>
<td>601</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#16</td>
<td>1,548</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#15</td>
<td>362,059</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#14</td>
<td>51,356</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#13</td>
<td>36,267</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#12</td>
<td>5,311</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#11</td>
<td>34,548</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#10</td>
<td>699,513</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#9</td>
<td>6,429</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#8</td>
<td>7,164,119</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#7</td>
<td>1,854</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#6</td>
<td>8,929</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#5</td>
<td>1,827</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#4</td>
<td>199</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#3</td>
<td>59</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td>5,341</td>
<td>(T21&quot; OR &quot;T31&quot; OR &quot;T41&quot; OR &quot;T51&quot;&quot;) AND LANGUAGE: (English)</td>
<td>Edit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

https://www.citebase.org/WS/AdvancedSearch?_面目=7680-Y2u4TfYf8h7f1C&m1strs=WS&replaceSet=39&goTo=Reg,Set20&div... 20
### APPENDIX B. Study appraisal quality (Quality assessment processes)

<table>
<thead>
<tr>
<th>Epistemology</th>
<th>1. Is a qualitative approach appropriate?</th>
<th>2. Is the study clear in what it seeks to do?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appropriate</td>
<td>Inappropriate</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Asher 2013</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study Design &amp; Data Collection</th>
<th>3. How defensible is the research design?</th>
<th>4. How well was the data collection carried out?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Defensible</td>
<td>Indefensible</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Asher 2013</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX B. Study appraisal quality continued…

<table>
<thead>
<tr>
<th>Validity</th>
<th>5. Is the role of the researcher clearly described?</th>
<th>6. Is the context clearly described?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Clearly described</td>
<td>Unclear</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Asher 2013</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Validity Cont.</th>
<th>7. Were the methods reliable?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reliable</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
</tr>
<tr>
<td>Asher 2013</td>
<td>V</td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
</tr>
</tbody>
</table>
APPENDIX B. Study appraisal quality continued...

<table>
<thead>
<tr>
<th>Analysis</th>
<th>8. Is the data analysis sufficiently rigorous?</th>
<th>9. Is the data rich?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rigorous</td>
<td>Not rigorous</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Asher 2013</td>
<td></td>
<td>V</td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Analysis Cont.</th>
<th>10. Is the analysis reliable?</th>
<th>11. Are the findings credible?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reliable</td>
<td>Unreliable</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Asher 2013</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>
### APPENDIX B. Study appraisal quality continued...

<table>
<thead>
<tr>
<th>Relevance &amp; conclusions</th>
<th>12. Are the findings relevant?</th>
<th>13. Conclusions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Relevant</td>
<td>Irrelevant</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Asher 2013</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td>V</td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td>V</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethics</th>
<th>14. How clear and coherent is the reporting of ethics?</th>
<th>15. Is the study relevant? (on the review being undertaken)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appropriate</td>
<td>Inappropriate</td>
</tr>
<tr>
<td>Carlin 2005</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asher 2013</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Johnstone et al. 2011</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stöver et al. 2006</td>
<td>V</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX B. Study appraisal quality continued...

<table>
<thead>
<tr>
<th>Ethics</th>
<th>14. How clear and coherent is the reporting of ethics?</th>
<th>15. Is the study relevant? (on the review being undertaken)</th>
<th>Overall assessment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Appropriate</td>
<td>Inappropriate</td>
<td>Not sure</td>
</tr>
<tr>
<td>Awgu et al. 2010</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perkins and Sprang 2013</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heimer et al. 2006</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zamani et al. 2010</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moradi et al. 2015</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Culbert et al. 2015</td>
<td>V</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wickersham et al. 2013</td>
<td>V</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C. Sampling frame

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner</th>
<th>Number of HIV prisoner</th>
<th>OST targeted programme 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G1</td>
<td>CLASS I BANDAR LAMPU</td>
<td>LAMPUNG</td>
<td>217</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G2</td>
<td>CLASS I BATU NUSAKAMBANGAN</td>
<td>CENTRAL JAVA</td>
<td>89</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G3</td>
<td>CLASS I CIPINANG</td>
<td>DKI JAKARTA</td>
<td>2340</td>
<td>43</td>
<td>45</td>
<td>17</td>
</tr>
<tr>
<td>G4</td>
<td>CLASS I CIREBON</td>
<td>WEST JAVA</td>
<td>66</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G5</td>
<td>CLASS I MALANG</td>
<td>EAST JAVA</td>
<td>496</td>
<td>13</td>
<td>22</td>
<td>-</td>
</tr>
<tr>
<td>G6</td>
<td>CLASS I MEDAN</td>
<td>SUMATERA UTARA</td>
<td>1688</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G7</td>
<td>CLASS I PALEMBANG</td>
<td>SUMATERA SELATAN</td>
<td>704</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G8</td>
<td>CLASS I SEMARANG</td>
<td>CENTRAL JAVA</td>
<td>227</td>
<td>3</td>
<td>8</td>
<td>-</td>
</tr>
<tr>
<td>G9</td>
<td>CLASS I TANGERANG</td>
<td>BANTEN</td>
<td>756</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G10</td>
<td>CLASS I SURABAYA</td>
<td>WEST JAVA</td>
<td>405</td>
<td>6</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>G11</td>
<td>CLASS II A AMBON</td>
<td>MALUKU</td>
<td>67</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G12</td>
<td>CLASS II A BALIKPAPAN</td>
<td>KALIMANTAN TIMUR</td>
<td>221</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G13</td>
<td>CLASS II A BANCEUY BANDUNG</td>
<td>WEST JAVA</td>
<td>945</td>
<td>13</td>
<td>39</td>
<td>5</td>
</tr>
<tr>
<td>G14</td>
<td>CLASS II A BANDA ACEH</td>
<td>ACEH</td>
<td>159</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G15</td>
<td>CLASS II A BANJARMASIN</td>
<td>KALIMANTAN SELATAN</td>
<td>1626</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G16</td>
<td>CLASS II A BATAM</td>
<td>KEPULAUAN RIAU</td>
<td>720</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G17</td>
<td>CLASS II A BAU-BAU</td>
<td>SULAWESI TENGGARA</td>
<td>29</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G18</td>
<td>CLASS II A BEKASI</td>
<td>WEST JAVA</td>
<td>804</td>
<td>30</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G19</td>
<td>CLASS II A BENGKALIS</td>
<td>RIAU</td>
<td>640</td>
<td>5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued...

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner</th>
<th>Number of HIV prisoner</th>
<th>OST targeted programme 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

223
<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner s</th>
<th>Number of HIV prisoner s</th>
<th>OST targeted programme s 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G20</td>
<td>CLASS II A</td>
<td>BENGKULU</td>
<td>275</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G21</td>
<td>CLASS II A BESI</td>
<td>CENTRAL JAVA</td>
<td>125</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G22</td>
<td>CLASS II A BINJAI</td>
<td>SUMATERA UTARA</td>
<td>681</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G23</td>
<td>CLASS II A</td>
<td>WEST JAVA</td>
<td>238</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G24</td>
<td>CLASS II A</td>
<td>EAST JAVA</td>
<td>15</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G25</td>
<td>CLASS II A</td>
<td>SUMATERA BARAT</td>
<td>240</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G26</td>
<td>CLASS II A</td>
<td>SULAWESI SELATAN</td>
<td>30</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G27</td>
<td>CLASS II A</td>
<td>WEST JAVA</td>
<td>1037</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G28</td>
<td>CLASS II A</td>
<td>BENGKULU</td>
<td>140</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G29</td>
<td>CLASS II A</td>
<td>BALI</td>
<td>200</td>
<td>9</td>
<td>20</td>
<td>-</td>
</tr>
<tr>
<td>G30</td>
<td>CLASS II A</td>
<td>GORONTALO</td>
<td>54</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G31</td>
<td>CLASS II A</td>
<td>JAMBI</td>
<td>461</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G32</td>
<td>CLASS II A</td>
<td>EAST JAVA</td>
<td>84</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G33</td>
<td>CLASS II A</td>
<td>LAMPUNG</td>
<td>267</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G34</td>
<td>CLASS II A</td>
<td>WEST JAVA</td>
<td>653</td>
<td>17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G35</td>
<td>CLASS II A</td>
<td>EAST JAVA</td>
<td>9</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G36</td>
<td>CLASS II A</td>
<td>CENTRAL JAVA</td>
<td>53</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G37</td>
<td>CLASS II A</td>
<td>CENTRAL JAVA</td>
<td>38</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G38</td>
<td>CLASS II A</td>
<td>SULAWESI TENGGARA</td>
<td>132</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G39</td>
<td>CLASS II A</td>
<td>WEST JAVA</td>
<td>147</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued…

