SERVICE DELIVERY FOR PEOPLE WHO USE AMPHETAMINE-TYPE STIMULANTS IN ALIGNMENT WITH HARM REDUCTION PRINCIPLES

Internship Report
Internship at Mainline Foundation Amsterdam

Agnes Walk (2535155)

On site supervisor: Machteld Busz, MSc
VU Supervisor: Laura Shields, PhD

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PERSONAL DETAILS

Student: Agnes Walk
Student number: 2535155
Telephone number: 06 27548297
E-mail address: a.walk@mainline.nl
Master programme: Management, Policy-analysis and Entrepreneurship in Health and Life sciences
Master specialisation: International Public Health

CONTACT INFORMATION INTERNSHIP

Supervisor at internship (Mainline): Machteld Busz, MSc
Address: FrederikHendrikstraat 111-115, 1052 HN Amsterdam
Department: International
Telephone number: 020 682 2660
E-mail address: m.busz@mainline.nl

CONTACT INFORMATION VU SUPERVISOR

Supervisor: Laura Shields, PhD
Telephone number: +31 20 59 86082
E-mail address: l.s.shields@vu.nl
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ABBR

ADHD  Attention Deficit Hyperactivity Disorder
AIDS  Acquired Immune Deficiency Syndrome
ATS  Amphetamine- type Stimulants
HIV  Human Immunodeficiency Virus
IHRA  International Harm Reduction Association
INPUD  International Network of People who Use Drugs
MDMA  3,4-methylenedioxy-N-methylamphetamine
MSM  Men who have sex with men
PUD  People who use drugs
SPF  Strategic Prevention Framework
STI  Sexual transmitted infection
TG  Transgender
UNAIDS  The joint United Nations programme on HIV and AIDS
UNODC  United Nation Office on Drugs and Crime
WHO  World Health Organisation
EXECUTIVE SUMMARY

Introduction
Since the early 1990s the availability and use of amphetamine-type stimulants (ATS) increased steadily and accounts nowadays to the major drug issues worldwide (WHO, 2014). ATS encompasses substances like methamphetamine,amphetamine and MDMA (UNODC, 2013). The effects of ATS range from energetic feelings, high positive emotions to wakefulness and is used for both, recreational and occupational reasons. Harms associated with the use of ATS are numerous and include the transmission of HIV/AIDS and sexual transmitted infections (STI), cardiovascular complications, neurological damages and mental health concerns like paranoia and full psychosis (Grund et al., 2010). Moreover, problematic use can result in poverty, unemployment or unstable housing. It is becoming increasingly difficult to ignore the present situation of ATS use and its consequences and a proper response is needed. Therefore the aim of this project is to gain more insight in to the use of ATS and provide recommendations on how services, in line with harm reduction can be provided for people who use stimulants in the network areas of Mainline in South Africa, Nepal and Indonesia.

Methodology
In order to answer the research questions a case study approach composed of 13 semi structured interviews combined with a literature study was chosen. Interviews were held with service provider for people who use drugs from South Africa, Nepal and Indonesia as well as people who have a background in drug use or are working closely together with people who use drugs. The literature search helped to form the description of the three cases and the interviews were later analyzed with the help of a conceptual model.

Results
Out of the 3.7 million to 4.7 million drug users in Indonesia around 2.1 million are estimated to use a form of ATS (UNODC, 2013). The interviews showed that it is currently the drug of choice in Indonesia, as it is easy available and popular among a variety of groups like sex worker, students, mining workers, housewives or students. Female sex workers are often requested by their customers to take ATS for a better sexual experience. In addition some of them are using to be able to cope with their situation. Under the influence of stimulants female sex workers are more likely to engage in high risk sexual behaviour. This can result in lower condom use and therefore increases the chance of infections with HIV/AIDS or other STIs.

Students and young people use the stimulants to perform better at university of for parties. They often mix ATS with other substances, especially alcohol which can lead to an overdose. It seemed that people who use ATS do no perceive the use as harmful and have no knowledge about the risks associated with the use. Although harm reduction programmes are available for people who use ATS it is still HIV/AIDS driven and a lot of information on how to reduce risks associated with ATS is missing. The results showed that it will still be a long way to implement new strategies for several reasons. The political motivation is missing as the use of ATS is not seen as a major public health issue and the diverse population of users is hard to reach and it is difficult to engage the variety of users in harm reduction programmes.
Also in South Africa the use of crystalline methamphetamine is very problematic as it is very cheap and easy to produce. The population of users encompasses school kids, street kids, male and female sex workers, gay and bisexual men housewives and people living on the street. For the MSM community the use of methamphetamine at sex parties is highly popular. Through the stimulants they are able to lose their inhibitions and have sex for longer times with more partners and engage in more risk sexual behaviour. Although, most of them are aware of the risks they are taking, they are using because it is part of their lifestyle and identity.

In the club scene in South Africa a lot of young people are using ecstasy in combination with speed, alcohol or crystalline methamphetamine. Like in the case in Indonesia, this also often results in an overdose. People, who are living on the street, are a big population of users and although they are using the same drugs as the MSM community or young people, namely methamphetamine, it is much more discriminated and has more negative associations. Currently, there is only one project in South Africa which aims to reduce risks associated with the use of ATS. The services includes consultation, information, HIV/AIDS and STIs testing as well as treatment, provision of clean smoking or injecting material, distribution of condoms and lubricants and referral to rehabilitation centers. Moreover, through their outreach team they are able to reach a broader group and gather information about people’s drug patterns. These services are specifically for the MSM community and have proven to be effective. Although, services for a wider population are planned, they are still focused on injecting drug users and the prevention of HIV and therefore a huge population of drug users is left out.

In contrast to Indonesia and South Africa, the use and the availability of ATS are limited in Nepal. This was explained by the fact that it is too expensive and the drug of choice is still heroin. Consequently no harm reduction programmes for people who use ATS are available and also service providers do not see a need to develop new strategies as they see a greater need to focus on other issues.

**Discussion and Conclusion**

The research showed that in all three cases the population of ATS user did not perceive their use as harmful and consequently do not see a need in attending any harm reduction services. These findings can also be explained by the lack of information regarding the use of ATS. To overcome these barriers it could be useful to focus on peer led interventions as well as outreach work to attract more users. In addition, it has shown to be effective to design harm reduction programmes for a specific target population. The study also revealed that harm reduction strategies can be partly adapted from already existing programmes, such as the provision of clean needles and syringes for injecting drug users, distribution of condoms and lubricants for safer sex or legal access to clean smoking equipment for people who smoke ATS. Further, for each country recommendation are given on how to improve their services. First, for the partner organization Laras Indonesia it is suggested to extend their outreach team and provide better access to information around the use of ATS. Next, South Africa should not only take into account people who inject drugs, moreover it is recommended to include people who snort and smoke ATS as this is a big part of the population of drug users. Last, it is important that services in Nepal gain knowledge on different attributes on ATS so in case of a sudden rise, they are able to provide proper services.
1. INTRODUCTION

“A drug free world is a utopia and substance use a social phenomenon." (Mainline)

In recent years, there has been a marked increase in the availability and use of amphetamine-type stimulants, especially among young people all over the world (WHO, 2014). They are ranked as the second most widely used type of drugs after cannabis, and it is reported even more widespread than the use of heroin and cocaine combined (UNODC, 2011). ATS encompasses a group of synthetic stimulants which comprises substances like amphetamine, methamphetamine and MDMA (3,4-methylenedioxyn-methylamphetamine) (UNODC, 2013). The effects of ATS range from energetic feelings, confidence, high positive emotions like love, happiness and gratitude to wakefulness, which makes it particularly attractive for recreational use (Riley and Pates, 2012). Additionally, ATS are used in a variety of professions to keep up alertness, by sex workers or by students to make it possible to study for long periods of time (Pates and Riles, 2012). The use of stimulants appears nowadays in various social settings and diverse demographic subgroups worldwide (UNDOC, 2013). Problematic stimulant use can result in poverty, unemployment, homelessness or unstable housing and is associated with lower socio-economic status and a variety of other social problems and legal problems (Grund et al., 2010). It is becoming increasingly difficult to ignore the present situation of ATS use and its consequences and more attention and a proper response to the progressing spread around the world is needed (WHO, 2014).

History of Amphetamine-Type Stimulants

The use of amphetamines has its origins in China were it was applied already hundreds of years ago to treat people with asthma with the help of the ma huang plant (Ephedra vulgaris). In the 19th century an extract of this plant, which has a stimulating effect on the central nervous system was first produced by chemical synthesis and later introduced for medical treatment and recreational use (Tyler, 1986). Methamphetamine was discovered in Japan and was injected by soldiers during World War II and the Vietnam War to increase alertness, confidence and feelings of strength (Bell, 2012). Since the 1960s the addictive characteristics of the stimulants are known and after years of reported abuse, the United Nations put them in the category for highly restrictive substances under the treaty (Rasmussen, 2008; UNTC, 1971). Despite the high restriction in many countries, the illicit market of ATS expanded and in the late 1990s the global use and production of ATS, such as ecstasy and methamphetamines accounts as one of the major drug issues (UNODC, 2013). Today, out of the 200 million drug users worldwide, 35 million are said to consume ATS for which methamphetamine use accounts up to 59% (UNODC, 2009).

Harms associated with ATS

ATS are available as a liquid, in powder form, as crystals or capsules and tablets and can be taken orally, intravenous injected, smoked or sniffed (Ceida, 2013). In addition to the harms experienced by injecting drug users, like the transmission of HIV/AIDS and Hepatitis C (Mathers et al., 2010), the use of ATS can also result in cardiovascular complications, neurological damages, sleeping problems and mental health concerns like paranoia and full psychosis (Jacobs, 2006; Pates and Riley, 2012; Szabadi, 2006). Moreover, people who use ATS are more likely to engage in risky sexual behaviour, which is also known to increase the risk of various infectious diseases (Grund et al., 2010). ATS presents not
only a risk for the health of the user it also influences the social and economic fabric of families, communities and nations (WHO, 2014). Nevertheless, drug use and the possible related risk factors are influenced by a wide range of behavioural, social and cultural factors (Grund et al., 2010).

**Harm reduction approach**

One possible approach to this complex and sensitive subject is to focus on the prevention of the possible harms with emphasis on the health and safety of the people who use ATS, rather than on prevention of the drug use itself. Drug and social policies, along with their justificatory social constructions and stigmas, which are responsible for driving and worsening many of these avoidable harms, should be avoided and new policies with the focus on harm prevention need to be implemented (Grund et al., 2007; Levy, 2012). The perspective of harm reduction to drugs is based on a solid relationship to public health and human rights (IHRA, 2014). With this approach the World Health organization and UNAIDs (2011) developed the harm reduction principles for people who inject drugs, in order to reduce infections of HIV among drug users. This package encompasses nine principles such as needle and syringe exchange programmes, Opioid substitution therapy, prevention and treatment for sexually transmitted infections and condom distribution programmes for people who inject drugs and their sexual partner. Moreover, Mainline Foundation developed the Continuum of Care model, which goes beyond the traditional principles of harm reduction and additionally focuses on the context in which substance users find themselves. This model considers factors like poverty and marginalization faced by substance users, the diversity of their choices and needs, the health and human rights and their place within their families and communities (Mainline, 2014).