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner s</th>
<th>Number of HIV prisoner s</th>
<th>OST targeted programme s 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G40</td>
<td>CLASS II A</td>
<td>SUMATERA UTARA</td>
<td>326</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G41</td>
<td>CLASS II A</td>
<td>CENTRAL JAVA</td>
<td>66</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G42</td>
<td>CLASS II A</td>
<td>SULAWESI UTARA</td>
<td>42</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Types of prisons</td>
<td>Provincial</td>
<td>Number of drug case prisoner s</td>
<td>Number of HIV prisoners</td>
<td>OST targeted programme s 2014</td>
<td>Number of OST patients Jan/May 2014</td>
</tr>
<tr>
<td>------</td>
<td>------------------------</td>
<td>---------------------</td>
<td>--------------------------------</td>
<td>--------------------------</td>
<td>------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>G43</td>
<td>CLASS II A MAROS</td>
<td>SULAWESI SELATAN</td>
<td>34</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G44</td>
<td>CLASS II A MATARAM</td>
<td>NUSA TENGGARA BARAT</td>
<td>218</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G45</td>
<td>CLASS II A METRO</td>
<td>LAMPUNG</td>
<td>85</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G46</td>
<td>CLASS II A PADANG</td>
<td>SUMATERA BARAT</td>
<td>313</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G47</td>
<td>CLASS II A PALANGKARAYA</td>
<td>KALIMANTAN TENGAH</td>
<td>239</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G48</td>
<td>CLASS II A PALOPO</td>
<td>SULAWESI SELATAN</td>
<td>35</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G49</td>
<td>CLASS II A PALU</td>
<td>SULAWESI TENGAH</td>
<td>5</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G50</td>
<td>CLASS II A PAMEKASAN</td>
<td>EAST JAVA</td>
<td>547</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G51</td>
<td>CLASS II A PANGKAL PINANG</td>
<td>BANGKA BELITUNG</td>
<td>94</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G52</td>
<td>CLASS II A PASIR PUTIH NUSAKAMBANGAN</td>
<td>CENTRAL JAVA</td>
<td>140</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G53</td>
<td>CLASS II A PEKALONGAN</td>
<td>CENTRAL JAVA</td>
<td>298</td>
<td>10</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G54</td>
<td>CLASS II A PEKANBARU</td>
<td>RIAU</td>
<td>947</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G55</td>
<td>CLASS II A PEMATANG SIANTAR</td>
<td>SUMATERA UTARA</td>
<td>300</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G56</td>
<td>CLASS II A PERMISAN NUSAKAMBANGAN</td>
<td>CENTRAL JAVA</td>
<td>78</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G57</td>
<td>CLASS II A PONTIANAK</td>
<td>KALIMANTAN BARAT</td>
<td>394</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G58</td>
<td>CLASS II A PURWOKERTO</td>
<td>CENTRAL JAVA</td>
<td>67</td>
<td>3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued…

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner s</th>
<th>Number of HIV prisoners</th>
<th>OST targeted programme s 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G59</td>
<td>CLASS II A RANTAU PRAPAT</td>
<td>SUMATERA UTARA</td>
<td>602</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G60</td>
<td>CLASS II A SALEMBA</td>
<td>DKI JAKARTA</td>
<td>1674</td>
<td>117</td>
<td>No OST</td>
<td>No OST</td>
</tr>
<tr>
<td>G61</td>
<td>CLASS II A SERANG</td>
<td>BANTEN</td>
<td>258</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G62</td>
<td>CLASS II A SIBOLGA</td>
<td>SUMATERA UTARA</td>
<td>271</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G63</td>
<td>CLASS II A SIDOARJO</td>
<td>EAST JAVA</td>
<td>219</td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G64</td>
<td>CLASS II A CENTRAL</td>
<td>CENTRAL</td>
<td>136</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Types of prisons</td>
<td>Provincial</td>
<td>Number of drug case prisoners</td>
<td>Number of HIV prisoners</td>
<td>OST targeted programmes 2014</td>
<td>Number of OST patients Jan/May 2014</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>---------------------</td>
<td>-------------------------------</td>
<td>-------------------------</td>
<td>-----------------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>G65</td>
<td>CLASS II A</td>
<td>JAVA</td>
<td>WEST JAVA</td>
<td>475</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>G66</td>
<td>CLASS II A</td>
<td>SUBANG</td>
<td>NUSA TAENGARA BARAT</td>
<td>38</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G67</td>
<td>CLASS II A</td>
<td>TANJUNG PINANG</td>
<td>KEPULAUAN RIAU</td>
<td>191</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>G68</td>
<td>CLASS II A</td>
<td>TANJUNG RAJA</td>
<td>SUMATERA SELATAN</td>
<td>288</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G69</td>
<td>CLASS II A</td>
<td>TEMBILAHAN</td>
<td>RIAU</td>
<td>196</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G70</td>
<td>CLASS II A</td>
<td>TERNATE</td>
<td>MALUKU UTARA</td>
<td>46</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>G71</td>
<td>CLASS II A</td>
<td>WAINGAPU</td>
<td>NUSA TAENGARA TIMUR</td>
<td>10</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G72</td>
<td>CLASS II A</td>
<td>WATAMPONE</td>
<td>SULAWESI SELATAN</td>
<td>86</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G73</td>
<td>CLASS II A</td>
<td>YOGYAKARTA</td>
<td>D.I. YOGYAKARTA</td>
<td>31</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>G74</td>
<td>CLASS II B</td>
<td>AMPANA</td>
<td>SULAWESI TENGAH</td>
<td>8</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G75</td>
<td>CLASS II B</td>
<td>AMUNTAI</td>
<td>KALIMANTAN SELATAN</td>
<td>88</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>G76</td>
<td>CLASS II B</td>
<td>ARGAMAKMUR</td>
<td>BENGKULU</td>
<td>32</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>G77</td>
<td>CLASS II B</td>
<td>ATAMBUA</td>
<td>NUSA TAENGARA TIMUR</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>G78</td>
<td>CLASS II B</td>
<td>BANGKINANG</td>
<td>RIAU</td>
<td>164</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G79</td>
<td>CLASS II B</td>
<td>BANGKO</td>
<td>JAMBI</td>
<td>69</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>G80</td>
<td>CLASS II B</td>
<td>BANGKINANG</td>
<td>EAST JAVA</td>
<td>140</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>G81</td>
<td>CLASS II B</td>
<td>BLITAR</td>
<td>EAST JAVA</td>
<td>41</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued...
<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoners</th>
<th>Number of HIV prisoners</th>
<th>OST targeted programme 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G106</td>
<td>CLASS II B LUMAJANG</td>
<td>EAST JAVA</td>
<td>9</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G107</td>
<td>CLASS II B LUWUK</td>
<td>SULAWESI TENGAH</td>
<td>28</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G108</td>
<td>CLASS II B MAJALENGKA</td>
<td>WEST JAVA</td>
<td>40</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G109</td>
<td>CLASS II B MOJOKERTO</td>
<td>EAST JAVA</td>
<td>156</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G110</td>
<td>CLASS II B MUARA BULIAN</td>
<td>JAMBI</td>
<td>65</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Types of prisons</td>
<td>Provincial</td>
<td>Number of drug case prisoner s</td>
<td>Number of HIV prisoners</td>
<td>OST targeted programme s 2014</td>
<td>Number of OST patients Jan/May 2014</td>
</tr>
<tr>
<td>-------</td>
<td>--------------------------</td>
<td>-------------------</td>
<td>--------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>-------------------------------------</td>
</tr>
<tr>
<td>G111</td>
<td>CLASS II B MUARA BUNGO</td>
<td>JAMBI</td>
<td>132</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G112</td>
<td>CLASS II B MUARA ENIM</td>
<td>SUMATERA SELATAN</td>
<td>240</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G113</td>
<td>CLASS II B MUARA SIJUNJUNG</td>
<td>SUMATERA BARAT</td>
<td>61</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G114</td>
<td>CLASS II B MUARA TEBO</td>
<td>JAMBI</td>
<td>83</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G115</td>
<td>CLASS II B MUARA TEWEH</td>
<td>KALIMANTAN TENGAH</td>
<td>41</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G116</td>
<td>CLASS II B NABIRE</td>
<td>PAPUA</td>
<td>27</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G117</td>
<td>CLASS II B NGAWI</td>
<td>EAST JAVA</td>
<td>28</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G118</td>
<td>CLASS II B NUNUKAN</td>
<td>KALIMANTAN TIMUR</td>
<td>208</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G119</td>
<td>CLASS II B PADANG SIDEMPUAN</td>
<td>SUMATERA UTARA</td>
<td>272</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G120</td>
<td>CLASS II B PANGKALAN BUN</td>
<td>KALIMANTAN TENGAH</td>
<td>139</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G121</td>
<td>CLASS II B PANYABUNGAN</td>
<td>SUMATERA UTARA</td>
<td>208</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G122</td>
<td>CLASS II B PARIAMAN</td>
<td>SUMATERA BARAT</td>
<td>147</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G123</td>
<td>CLASS II B PASIR PANGARAYAN</td>
<td>RIAU</td>
<td>200</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G124</td>
<td>CLASS II B PASURUAN</td>
<td>EAST JAVA</td>
<td>60</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G125</td>
<td>CLASS II B PATI</td>
<td>CENTRAL JAVA</td>
<td>47</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G126</td>
<td>CLASS II B PIRU</td>
<td>MALUKU</td>
<td>1</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G127</td>
<td>CLASS II B POLEWALI</td>
<td>SULAWESI BARAT</td>
<td>60</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G128</td>
<td>CLASS II B PURWAKARTA</td>
<td>WEST JAVA</td>
<td>180</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G129</td>
<td>CLASS II B SAMPIT</td>
<td>KALIMANTAN TENGAH</td>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued…