**Problem statement**

To date, there has been substantial literature about the harmful health effects of stimulants; however, limited knowledge about harm reduction programmes for ATS is available. The harm of ATS use could be greatly reduced if people have access to services which are responding to the specific attributes and effects of stimulants (Riley and Pates, 2012). Nevertheless, traditional harm reduction programmes, may fail to reach problem stimulant users, due to the focus of HIV prevention and people who inject drugs. It is a necessity to develop suitable interventions to reach the various groups of ATS users in order to ensure the healthiest lives for the people who are using drugs. Therefore the aim of this project is to gain more insight in to the use of ATS and provide recommendation on how services, in line with harm reduction can be provided, for people who use stimulants in the network areas of Mainline in South Africa, Nepal and Indonesia.
1.1. **Research Aim**
The aim of this research project is to provide recommendations to Mainline Foundation on how they can improve and extend their service delivery programmes to stimulant users in South Africa, Nepal and Indonesia, in line with harm reduction principles, by conducting three case studies in order to synthesise best practices and harm reduction programmes for Amphetamine-type stimulants use.

1.2. **Research Question**
What are the service needs of people who use ATS in South Africa, Nepal and Indonesia and what services should be provided to reduce stimulant related harm and to improve health for users?
2. THEORETICAL BACKGROUND

The aim of this study is to assess which services are needed for ATS users in South Africa, Nepal and Indonesia with the perspective of harm reduction. In order to answer the main research question a conceptual model is used. A conceptual model indicates, with a defined perspective, the focus and the content of the project and helps to structure the research (Verschuren and Doorewaard, 2010). In this chapter, the conceptual model is described, following the operationalization of the different pillars within the model. To conclude the chapter, the sub questions for this research project, which are derived from the conceptual model, are delineated.

2.1. Conceptual Model

In order to investigate what services are needed for people who use ATS in South Africa, Nepal and Indonesia, the Strategic Prevention Framework (SPF), created by Hornby Zeller Associates (2011) was used. This framework is generally applicable to any service provision for substance use, from the initial needs assessment through evaluation with a move towards programme and service sustainability. The goal of the Strategic Prevention Framework is to implement various strategies to prevent substance abuse in different communities. The model consists of components that have an impact or “Cause” on the drug use and the following “Consequences” related to substance use. These causal factors, also known as contributing factors can be categorized into groups called “Intervening Variables”. These factors have an influence on the “Cause” and “Consequences” of each substance use. Both concepts, “Intervening Variables” and “Cause & Consequences”, shape the last concept of the model, the “Strategies & Programmes”, which presents interventions which needs to be done in order to decrease the substance use in different communities (Hornby Zeller Associates, 2011).

To achieve this goal, the framework is made up of five steps:

1. Conduct a community and needs assessment
2. Build capacity
3. Develop a comprehensive strategic plan
4. Implement evidence-based prevention programmes
5. Monitor process and evaluate effectiveness

(Hornby Zeller Associates, 2011)

It takes several years to accomplish all five steps from the framework and reach the desired outcomes. Each phase needs to be evaluated and requires commitment at different levels in the systems in order to complete each step. The main focus of the framework is on the outcome, which are the “Strategies & Programmes”. It intends to find strategies that are especially tailored for the prevention of these outcomes. Additionally, it includes environmental factors which are believed to have a significant influence on the motivation for an individual to use substances, such as peer pressure, family and availability of substances. Consequently, a change in the environment, in the model referred to intervening variable, of substance users, could lead to a decrease the substance use (Hornby Zeller Associates, 2011).

However, the model had to be adapted to make it suitable for this project. First, within this research the focus of the service provision and possible programmes, is placed on harm reduction and the health of the user, rather than on total prevention of ATS. The concept of “Causes” from the original
model was changed into “Motivations” because this project aimed to understand the individual reasons for substance use rather than the “Causes” for it. Moreover, within the scope of this project it was not feasible to conduct all five steps from the Strategic Prevention Framework. Therefore, the adapted model encompasses the needs assessment and the development of recommendations for “Strategies & Programmes”, which was feasible to conduct in this timeframe. The adapted Strategic Prevention Framework can be seen in Figure 1.

![Harm Reduction Diagram](image)

**Figure 1**: Conceptual Model based and adapted from the Strategic Prevention Framework by the Hornby Zeller Associates (2011)

The “Harm Reduction” glasses on the top of the model illustrate the perspective, which is taken to look at the different concepts. The two pillars on the left side, “Motivations & Consequences” and “Intervening Variables”, are interrelated and have an impact on each other. In addition, both of them shape the last concept, the “Strategies & Programmes”. Each concept and the perspective of harm reduction are described below.

### 2.1.1. Harm Reduction

The harm reduction approach offers a practical guidance which can be tailored to diverse populations and various settings with a move towards improved health of the substance user. It is based on the assumption that substance use can exist on a continuum from non problematic to severely problematic and aims to reduce the associated harm experienced by the individuals and their environment (Enders, 2009). Following these principles, a shift from elimination of illicit drugs, to prevention and preventative care is made (Hilton et al., 2000). The harm reduction approach encompasses a set of strategies that seek to decrease the negative consequences of drug use and the consequently unsafe behaviour by integrating several principles:
- Pragmatism: According to Thomas (2005), this feature refers to the fact that, “Harm reduction accepts that some use of psychoactive substances is inevitable and that some level of substance use is expected in a society”.

- Human values: The decisions of the people who use drugs are accepted as their own choices; no moralistic judgment is made, regardless of level of use or mode of intake. The dignity and the rights of people who use ATS are respected (Thomas, 2005).

- Health and Harm: People who use stimulants have the right to the highest attainable standard of health. The extent of a person’s substance use is of secondary importance, compared to the harms resulting from that (IHRA, 2011; Thomas, 2005).

- Hierarchy of goals: The most urgent needs are addressed first. This would mean that more feasible goals, like keeping people healthy, are put before abstinence (IHRA, 2011).

- Participation: Harm reduction encourages free expressions and the participation of a wide range of stakeholders who are responsible for the programme implementation, delivery and evaluation. Especially, people who use ATS and other who are affected by these decision should be involved in this process (IHRA, 2011).

By taking this perspective, moralistic and judgmental statements as well as value laden language is avoided (Thomas, 2005). A harm reduction perspective demands non-coercive provision of services and seeks changes in regulations and policies that prohibit harm reduction interventions or decrease the health of people who use drugs. However, this approach does not attempt to minimize or ignore the real harm and danger associated with drug use, moreover it tries to increase people’s motivation and seek to empower the substance user to live and achieve a healthier live (Enders, 2009).

### 2.1.1. Motivation and Consequences

The first pillar of the conceptual model describes the motivations and consequences which are related to the use of drugs. It encompasses the outcomes of drug use, the reasons for an individual to use drugs and other causal factors which are contributing to this effect. To define the motivations and consequences of ATS use, the drug, set and setting model by Zinberg (1984) was used, which is presented in Figure 2.

![Figure 2: Drug, Set and Setting (Zinberg, 1984)](image-url)
On the top of the triangle, the drug, in this context the Amphetamine-types stimulants are placed. It refers to the nature of the drug use itself and the chemical impacts on brain and body. This aspect includes the purity of the drug, the route of administration, the dosage, the mix with other substances, price and availability and the type of drug. Next to it, the set is illustrated which incorporate the mental state of the individual, like thoughts, moods, expectations, previous experiences, beliefs and attitudes, personal background, health, age and gender. The last part is called setting, which comprises a collection of the environmental factors surrounding the occasion of the drug use, including social, cultural and physical factors and other external influences (Zinberg, 1984). These three aspects combined offer a comprehension of the effect and consequences of the different types of stimulants and the reasons and motivations various individuals and target groups have to use ATS.

### 2.1.3. Intervening Variables

The Strategic Prevention Model provides five different intervening factors which were adapted in this context to make it more suitable for the research project. These variables are contributing to the drug use and the consequences. It is assumed, that a change in these variables, can also change the “Motivations & Consequences” and the other way around. They are defined as broad concepts that manifest differently in different communities (Hornby Zeller Associates, 2011). The intervening variables are partly overlapping with the “Setting/Environment” aspect of the Drug, Set and Setting Triangle by Zinberg (1984). The intervening variables encompass the following sub-concepts:

- **Access and availability:** This aspect refers on one hand to the access and availability of ATS in the different countries, as well as to the access and availability of programmes and services which are currently present for people who use stimulants.
- **Pricing and Promotion:** The pricing and promotion of substances, either the positive or negative stimulation, can appear on two levels: the social environment of the user and through the public, like media and advertisement. This concept aims to look on how ATS is supported in different target groups or discouraged by the public and what strategies are used to do so.
- **Social and Community Norms:** This sub concept comprises the values, practices and tradition the different target groups of drug users in South Africa, Nepal and Indonesia have and what influences it has on the use of drugs.
- **Enforcement:** Enforcement refers to the observance and compliance with the laws and rules around the drug use. In this case, the sub concept is divided into two aspects, namely the perceived, how the individual user recognize it, and in actual enforcement, how it takes place in reality.
- **The last sub concept describes the policies which are present around the use of ATS and the regulation of interventions for people who use stimulants.**

Evaluation of these different factors provided a better understanding of the actual as well as perceived consequences and harms of substance use and contributes to revealing the needs and feasibility for services for stimulant users. Furthermore, additional intervening variables came up during the data analysis of the research.
2.1.4. Strategies and Programmes

The last pillar of the conceptual model illustrates the outcome of the evaluation of the first two concepts. Strategies and Programmes refer to services which are provided to people who use ATS and how they should be implemented. It illustrates which interventions and programmes are feasible to implement and needed in South Africa, Nepal and Indonesia. Moreover, it investigated how current services could be adapted and what is missing to meet the needs of people who use ATS. Therefore, the needs should be properly prioritized according to the findings from the first two concepts, to ensure better planning of local services.

2.2. Sub-Questions

The sub-questions are based on the different pillars of the conceptual model from the perspective of harm reduction. The concepts and the sub-questions offered a structured way to assess the various needs of people who use ATS in order to provide service delivery. The following sub questions were derived from the conceptual model:

- What are the specific risks and harms associated with the use of ATS?
  - What causes those risks?
  - What are the consequences for ATS users?
  - What influence do the different modes of administration and intake have on the effect of the drug?
  - What influence do the different settings have on the effect of the drug user?
- What are the different reasons people have to use ATS?
- What can be done to reduce ATS associated risks and harms?
  - What services needs to be implemented to address the needs of people who use ATS?
  - What services are currently available for people who use ATS in South Africa, Nepal and Indonesia?
  - What are the gaps in current service delivery for people who use drugs and how can they be adjusted for people who use ATS in South Africa, Nepal and Indonesia?
  - What steps need to be taken to successfully implement new interventions that focus on harm reduction of ATS use?
- How can the findings for South Africa, Nepal and Indonesia be generalized for ATS programmes in other countries?
3. METHODOLOGY

3.1. RESEARCH FRAMEWORK
To structure the whole research and achieve the goal of the project, a research framework was created. A research framework is a schematic representation of the research objective and provides the steps that need to be taken to achieve it. Furthermore it helps to create the theoretical background and offers a clear picture of the research process in order to reach the research objective, or the deliverable of the study (Verschuren and Doorewaard, 2010). The framework can be found in Appendix 1.