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner s</th>
<th>Number of HIV prisoners</th>
<th>OST targeted programme s 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G130</td>
<td>CLASS II B SEKAYU</td>
<td>SUMATERA SELATAN</td>
<td>83</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G131</td>
<td>CLASS II B SIBORONG-BORONG</td>
<td>SUMATERA UTARA</td>
<td>369</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G132</td>
<td>CLASS II B SINGARAJA</td>
<td>BALI</td>
<td>37</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G133</td>
<td>CLASS II B SINGKAWANG</td>
<td>KALIMANTAN BARAT</td>
<td>101</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G134</td>
<td>CLASS II B</td>
<td>KALIMANTAN</td>
<td>112</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Types of prisons</td>
<td>Provincial</td>
<td>Number of drug case prisoner s</td>
<td>Number of HIV prisoner s</td>
<td>OST targeted programme s 2014</td>
<td>Number of OST patients Jan/May 2014</td>
</tr>
<tr>
<td>------</td>
<td>------------------</td>
<td>------------</td>
<td>--------------------------------</td>
<td>--------------------------</td>
<td>-------------------------------</td>
<td>----------------------------------</td>
</tr>
<tr>
<td>G135</td>
<td>CLASS II B SLAWI</td>
<td>CENTRAL JAVA</td>
<td>78</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G136</td>
<td>CLASS II B SOLOK</td>
<td>SUMATERA BARAT</td>
<td>82</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G137</td>
<td>CLASS II B SUKABUMI</td>
<td>WEST JAVA</td>
<td>135</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G138</td>
<td>CLASS II B SUMEDANG</td>
<td>WEST JAVA</td>
<td>33</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G139</td>
<td>CLASS II B SUNGAI LIAT</td>
<td>BANGKA BELITUNG</td>
<td>142</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G140</td>
<td>CLASS II B TABANAN</td>
<td>BALI</td>
<td>48</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G141</td>
<td>CLASS II B TAKALAR</td>
<td>SULAWESI SELATAN</td>
<td>25</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G142</td>
<td>CLASS II B TANJUNG BALAI ASAHAN</td>
<td>SUMATERA UTARA</td>
<td>491</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G143</td>
<td>CLASS II B TANJUNG PANDAN</td>
<td>BANGKA BELITUNG</td>
<td>23</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G144</td>
<td>CLASS II B TASIKMALAYA</td>
<td>WEST JAVA</td>
<td>88</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G145</td>
<td>CLASS II B TEBING TINGGI DELI</td>
<td>SUMATERA UTARA</td>
<td>654</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G146</td>
<td>CLASS II B TEGAL</td>
<td>CENTRAL JAVA</td>
<td>58</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G147</td>
<td>CLASS II B TIMIKA</td>
<td>PAPUA</td>
<td>8</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G148</td>
<td>CLASS II B TOBELLO</td>
<td>MALUKU UTARA</td>
<td>4</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G149</td>
<td>CLASS II B TOLI-TOLI</td>
<td>SULAWESI TENGAH</td>
<td>19</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G150</td>
<td>CLASS II B TUAL</td>
<td>MALUKU</td>
<td>18</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G151</td>
<td>CLASS II B WAIKABUBAK</td>
<td>NUSA TENGGARA TIMUR</td>
<td>2</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G152</td>
<td>CLASS II B WAMENA</td>
<td>PAPUA</td>
<td>6</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued…

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner s</th>
<th>Number of HIV prisoner s</th>
<th>OST targeted programme s 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G153</td>
<td>CLASS II B WAYKANAN</td>
<td>LAMPUNG</td>
<td>24</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G154</td>
<td>CLASS III BANJAR</td>
<td>WEST JAVA</td>
<td>75</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G155</td>
<td>CLASS III BANYUASIN</td>
<td>SUMATERA SELATAN</td>
<td>193</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G156</td>
<td>CLASS III BEKASI</td>
<td>WEST JAVA</td>
<td>25</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G157</td>
<td>CLASS III CILEGON</td>
<td>BANTEN</td>
<td>37</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G158</td>
<td>CLASS III</td>
<td>WEST JAVA</td>
<td>407</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Types of prisons</td>
<td>Provincial</td>
<td>Number of drug case prisoner s</td>
<td>Number of HIV prisoner s</td>
<td>OST targeted programme s 2014</td>
<td>Number of OST patients Jan/May 2014</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------</td>
<td>---------------------</td>
<td>--------------------------------</td>
<td>-------------------------</td>
<td>-------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>N8</td>
<td>NARCOTICS CLASS II A BANGLI</td>
<td>BALI</td>
<td>7</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N9</td>
<td>NARCOTICS CLASS II A CIPINANG</td>
<td>DKI JAKARTA</td>
<td>2649</td>
<td>178</td>
<td>97</td>
<td>45</td>
</tr>
<tr>
<td>N10</td>
<td>NARCOTICS CLASS II A CIREBON</td>
<td>WEST JAVA</td>
<td>734</td>
<td>25</td>
<td>48</td>
<td>2</td>
</tr>
<tr>
<td>N11</td>
<td>NARCOTICS</td>
<td>KALIMANTAN</td>
<td>798</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

APPENDIX C. Sampling frame continued…

<table>
<thead>
<tr>
<th>Code</th>
<th>Types of prisons</th>
<th>Provincial</th>
<th>Number of drug case prisoner s</th>
<th>Number of HIV prisoner s</th>
<th>OST targeted programme s 2014</th>
<th>Number of OST patients Jan/May 2014</th>
</tr>
</thead>
<tbody>
<tr>
<td>G159</td>
<td>CLASS III GUNUNG SUGIH</td>
<td>LAMPUNG</td>
<td>87</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G160</td>
<td>CLASS III KAYU AGUNG</td>
<td>SUMATERA SELATAN</td>
<td>175</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G161</td>
<td>CLASS III LEMBATA</td>
<td>NUSA TENGGARA TIMUR</td>
<td>4</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G162</td>
<td>CLASS III SAROLANGUN</td>
<td>JAMBI</td>
<td>34</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G163</td>
<td>CLASS III TANJUNG</td>
<td>KALIMANTAN SELATAN</td>
<td>32</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G164</td>
<td>CLASS III WARUNGKIARA</td>
<td>WEST JAVA</td>
<td>137</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G165</td>
<td>CLASS II A AMBARAWA</td>
<td>CENTRAL JAVA</td>
<td>68</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N1</td>
<td>NARCOTICS CLASS II A BANDUNG</td>
<td>WEST JAVA</td>
<td>182</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N2</td>
<td>NARCOTICS CLASS II A MADIUN</td>
<td>EAST JAVA</td>
<td>9</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N3</td>
<td>NARCOTICS CLASS II A NUSAKAMBANGAN</td>
<td>CENTRAL JAVA</td>
<td>106</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N4</td>
<td>NARCOTICS CLASS II A SUNGUMINASAU</td>
<td>SULAWESI SELATAN</td>
<td>539</td>
<td>11</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N5</td>
<td>NARCOTICS CLASS II A TANJUNG PINANG</td>
<td>KEPULAUAN RIAU</td>
<td>156</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N6</td>
<td>NARCOTICS CLASS III MUARA SABAK</td>
<td>JAMBI</td>
<td>105</td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>N7</td>
<td>NARCOTICS CLASS II A BANDAR LAMPUNG</td>
<td>LAMPUNG</td>
<td>836</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

230
<table>
<thead>
<tr>
<th>No</th>
<th>Narcotics Class</th>
<th>Region</th>
<th>Code</th>
<th>Total</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>N12</td>
<td>CLASS II A KARANG INTAN</td>
<td>SELATAN</td>
<td>115</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>N13</td>
<td>NARCOTICS CLASS II A LUBUK LINGGAU</td>
<td>SUMATERA SELATAN</td>
<td>477</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>N14</td>
<td>NARCOTICS CLASS II A PAMEKASAN</td>
<td>EAST JAVA</td>
<td>175</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>N15</td>
<td>NARCOTICS CLASS III PANGKAL PINANG</td>
<td>BANGKA BELITUNG</td>
<td>366</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>N16</td>
<td>NARCOTICS CLASS III SAMARINDA</td>
<td>KALIMANTAN TIMUR</td>
<td>625</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX D. Topics Guide

Topic guide for prison governors

Introduction
Thank you for agreeing to participate in the study. As I explained when we met initially, the study is for my PhD thesis, which I am taking at the University of Stirling. There is no right or wrong answer; I am only looking for your perspectives and experiences. Remember all you tell me today remains anonymous and confidential, and you can refuse to answer any question at any stage. The tape recorder will be used with your permission. Please feel free to ask me questions at any time.