3.2. STUDY DESIGN
In order to fulfil the aim of this research and answer the research questions three case studies were performed. The research had an inductive approach and the data was qualitative. This approach was chosen, because qualitative research seeks to explain a current situation more in depth and aims to describe that situation for a specific population (Flick, 2002). This was combined with inductive research, which aims to move from specific observations, the description of the different cases, to broader generalizations and theories in this research (Verschuren and Doorewaard, 2010). The data was collected through interviews, which were later analyzed with the help of the conceptual model, and themes emerging from the findings from the literature search.

3.2.1. CASE STUDIES
According to Eisenhardt (1989) case studies are “particularly well suited to new research areas or research areas for which existing theories seems inadequate”. In this case, there is only little literature available about harm reduction services for stimulants users and how to address their needs. In addition, case studies offer insights that might not be achieved through other research strategies, which made it suitable for this study, as it aimed gain insight into the current situation of ATS use and investigate what services are needed for the various populations.

For this research a comparative case study was applied because several interrelated cases are compared instead of just one (Verschuren and Doorewaard, 2010). As current research indicated that ATS is an increasing subject of concern worldwide, especially in Asian countries and South Africa (UNODC, 2013), the criteria for selecting a case were to choose among the different countries where Mainline is networking and where the use of stimulants is increasing. Therefore it was decided to further investigate the current situation around the use of ATS in South Africa, Nepal and Indonesia.

3.3. DATA COLLECTION
As a case study approach typically use two or more data sources (Rowley, 2002) interviews combined with data collection through a literature search to support the description of the cases were conducted.

3.2.1. LITERATURE
During the whole research use of scientific literature was applied to help to form the description of the three cases and shed initial light on the context of ATS use in the country. In addition best practices around harm reduction for stimulants users were gathered and analyzed. Databases such as PubMed, International Journal of Drug Policy, EBSCO and Science Direct were searched and following key words have been used: Crystalline methamphetamine, amphetamine, ecstasy, harm reduction for methamphetamine and ecstasy, drug use among female sex workers/MSM community/students/laborers, drug use in Nepal/South Africa/Indonesia.

3.2.2. INTERVIEWS

For this research, semi-structured interviews were performed. Semi-structured interviews were preferred in this context as there is only one opportunity to speak with each participant. Therefore, guides and prompts to maximize richness of information are important. To provide structure in the interviews an interview guide with a topic list was used. The interview guide was created with the help of the background knowledge from the literature as well as with the help of the supervisor of this project (see Interview guide in Appendix 3). It encompassed the concepts which were explained in Chapter 2. Also new concepts emerged through the interviews.

Based on the analysis of two pilot interviews, with key informants the topic list of the interviews changed slightly. After that, the themes in the interview guide remained the same. However, some questions were adapted to provide optimal data gathering depending on the different interviewees.

Participants

Interviews were held with international partners of Mainline from Indonesia, Nepal and South Africa as well as employees of Mainline, who are coordinating projects in these countries. The respondents were gathered through the international connections of Mainline and through a purposive sampling strategy, which is based on the fact that participants are selected, based on their knowledge and understanding of the research topic, which have different and important perspectives to this subject to offer (Mason, 2002). In addition, snowball sampling was used, which means that previous participants were asked for recommendation for other respondents, who are might be qualified for participation (Robinson, 2014).

The international respondents were 1) service providers for people who use drugs, 2) people with a history of drug use and 3) people who are working closely together with people who use drugs (PUD). Interviews were held via Skype with the international respondents and in person with the selected employees of Mainline. Also at the partner meeting of Mainline and AIDS Foundation East West, which took place in Amsterdam in the second week of April 2014, there was the possibility to connect with international partner and conduct interviews. Because of the diversity of the interviewees, every interview was differently approached. In the actors table (Table 2) the participants of the interviews are shown. Every respondent received a unique ID number in order to de-link personal identifying information with the quotes from the interview. The interviews started with two key informants who helped to shape the topic list of the final interview guide, which can be viewed as a pilot exercise.

Table 2: Actors interviews

<table>
<thead>
<tr>
<th>RESPONDENT</th>
<th>MALE / FEMALE</th>
<th>COUNTRY AND ORGANISATION</th>
<th>FUNCTION</th>
</tr>
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3.4. **DATA ANALYSIS**

3.4.1. **LITERATURE**

The analyzed literature was first divided per country and helped to form the three cases with background information for each country. In addition for more in depth information about ATS the studies were categorized by population of users, type of drug and the associated harms. In addition current services and harm reduction programmes for ATS users were compared.

3.4.2. **INTERVIEWS**

The data from the semi-structured interviews was transcribed verbatim. The labels that were used for coding were derived from the conceptual model and some new concepts emerged during the analysis, whereas some concepts related to the conceptual model (see Chapter 2), were not used for the analysis. The coding process consisted of a few steps. It started with open coding, which means that possible useful text phrases were assigned to a code, from the conceptual model, or given a new code. These codes aimed to just explain, rather than interpret the subject of a specific piece of text. Next, axial coding was applied. In this phase, the interpretation of the codes was formed more clearly. The last step consisted of the selective coding, where previous codes were refined to more specific themes (Verschuren and Dooreward, 2010). This process enabled a comparison between the various concepts and helped to structure the results for each case.

3.5. **ETHICAL CONSIDERATION**

In order to protect the privacy of the participants of the interviews, informed consent is of great importance (DiCicco- Bloom and Crabtree, 2006). Before the start of an interview, the participant was asked to provide informed consent (Appendix 4) after information about the research and what will happen with the end results was provided for the interviewees. In interviews via Skype, informed consent was given orally and was recorded. To ensure the anonymity of each person, each participant was assigned with a unique ID number, which can be seen in the previous table (Table 2).
4. RESULTS

The Context of ATS use Globally

Amphetamine-type stimulants can be found in a variety of contexts. It is used both for recreational and occupational reasons. People who use ATS can be found in various settings like in public in night clubs, workplace, at house parties or on site sex work venues, which differs from country to country. Motivations for recreational use include loss of inhibitions, increased sociability, sexual arousal or escaping reality (McKernan et al., 2011). The purpose of ATS use in a working environment encompasses motivations such as maintaining long work hours, keeping up alertness and increase productivity and creativity. This can include, mining workers, entertaining work, air force pilots and sex workers (Chouvy and Meissonnier, 2004; Williamson, 2007)

Patterns of ATS use can range from experimental and occasional use to chronic and problematic use which can result in dependency. Dependency can lead to mental health concerns, such as paranoia, psychosis, mood disorders and anxiety (Lee, 2004) and to physical health problems, including, sleep problems, anorexia, cardiomyopathy, myocardial infarction or oral problems (Hildrey et al., 2010; Jacobs, 2008). Smoking and injecting of ATS allows a quicker intake of the substance and a faster effect as well as higher peak rather than when the substance is snorted or swallowed (Volkow et al., 2004).

Harms associated with injecting encompass the risk of HIV /AIDS infection, hepatitis, endocarditis, abscesses, sepsis and collapsed veins. Injecting patterns of people who use ATS differ from those who are injecting opiates. While, opiate- dependents tend to inject a few times a day, people who inject ATS rather have periodic binges, days or even weeks where they inject many times a day (Pinkham, 2010). Nevertheless, it is difficult to generalize these patterns as the various populations of ATS users have different patterns of use. For example, sex workers, might inject every day while the men who have sex with men (MSM) community only use at weekends at sex parties (Reference Group to the United Nations on HIV and Injecting Drug Use, 2008). Moreover, people who are injecting and smoking the stimulants are also more likely to develop a dependency (Volkow et al. 2004).

However, in most cases people, who use ATS prefer to smoke, in glass, with pipes or in aluminum foil heated by a flame underneath, or snort it, especially when crystalline methamphetamine is used (Bluebelly, 2009). This process can lead to lip injuries, such as torn up lips of users or bleeding, caused by the dehydration of the stimulant. Consequently, this poses a higher risk of infections through shared smoking. Moreover, if it is smoked in a foil or pipe it can lead to burns on fingers and face and the use of inappropriate materials can cause inhalation of toxic fumes. Straws, which are used for snorting may get contaminated with blood and therefore are more likely to transmit blood-borne viruses or hepatitis C (Pinkham, 2010). In addition, if someone started with smoking the stimulant and develops a dependency the person could switch to injecting (Darke et al., 1994). The risk of turning from occasional to problematic use is also determined by the form of the stimulant. For example, the crystalline form of methamphetamine is more effective than powder and higher in purity (Maxwell, 2005). Nevertheless, many other factors have to be considered when talking about the risk of developing a dependency and cannot referred back solely to the route of administration or purity of the drug.

ATS use among sub groups
The use of ATS is highly popular among female and male sex workers and literature reveals various reasons for their use and the consequences. A study by Maher et al. (2011) in which 33 sex workers from South East Asia have been interviewed, reported that stimulants are often used because they see no need to sleep while using the substance, which consequently also helps to get more customers because they have the energy to for work for more hours. In addition it also suppresses the feeling of hunger. They perceive their use to be highly positive, because it makes them feel more confident and friendlier while dealing with customer. Moreover, the use is associated with concepts of power and strength and enables them to do things they wouldn’t necessarily do. In addition, it was also reported that female sex workers use to be able to cope with their situation and escape from reality (Maher et al. 2001).

Also among gay and bisexual men, crystalline methamphetamine is the most used drugs since the early 2000s. Motivations to start using are linked with the stigma of being a homosexual and how society views their behavior as being sinful (Rosza, 2013). A study by Semple et al. (2003) in which focus groups with the MSM community were conducted, identified motivations behind the use such as feeling alone, unloved and not acceptable. The use of stimulant offers a way to avoid those realities. Furthermore, the effects of the drug provide the courage, to overcome these fears and meet with other people. They describe it as increasing sexual arousal and lowering inhibitions. Consequently this lead to taking sexual risks, they would not have done without the drug (Semple et al., 2002).

For both sex workers and the MSM community, these effects result in engagement of high risk sexual behavior and are associated with lower condom use. Consequently it causes a risk of HIV/AIDS infections and other sexual transmitted infections as well as tissues damaging, due to longer sexual activity (Reference Group to the United Nations on HIV and Injecting Drug Use, 2008). The regular use can result in dependency, which brings long term consequences such as mental as well as physical health problems. Beside the preference by some students and young adults to use ecstasy and other substances for experimental use, also prescription stimulants, with the initially purpose of treating Attention Deficit Hyperactivity Disorder (ADHD), are used for non-medical purposes. Reasons behind this behavior include to focus better in class at university, enhance performance at exams, better socializing, lose weight or feel better or get high (Weyandt et al., 2012; McCabe et al., 2004). Students who were using reported also a higher level of psychological distress and restlessness compared to students who are not using stimulants (Weyandt et al., 2012).

4.1. Case Study 1: Indonesia

This section deals with the ATS use in Indonesia. First, the current situation of stimulant use will be described following the analysis of the Interviews, which were held with: 1) service providers for people who use drugs in Indonesia; 2) people who work closely together with people who use drugs and 3) people who have and background in drug use or are still using a substance.

4.3.1. The Context of ATS Use in Indonesia

Since the 1990s methamphetamine and ecstasy have been produced in Indonesia for both international trafficking purposes and for self-consumption. Before the increase in ATS manufacturing, Cannabis was the primary drug of choice for domestic use followed by heroin,
especially injecting drug use which resulted in a rise in HIV infections (UNODC, 2013). However, since ATS and in particular crystalline methamphetamine has become more readily available and accessible, the trends in drug use have shifted and crystal meth has become the most widely used type of drug in Indonesia (UNODC, 2013a). Due to the increasing prices of ATS in Indonesia, only small quantities of the stimulants are exported. Moreover the current situation attracts international traffickers to smuggler larger amount of ATS into the country. The UNODC assessment on Amphetamine-Type Stimulants (2013) indicated that in 2011 of the estimated 3.7 million to 4.7 million people who use drugs, 1.2 million used crystalline methamphetamine and around 950,000 used ecstasy, between the age of 10 and 59. From 2006 to 2011 135 ATS manufacturing laboratories have been revealed. The highest reported drug use is on the island of Java, which is the home of 60% of Indonesia’s population (UNODC, 2013b).

**Crystalline Methamphetamine**

Crystalline methamphetamine is estimated to be used by 1.1 to 1.3 million people in Indonesia (UNODC, 2013b). The prevalence estimates are based on household and student surveys, laborers, street children and female commercial sex workers, and actual prevalence rates are estimated to be higher. In 2010 crystalline methamphetamine accounted already for the most drug related treatment admissions and drug related arrests (53% of all drug related arrests, in comparison to 2009 where it was only 38%) (UNODC, 2013b). The stimulant is available in powder, crystalline, tablet or paste. On the street is it sold and locally known as *ice, SS or shabu*. The preferred mode of administration is smoking or snorting. A minority of the users are also injecting, around 3,8% in 2011, which has already increased in the following years. The use of methamphetamine in pill form is less common, but pills sold as ecstasy have been found to include methamphetamine. Crystalline methamphetamine is usually sold in small portions called “pahe” which contains about 0.04 to 0.08 grams of the stimulant for around Rp 100,000-300,000 (US$ 12-33). In comparison, one gram is sold for Rp 1.2 to 1.8 million (US$ 133-200). Street dealers tend to divide one gram into 12-24 “pahe” and sometimes even add weight to the product. A group of two to three crystalline methamphetamine users usually share such a package to save costs.

**Ecstasy**

Ecstasy is the third widely used type of drug in Indonesia and is especially popular among young adults. Since 2008 a decline in the use of ecstasy was observed, which can be referred back to the availability of crystalline methamphetamine as well as the law enforcement which was focused on reducing ecstasy (UNODC, 2013). Also a number of street drug dealers have changed from selling ecstasy to crystalline methamphetamine. Many pills which are sold as ecstasy contain other substances than MDMA. The dealer will purchase the pills for around Rp 50,000-70,000 (US$6-8) per pill and market it on the street and clubs for Rp 150,000–300,000 (US$ 17-33) per pill.

**ATS user population in Indonesia**

It is hard to define a clear population of ATS users in Indonesia as it is popular among various groups. The majority of ATS users, namely 89% for crystalline methamphetamine and 77% for ecstasy, are said to be men and are between 20-29 years old. However, recent data from drug related arrests and treatment have shown an increase in the female population. In 2011, 77% of all women who were arrested for drug related issues are due to crystalline methamphetamine. According to the
report by the UNODC, laborers account for the majority of methamphetamine users followed by students. The use of ecstasy appears mostly at nightclubs or parties, whereas crystalline methamphetamine is consumed for better working performance as well as enhancement of sexual performance.

4.3.2. Interviews

Interviews were conducted with service providers with experience in Indonesia to gain a more in-depth insight into implementation of services for people who use drugs, and in particular, ATS. In addition some respondents with a background in drug use, who are working closely together with people who are using drugs, were able to provide information about their own experiences, how they perceive the harms of other users and what are the actual consequences of ATS use from their perspective. The analysis of the interviews will provide a better understanding of what is needed for people who use ATS and where are the challenges when it comes to implementation of these services.

Availability and Accessibility of ATS

As previously mentioned in the context analysis above, ATS is now the drug of choice in Indonesia. All respondents in the interviews were aware of the increase of the ATS use, especially crystalline methamphetamine in Indonesia. The main reason for the increase can be referred back to the fact, as one respondent explained, that the ingredients for crystalline methamphetamine production are easy to find and it can be manufactured almost everywhere, which makes it even more accessible than heroin.

Interviewees were also asked about how to access their drugs. Female sex workers are mostly requested by their clients to use the drugs together, therefore they get the stimulants from their clients. On some occasions, where sex workers are already dependent on the drug, they also prefer to get paid in crystalline methamphetamine, as their salary is not enough to buy it for themselves, as one service provider told. Housewives are getting their drugs from their husbands to enhance their sexual performance; students will get it from their friends. Crystalline methamphetamine use is also increasing in both production and use, in jail. One respondent described an interview she had with a female prisoner who preferred to stay in jail, as she can still take her drugs and will not be sent to medical rehabilitation.

Motivation and Pattern of ATS use among Sub Groups

In addition to the information found in the literature about the different population of ATS users, interviewees provided some indications for the use of stimulants depending on the various situations. This section will start with giving more insight into the patterns and motivations of use by the female sex workers, followed by laborers who use ATS in Indonesia.

Female sex workers have various reasons for stimulant use, like being requested by their clients to use ATS for a better sexual experience. One respondent explained that the male clients are really pushing the sex workers to use drugs, so that the workers will let down their guard and forget about
safety concerns like using a condom. This is related to a frequent conflict arising in the Indonesian sex worker context, which is that when the sex worker does not agree to the demands of the client (e.g. not using a condom), the client will seek another sex worker, thus the sex worker loses out on business.

R4: “And we did a lot with Laras\(^1\) to get everybody informed and everybody knows about it and it’s still, the girls don’t negotiate, they don’t have a position or something, clients will just go to somebody else.”

Besides the request by the clients, female sex workers use stimulants to be able to cope with their circumstances. They are working hard every day, have to be awake for long hours and sometimes just want to feel better about their difficult life circumstances, as one interviewee explained. In these cases the substance use is a personal choice, not a demand from the client. If a sex worker is dependent on crystalline methamphetamine, this can lead to a bad position when negotiating payment with a client, as clients may want to pay the sex worker in drugs rather than in cash, however as one respondent pointed out, it is unwise for sex workers to get paid in substances from their clients. It is often more to the advantage of the sex worker to receive cash from their customers and buy drugs for themselves afterwards.

R4: “They would be also in a very bad position [if they have to] negotiate their safety with their clients if somebody then says: I want to fuck you without a condom and I don’t pay you, but you get your drug from me. That is always a bad situation in sex work.”

Nevertheless, a service provider in Indonesia explained that it is actually acceptable to receive payment in the form of stimulants as long as there is a mutual agreement on this between both the client and the sex worker. The same respondent justified his answers, with the fact that the salary of sex worker is not enough to buy crystalline methamphetamine for them. The female sex workers who are attending the services reported to use every day the stimulants, sometimes even more than one gram per day.

As previously indicated in the context analysis, according to the surveys by the UNODC, laborers represent the majority of crystalline methamphetamine users in Indonesia. Two service providers described two different groups of laborers and their patterns of stimulant use. On the one side, there are truck drivers who have to drive long distances, and in order to cope with their jobs they are likely to use stimulants to be productive for many hours. The other group consists of mining workers. One respondent pointed out that, when the workers are high on ATS they will be able to work longer hours, which is also profitable for the companies:

R2: “In fact the companies use them, because when the workers use the ATS, it’s really high (...) and the workers can work for hours and hours and then this is benefit for the companies, especially at the mining companies where the production and the work has to be done nonstop”

\(^1\) Laras Indonesia is a partner organization of Mainline Foundation and is providing harm reduction programmes for people who use drug, especially sex workers who use drugs, in Indonesia.
The mining sites are usually located in remote areas, which are increasingly surrounded by brothels and/or prostitutes. As one service provider explained, aside from work there is not much to do, therefore mining workers visit the sex ‘villages’ and use there together with sex workers to enhance sexual performance and loosen up from their stressful work day.

**Perception of ATS use among user and the Public in Indonesia**

Zinberg’s drug triangle (1984, referred to in Chapter 2) details how the mindset of people who use ATS is an important consideration, to reveal the different attitudes, experiences and expectations people have towards stimulant use. In order plan and implement new services it is crucial to understand how the users perceive their drug use and to get a clear idea on how to engage this people in harm reduction services.

**A user’s reflection on ATS use**

One common response throughout the interviews with active ATS users in Indonesia was that they did not perceive the drug as harmful. Furthermore the beneficial effects, they experienced from the stimulant use, such as creativity, more energy and sexual arousal, meant that they will repeat usage. Although they were aware of the risks associated with using, they did not themselves experience these risks. Moreover, they did not perceive it as a drug which is addictive, rather perceiving it as a fun drug for recreational use once in a while.

R5: “We are using for partying or go to the club for dancing, for yeah just like that.” I: “and when you take it, did you face any harm after using it?” R5: “(...) after I take crystal meth? Nooo (laughing) I don’t feel any harm”

In addition, one respondent explained that some like to use crystalline methamphetamine over other drugs, such as heroin, because they perceive it as less harmful. The respondent further explained that this is referred back on the one hand to the route of administration (because they do not want to inject drugs) rather than the drug itself and on the other side due to the missing information about the consequences of regular ATS use.

R5: “some of my friends, they are women, they just … they just told me, this has no harm effect, so it’s okay to take some, yeah and they also say this is not make you addicted, this is different with heroin, heroin will make you addict and compulsive like, but ATS is not. You can stop any time, anytime when you want”

Interestingly, the same interviewee who did not perceive their ATS use as risky were aware and able to name several harms associated with use of crystalline methamphetamine when talking about sex workers, MSM or transgender (TG) community. They talked about different settings, such as the MSM communities at sex parties, where the respondent assumed engagement in a high risk sexual behavior, and therefore she made a clear distinction between her use and the use by the MSM community.
R5: “It’s bit different with the people who use drugs in my community, (...) I mean in my network. We are using for partying or go to the club for dancing, for yeah just like that. But in the MSM community, they are using crystal meth like a party, like a sex party with multiple partners”

ATS users not only distinguished themselves from other sub-groups of users, but also differentiated themselves from heroin users; in the latter case they would even look down on heroin users, as one respondent explained:

R3: “(...) injecting drug users are stigmatized and discriminated rather than people who use ATS. Sometimes, if we are hanging around with them, me and our communities a lot of us are injecting drug users and then we meet with some of our friends who are ATS users, they said, “okay why do you use still that thing? You shouldn’t” basically they look down on people who use heroin or inject (...)”

Societal perspectives on ATS users
Interestingly, Indonesian society at large holds a different perception of ATS users. Stimulants are believed to be a drug for the middle to high-income class and often reserved for recreational use only. It was explained that also the police prefers to catch stimulant users, rather than injecting drug users, for several reasons. First, one respondent revealed that the police is afraid of infecting themselves with HIV/AIDS which is associated withinjecting drug users. Next, they assume that people who use stimulants are likely to have more money and will be able to pay a higher fine to avoid arrest. Lastly, in the club scene, although regulations around drug use in clubs is strict, police often pretend that they are unaware of stimulants use in clubs so they can bend regulations to use stimulants themselves in such settings.

Consequences and Effects of ATS use
As perception from different stakeholders on ATS use varies widely, so did the consequences and effects of ATS use. Some stakeholders speculated about the effects, whereas user explained any effects that they had experienced themselves or knew of someone who had experienced it.