Background of prison governor
How long have you been working in the prison service?
How long have you been a prison governor?
What do you most/least enjoy about your role?

Role of methadone/HIV programmes
What kind of prison is this and is drug use a problem?
What is the approach to the management of people who use drugs?
Can you describe your role here in the management of people who use drugs?
Are you aware of any policies/programmes either from the Ministry or the prison in relation to drug users in this prison?
Does your prison have methadone programmes? If no, from your perspective, are methadone programmes required in this prison? Why/why not?

Facilitators and barrier to methadone/HIV programmes
Have you encountered or have knowledge of any problems or barriers in designing and implementing HIV prevention programmes (/methadone programmes) in your prison? (Lack of prison/prison healthcare staff; lack of key support; lack of technical assistance including funding, training; stigma)
How did you overcome the barriers?
What has helped implementation?
Do you think you can impact positively on the implementation? In what way?
What strategies/programmes would you recommend be maintained? Why?
Wrapping up
Could anything be done differently to improve the strategies/programmes delivery?
Anything else would like to add?

Thank you very much for your time, your answers will help me so much with my project!

Space for comments/observations

Topic Guide for Prison Healthcare Staff

Introduction
Thank you for agreeing to participate in the study. As I explained when we met initially, the study is for my PhD thesis, which I am taking at the University of Stirling. There are no right or wrong answers. I am only looking for your perspectives and experiences. Remember all you tell me today remains anonymous and confidential, and you can refuse to answer any question at any stage. The tape recorder will be used with your permission. Please feel free to ask me questions any time.

Background of prison healthcare staff
How long have you been working in prison?
Can you describe your role here in the prison?
What do you most/least enjoy about your role?

Role of methadone/HIV programmes
What kind of prison is this and is drug use a problem?
What is the approach to the management of people who use drugs?
Can you describe your role here in the management of people who use drugs?
Are you aware of any policies/programmes either from the Ministry or the prison in relation to people who use drugs in this prison?
Does your prison have methadone programmes? If no, from your perspective, are methadone programmes required in this prison? Why/why not?
Facilitators and barriers to methadone/HIV programmes

Can you explain about the management of HIV/methadone programmes? (Key programmes, sustainability of programmes, source of funding, supporting programmes, coverage/outcome of the programmes and or admission criteria/processes, drug prescribing, handling the withdrawn patients, and referral system of the programmes)

What strategies/programmes would you recommend be sustained? Why?

What were some of the barriers, if any, that you encountered in delivering the HIV prevention strategies/methadone programmes in your prison? (Availability of illegal drugs; lack of key support including from the government, prison officer, prison healthcare staff, family member of prisoners; lack of technical assistance including funding and staff training; shortage of prison healthcare staff; lack of partnership; stigma; strict rules/guidelines for methadone programmes patients; drug diversion)

How did you overcome the barriers?

What has helped implementation?

Wrapping up

Could anything be done differently to improve the delivery of the strategies/programmes?

Anything else would like to add?

Thank you very much for your time, your answers will help me so much with my project!

Space for comments/observation

Topic Guide for Prison Officers

Introduction

Thank you for agreeing to participate in the study. As I explained when we met initially, the study is for my PhD thesis, which I am taking at the University of Stirling. There are no right or wrong answers; I am only looking for your perspectives and experiences. Remember all you tell me today remains anonymous and confidential, and you can refuse to answer any question at any stage. The tape recorder will be used with your permission. Please feel free to ask me questions at any time.

Background of Prison Officer

Where do you come from?

How long have you been working in prison?
Can you describe your role here in the prison?

**Role of methadone/HIV programmes**

What kind of prison is this and is drug use a problem?

What is the approach to the management of people who use drugs?

Can you describe your role here in the management of people who use drugs?

Are you aware of any policies/programmes either from the Ministry or the prison in relation to people who use drugs in this prison?

Does your prison have methadone programmes? If no, from your perspective, are methadone programmes required in this prison? Why/why not

What is your understanding of the reasons for the HIV/methadone programmes being brought into the prison?

**Facilitators and barriers to methadone/HIV programmes**

Are drug-using prisoners any different from other prisoners? Or are prisoners on methadone any different from other drug-using prisoners?

What are the main benefits/drawbacks to prison officers of the HIV strategies (methadone programmes)?

What experiences do you have when working with drug users/methadone programmes prisoners?

What were some of the barriers, if any, that you encountered in implementing the HIV strategies/methadone programmes? (Pressure from prisoners or others, lack of staff, lack of prison facilities, lack of training, lack of prevention measures such as condoms, clean needles and syringes; stigma)

How did you overcome the barriers?

What has helped implementation?

**Wrapping up**

Could anything be done differently to improve the delivery of the strategies/programmes?

Anything else would like to add?

Thank you very much for your time, your answers will help me so much with my project!

Space for comments/observations
Introduction
Thank you for agreeing to participate in the study. As I explained when we met in the clinic, the study is for my PhD thesis, which I am taking at the University of Stirling. There are no right or wrong answers; I am only looking for your views and experiences. Remember all you tell me today remains anonymous and confidential, and you can refuse to answer any question at any stage. The tape recorder will be used with your permission. Please feel free to ask me questions any time.

Background of Prisoner
How long is your stay here? And for what reason?
How long have you been here?
How long you have been using drugs (hashish, ecstasy, and heroin) (Probe types of drugs and injecting status)?

Role of methadone/HIV programmes
What kind of prison is this and is drug use a problem?
Does your prison have methadone programmes? How do people who use drugs get onto the programmes?
Does the availability of the HIV/methadone programmes make any difference to your life in this prison?
What is your understanding of the reasons for the HIV/methadone programmes being brought into the prison?
If no methadone programmes, from your perspective, would methadone programmes make a difference to this prison? Why/why not

Facilitators and barriers to methadone/HIV programmes
How do you feel about being/not being on the HIV/methadone programmes?
Are drug-using prisoners treated any differently from other prisoners? Or are prisoners on methadone programmes treated any differently from other drug-using prisoners?
What were some barriers, if any, that you felt in receiving the HIV/methadone programmes? (Limited access, drugs availability, lack of prevention measures such as condoms, clean needles and syringes, admission criteria, dispensing processes,
prescription of drug, lack of supports including from family/ friends/prison officer, stigma)

How did you cope with this?

What worked well in the HIV/methadone programmes? (Staff attitudes, availability of drug treatment options, family/friend/prison officer/third party support, prison circumstances, and referral system)

Wrapping up

Could anything be done differently to improve the support or treatment of drug users in this prison?

Is there anything else you would like to add?

Thank you very much for your time, your answers will help me so much with my project!

Space for comments/observations.
Appendix E. Observation Guide

Description of the activity
Duration of the activity
Outcome of the activity
Satisfaction of prison healthcare staff and prisoner
What do they talk about?
How the approach of prison healthcare staff to the prisoner?
How do prisoners respond to this?
Do prisoners talk about what they want or their concerns?
Do prisoners talk about other health concerns?
How do prison healthcare staff respond to this?
APPENDIX F. Information sheet

Information sheet for prison governors in the narcotics and the general methadone prison

Dear (name),

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I am writing to invite you to participate in a study about methadone programmes and the treatment of drug users in Indonesian prisons. Your perspectives and experiences as a prison governor of a narcotics or a general methadone prison will make a significant contribution to the development of understanding of the barriers and facilitators to effective implementation of methadone programmes and HIV prevention strategies in prison settings.

Before you decide, I would like you to understand what the study is about and what your participation would involve.

Please read the following information carefully before signing the consent form on the final page.

What is the purpose of this study?

To understand the role of methadone programmes and the approach to the management of drug users in Indonesian prisons within the context of the broader prison HIV prevention strategy.

To understand the factors which help and hinder the effective implementation of methadone programmes and the management of drug users in Indonesian prisons.
To help to improve the programmes to reduce HIV transmission in Indonesian prisons

**What is involved?**

If, after reading this information sheet, you are interested in taking part, sign the consent form and return it to the researcher in the prison clinic.

The researcher will leave at least 24 hours cooling-off period after providing information and before requesting signed informed consent. The interview will be also arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish.

The interview will last about one hour and with your permission, I will record the interview with a digital recorder. The recording will not be given to anyone else. The recording will be destroyed once it has been used. Overall, three prison governors interviews are planned in three different prisons.

**Why have I been invited to take part?**

You have been invited to participate in this study because you are currently working as a prison governor in a narcotics or a general methadone prison and you are knowledgeable and have experience in designing and implementing methadone programmes in this prison.

I am very interested to know more about your experience and views about factors which help or hinder the delivery of the programmes.

**Do I have to take part?**

No. Participation in the study is completely voluntary. This means that you can choose whether or not you want to take part.

**What if I change my mind about taking part?**

You have the right to withdraw at any stage of this study since this research is voluntary. Your decision will not affect your legal rights as a prison governor.

**Will I benefit from taking part?**

Your perspective will help inform policy makers and practitioners and help in the future re-design and development of strategies to improve the treatment of drug
users and prevention of HIV transmission in prison settings. This means you will be contributing towards improving health services in Indonesian prisons.

**Are there any risks involved in taking part?**

There are no intended risks in taking part in this study. However, if you feel uncomfortable about answering the questions, you may take a break or completely stop at any time. The researcher will ensure that your identity and all information you give will remain private and confidential. All information will be anonymised, and no names will be disclosed. No information which could lead to the identification of any individual participating in the study will be disclosed to health or prison officer or to anyone else. No participants will be identified in any reports from the project.

All data will be saved in a password protected computer and transcripts stored in a locked filing cabinet located off the prison premises. Only general information will be presented in reports of the study’s findings to ensure that your identity remains private. Furthermore, the prison shall not be named to help to maintain the confidentiality of participants.

**What if something goes wrong?**

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number: X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor [Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK jayne.donaldson@stir.ac.uk], or Dr Henhen Heryaman, Sp.PD, University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number: X, email address: henhen.fk.unpad@gmail.com].

**What will happen to the results of this study?**

This study’s findings will be presented in report called a PhD thesis and will be published as papers in journals. Neither the name of the narcotics prison nor your name nor any personal details will be revealed.

**Who has approved the research?**

This study has been approved by the School Research Ethics Committee (SREC) in the University of Stirling’s School of Health Science, and by the Indonesian Ministry of Justice and Human Rights. The research will be supervised by Professor Sally
Haw and Dr Sarah Wilson from the University of Stirling. Further details can be found at http://www.stir.ac.uk/.

Who is paying for this research?

Rita Komalasari is funded by the Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information, please see www.lpdp.kemenkeu.go.id

Thank you for reading this information sheet and considering participation in the study.

For further information please contact:
Researcher name: Rita Komalasari in the prison clinic
(rita.komalasari@stir.ac.uk, mobile phone number: X)

School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Dear (name),

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I am writing to invite you to participate in a study about HIV prevention strategies and the treatment of drug users in Indonesian prisons. Your perspectives and experiences as a prison governor of a general non-methadone prison will make a significant contribution to the development of understanding of the barriers and facilitators to effective implementation of methadone programmes and HIV prevention strategies in prison settings.

Before you decide, I would like you to understand what the study is about and what your participation would involve.

Please read the following information carefully before signing the consent form on the final page.

You can contact me in the clinic or on the contact number provided below to ask for further information if you wish.

What is the purpose of this study?
To understand the role of HIV prevention programmes and the approach to the management of drug users in Indonesian prisons within the context of the broader prison HIV prevention strategy.
To understand the factors which help and hinder the effective implementation of HIV prevention programmes and the management of drug users in Indonesian prisons.
To help to improve the programmes to reduce HIV transmission in Indonesian prisons.

What is involved?
If, after reading this information sheet, you are interested in taking part, sign the consent form and return it to the researcher in the prison clinic.

The researcher will leave at least 24 hours cooling-off period after providing information and before requesting signed informed consent. The interview will be also arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish.

The interview will last about one hour and with your permission, I will record the interview with a digital recorder. The recording will not be given to anyone else. The recording will be destroyed once it has been used. Overall, three prison governors. Interviews are planned in three different prisons.

**Why have I been invited to take part?**
You have been invited to participate in this study because you are currently working as a prison governor in a general non-methadone prison and you are knowledgeable and have experience in designing and implementing HIV prevention programmes in this prison.

I am very interested to know more about your experience and views about factors which help or hinder the delivery of the programmes.

**Do I have to take part?**
No. Participation in the study is completely voluntary. This means that you can choose whether or not you want to take part.

**What if I change my mind about taking part?**
You have the right to withdraw at any stage of this study since this research is voluntary. Your decision will not affect your legal rights as a prison governor.

**Will I benefit from taking part?**
Your perspective will help inform policy makers and practitioners and help in the future re-design and development of strategies to improve treatment of drug users and prevention of HIV transmission in prison settings. This means you will be contributing towards improving health services in Indonesian prisons.

**Are there any risks involved in taking part?**
There are no intended risks in taking part in this study. However, if you feel uncomfortable about answering the questions, you may take a break or completely stop at any time. The researcher will ensure that your identity and all information you give will remain private and confidential. All information will be anonymised, and no names will be disclosed. No information which could lead to the identification of any individual participating in the study will be disclosed to health or prison officer or to anyone else. No participants will be identified in any reports from the project.

All data will be saved in a password protected computer and transcripts stored in a locked filing cabinet located off the prison premises. Only general information will be presented in reports of the study’s findings to ensure that your identity remains
private. Furthermore, the prison shall not be named to help to maintain the confidentiality of participants.

**What if something goes wrong?**
If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number: X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor [Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK jayne.donaldson@stir.ac.uk], or Dr. Henhen Heryaman, Sp.PD, University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number: X, email address: henhen.fk.unpad@gmail.com].

**What will happen to the results of this study?**
This study’s findings will be presented in report called a PhD thesis and will be published as papers in journals. Neither the name of the general prison nor your name nor any personal details will be revealed.

**Who has approved the research?**
This study has been approved by the School Research Ethics Committee (SREC) in the University of Stirling’s School of Health Science, and by the Indonesian Ministry of Justice and Human Rights. The research will be supervised by Professor Sally Haw and Dr Sarah Wilson from the University of Stirling. Further details can be found at [http://www.stir.ac.uk/](http://www.stir.ac.uk/).

**Who is paying for this research?**
Rita Komalasari is funded by the Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information, please see [www.lpdp.kemenkeu.go.id](http://www.lpdp.kemenkeu.go.id)

Thank you for reading this information sheet and considering participation in the study.

For further information please contact:
Researcher name: Rita Komalasari in the prison clinic (ritakomalasari@stir.ac.uk, mobile phone number: X)

School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Information sheet for prison healthcare staff in the narcotics and the general methadone prison

Participant Information Sheet

You will be given a copy of this information sheet to keep.

Version: 2   Date: 06/10/2015

Name of researcher: Rita Komalasari

Dear (name),

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I am writing to invite you to participate in a study about methadone programmes and the treatment of drug users in Indonesian prisons. Your manager (name) gave me your name as someone who has expertise in the area and who might be interested in participating in the study.

Before you decide, I would like you to understand what the study is about and what your participation would involve.

Please read the following information carefully.

You can contact me in the clinic or in the contact number provided below to ask for further information if you wish.

What is the purpose of this study?

To understand the role of methadone programmes and the approach to the management of drug users in Indonesian prisons within the context of the broader prison HIV prevention strategy.

To understand the factors which help and hinder the effective implementation of methadone programmes and the management of drug users in Indonesian prisons.

To help to improve the programmes to reduce HIV transmission in Indonesian prisons
What is involved?

The researcher will explain the study in more detail and answer any questions you may have. You will be given an information sheet and consent form by the researcher. If you are interested in taking part sign the consent form and return it to the researcher or post the signed consent form into a sealed box in the prison clinic. Then, the researcher will contact you to arrange a convenient time and place for an interview.

The researcher will leave at least 24 hours cooling-off period after providing information and before requesting signed informed consent. The interview will be also arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish.

The interview will last about one hour and with your permission, I will record the interview with a digital recorder. The recording will not be given to anyone else. The recording will be destroyed once it has been used. Overall nine prison healthcare staff interviews are planned in three different prisons.

The study will also involve three days of observation with your prison health clinic. This will focus on how the methadone programmes works in practice. Observations will be recorded in a field diary.

Why have I been invited to take part?

You have been invited to participate in this study because you are currently working as a member of the prison healthcare staff in a narcotics or a general methadone prison and you are considered by your manager to be knowledgeable and have experiences in implementing methadone programmes in this prison.

I am very interested to know more about your experiences and views about factors which help or hinder the delivery of the programmes.

Do I have to take part?

No. Participation in the study is completely voluntary. This means that you can choose whether or not you want to take part.

What if I change my mind about taking part?

You have the right to withdraw at any stage of this study, since this research is voluntary. Your decision will not affect your legal rights as a prison healthcare staff.

Will I benefit from taking part?
Your perspective will help inform policy makers and practitioners and help in the future re-design and development of strategies to improve treatment of drug users and prevention of HIV transmission programmes in prison settings. This means you will be contributing towards improving health service in prisons in Indonesia.

Are there any risks involved in taking part?

There are no intended risks in taking part in this study. However, if you feel uncomfortable about answering the questions, you may take a break or completely stop at any time. The researcher will ensure that your identity and all information you give will remain private and confidential. All information will be anonymised, and no names will be disclosed. No information which could lead to the identification of any individual participating in the study will be disclosed to prison governors, health or prison officers or to anyone else. No participants will be identified in any reports from the project.

All data will be saved in a password protected computer and transcripts stored in a locked filing cabinet located off the prison premises. Only general information will be presented in reports of the study’s findings to ensure that your identity remains private. Furthermore, the prison shall not be named to help to maintain the confidentiality of participants.

What if something goes wrong?