The negative effects of mixing ATS with other substances
One respondent, a recreational crystal meth user, spoke very positively about her experiences with smoking ATS, although she mentioned that the one unpleasant side effect she experiences is the “coming down” of the drug; that is when the effect of the drug reduces. This participant felt unable to cope with this feeling:

R5: “After I use, ehm after I use crystal meth, I’m, I just don’t like the feeling if the effect is going down, yeah it’s like ehm.. I don’t know what I would say. It’s like a fever, you feel like fever and exhausted and hot in your body or, yeah it’s a disgusting feeling”

She indicated that she would use heroin in order to get over the feeling that ATS causes after using. In this case, she was aware that this is not the right way to handle it, but she just did not know how
to cope differently with the undesirable side effect. This was not the only case which was mentioned during the interviews; two other respondents, who have experience with heroin, indicated that they would handle the “come down” effect of the drug the same way.

Recognition and Experience with Overdose
Occasional ATS users were asked about the different effects resulting from ATS use. They reported that in the last years, they noticed that the quality of the drug went down, which influenced the therapeutic effect. For example, pure ecstasy has a pure amount of MDMA, which will result in a much longer effect of positive feelings and a greater hallucinogenic experience. However, one respondent explained that such ecstasy is hard to find in Indonesia and the pills you are able to get have similar effects to crystal meth, because it has been mixed up. Participants described the effect as sudden and short, and the anticipated hallucinogenic effects are much lower and instead of having a smooth coming down period, it feels like a more extreme kind of reaction. Nevertheless, the interviewees also indicated that people actually do not care what kind of drugs they will get, because they just want to get high. When the usual effect was not achieved through one pill they would take more and mix it with other substances. This was linked to a higher risk of overdose.

R3: “Have you seen someone overdose on ATS? You get higher more and more, with bad quality they didn’t feel it and they will buy and buy it and take it and then at one point they will feel like their heart want to explode, I’ve seen it a few times, people overdose because of stimulant (...) yeah, the yelling at the stage, they hit their head to the speaker like something they cannot control because your heart feels like want to explode. I’ve been in overdose with ATS and heroin one time. It’s mixed, not only because of ATS but mixed with heroin. So if people, they expect to get ecstasy effect, but when they bought bad quality of ecstasy, they drink alcohol so much to get more effect (...) there is a new drug in Indonesia, in Malaysia, they call it n-Bomb, they mix ecstasy with LSD, so basically a month ago, six people were overdosed, three people in Malaysia and three people in Indonesia (...) but I don’t think they get overdosed by LSD, the ingredients in the pills, basically you don’t know what is inside the pills, and you get overdosed by another chemical or another (...)”

A similar phenomenon was described for crystal meth; as the quality decreases, users want to take more to obtain the same high they used to be able to achieve with a more pure form of the drug. Consequently, this increases the risk of overdose and results in unpleasant side effects including paranoia, confusion, restlessness, sweating, increased heart rate and chest pain. The risk of an overdose with crystalline methamphetamine occurs in the most cases due to injecting, and not being able to estimate the “proper” amount to use.

Harms and Risks associated with ATS use
The harms and risks mentioned during the interviews overlap with the harms and risks found in the literature, comprising the physical harms associated with injecting or smoking crystal meth and higher risks of STIs and HIV/AIDS through engaging in high-risk sexual behavior.
Long-term effects were difficult to pinpoint by respondents; the most common long-term consequences described were paranoia, restlessness and loss of appetite (until the drug was in possession).
R5: “(...) he is a hardcore using crystal meth, I met, first met with him I just thinking he was crazy because he was like you know, like “somebody follow me, yeah here’s the police!” where, there is nobody here, I just thinking he is crazy because he is like paranoid or I don’t know. I first met with him and I think he is crazy. (laughing) yeah because “hey, there a lot people, they are following me “, no there is nobody here, I think he is just crazy but time by time he is getting better “

**HARM REDUCTION SERVICES FOR PEOPLE WHO USE ATS**

Indonesia already has some existing services aiming to reduce the risks associated with drug use; however, these are more general services and not focused on ATS users in particular. One of them, Laras Foundation Indonesia, is a partner organization of Mainline and provides services for different user populations. The organization employs a lot of women doing outreach work, which made it easier to build trust to a specific target population, namely sex workers. They offer comprehensive information on safe sex and information on the prevention of STIs, distribution of sterile needles and syringes in order to prevent transmission of HIV/AIDS, and encourage clients to access the health programmes which are available at the local hospitals and medical rehabilitation. Nevertheless, all these programmes are still HIV/AIDS driven and are focusing on injecting drug users. Although Laras Foundation is providing information on safe sex and distributes condoms and clean needles and syringes to all kind of drug users, their knowledge about additional harm reduction services for people who use ATS is limited. All interviewees agreed that the lack of knowledge around ATS use and effects, as well as how to reduce associated harms is missing in Indonesia, which makes it difficult to design and implement new services.

R5: “in Indonesia we don’t have a lot of information about ATS (...) we don’t know how take drugs, how take the ATS safely, we have no idea. Because it’s so limited information about ATS; Yeah, you know because harm reduction is more focused in injecting drug users, especially heroin”

Despite limited knowledge and a lack of services some interviewees were aware of simple things they can provide for people using crystalline methamphetamine, including the provision of condoms and lubricants for sex parties and sex workers or advise on drinking enough water, due to the dehydration caused by the stimulant. Specifically related to smoking methamphetamine, one respondent suggested providing clean pipes and filters in order to prevent lip injuries. Moreover the respondent advised to ensure education around safe smoking, injecting and condom use and how people can manage them when they are high on ATS.

**Challenges in implementing Harm Reduction Services for ATS users**

Several other reasons for the gap in service provision for people who use ATS emerged during the interviews. One service provider explained that while they are pushing the government, it is a long process until action is taken to develop ATS specific services. The government needs to be willing to intervene and perceive ATS use as a substantial public health problem in Indonesia:

R6: “I think the other issue has been political will as well so, I think with, when we are talking about heroin and injecting drug use, the main reason why governments and programmes or whatever want
to address this group is because of their risk of HIV, which is a public health issue, but with ATS it’s not that strong (...) so there is just not that motivation and the political will to address these issues."

Second, the population of people who use ATS is so diverse that it is difficult to reach them and engage them in harm reduction services. One interviewee pointed out that different approaches are required in order to target different drug using communities as everyone has different needs. Another challenge is creating harm reduction services for a drug considered as recreational and not problematic, given that users differentiate themselves from other types of drug users, ATS users, may feel uncomfortable in attending the same services.

R3: “yeah, I think it is quite challenging to reach people who use ATS, because first they have different types of character, they are paranoid rather than injecting drug users (...) they are more paranoid, so basically they are suspicious (...) if you are not sleeping for two or three days you are more paranoia than other people and then, it feels like you don’t have risks, you don’t need you or someone to give us knowledge, we know what we do. So they are not realized that they have potential harms of using this kind of drug”

The final challenge articulated by interviewees was the setting in which to reach out to target populations; for instances, it is difficult to encourage users to attend harm reduction services or provide advise when ATS use is so prevalent in the club scene, or at house parties.

4.2. Case Study 2: South Africa

4.2.1. The Context of ATS Use in South Africa

Since 1994 there has been a rise in drug trafficking and domestic heroin, cannabis and amphetamine-type stimulants use in South Africa. The rise has been attributed to the geographical location of the country, neglectful border controls and international trades with South and North America, Europe and Asia (Plüddemann et al., 2008). ATS production and consumption has particularly increased in the last ten years; to illustrate: in 2007, 72% of all drug treatments were for methamphetamine (Plüddemann et al., 2008). In the same year, methamphetamine laboratories made up the largest part of dismantled ATS laboratories. According to expert perception, methcathinone (cat) and crystalline methamphetamine (tic) are the most used types of ATS (UNODC, 2014).

Crystalline methamphetamine

On the street crystalline methamphetamine is better known as Tik, tuk-tuk, straws, crystal or globes. It is usually available as a white, bitter-tasting crystalline powder which is dissolvable in water or alcohol and can be easily produced in clandestine laboratories (Plüddemann et al. 2005). The stimulant received it name from the noise it makes while smoked. Usually it is sold in drinking straws for about R15 to R30 (US$ 1,5 - 3). The fume of the white powder is smoked with the help of a light bulb where the metal threading was removed (Kapp, 2008). The use of methamphetamine is especially popular among young people and in the colored community in Cape Town (Plüddeman et al. 2008). In addition, crystalline methamphetamine accounts to the majority of treatment cases in rehabilitation centers.
Ecstasy
Since the early 1990s ecstasy has the greatest impact compared to other substances used in South Africa. The use of the stimulant occurs mainly in the rave scene and is preferably used by young adults and teenagers (Drugaware, 2006). On the street it is referred to a numerous names, such as e, Swallows, White Doves, Yellow Callies, X, XTC or Love Doves (Erasmus, 2006). One pill can be purchased for R60 (US$ 6), which is enough to create the desired effects, but usually a larger amount is used (Drugaware, 2006).

ATS user population in South Africa
As well as in Indonesia also the population of ATS user varies a lot in South Africa. People who are using stimulants includes school kids, street kids, male and female sex workers, gay and bisexual men, housewives and people living on the street (Kapp, 2008). Data which was gathered through treatment statistics showed that the average of methamphetamine users is 21 and 76% are male (Plüddeman et al., 2008).

4.2.2. Interviews
Three interviews were conducted with providers of drug services and who are experts in the field of planning harm reduction programmes. All respondents were involved in the harm reduction programme “Health4men”, therefore the main focus during the interviews was ATS use among the MSM community in South Africa.

Availability and Accessibility of ATS in South Africa
In South Africa crystalline methamphetamine use is very problematic, as it is very cheap to both use and produce. One service provider explained that your dealer can get the drug in under 20 minutes for an affordable price. These conditions makes it also attractive for the use in Townships, for the colored community and people with a lower socio economic status because the can produce it by themselves, lowering the cost.

Motivation to use and Pattern of Use
This section describes the motivations and patterns of use in three different sub groups, which were explained during the interviews. It starts with the MSM community, followed by street kids and young people in the party scene.

Two interviewees expressed that among the MSM community in Cape Town, crystalline methamphetamine is most commonly used after GHB (Gamma-Hydroxybutyric acid), a substance with similar effects to alcohol. The consumption of the stimulants can be found in various settings, such as sex parties, trance parties, house parties and at pre parties to tae crystalline methamphetamine before going to the actual party. One interviewee explained that the preferred route mode of administration for crystalline methamphetamine is smoking it through a glass tube, where the fume will be inhaled; this is referred to a “lolly”. The second way is injecting the drug, which is the most common way among chronic users, as the effect will occur quicker and more
intense. The last way is called booty pumping. This way is often chosen as an alternative to injecting the stimulant.

R8: “they will take a dildo, they will then dive the dildo in crashed crystal meth and sit on it for example, exposing the crystal to the inner membrane or the inner anal canal, which is very thin so it allows to take in the drug very, very quickly”

In contrast to the crystalline methamphetamine which is used by people who use drugs with a higher socio economic status, such as the MSM community, the same drug is called “Tic” in the Townships. Both the name and the reason for use differ in the two communities. Users in Townships use to escape reality, feel good, remain alert and have more energy. Users in Townships are usually street youth hanging around in small groups, running around at night and hide during the day. One interviewee described his observations that in most cases one older kid acts as a guardian or leader of the group. Tic is very cheap and some even produce the stimulants by themselves, often used in combination with glue.