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number. X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK [jayne.donaldson@stir.ac.uk], or Dr Henhen Heryaman, Sp.PD, University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number. X, email address: henhen.fk.unpad@gmail.com].

What will happen to the results of this study?

This study’s findings will be presented in report called a PhD thesis and will be published as papers in journals. Neither the name of the narcotics prison nor your name nor any personal details will be revealed.

Who has approved the research?
This study has been approved by the School Research Ethics Committee (SREC) in the University of Stirling’s School of Health Science, and by the Indonesian Ministry of Justice and Human Rights. The research will be supervised by Professor Sally Haw and Dr Sarah Wilson from the University of Stirling. Further details can be found at http://www.stir.ac.uk/.

**Who is paying for this research?**

Rita Komalasari is funded by Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information see www.lpdp.kemenkeu.go.id

Thank you for reading this information sheet and considering participation in the study.

For further information please contact:

Researcher name: Rita Komalasari in the prison clinic
(Email address: rita.komalasari@stir.ac.uk, mobile phone number: X)

Researcher address:
School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Dear (name),

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I am writing to invite you to participate in a study about HIV prevention strategies and the treatment of drug users in Indonesian prisons. Your manager (name) gave me your name as someone who has expertise in the area and who might be interested in participating in the study.

Before you decide, I would like you to understand what the study is about and what your participation would involve.

Please read the following information carefully.

You can contact me in the clinic or on the contact number provided below to ask for further information if you wish.

What is the purpose of this study?
To understand the role of HIV prevention programmes and the approach to the management of drug users in Indonesian prisons within the context of the broader prison HIV prevention strategy.

To understand the factors which help and hinder the effective implementation of HIV prevention programmes and the management of drug users in Indonesian prisons.

To help to improve the programmes to reduce HIV transmission in Indonesian prisons

What is involved?

The researcher will explain the study in more detail and answer any questions you may have. You will be given an information sheet and informed consent form by the researcher. If you are interested in taking part sign the consent form and return it to the researcher or post the signed consent form into a sealed box in the clinic at a later date. Then, the researcher will contact you to arrange a convenient time and place for an interview.

The researcher will leave at least 24 hours cooling-off period after providing information and before requesting signed informed consent. The interview will be also arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish.

The interview will last about one hour and with your permission, I will record the interview with a digital recorder. The recording will not be given to anyone else. The recording will be destroyed once it has been used. Overall nine prison healthcare staff interviews are planned in three different prisons.

Why have I been invited to take part?

You have been invited to participate in this study because you are currently working as a member of the prison healthcare staff in a general non-methadone prison and you are considered by your manager to be knowledgeable and have experience in implementing HIV prevention programmes in this prison.

I am very interested to know more about your experience and views about factors which help or hinder the delivery of the programmes.

Do I have to take part?

No. Participation in the study is completely voluntary. This means that you can choose whether or not you want to take part.

What if I change my mind about taking part?
You have the right to withdraw at any stage of this study, since this research is voluntary. Your decision will not affect your legal rights as a prison healthcare staff.

**Will I benefit from taking part?**

Your perspective will help inform policy makers and practitioners and help in the future re-design and development of strategies to improve treatment of drug users and prevention of HIV transmission programmes in prison settings. This means you will be contributing towards improving health service in prisons in Indonesia.

**Are there any risks involved in taking part?**

There are no intended risks in taking part in this study. However, if you feel uncomfortable about answering the questions, you may take a break or completely stop at any time. The researcher will ensure that your identity and all information you give will remain private and confidential. All information will be anonymised, and no names will be disclosed. No information which could lead to the identification of any individual participating in the study will be disclosed to prison governors, health or prison officers or to anyone else. No participants will be identified in any reports from the project.

All data will be saved in a password protected computer and transcripts stored in a locked filing cabinet located off the prison premises. Only general information will be presented in reports of the study’s findings to ensure that your identity remains private. Furthermore, the prison shall not be named to help to maintain the confidentiality of participants.

**What if something goes wrong?**

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number. X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK [jayne.donaldson@stir.ac.uk], or Dr Henhen Heryaman, Sp.PD, University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number. X, email address: henhen.fk.unpad@gmail.com].

**What will happen to the results of this study?**

252
This study’s findings will be presented in a report called a PhD thesis and will be published as papers in journals. Neither the name of the general prison nor your name nor any personal details will be revealed.

Who has approved the research?
This study has been approved by the School Research Ethics Committee (SREC) in the University of Stirling’s School of Health Science, and by the Indonesian Ministry of Justice and Human Rights. The research will be supervised by Professor Sally Haw and Dr Sarah Wilson from the University of Stirling. Further details can be found at http://www.stir.ac.uk/.

Who is paying for this research?
Rita Komalasari is funded by Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information see www.lpdp.kemenkeu.go.id

Thank you for reading this information sheet and considering participation in the study.

For further information please contact:
Researcher name: Rita Komalasari in the prison clinic
(Email address: rita.komalasari@stir.ac.uk, mobile phone number: X)
Researcher address:
School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Participant Information Sheet

You will be given a copy of this information sheet to keep.

Study title: Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

Version: 2   Date: 06/10/2015

Name of researcher: Rita Komalasari

Dear (name),

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I would like to invite you to participate in a study about methadone programmes and the treatment of drug users in Indonesian prisons. Your manager (name) gave me your name as someone who is knowledgeable in the area and who might be interested in participating in the study.

Before you decide, I would like you to understand what the study is about and what your participation would involve.

Please read the following information carefully.

You can contact me in the clinic or on the contact number provided below to ask for further information if you wish.
What is the purpose of this study?

To understand the role of methadone programmes and the approach to the management of drug users in Indonesian prisons within the context of the broader prison HIV prevention strategy.

To understand the factors which help and hinder the effective implementation of methadone programmes and the management of drug users in Indonesian prisons.

To help to improve the programmes to reduce HIV transmission in Indonesian prisons

What is involved?

After you read the information sheet, if you are interested, you can contact the researcher in a way that suits you (see the contact details provided in the last page of this form) to arrange a convenient time and place for an information session with the researcher. At that session the researcher will explain the study in more detail and answer any questions you may have by going through the information sheet. If you are interested, you can take away the information sheet and consent form given by the researcher to you. If you are interested in taking part sign the consent form and return it to the researcher or post the signed consent form into a sealed box in the clinic at a later date. Then, the researcher will contact you to arrange a convenient time and place for an interview.

The researcher will leave at least 24 hours cooling-off period after providing information and before requesting signed informed consent. The interview will be also arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish.

The interview will last about one hour and with your permission, I will record the interview with a digital recorder. The recording will not be given to anyone else. The recording will be destroyed once it has been used. Overall prison officers’ interviews are planned in three different prisons.

Why have I been invited to take part?

You have been invited to participate in this study because you are currently working as a prison officer in a narcotics or a general methadone prison and you are knowledgeable and have experience in implementing the methadone programmes in this prison.

I am very interested to know more about your experience and views about factors which help or hinder the delivery of the programmes.
Do I have to take part?
No. Participation in the study is completely voluntary. This means that you can choose whether or not you want to take part.

What if I change my mind about taking part?
You have the right to withdraw at any stage of this study, since this research is voluntary. Your decision will not affect your legal rights as a member of prison security staff.

Will I benefit from taking part?
Your perspective will help inform policy makers and practitioners and help in the future re-design and development of strategies to improve treatment of drug users and prevention of HIV transmission in prison settings. This means you will be contributing towards improving health services and safe working environment in prisons in Indonesia.

Are there any risks involved in taking part?
There are no intended risks in taking part in this study. However, if you feel uncomfortable about answering the questions, you may take a break or completely stop at any time. The researcher will ensure that your identity and all information you give will remain private and confidential. All information will be anonymised, and no names will be disclosed. No information that could lead to the identification of any individual participating in the study will be disclosed to the prison governors, health or prison officer or to anyone else. No participants will be identified in any reports from the project.

All data will be saved in a password protected computer and transcripts stored in a locked filing cabinet located off the prison premises. Only general information will be presented in reports of the study’s findings to ensure that your identity remains private. Furthermore, the prison shall not be named to help to maintain the confidentiality of participants.

What if something goes wrong?
If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number, X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor Jayne Donaldson, Head of School of Health Sciences, University of
What will happen to the results of this study?

This study’s findings will be presented in report called a PhD thesis and will be published as papers in journals. Neither the name of the narcotics prison nor your name nor any personal details will be revealed.

Who has approved the research?

This study has been approved by the School Research Ethics Committee (SREC) in the University of Stirling’s School of Health Science, and by the Indonesian Ministry of Justice and Human Rights. The research will be supervised by Professor Sally Haw and Dr Sarah Wilson from the University of Stirling. Further details can be found at http://www.stir.ac.uk/.

Who is paying for this research?

Rita Komalasari is funded by Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information see www.lpdp.kemenkeu.go.id

Thank you for reading this information sheet and considering participation in the study.

For further information please contact:

Researcher name: Rita Komalasari in the prison clinic
(Email address: rita.komalasari@stir.ac.uk, mobile phone number: X)

Researcher address:
School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Participant Information Sheet

You will be given a copy of this information sheet to keep.

Study title: Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons
Version: 2 Date: 06/10/2015
Name of researcher: Rita Komalasari

Dear (name),

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I would like to invite you to participate in a study about HIV prevention strategies and the treatment of drug users in Indonesian prisons. Your manager (name) gave me your name as someone who is knowledgeable in the area and who might be interested in participating in the study.

Before you decide, I would like you to understand what the study is about and what your participation would involve.

Please read the following information carefully.

You can contact me in the clinic or on the contact number provided below to ask for further information if you wish.

What is the purpose of this study?
To understand the role of HIV prevention programmes and the approach to the management drug users in Indonesian prisons within the context of the broader prison HIV prevention strategy.

To understand the factors which help and hinder the effective implementation of HIV prevention programmes and the management of drug users in Indonesian prisons.

To help to improve the programmes to reduce HIV transmission in Indonesian prisons

What is involved?

After you read the information sheet, if you are interested, you can contact the researcher in a way that suits you (see the contact details provided in the last page of this form) to arrange a convenient time and place for an information session with the researcher. At that session the researcher will explain the study in more detail and answer any questions you may have by going through the information sheet. If you are interested, you can take away the information sheet and consent form given by the researcher to you. If you are interested in taking part sign the consent form and return it to the researcher or post the signed consent form into a sealed box in the clinic at a later. Then, the researcher will contact you to arrange a convenient time and place for an interview.

The researcher will leave at least 24 hours cooling-off period after providing information and before requesting signed informed consent. The interview will be also arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish.

The interview will last about one hour and with your permission, I will record the interview with a digital recorder. The recording will not be given to anyone else. The recording will be destroyed once it has been used. Overall prison officers’ interviews are planned in three different prisons.

Why have I been invited to take part?

You have been invited to participate in this study because you are currently working as a prison officer in a general prison and you are knowledgeable and have experience in implementing HIV prevention programmes in this prison.

I am very interested to know more about your experience and views about factors which help or hinder the delivery of the programmes.

Do I have to take part?

No. Participation in the study is completely voluntary. This means that you can choose whether or not you want to take part.
What if I change my mind about taking part?

You have the right to withdraw at any stage of this study, since this research is voluntary. Your decision will not affect your legal rights as a member of prison security staff.

Will I benefit from taking part?

Your perspective will help inform policy makers and practitioners and help in the future re-design and development of strategies to improve treatment of drug users and prevention of HIV transmission in prison settings. This means you will be contributing towards improving health services and safe working environment in prisons in Indonesia.

Are there any risks involved in taking part?

There are no intended risks in taking part in this study. However, if you feel uncomfortable about answering the questions, you may take a break or completely stop at any time. The researcher will ensure that your identity and all information you give will remain private and confidential. All information will be anonymised, and no names will be disclosed. No information that could lead to the identification of any individual participating in the study will be disclosed to prison governors, health or prison officers or to anyone else. No participants will be identified in any reports from the project.

All data will be saved in a password protected computer and transcripts stored in a locked filing cabinet located off the prison premises. Only general information will be presented in reports of the study’s findings to ensure that your identity remains private. Furthermore, the prison shall not be named to help to maintain the confidentiality of participants.

What if something goes wrong?

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number. X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK[ jayne.donaldson@stir.ac.uk], or Dr Henhen Heryaman, Sp.PD, University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number. X, email address: henhen.fk.unpad@gmail.com].

What will happen to the results of this study?
This study’s findings will be presented in report called a PhD thesis and will be published as papers in journals. Neither the name of the general prison nor your name nor any personal details will be revealed.

**Who has approved the research?**

This study has been approved by the School Research Ethics Committee (SREC) in the University of Stirling’s School of Health Science, and by the Indonesian Ministry of Justice and Human Rights. The research will be supervised by Professor Sally Haw and Dr Sarah Wilson from the University of Stirling. Further details can be found at [http://www.stir.ac.uk/](http://www.stir.ac.uk/).

**Who is paying for this research?**

Rita Komalasari is funded by Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information see [www.lpdp.kemenkeu.go.id](http://www.lpdp.kemenkeu.go.id)

Thank you for reading this information sheet and considering participation in the study.

For further information please contact:

Researcher name: Rita Komalasari in the prison clinic
(Email address: rita.komalasari@stir.ac.uk, mobile phone number: X)

Researcher address:
School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Information sheet for prisoners in the narcotics and the general methadone prison

Participant Information Sheet

You will be given a copy of this information sheet to keep.

Version: 2   Date: 06/10/2015

Name of researcher: Rita Komalasari

Dear (name)

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I would like to invite you to take part in an important study about the treatment of drug users in Indonesian prisons. Your doctor (name) gave me your name as someone who knows a lot about this area and who might be interested in participating in the study.

Before you decide whether to take part in the study, it is important that you understand why the study is being done and what it involves.

Please read the following information carefully. Please ask me any questions as we read through the information sheet.

Discuss it with your family or friends or your doctor if you want to

Take as long as you like to decide whether or not you want to take part.

You can contact me to ask for further information if needed.

What is this study about?

We are interested in:

Your views about the treatment of drug users in Indonesian prisons.

Your experience and views about the methadone programmes here.
How you think the programmes and the treatment of drug users could be improved.

**What will taking part involve?**

The researcher will explain the study in more detail and answer any questions you may have. The researcher will read through the information sheet with you making sure that you understand the study and what is involved if you agree to participate. If you are interested, you can take away the information sheet and consent form given by the researcher to you.

If you agree to participate, you can post the signed consent form into a sealed box in the clinic at a later date. Then, the researcher will arrange a convenient time and place for an interview.

The interview will be arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish. Before the start of the interview the researcher will make sure that you understand the information sheet.

The interview will last about one hour. It will be like a chat about your experiences here as a drug user in the prison. If you agree the interview will be recorded. No one will know what you have said. The recording will not be given to anyone else. The recording will be destroyed once it has been used. The researcher will also spend time in your prison health clinic learning about the treatment programmes.

**Why have I been invited to take part?**

You know a lot about how drug users are treated and how the methadone programmes are run here. We want to know about your views and experiences.

**Do I have to take part?**

YOU decide whether or not you want to take part. You can change your mind and stop taking part at any time. You do not need to give a reason for changing your mind.

If you do not want to take part, this will not affect your legal rights in this prison and the medical care you receive at the health clinic in the future.

**What if I change my mind about taking part?**

Yes. You can change your mind at any time. If you do decide to stop the prison authorities will not know.
Will I benefit from taking part?

The views of prisoners are important and should help to develop better treatment programmes to support drug users in prison.

Are there any risks involved in taking part?

There are no intended risks in taking part in this study. However, if you feel uneasy about answering any questions, you may take a break or stop the interview. The researcher will conduct the interview in a private room in the prison clinic without supervision from prison officers or prison healthcare staff. The researcher will not tell anyone in the prison about what you say.

Your personal data will be stored safely on a researcher computer located off the prison area, with all names removed so that you and this prison cannot be recognised.

What if something goes wrong?

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK[ jayne.donaldson@stir.ac.uk], or Dr. Henhen Heryaman, Sp.PD University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number, email address: henhen.fk.unpad@gmail.com].

How study result used?

The researcher will write the results up in report called a PhD thesis and they will also be published as papers. The report of this study will be sent to prison authorities and prison healthcare staff. You will not be named in any report.

Who has approved the research?

The School Research Ethics Committee (SREC) in the School of Health Science, University of Stirling and by the directorate corrections of the Ministry of Justice and Human Right of Republic Indonesia.
Who is paying for this research?

Rita Komalasari is funded by Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information see www.lpdp.kemenkeu.go.id

Thank you for reading this information sheet and considering participation in the study.

For further information please contact the following person in the prison clinic:
Chief Doctor: (name)
Researcher name: Rita Komalasari

Researcher address:
School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
Participant Information Sheet

You will be given a copy of this information sheet to keep.

Name of researcher: Rita Komalasari
Version: 2 Date: 06/10/2015

Dear (name)

Methadone Maintenance Treatment (MMT) Programmes in Indonesian Prisons

I would like to invite you to take part in an important study about HIV prevention programmes and the treatment of drug users in Indonesian prisons. Your doctor (name) gave me your name as someone who knows a lot about this area and who might be interested in participating in the study.

Before you decide whether to take part in the study, it is important that you understand why the study is being done and what it involves.

Please read the following information carefully. Please ask me any questions as we read through the information sheet.

Discuss it with your family or friends or your doctor if you want to

Take as long as you like to decide whether or not you want to take part.

You can contact me to ask for further information if needed.

What is this study about?

We are interested in:

Your views about the treatment of drug users in Indonesian prisons.

Your experience and views about HIV prevention programmes here
How you think the programmes and the treatment of drug users could be improved

**What will taking part involve?**

The researcher will explain the study in more detail and answer any questions you may have. The researcher will read through the information sheet with you making sure that you understand the study and what is involved if you agree to participate. If you are interested, you can take away the information sheet and consent form given by the researcher to you.

If you agree to participate, you can post the signed consent form into a sealed box in the clinic at a later date. Then, the researcher will arrange a convenient time and place for an interview.

The interview will be arranged at least 24 hours after signing your consent form to allow you to change your mind about participation in the study, if you wish. Before the start of the interview the researcher will make sure that you understand the information sheet.

The interview will last about one hour. It will be like a chat about your experiences here as a drug user in the prison. If you agree the interview will be recorded. No one will know what you have said. The recording will not be given to anyone else. The recording will be destroyed once it has been used. The researcher will also spend time in your prison health clinic learning about the treatment programmes.

**Why have I been invited to take part?**

You know a lot about the treatment of drug users and how HIV programmes are run here. We want to know about your views and experiences.

**Do I have to take part?**

YOU decide whether or not you want to take part. You can change your mind and stop taking part at any time. You do not need to give a reason for changing your mind.

If you do not want to take part, this will not affect your legal rights in this prison and the medical care you receive at the health clinic in the future.

**What if I change my mind about taking part?**

Yes. You can change your mind at any time. If you do decide to stop the prison authorities will not know.

**Will I benefit from taking part?**
The views of prisoners are important and should help to develop better treatment programmes to support drug users in prison.

**Are there any risks involved in taking part?**

There are no intended risks in taking part in this study. However, if you feel uneasy about answering any questions, you may take a break or stop the interview. The researcher will conduct interview in a private room in prison clinic without supervision from prison officers or prison healthcare staff. The researcher will not tell anyone in the prison about what you say.

Your personal data will be stored securely on a researcher computer located off the prison area, with all names removed so that you and this prison cannot be recognised.

**What if something goes wrong?**

If you have a concern about any aspect of this study, you should ask to speak to the researcher who will do her best to answer your questions at the clinic [phone number X].

If you remain unhappy and wish to complain formally, you can do this by contacting Professor Jayne Donaldson, Head of School of Health Sciences, University of Stirling, UK [jayne.donaldson@stir.ac.uk], or Dr. Henhen Heryaman, Sp.PD, University of Padjadjaran Department of Internal Medicine – Hasan Sadikin Hospital Bandung [Phone number, email address: henhen.fk.unpad@gmail.com].

**How study result used?**

The researcher will write the results up in report called a PhD thesis and they will also be published as papers. The report of this study will be sent to prison authorities and prison healthcare staff. You will not be named in any report.

**Who has approved the research?**

The School Research Ethics Committee (SREC) in the School of Health Science, University of Stirling and by the directorate corrections of the Ministry of Justice and Human Rights of the Republic of Indonesia.

**Who is paying for this research?**
Rita Komalasari is funded by the Indonesia Endowment Fund for Education (LPDP) under The Ministry of Finance of the Republic of Indonesia. For more information see www.lpdp.kemenkeu.go.id

Thank you for reading this information sheet and considering participation in the study.

For further information please contact the following person in the prison clinic:
Chief Doctor: (name)
Researcher name: Rita Komalasari

Researcher address:
School of Health Sciences
University of Stirling
United Kingdom
FK9 4LA
APPENDIX G. Consent Form

Consent form for prison governors, prison healthcare staff, and prison officers

CONSENT FORM

You will be given a copy of this information sheet to keep.

Participant Identification Number:

Prison Identification Number:

Version: 2 Date: 06/10/2015

Name of the researcher: Rita Komalasari

Study title: Methadone Maintenance Treatment (MMT) Programmes in Indonesian prisons

Please read and complete this form carefully. If you are willing to participate in this study, fill in the boxes using your initials and sign and date the declaration at the end. If you do not understand anything and would like more information, please ask.
I confirm that I have read the information sheet dated 06/10/2015 version 2 for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactory.

I understand what my participation involves, the potential outcomes of the project and what the information will be used for.

I understand that there is no obligation to participate in this study. I may withdraw from this study at any time without having to give an explanation. I can decide whether or not to answer the questions, without my legal rights being affected.

I understand that all information about me will be treated in strict confidence and that no information which could lead to the identification of any individual or prison institution will appear in any report or be disclosed to any other party.

I agree to the interview being recorded. I understand that any audiotape material will be destroyed once it has been used for your study.

I understand that, if I have any concerns or difficulties, I can contact the researcher, or an independent person not involved in the study.

I have read the consent form

I agree to take part in this study

I freely give my consent to participate in this study and have been given a copy of this form for my own information.

---

Name of Participant  Date  Signature

Name of Person taking consent  Date  Signature

When completed: 1 for participant; 1 for researcher site file

271
CONSENT FORM

You will be given a copy of this information sheet to keep.

Participant Identification Number:
Prison Identification Number:
Version: 2 Date: 06/10/2015
Name of the researcher: Rita Komalasari

Study title: Methadone Maintenance Treatment (MMT) Programmes in Indonesian prisons

Please read and complete this form carefully. If you are willing to participate in this study, fill in the boxes using your initials and sign and date the form at the end. If you do not understand anything and would like more information, please ask.
<table>
<thead>
<tr>
<th>Please initial box</th>
</tr>
</thead>
<tbody>
<tr>
<td>I have had the study explained clearly to me in oral or written form (dated 06/10/2015, version 2) by the researcher. I have understood the information and have asked questions which have been answered clearly.</td>
</tr>
<tr>
<td>I understand what the information will be used for.</td>
</tr>
<tr>
<td>I understand that there is no obligation to participate in this study; I may choose not to answer the questions; I can stop participating in this study at any time, without my legal rights and medical care being changed.</td>
</tr>
<tr>
<td>The researcher will keep the personal information safely and I will not be named in any report</td>
</tr>
<tr>
<td>I agree to the interview being recorded and understand that it will be destroyed once it has been used</td>
</tr>
<tr>
<td>I can contact the researcher, or an independent person not involved in the study, if I need to</td>
</tr>
<tr>
<td>I have read the consent form</td>
</tr>
<tr>
<td>I agree to take part in this study</td>
</tr>
</tbody>
</table>

I freely give my consent to participate in this study and have been given a copy of this form for my own information.

<table>
<thead>
<tr>
<th>Name of Participant</th>
<th>Date</th>
<th>Signature</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of Person taking consent</td>
<td>Date</td>
<td>Signature</td>
</tr>
</tbody>
</table>

When completed: 1 for participant; 1 for researcher site file
Appendix H. Flyer

Flyer for the narcotics methadone prison

EVENT:
A study about methadone programmes and the treatment of people who use drugs in Indonesian prisons.

WHERE:
Dr. Rita Komalasari, a researcher from the University of Stirling, Scotland will be conducting research in the prison health clinic in January and February 2016.

WHAT AND WHEN:
Dr. Rita will be:
Observing work in the clinic between 5th and 7th January 2016
AND
Conducting interviews in the clinic between 11th January and 5th February 2016

FURTHER INFORMATION:
For further information about the study, please contact:
Dr. Rita, the researcher in the prison clinic
Dr. Febbya who is responsible for methadone programmes in the prison health clinic
EVENT:
A study about methadone programmes and the treatment of people who use drugs in Indonesian Prisons.

WHERE:
Dr Rita Komalasari, a researcher from the University of Stirling, Scotland will be conducting research in the prison health clinic in February and March 2016.

WHAT AND WHEN:
Dr Rita will be:
Observing work in the clinic between 8th and 10th February 2016
AND
Conducting interviews in the clinic between 15th February and 4th March 2016.

FURTHER INFORMATION:
For further information about the study, please contact:
Dr Rita, the researcher in the prison clinic
Dr (name) who is responsible for methadone programmes in the prison health clinic.
REFERENCES


Ministry of Health Indonesia (2013) *Ministry of Health of the Republic of Indonesia Regulation Number 21 Year 2013 on Response to HIV and AIDS*. Jakarta. 31 (1).


Ratri, S.D. (2016) ‘No more money for our needles’. *Inside Indonesia*, 17 May 2016. Available: http://www.insideindonesia.org/no-more-money-for-our-needles?highlight=WyJubyIslidubyculiniwibm8nLiLiubylslidubycilClnom8nLCIsIm5vJylslIvmUicUIClnbW9yZSIIsIm1vcUnliviwibW9yZSCsliwibW9yZScuIwibW9uZXkIJCm3liCJmb3lnLCIsildmb3iILClnZm9yJylslImZvciculiwib3VyclwiJ291cilsidvdXInliviwibVlZGxlycIIsIm5vIG1vcUICJubyBtb3JllG1vbcmV5liwibW9yZSBtb25leSlsm1vcUmgbW9uZXkgZm9yliwibW9uZXkgZm9yliwibW9uZXkgZm9yG91cisIsImZvciBvdXIlJCm3Igb3VylG5lZWRsZXMiLCJdJvdXlgbmVlZGxlcYJd. [Accessed: 13 March 2018].


Sacks, S., Chaple, M., Sacks, J.Y., McKendrick, K. and Cleland, C.M. (2012) Randomized trial of a re-entry modified therapeutic community for offenders