In the rave scene in Cape Town different kinds of ecstasy are easily found, but one new pill, called “Mitsubishi” is increasingly popular as it consists of 40% MDMA and 60% speed. The MDMA component evokes a feeling of happiness and joy, while the amount of speed enables the people who use it to keep partying. Some prefer to take a “lolly” and consume it together with 10 to 15 ecstasy pills to achieve a similar effect.

R8: “absolutely, particularly on the party scene and on Longstreet again, you will find ecstasy is very much in demand and particularly, ecstasy that is in combination with speed, so for example you can buy all kinds of ecstasy on Cape Town, but generally people go for the once which are mixed with the amphetamine, simply because it’s keep the party going for much, much longer and it keeps that feeling, that rushing feeling for much, much longer. So generally people would favor ecstasy that has been mixed or in combination with speed and if they can’t find ecstasy that is already in combination with speed itself, they will buy whatever ecstasy they can and then obviously process any speed or amphetamine they can to keep the party going.

In the club scene, it is unlikely to find people who are injecting stimulants, as this is more removed from the social scene; people are going for snorting or swallowing. At festivals, where organic substances are mainly used, a lot of chemical stimulants can be found now, like speed or crystalline methamphetamine.

**Perception of ATS use among Users**

The mindset of people who are using ATS is important to understand the motivation behind their use. This concepts aims to provide comprehension of the users and what needs to be considered when harm reduction services are planned.

The MSM community, who receive service from health4men, have a higher socio economic status and are well educated about the risks they are taking while using substances. Nevertheless, they are still taking these risks. One respondent explained that it is part of their lifestyle and their identity.
R10: “it is part of the lifestyle within the MSM community as part of them and actually they also say that we need the drugs to have sex to feel comfortable, so it’s too linked with stigma of being a homosexual and maybe even within their own perception of being a homosexual”

**Differences in drug using society**

As previously mentioned there are substantial differences between communities who use ATS in South Africa. On the one hand, one will find the wealthier people who use it for recreational purpose and on the other side, the people who are living in the Townships, associated with a lower socio economic status use it to escape reality. Therefore, has the use of Tic in the Townships a much more negative association than the use of crystalline methamphetamine. In addition a clear drug using hierarchy was observed, in that people who inject stimulants place themselves higher on the hierarchy than heroin user, and simply because of the reputation heroin has in Cape Town.

R8: “So in the drug using community, people will look down on people who use heroin, so there is definitely a hierarchy of users and then above the people who inject crystal are all the people who snort and smoke, so people who snort and smoke look down on people who inject and then the people who inject its first crystal and then the rank below that would be the heroin users.”

**Harms and Risks Associated with the use of ATS**

The service providers were aware of the harms associated with the different routes of administration, like injecting and smoking the stimulant as well as ATS specific harms, such developing drug related psychosis, which can already occur in the first couple of weeks while using the substances or high risk sexual behavior (e.g. unprotected sex). In addition, for users, several additional harms were mentioned as well, such as general affected immune system, bad nutrition, poor hygiene, large abscess and the indirect consequence of tuberculosis.

**The consequences of long term ATS use**

One interviewee talked about two different cases of long term users. On the one hand, there are stimulant users who are already using for couple of years, but they would follow all their daily obligations, such as going to work and having professions like bankers, lawyers or physicians. They are able to maintain a certain lifestyle, have their own place to stay, are able to afford to their own drugs and would also stick to only one drug, namely crystalline methamphetamine. On the other hand you can also see the opposite effect. Some guys might lose their job, get major health problems and look like “an advert for an Anti meth campaign” as one interviewee told, soon after getting introduced to crystalline methamphetamine.

R8: “yes, I mean no sometimes it’s only weeks in Cape Town, literally, the guys come from Joburg, they get off the bus and they are beautiful and they are fresh and they are clean and then something happens and six weeks later they look like a methamphetamine advert for what it looks like, it is incredible how quickly it goes out of control. They try it for the first time in the club and literally six weeks later, they are homeless, they got meth mouth, they got nothing, that’s incredible you know”
However, well-functioning chronic ATS users face other problems than physical dependence and physical effects (e.g. meth mouth), such as psychological dependence. This can manifest in for example sex perceived as boring without using crystalline methamphetamine.

R9: “(provider talks about a client) you know I started when I was 40 and it was great and I got my job and for long time and now it is getting very difficult for me. He wants to stop and so he started to reduce his use and he wanted to stop and then he says, yeah, life is different, so I think emotionally they get addicted”

Risks of Overdose
Similar to Indonesia, the South African providers also had experience with people overdosing on ecstasy or speed, however it happened not solely on the substance but because of the mixing. In the club scene the combination of the stimulants with other substances such as alcohol or poppers can cause overdose. One interviewee explained that people are taking an amount of five to seven ecstasy pills and doing perfectly fine, but as soon as it is mixed with other substances, they easily overdose or are overwhelmed by the effects of the missed drugs.

Harm Reduction Services for people who use ATs
Currently South Africa has only one programme, Health4men, which aims to improve the health of the MSM community, and as crystalline methamphetamine concerns the health of their clients, their services include also harm reduction programmes. Despite focusing primarily on the MSM community, they also offer services to other substances users, if requested. The services they are providing for the MSM community includes providing clean injection or smoking equipment, distribution of condoms, which are specially tailored for the MSM community and lubricants, consulting, referral rehab, treatment for STIs, HIV screening and testing and psychological treatment. In addition, they have outreach workers, who provide services on site, and which even extend to intervening in the party scene. One way outreach workers penetrate this party scene is to invite substance users outside for a cigarette so they can speak quietly and qualm to the users. In addition they try to keep people away from alcohol and hand them a sealed bottle of water instead. If it is not possible to talk to users themselves, which is most often the case, the outreach worker talks to their partners or friends to get more information about their use and provide advise. Interviewees explained that outreach workers go to sex venues to talk to the MSM community and provide services. The majority of users are open and are grateful for advise the receive; however some men only want the equipment (e.g. lubricant, clean needles) and do not solicit advise.

R8: “Lots of people are just interested in education and information. So just having an opportunity to speak to someone who is open about it, is just as good as giving them a set of clean needles or a set of pipes to snort with; So for example, I speak to guys and they are so grateful that they just can speak to someone who can send them to a particular service if they need it or can explain something to them, so for example a guy will come to you regarding a STI, as he is not sure where to go what to do and he doesn’t want his girlfriend to know and you can speak to him about it and you can direct
him to the right places and he can get help. So he is a drug user and he does need help, but it wasn’t necessarily for clean equipment and they appreciate that, so it’s not necessarily all about drugs, not always about clean equipment or trying to get your hands in it, sometimes it just about being able to access the right information and going to the right places and get the right help.”

Challenges in implementing services for ATS users
Although the harm reduction services regarding crystal meth use for the MSM community are very successful, interviewees pointed out that there is limited existence of services for other user populations, which was attributed to a number of reasons. First, the idea of harm reduction is still a new concept that is not fully accepted and supported by society. Various policy makers are opposed to the idea of harm reduction and everything that does not hold abstinence as a goal.

R8: “the tic problem in Cape Town, they (the government) are aware of that, because it’s quite a serious problem, but they focused that as a war on drugs, not so much they are trying to remove the drugs from the area, not so much reduce the harms, they wouldn’t think of harm reduction in that sense at all.”

In addition, the lack of evidence based data regarding effective harm reduction programmes for people who use ATS leads to misunderstanding of this concept. Harm reduction is often perceived as promoting drug use. One respondent pointed out that this is a real challenge, because no evidence based interventions for ATS users, such as the one for injecting drug users are available. Moreover, a lot of strategic data is missing to be able to see the real extent of stimulant use in South Africa, which makes it difficult for people to plan services and realize the scope of the issue. Similar to Indonesia, all respondents agreed that it will be difficult to approach the various groups of people who use ATS, as each group of users have different demands. One interviewee gave the example of street kids who will need stability, having a safe place to sleep and foodfirst before provision of harm reduction services. In addition, there are many users who are being discriminated and also a great part of users is hidden, which poses challenges to engage them in services.

R9: “I think it is very important to provide harm reduction for all, but you need to be aware of the difference between the different drug user communities, this is very, very important because sex workers have different problems and MSM have different problems and so you know, you need to be aware of the differences, but in the same time you need to provide services for them all, because otherwise you will have difficulties like we have now, we have the MSM project and (...) for me it doesn’t feel very comfortable”

Last, the problem with ATS use is not prioritized in South Africa. The country has a high prevalence of HIV infections and therefore donors and programmes are focusing on the injecting drugs user in order to decrease the rate of new infections. This may include the people who inject ATS, but does not consider the people who are smoking or snorting the stimulant.

4.3. Case Study 3: Nepal
Compared to the other two cases, only limited literature about ATS use in Nepal was available. Also the interviews that were conducted with service providers were not able to give more information about ATS use and users in Nepal.

### 4.3.1. Context of ATS use in Nepal

Drugs such as alcohol and cannabis have a long cultural tradition in Nepal and did not (at least in reports) appear to cause major social problems in the last centuries. Nevertheless, during the last decades there was a shift in drug use and heroin became a dominant drug for Nepalese people. More recently, there has been a rise in the production and consumption of synthetic drugs, including ATS. There has also been a shift in mode of administration, from smoking to injecting, which resulted in a spike in the number of HIV infections (Ministry of Home Affairs, 2013). In Nepal, drug use is especially popular among the young people, including street kids, students and other occupational groups.

The data for the numbers of stimulant user in Nepal was gathered though the last Survey Report of current hard drug use in Nepal by the Ministry of Home Affairs (2013), which showed that 5.2% use ATS, including cocaine (Ministry of Home Affairs, 2013). However, this study may not show the correct number for stimulant users, as they often do not fall under the category of hard drug use, but recreational use.

### 4.3.2. Interviews

Interviews were held with two service providers and one person working for Youth RISE, a youth led network aiming to promote drug policies and harm reduction, with a special focus of young drug users in Nepal.

### Accessibility and Availability of ATS in Nepal

In contrast to South Africa and Indonesia, the availability and accessibility of ATS in Nepal is quite different. The stimulants are not attractive to drug users in Nepal, because of their high price and their preference for heroin. One interviewee stressed out that despite the fact that in most Asian countries ATS is cheap and easy to produce; this is not the case in Nepal, where it is only available for specific population who can afford it. Furthermore, ATS is being seized by officials more and more, responding to the fact that Nepal was a safe transit country for stimulants by international traffickers.

R12: “(...) there are many Nepalese people who are stimulant users but they are in other countries like UK and Hong Kong, (...) who occasionally come to Nepal and they are more based in other countries, but in Nepal the drug users (...) just based in Nepal are not stimulant users they are just using alcohol, mostly heroin and injecting drug users”

R12: “yes, stimulant users are growing, but due to the economic condition of the drug users, drug users in Nepal will not be able to afford those kinds of drugs”
Motivation and Pattern of ATS Use

Students are the main ATS users in Nepal, although the interviewees could not provide detailed information about this sub-population as it fell beyond their scope of work. None of the interviewees knew of or observed any crystal meth users in their work/experiences. The only comments they could make about this population is that they are often Nepalese students living abroad using ATS for enhancing academic performance or at parties for recreational use.

R13: “Regular based ATS users are found in rare number. Basically, these drugs are used by high-end users and mostly trance party goers. (....)Some people used as part of experiment while some use to keep themselves alert and energetic in various purposes such as during late night, long hours work or in trance party.”

R12: “I think crystal meth, I myself haven’t seen that, except in the Breaking Bad series (laughing) Yeah just in the Breaking Bad (...) yeah and how they cook and how they take it, I’ve seen it the Breaking Bad, but I haven’t seen in Nepal any drug user who are using crystal meth(...) I haven’t seen this kinds of drug too as a service provider and myself being an injecting drug user, having a drug use history”

Societal Perspective on ATS Users

Due to the high-price of the drug and the few users, it is perceived as a drug for rich people in Nepal. In addition, drug users are still highly discriminated in Nepal; therefore, people who have the money and use these substances are able to hide their use.

R12: “I’ve already told you that the stimulant drug users are low in Nepal, yet increasing but low and drug users in Nepal, mostly they know about these kinds of drugs, they have some kind of knowledge and the wish to take these kind of drugs if they were available but it is very, very rare in Nepal (...)”

Consequences of ATS Use

So far the consequences of ATS use are not visible in Nepal. Although an increase in the use and production is expected. In addition, the service provider for people who use drug in Nepal had only limited knowledge about the stimulants and the possible risks and harms which are associated with the use of stimulants.

R13: “The use of ATS is not widely accepted or not known by the society in general. Only few people know about the drugs. Service providers are not equipped around the knowledge and information about the risk and harm associated with the use of ATS.”

Harm Reduction Services for People who use ATS

Services which are available include residential rehab centre, detoxification, needle and syringe exchange programme, OST, STI treatment, tuberculosis screening, treatment and anti retroviral treatment as well as CD4 and viral load test. However, none of these services are specifically
addressing the needs of people who use ATS. If people who are using stimulant would attend these programmes, service providers would try to deal with this situation, spontaneously.

R13: “There is not any harm reduction services available for ATS users. I think formative research would be useful before introducing any harm reduction programmes for people who use ATS in Nepal. Because the traditional Harm Reduction Service providers or the existing service providers does not hold adequate understanding of the drugs itself and the drug using scene and target group and the other reason is also most of the NGO’s working in the field of drug use are already swamped in managing regular harm reduction projects and needs – which also shows that ATS does not fall on their priority.”

It is also not likely that services for ATS users will be implemented, as one interviewee explained. First of all, the percentage of people who is using stimulant is estimated for 5% and are said to be students living abroad and sometimes come back to party and use in Nepal. So on the one hand, the population of stimulant users is not using in Nepal and on the other side, they do not perceive their use as harmful and are not expected to attend harm reduction services. In addition, Nepal first needs to address the needs of other people who are using drugs and improve their existing services before focusing on a new population. Moreover, more research and information is needed to start planning and implementing services for ATS users in Nepal.

R12: “I think it is more important to focus on the current issues; I’m not saying we should not focus on other plans and harm reduction programmes for ATS users or any, if not harm reduction programme than any kind of information programmes and awareness programmes for the ATS user but the major problem in Nepal is the heroin among the 93000 people we have all the rest of the 95% population using heroin, heroin and injecting drugs here, so our primary focus should be to those drug users, street children and young population of, who are still not focused properly and the general programmes are not able to saw the effectiveness yet, so I think it is more important to focus on these rather than having new programmes for ATS.”

Harm reduction Programmes for people who use ATS (Summary of Case Studies)

Both scientific and grey literature, as well as the information obtained through the interviews, provides an understanding about directions on how to minimize harms for ATS users. From the interviews, strategies and considerations can also be adapted from existing programmes that have been implemented for other types of users (e.g. injecting heroin users, or smoking cocaine). In some cases (South Africa and Indonesia), harm reduction programmes for people who use crystalline methamphetamine already exist, wherein advice is provided to reduce risks associated with different route of administration of the drug. This includes sterile material for injecting and smoking, distribution of condoms and lubricants, consulting, education around safe sex, information and testing and treatment for STIs, HIV/AIDS and hepatitis C, and referral to treatment, if requested. In both these countries, outreach work is done by existing organisations/NGOs in order to reach specific target groups. Health4men is also doing outreach work in the party scene to reach the younger population of users. One unique approach used in South Africa is to avoid value laden language when
talking about drug use and always refer to recreational substance use, to make it more attractive for people to attend the services and receive advice.

In contrast to harm reduction services in South Africa and Indonesia, Nepal currently has no services which address the needs of people who use stimulants. Also the knowledge on how to minimize risks associated with ATS is missing. These findings from the interviews align with what is highlighted in the literature reviewed first in the Results section. Literature focuses on services which should be provided for injecting drug users include syringe and needle exchange in combination with alcohol pads for disinfection, sterile water for preparation of the drug dose, cotton filters for drug filtration, condoms and pregnancy tests. Moreover for both users and their relatives, services can provide basic hygiene and food services, support for job applications and accommodation, HIV, hepatitis C and syphilis testing. The respondent from the Czech Republic also suggested providing more vending machines and application rooms in problematic areas which could make it possible to access sterile material 24 hours a day. In addition, they recommend their clients to switch from injecting to oral administration and therefore distribute gelatin capsules.

An important consideration from all three of the case study countries but in particular Indonesia, is that service providers need to understand and acknowledge the role of amphetamine for users taking the drug for sex or work and develop a sexual harm reduction plan in advance and discuss ways on how to minimize sex related harms in a user’s life. She also indicates that it is important to talk about sexual and physical violence, abusive relationships and other issues related to sexual risk behavior. Another important component, of harm reduction service is to receive knowledge on how to act in case of an overdose. This can be helpful when they experience users in such a situation and to spread the knowledge to peers and users how to manage paranoia, delusions and anxiety. This encompasses the provision of water and cool compressions for hands and head to cool the body temperature down, trying to calm the person down and knowing that this feeling is caused by the drug. Also small doses, 50-100 ml of diphenhydramine (Benadryl/Dimedrol) can be helpful.
5. DISCUSSION

Although there is considerable literature about risks associated with amphetamine-type stimulants, there is relatively limited research or information on harm reduction programmes for people who use stimulants. Responding to this gap, this study aimed to identify the service needs for people who use ATS, in the countries of the partner organizations of Mainline Foundation in Nepal, South Africa and Indonesia and determined what services should be provided to reduce the risks associated with the use of stimulants.

The research indicated that in all three cases, the population of ATS users did not perceive their use as harmful, which might be explained by being misinformed about ATS use or a lack of available information on ATS use more generally. In addition, those who are using the stimulants, for recreational purpose or to enhance work performance in jobs or university do not identify themselves as drug users and therefore see no need to attend such services. These findings were also supported by Australian researchers (MacDonald et al. 2003), which indicated that young people are not likely to access harm reduction programmes. The findings from the interviews in South Africa and Indonesia showed that peer led interventions as well as outreach workers can help to overcome these barriers, in line with a study by MacDonald et al. (2003) proved that peer education can have a positive influence on knowledge around drug use and can be effective in reducing drug related harms.

Next, the results from the research support the idea that it might be useful to approach each population of ATS users differently. As it was shown, sex workers might need different services than students or people living on the street. Health4men, which is focused on the MSM community, showed to be effective in this technique. Through their outreach workers, where some employees are also part of the MSM community, they were able to build trust and consequently gain more insight into their patterns of use and tailor the programmes specifically for them. These findings resonate with the findings of the work by Pates and Riley (2012) on Harm Reduction in Substance use and high-risk behaviour, which suggest that it is more effective to have harm reduction programmes that are designed for a specific target population.

The study also showed that practical harm reduction advices for people who use ATS can be partly adapted from already existing programmes. This accounts for people who inject or smoke stimulants. The physical harms which are associated with the route of administration, such as transmission of HIV/AIDS, tissue damage or burns, remain the same, not depending on the used drug and can be reduced through legal access to clean needles and syringes or appropriate smoking equipment. However, it has to be considered that stimulant users have different patterns of use than opiates user and can be found in a variety of settings (Grund et al. 2010). This includes more frequent injections, chaotic injecting behaviour, younger ages and engagement in high risk sexual behaviour (Pinkham, 2010).

The results from the case study on ATS use in Indonesia, demonstrated that crystalline methamphetamine is currently the most widely used drug by a variety of populations. Existing services for PUD are still HIV/AIDS driven and information is missing to improve and extend the
services. Nevertheless, the interviewed service providers were willing and enthusiastic to develop their programmes in order to reach more people and address their needs. In addition they would be grateful to get more information regarding the stimulants in order to educate peer groups and share their knowledge.

In South Africa, Health4men is providing a range of service which is also focused on people who use ATS. However, the services are focused on a specific target population, which are wealthier and associated with a higher-socio economic status, thus also less discriminated, than the majority if people who use ATS who might are in greater need of harm reduction services. Therefore, a demonstration project, funded by PEPFAR wants to provide harm reductions services in three cities in South Africa. Nevertheless, they are still focused on injecting drug user, and as the research and literature showed the majority of ATS user is smoking or snorting the stimulant which consequently excludes them from these services. Another explanation, why this population might be overlooked is that ATS is not prioritized in South Africa and funding is mostly provided to reduce the infections of HIV/AIDS which is still highly problematic.

Contrary to expectations, and considering the fact that this research project started because of an indication of the increasing methamphetamine consume in Nepal it was surprising to find only limited information around the use of stimulants in the Asian country. Not only in literature also the interviewed service providers in Nepal had limited knowledge about this type of drug. This might be due to the focus on injecting drugs users and heroin of these organizations. Nevertheless, one interviewee indicated that the use of stimulants is increasing and will become more problematic, if no specific services are being implemented. The research suggests that more awareness and education around the use of ATS should be provided. Moreover, further research is needed to assess the situation of stimulant use in Nepal more in detail.

Finally a number of limitations need to be considered. First, the majority of interviews were conducted via Skype, which in some cases lead to connecting problems, where interviews had to be stopped and continued in written form, which minimized the data gathering and interpretation. Second, for each country only three to five people have been interviewed, which made it difficult to generalise and assess the whole situation in a country and analyse each population of ATS users. Nevertheless, all interviewees had a broad knowledge around drug use and service provision for PUD and therefore were able to give in-depth insights for specific groups and all respondents were enthusiastic to participate and support the research with their knowledge and experiences.

The conceptual model was a useful tool to design the interview guide and especially the drug triangle by Zinberg (1984) helped to get a better understanding of the effect of the drug and what factors need to be considered. However, some concepts mentioned in the model were not used for the result sections as they did not contribute to answering the research question. The study design which was originally consisted of a needs assessment was changed to a case study approach supported by literature, which helped to describe the different cases. This adaption was made during the process of the research, as it seemed a more suitable strategy to present the result and include the in depth information, which was gained from the three different countries.
5.1. CONCLUSION
To conclude, this study was designed to determine what services should be provided in order to reduce risk associated with the use of ATS. Before the recommendations are provided, it has to be noted that the research throw up some questions which need to be further investigated. The study showed that there are people who like to mix ATS with other substances. It would be interesting to assess the effects of poly drug user in order to develop specific harm reduction strategies. In addition through the research it was tried to cover all populations of ATS user. Unfortunately, this was not possible, due to limited time and therefore fewer interviews. More research is needed to gain more in depth information for specific sub-population such as the street children in South Africa or the small population of stimulant users in Nepal. Nevertheless, the results of the three different cases and the literature search found a number of harm reduction strategies which can be applied for people who use ATS. In addition recommendations were developed for harm reduction services, in the network areas of Mainline in Indonesia, South Africa and Nepal on how to extend or improve their services to reach people who use stimulants.

5.2. RECOMMENDATIONS
The recommendations for service delivery for people who use ATS are divided into two parts. In part 1 best practices and user friendly advises for the use of stimulants is provided. Part 2 is focused on how organization, especially in the network areas of Mainline in South Africa, Nepal and Indonesia could improve and extend their services to address the needs of people who use ATS.

5.2.1. PRACTICAL RECOMMENDATIONS FOR USERS TO MINIMIZE HARM FROM ATS
The use of ATS occurs in a variety of settings, by different populations and routes of administrations where harm reduction can be applied.

Quality of the drug: First, it is important to know what kind of drug you are taking and where is comes from. It helps to assess which effect will be achieved and therefore could be helpful to prevent an overdose. Do not use alone and look after your friends.

Smoking: Make use of appropriate smoking equipment (stem, mouthpieces, screen and filters), cover your mouthpiece and do not share your pipe, if it is shared wash it in between or have a second pipe with you for friends. Hold the pipe with the end of the tube behind your teeth and try not to hold the pipe with your lips. Do not apply the flame directly to the glass, keep it below and move around, gradually heat the substances. Take breaks in between and drink water. Use lip balm for dry lips and if needed burn salve. Brush your teeth and rinse your mouth after using to avoid dental problems.

Injecting: Make use of clean needles and syringes. Clean injection side and use alternative sources. Do not share you needles to avoid the transmission of blood borne viruses. If no clean needle is available use bleach to clean it. Try to use smoking and snorting as an alternative to injecting. Use sterile water and filters for the preparation of the drug.

Snorting: For people, who prefer to snort, do not share your straws and use saline spray after using or snort warm water to keep the nasal passage clean.
In case of an overdose: Do not use alone, so in case of an overdose you are surrounded by people who can help to handle the paranoia, delusions and anxiety. If these feelings emerge be calm and reassuring, drink water. If you recognize another person in this situation take him to a quiet place and turn the attention to something else. Keep in mind that these feelings are caused by the drug and are not real. Make use of cool suppression for hands and head. Try to drink enough water, sleep and eat.

Crystal meth and sex: When crystalline methamphetamine is used to enhance sexual performance, several things can be done to minimize risks. For the MSM community, use condoms and lubricants. Make use of enough lubricants for long and rough sex. Use condom for anal sex with guys whose HIV status is different from yours or you do not know. Change condom after a while as it might break. Set you limits before engaging in sex parties. Make breaks in between and drink enough water. For female and male sex workers some things are the same. Use a condom with every client and negotiate if the client says no. Drink enough water, eat and make breaks.

For students who use stimulants: keep in mind that although it initially helps to perform better and helps to sustain attention and endurance it can result in chronic use which might make it difficult to complete other tasks. A lot of websites are available, were people with experience in stimulant use discuss their experience in combination with advice on how to minimize the risks.

Coming down from a trip: The come down from a trip can make you feel exhausted, lethargic and depressed, which may tempt you to take more or other substances to pass this feeling. Keep yourself in a calm and quiet environment, try to sleep. If the unpleasant feeling is not going away try to avoid using other drugs such as heroin, GHB or other stimulants and try to pass this feeling while smoking a joint together with friends.

5.2.2. Recommendation on an Organisational Level

The second part will start with general recommendation for organization on how to address the needs of stimulants users and later give advice for the partner organisations of Mainline in South Africa, Nepal and Indonesia.

- Inform Public: As there is a lot of mis- as well as missing information around the use and risks associated with ATS, it is recommended to do peer outreach to reach more young people. This could include information about the drug, education around safe sex and overdose prevention.

- For the injecting stimulant users: When providing harm reduction for injecting stimulant users it needs to be considered that they have a more chaotic injecting behaviour, need more needle and syringes, and advice on how to minimize the risks with frequent injections.

- Education around safe sex, distribution of condoms and lubricants. Service providers could develop plans with ATS user on how to manage condom use under the influence of stimulant use, and other advice on how to minimize their high risk sexual behaviour. In addition it could be helpful to talk about sexual violence with female users who are forced by their husbands to use stimulants.

- Education around HIV/AIDS, STIs, hepatitis C and provision of testing and health services.

- Overdose prevention, and how to handle an overdose.

- Teach users on safe injection and how to make safer pipes. Distribution of sterile smoking equipment, lip balm and burn salve.
- Increasing the skills of service providers: A lot of services are still focused on injecting drug user, but the majority of ATS users snort, swallow or smoke the stimulant. In addition, stimulants have a different effect and consequences which need to be addressed differently than those for other people who use drug. Service providers need to get more informed to be able to do outreach work and educate users on how to take the stimulants safely.

**Indonesia:** For the organisation Laras in Indonesia it is suggested to extend their outreach team in order to reach also other population of user than sex workers. In addition the service provider should get informed about the effects and consequences of ATS to ensure better services for users. This could include more information around safe smoking and snorting (the focus is still on injecting drug users) and education on overdose prevention.

**South Africa:** New services which are being implemented in South Africa are still focused on injecting drug user. To reach a broader population of ATS users it is recommended to include harm reduction programmes for people who smoke or snort the stimulant. In addition, it could be considered to develop services which are only focused on ATS user to ensure engagement of these populations.

**Nepal:** For the harm reduction services in Nepal it is recommended to gain knowledge on different attribute of ATS compared to heroin. In addition it is suggested to adjust their services for ATS users so in case of a sudden rise in ATS use they are able to cope with the situation.
6. REFERENCES


Semple, S.J., Patterson, T.L., Grant, I. (2002). Motivations associated with methamphetamine use among HIV+ men who have sex with men. Journal of Substance Abuse Treatment 22, pp. 149-156


7. APPENDIX

7.1. APPENDIX 1: RESEARCH FRAMEWORK

- Preliminary Research
- Harm reduction theories
- Background information about ATS
- Service planning theories
- Literature about Nepal
- Literature about Indonesia
- Literature about South Africa

Service Providers in South Africa, Nepal & Indonesia

Programmes/ Organisations in South Africa, Indonesia & Nepal

Analysis of Nepal

Analysis of Programmes/Organisations

Analysis of Service delivery programmes and models

Analysis of ATS users and harms

Research perspective (Conceptual Model)

Service delivery programmes and models for ATS

ATS users and harms

Analysis of Results

Recommendations for service delivery programmes for ATS users in South Africa, Nepal and Indonesia
7.2. **Appendix 2: Interview Design**

The interviews will be semi-structured. Therefore, a predetermined structure, which covers the themes form the conceptual model, will be present in the interviews. Nevertheless, this structure won’t be similar in every interview. Every respondent will answer differently and new concepts to talk about may pop-up.

**Introduction:**
- Introduction of the interviewer: My name is Agnes Walk and I am doing and International Public Health Master at Vrije Universiteit, Amsterdam. For my studies, I am currently conducting a research project at Mainline Foundation. One part of this research is to conduct interviews with people, who are experts in my research topic.
- Objective of project and interview in particular: By interviewing I want to gain insight into the service needs of peoples who use ATS, particularly in South Africa, Nepal and Indonesia. The aim is to explore, what services should be provided to reduce stimulant related harms and how to improve health of user.
- In this interview I will therefore ask questions based on some topics regarding ATS use and service provision. You are free to answer and add information which might be important for me to know. You are able to stop the interview any time you want and not to answer questions you feel uncomfortable with.

**Interview procedures:**
The procedure of the interview will be explained, and it will be told what happens with the material. If any questions regarding the procedure come up, the interviewee is free to ask.
- This interview will be anonymously. Is it okay for you when I record it?
- The interview will last approximately one hour and I have some questions prepared which I like to ask.
- If you like, I will send you a summary of the interview, to check your answers and add some additional information.
- Are you alright with these conditions?

**Introductory questions:**
Can you tell me something about the work you do at...?

**Concepts which were covered during the interviews**

**Service Delivery and Harm Reduction**
Can you tell me more about your experiences of services provision for people who use drugs in ....?
What are necessary things you have to consider when you are planning service delivery for people who use drugs?
How long does it take to implements new services?
Are there any limitations or barriers in the provision of HR services?
Do the services you provide also include people who use ATS?
  If yes, how does it look like?
If no, why not?
Do you know something about harm reduction programmes for people who use ATS?

**ATS**
Can you tell me more about the current situation of ATS use in ...?
Who are the different population of user use can see in ....?
What could be barriers to implement services for people who use ATS?
Do you have experiences with people who use ATS?
Which type of ATS are those people using?
How does the population of ATS users differ from other drug users?
Do people mix ATS with other drugs?
What are the risks when people mix ATS with other drugs?
What are the harms you experienced of people who use ATS?

**Population of user**
In what kind of settings can people who use ATS be found?
What is their motivation to use ATS?
What are the associated risks in these settings?
How often is it used? Mode of administration
Does their consumption of ATS have an impact of their environment?
If yes, how could it be seen?
What should be done do reduce these harms?
Can you tell me something about harm reduction for sex workers?
Can you tell me something about harm reduction for men who have sex with men?
ATS at the workplace: What possibilities do they have to reach the people at their workplace?
What are difficulties they face when it come to harm reduction for ATS users?

**Services for people who use ATS**
How should you approach people who use ATS to engage them in harm reduction services?
What do you think are possible challenges?

**Access and availability**
Access and availability of ATS in the different communities
How is ATS accepted in the different groups?
How is ATS accepted by the society?

**Personal experiences**
Can you tell me more about your experiences with ATS?
Did you face any harm or risks while using it?

**Environment**
How does the society few people who use ATS?
Does the policy, government treat ATS users the same as other drug users?
Closing:

- Summarize important points
- Ask for additional information: Do you have anything to add? Did I miss anything?
- Repeat further procedures: I will report the results anonymous. If you feel you have anything to add in the future that you couldn’t think off now, you can always contact me (a.walk@mainline.nl). I will send you a summary of the interview so that it is possible for you to check if I have understand the main points you made in the interview.
- Are there any questions or remarks from your side?

Thank the respondent.
7.3. Appendix 3: Informed Consent

Since interviews will be performed mainly via Skype informed consent can’t be asked on paper. Therefore it will be asked vocally and will be recorded.

Consent to participate in the research project: Service delivery for people who use Amphetamine-type stimulants in alignment with harm reduction principles

Researcher: Agnes Walk

Purpose of the project: The purpose of this project is to make recommendation to Mainline Foundation on how they can improve and extend their service delivery programmes to stimulant users in South Africa, Nepal and Indonesia, in line with harm reduction principles. Therefore, interviews will be conducted to synthesise best practices and harm reduction programmes for Amphetamine-type stimulants use.

Ethics: The privacy of the respondent will be respected and he or she will be made anonymously in this research. In case the respondent asks to not report something he or she said, this will not be reported.

I agree to participate in this research project:

Signature:

Date: