The Patients’ Perspective on Opioid Substitution Treatment
A study of desistance from illicit drug use

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Abstract

Using thematic analysis, this qualitative study investigates desistance from illicit drug use from the perspective of patients within opioid substitution treatment (OST). Wikström’s theoretical framework was used to explain this process. From semi-structured reflective interviews with 12 patients admitted to an OST clinic in Sundsvall, three main themes were identified as relevant to the research aim. These main themes were labelled as follows: Motives for desistance, Perspectives on OST and Recipe for successful desistance. The findings were similar to those of previous research. The participants expressed criticism on specific regulations within OST, but were positive to the treatment in general. They felt a lack of emotional support from OST, but still reported an improvement in mental well being. While varied views on diversion of OST medication were expressed, a majority believed illicitly used opioids to originate from sources other than OST. In conclusion, the participants viewed OST as an essential method for desistance from illicit drug use. Having a sincere will to desist and perceiving the past illicit opioid use as problematic were also deemed necessary for the treatment to be successful.

Key words: opioid substitution treatment, illicit drug use, desistance, diversion

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Individuals suffering from drug addiction have been described to be in a state of chronic illness where a drug has taken control of their lives (Agerberg, 2014). However, in Sweden all illicit use of drugs is criminalised (Agerberg, 2014). Illicit drug use is a term defined by the United Nations Office on Drugs and Crime (UNODC, 2017) as the illegal use, production or trafficking of drugs under international control. This definition does not concern whether the drug itself is criminalised, but rather that the use of the drug is (UNODC, 2017). This is of importance since use of criminalised drugs such as heroin could lead to addiction, but so can certain groups of legally prescribed medication (Agerberg, 2014). In addition, earlier research has found illicit drug use to be associated with other criminal behaviour (Bell, Mattick, Hay, Chan & Hall, 1997). Bell et al. (1997) found the cost of illicit drug use to be a major predictive factor for committing acquisitive crimes, meaning that in order to afford an illegal drug habit the individual has to continually commit crimes such as theft.

The term desistance has been described by Laub and Sampson (2001) as a complex process an individual goes through when ceasing to commit criminal acts or problematic behaviours, such as illicit drug use. The desistance process is associated with several psychological and sociological factors (Laub & Sampson, 2001), this could entail everything from securing an occupation to changing attitudes towards criminality. Regarding desistance from illicit drug use, heroin has been described as the most addictive substance and nearly impossible to desist from without receiving any form of help due to strong cravings and withdrawals (Agerberg, 2014).

Sweden was among the first countries in the world to offer opioid substitution treatment (OST) to individuals suffering from opioid addiction when opening a methadone treatment at Ulleråker hospital in 1966 (Agerberg, 2014). In recent years, OST has expanded in Sweden (Johnsson, 2010; Richert & Johnson, 2013). The purpose of OST is to provide patients suffering from opioid addiction with a higher quality of life (NBHW, 2015), which includes no criminality as well as the patient having stable living conditions and social relationships. This treatment consists of prescribing narcotic pharmaceuticals to individuals suffering from opioid addiction, mainly as a substitute to illicit drug use. This medication is prescribed in combination with psychosocial therapy and is regulated through directions by the National Board of Health and Welfare (NBHW, 2015). Opioids is a broad term that encompass both opiates, which refers to natural substances such as heroin and morphine, as well as synthetic opioids (NBHW, 2015). Methadone is a synthetic liquid opioid and buprenorphine is a
semisynthetic opioid in pill form (Johnsson, 2010; NBHW, 2015), both of which prescribed within OST. These medications ease the patient’s addiction symptoms and decrease the intoxication effect in order for the OST patient to function well during daily life (Johnsson, 2010).

The regulations surrounding OST in Sweden are defined by NBHW (2017). According to these regulations the individual seeking OST must be at least 20 years old and have a documented opioid addiction for at least one year prior to OST admission (NBHW, 2017). Such documentation could entail prior drug crime convictions or medical records demonstrating an opioid addiction (Richert & Johnson, 2015). The treatment must include both medication and psychosocial therapy according to the OST regulations (NBHW, 2017). Additionally, there are rules the OST patient must follow in order to stay admitted to the program (Svensson & Andersson, 2012). The most common reasons for patient discharge is breaking the rules against relapse into illicit opioid use and side abuse (NBHW, 2015), compared to breaking the rules against selling drugs or displaying violent behaviour. Side abuse refers to an illicit use of drugs other than opioids while taking the OST medication (Johnsson, 2010), which may have negative effects on the treatment.

There has been much controversy surrounding OST as a method for treating individuals with opioid addiction (Johnsson, 2010). The main critique towards OST has focused on the treatment replacing one drug addiction with another (NBHW, 2015) as well as the risk of OST medication leaking unto the illegal drug market, a phenomenon called diversion (Johnsson, 2010). However, there is strong scientific support for the effectiveness of OST (Dugosh et al., 2016; Johnson & Richert, 2015b; Johnsson, 2010). It has been shown that participation in OST lead to an overall decrease in criminal activities and prostitution (Johnsson, 2010; Soyka et al., 2012), as well as a decrease in mortality rates (Johnsson, 2010). Aside from the studied benefits of OST, there have been growing concerns regarding several identified problems with the treatment (Johnsson, 2010; Richert & Johnson, 2013). While diversion has been regarded as the main risk with OST (Johnsson, 2010; Richert & Johnson, 2013), concerns have also been directed towards the prescribed OST medications being increasingly attractive on the illegal drug market (Cicero, Ellis, Surratt & Kurtz, 2014; Johnsson, 2010). Since these drugs are highly addictive, illicit use could lead to new recruits in the drug trade and higher mortality rates (Johnsson, 2010). Still, in 2013 Richert and
Johnson stated that no research had been done to that point on the extent of diversion from Swedish OST programs or how the illegal market for these medications was organised.

It has been reported that police seizures of illicitly sold OST medication in Sweden have increased during the last decade (NBHW, 2015), with the biggest increase being that of buprenorphine. Regarding sources of illicitly used buprenorphine, a study on individuals injecting drugs in Malmö by Håkansson, Medvedo, Andersson and Berglund (2007) reported that 80% of the participants who claimed to know the origin of the buprenorphine, reported it originating from Sweden. In contrast, the report from NBHW (2015) stated that 10% of the traceable buprenorphine sold on the illegal market in Sweden originated from native OST programs, indicating that a strong majority of illicitly used buprenorphine in Sweden originates from sources other than OST.

Regarding treatment quality, questions remain whether psychosocial therapy offered within OST provides additional benefits to the effectiveness of the treatment (Dugosh et al., 2016). This is of interest since patients with comorbid anxiety disorders might be more likely to relapse into illicit drug use compared to those without such comorbidity (Ferri, Finlayson, Wang & Martin, 2014). Patients have previously criticised OST for having strict regulations and not taking individual needs or circumstances into account (Granerud & Toft, 2015; NBHW, 2015; Richert & Johnson, 2015). Examples of such previous criticism is the requirement to visit the OST clinic frequently in order to receive medication (Notley, Holland, Maskrey, Nagar & Kouimtsidis, 2014) and not accounting for individuals addicted to drugs besides opioids (Mitchell et al., 2011).

The Present Study

To our knowledge, few qualitative studies have been made in Sweden on the subject of opioid substitution treatment. For example, Swedish studies have primarily focused on either the lived experience of being an OST patient (Lindgren, Eklund, Melin & Hällgren Graneheim, 2015) or diversion (Johnson and Richert, 2015a, 2015b). However, since there is sparse scientific knowledge regarding OST patients’ views on OST as a method for desistance from illicit drug use, this study could provide a much-needed contribution to the knowledge on this perspective (Lindgren et al., 2015).

Theoretical Framework
Even though drug addiction can be viewed as a chronic illness (Agerberg, 2014), illicit drug use is still criminalised in Sweden (Agerberg, 2014). For that reason, the developmental ecological action theory of crime involvement by Wikström (2005) may provide a theoretical framework for explaining why individuals seek OST in the first place and why some OST patients break the rules of the program while other patients achieve desistance from illicit drug use. According to the theory, the individual makes an intentional decision to break moral rules or commit criminal acts based on an interaction between the activity field and individual characteristics (Wikström, 2005). The activity field refers to the social setting in which the individual participates, while individual characteristics are constituted by level of self-control and moral judgement (Wikström, 2005). The situational factors of the activity field can either inhibit or promote behaviour (Wikström, 2005). Such factors that promote criminal behaviour could for example entail other persons with illicit drug use or opportunities presented to the individual to divert OST medication. The individual’s capability to exercise choices or inhibit morally unaccepted behaviours constitutes self-control. Moral judgement on the other hand, is based on the perception of available action alternatives in a situation (Wikström, 2005).

Wikström (2005) stipulated that low crime propensity will be found in individuals with high thresholds for temptation, while the activity field is more likely to influence individuals with moderate thresholds. Offenders with low thresholds for temptation on the other hand, are primarily driven by individual characteristics. According to Wikström (2005), changes in the individual’s executive functions, moral judgement and activity field may influence an individual’s potential to desist from a behaviour such as illicit drug use. With this theoretical framework in mind, the intention was to investigate whether the theory of Wikström (2005) could provide an explanation for desistance from illicit drug use by means of OST.

Aim
The objective was to contribute to the scientific knowledge on the OST patients’ perspective regarding several aspects surrounding the treatment, such as: motives for desistance by seeking OST, identify components for successful desistance from illicit drug use as well as the patients’ views on diversion. Therefore, the aim of this study was to answer the question: What are the patients’ views on opioid substitution treatment as a method of desistance from illicit drug use?
Method

Research Design
Since the purpose of this study was to investigate views and experiences of OST patients, the study used a qualitative study design (Flick, 2014). Semi-structured reflective interviews were performed in person at the OST clinic in Sundsvall. This interview method was chosen in order to ask open questions following a guide of topics, which encourages reflection by the participant and allows flexibility through follow-up questions (Davies & Hughes, 2014). The researchers were allowed to use a conference room at the clinic for conducting the interviews. Being allowed to use this room was helpful in setting up interviews with participants, due to difficulties some patients had with time management. The proximity of this room to staff and other patients could have influenced the participants' willingness to disclose sensitive information. Nevertheless, a decision was made to use this room since it was separated from the waiting room and staff offices. The length of the interviews ranged from twenty minutes to two hours depending on how much time the participants required in order to answer the questions or were willing to spare. One researcher conducted the interview while the other was present at each occasion to verify interview quality and ensuring no interview topic was missed. These tasks were performed alternatingly.

Population Characteristics
The population of interest for this qualitative study was patients within OST. However, due to this study being a part of an academic course, there were time constraints that resulted in the decision to limit the study to the OST clinic at Sundsvall Regional Hospital. This decision was made due to the academic course being held in Sundsvall in close proximity to this clinic. An earlier study on cooperation showed that this particular clinic had roughly 100 patients admitted, 67% of which were male and 33% were female (Augutis & Hillborg, 2011). This study also stated that the average age of patients admitted was 37 years and among these patients 74% suffered from psychiatric comorbidity (Augutis & Hillborg, 2011), depression and anxiety being the most common diagnoses.

Sampling Procedure
The inclusion criterion for participation in this study was currently being a patient admitted to OST at Sundsvall Regional Hospital. A purposive sampling method was chosen since this
method can be used to select a sample with maximal variation (Flick, 2014), which aims to reveal the range of variation within the study population. In the present study, this entailed recruiting participants as different as possible regarding gender, age, background and time in treatment (Flick, 2014).

In the initial phase of the sampling procedure the head of the OST program in Sundsvall was contacted by e-mail. A meeting was set up at Sundsvall Regional Hospital where an agreement was made to let the researchers recruit OST patients willing to participate in the study. In order to attract participants, a flyer was written, printed and handed to the staff in direct daily contact with patients, meaning nurses, at the OST clinic in Sundsvall. The staff assisted both in handing out the flyers to patients and in encouraging patients to participate. Both researchers were present in the OST waiting room during visiting hours on weekdays all but six days from February 24th through March 21st, 2017. The six days of absence were due to other commitments. The visiting hours on weekdays were between 08.00 AM and 12.00 at noon. Cooperation with the staff, in combination with the researchers being present in the waiting room during visiting hours, proved to be an effective strategy for building the patients trust in the researchers’ intentions. If the researchers had not been afforded this help from the OST staff, attracting a sufficient number of participants might have proven infeasible.

The staff dissuaded from scheduling meetings with the patients, due to these individuals having general difficulties with time management. Therefore, a decision was made to conduct the interviews directly following agreement of participation. Eleven patients were recruited by making contact in the waiting room. Two additional participants were referred by the clinic staff and contacted by phone to set up interviews. These latter patients were selected to represent patients not visiting the clinic on a daily basis. This resulted in a total of 13 patients interested in participating in the study. Unfortunately, one participant was excluded from the study due to the fact that he was unable to complete the interview and was shortly thereafter discharged from OST. Participants were not offered any compensation for their participation.

**Participant Characteristics**

A total of 12 participants were finally included in the study, three of whom were women and nine were men. The age of participants ranged from 27 to 60 years. All participants were patients admitted to the OST program in Sundsvall. Since there was only one participant in his twenties and an unequal representation of female patients in the sample, there might have
been a lack of younger as well as female perspectives on OST in this study. However, since there were time constraints and being a patient admitted to OST in Sundsvall was the inclusion criteria, having a sufficient number of participants in total was prioritised. Among the participants, time in treatment had an estimated range from five months to 17 years. Time in treatment are estimates due to the participants’ uncertainty on the matter. Three participants had an occupation while the remaining participants either were unemployed or on disability pension. Regarding living conditions, two of the participants were either staying with parents or an acquaintance, while 10 had a home of their own. Additionally, three participants had experience of OST clinics in other Swedish cities than Sundsvall.

**Measures**

When performing the semi-structured reflective interviews, a written interview guide with carefully selected topics was used. This interview method was chosen since it has been considered effective in providing an understanding of individual perspectives on a topic such as treatment (Davies & Hughes, 2014). The open questions were formulated from the aims in the present study and inspired by the interview guide used in a study of health care professionals (Green et al., 2014). The interview guide can be found in the Appendix.

Qualitative studies such as this one are not interested in frequencies or distributions (Flick, 2014). However, to facilitate a general understanding of how many participants expressed a certain view, a template was developed and was used when presenting the results of the study. The terms *all* and *one* are self-explanatory. *A few* refer to between two and three participants and *a number of* refers to four to five participants. *Half* refers to six participants and *a majority* consisted of between seven and 10 participants. Lastly, *all but one* refers to 11 participants.

**Data Analysis**

Thematic analysis was used since the purpose of this type of analysis is to identify and analyse patterns of meaning within transcribed verbal data (Braun & Clarke, 2006). Digital audio recordings of the interviews were transcribed word by word into text form. Initially, a theoretical method of thematic analysis was chosen to only capture the more detailed aspects of the verbal data relevant to the research question (Braun & Clarke, 2006). A decision to identify themes at a semantic level was also made, this meant focusing on explicit statements made by the participants, rather than making extensive assumptions of underlying ideas in the
statements (Braun & Clarke, 2006). The first step of the thematic qualitative analysis entailed repeated readings of the 12 transcripts in order to achieve familiarisation with the data. Each transcribed interview was analysed to generate initial codes, which meant making marginal notes and labelling ideas deemed important for this study. These initial codes were then reviewed, compared and grouped into main themes, themes and sub-themes by both researchers at the next step. The themes were later reviewed and generated into a thematic map representing all identified themes. All these steps according to the guidelines for thematic analysis provided by Braun and Clarke (2006).

Trustworthiness
Throughout the study process considerations on trustworthiness were made, meaning the scientific quality of the study (Cope, 2014). Trustworthiness is established through meeting four criteria: credibility, dependability, confirmability and transferability (Cope, 2014). Credibility refers to veracity of the transcribed data and in the interpretations made by the researchers (Cope, 2014). The present study maintained credibility through both researchers being present during each interview and taking turns in ensuring no interview topic was missed, this strategy was used in order to maintain credibility in interview procedure as well as in interpretations of participants’ views (Cope, 2014). In addition, credibility was further maintained throughout the analysis process, since both researchers were involved in all interpretations and conclusions drawn from the data (Cope, 2014).

Dependability can be attained through finding other research on similar populations with similar results (Cope, 2014). Dependability in the present study was achieved by finding similarities when comparing the results to previous studies on OST patients (Cope, 2014). Confirmability refers to the researchers’ capacity to display how potential bias in interpreting the study data was minimised (Cope, 2014). Confirmability in the present study was maintained by minimising researcher bias through not making extensive assumptions of the participants’ underlying motives or intentions (Cope, 2014). It was also preserved by including rich quotes when presenting the results of the study (Cope, 2014). The criterion of transferability is met if the results are demonstrated to have value to individuals not included in the present study and was achieved by having an as diversified sample population as possible (Cope, 2014). This included age of participants, time in treatment as well as having both male and female participants. Additionally, there were participants with experience of other OST clinics in Sweden that might have enabled them to expand their view of the
treatment beyond OST in Sundsvall. For this reason, the findings were deemed transferable to other OST populations (Cope, 2014).

**Ethical Concerns**

In order to maintain an ethically sound approach in the study (Swedish Research Council, 2011), participation was fully voluntary. Confidentiality for the participants was ensured during the initial phase of the study by using numbers as identifiers of participants (Swedish Research Council, 2011). These participant numbers could then be used by the participants to terminate their participation at any time during the research process by contacting the researchers. During the analysis process, the participant numbers were replaced by aliases assigned according to the participant’s gender. Other than gender, no identified information that could reveal the participants’ identities was included in the results. This strategy ensured that sensitive information regarding illegal activities disclosed by the participants was kept confidential to ensure that the information did not reach third parties such as professionals working within OST (Swedish Research Council, 2011). This may have influenced the results of the analysis but was deemed important to treat the participants ethically correct (Swedish Research Council, 2011). Before the interviews began, all participants were presented with an information sheet declaring the aforementioned terms of participation. The interviewer also read the information sheet out loud in order to avoid potential misunderstandings.

**Results**

All 12 participants had extensive stories to tell about their lives and their experiences of OST. Although their backgrounds varied, all participants had positive views on OST except for one, who had a mixed view. With that said, the participants expressed several aspects of criticism regarding OST. These aspects ranged from views on rules and routines to views on other patients. Within the data three main themes were identified, **Motives for desistance**, **Perceptions of OST** and **Recipe for successful desistance**. These main themes were identified and defined because of their relevance to the research question. **Perceptions of OST** encompassed both themes and sub-themes since this was the most extensive main theme, while **Motives for desistance** and **Recipe for successful desistance** only consisted of sub-themes. All themes can be found in Figure 1.
Motives for Desistance

Since desistance has been regarded a complicated process (Laub & Sampson, 2001), it was important to investigate how the participants viewed their life prior to OST and what motivated them to desist from illicit drug use. For this reason, the participants were asked to describe their motives for seeking OST. In the analytical process, the main theme Motives for desistance was found to consist of three sub-themes: Tired of lifestyle, OST or death and For the sake of loved ones. The participants in the present study supported the view of desistance as a complicated process (Laub & Sampson, 2001), since the sub-themes were not mutually exclusive. A number of the participants reported more than one incentive for desistance from illicit drug use.

Tired of lifestyle. A majority of the participants expressed a perception of having an unsustainable lifestyle prior to getting treatment. The prior lifestyles of these participants entailed hardship in the form repeated withdrawals and having to commit criminal acts in order to support their drug addiction financially. Eventually, the participants had grown tired
of these daily struggles. By reaching the conclusion that life with illicit drug use was unsustainable, the participants' motivation to change their lifestyle grew. This finding was similar to the results in a study on patients recently admitted to methadone programmes in Baltimore by Mitchell et al. (2011), in which participants were motivated to enter treatment after reaching a critical stage in their lives that caused reflection on their history of illicit drug use.

When you're an addict you wake up in the morning. Oh well, you're without drugs. Then your mind starts racing. Oh well, no money. Don't know anyone who has anything. And I'm starting to feel ill if I don't get anything in the morning. So then off to the liquor store. And with no money, what do you do? Well, you steal. Go into the liquor store and then steal a bottle, that's standard routine. Then at least my nerves were calmed. But the body wants its opiates. So, then you just go on. Standing and begging for money. Or you go and steal something and sell. So, you should know that this is no two-hour job. This is twenty-four hours. Around the clock. And no vacation or anything. (Jenny)

A heroin addiction is... Unsustainable. You experience those withdrawals over and over and over again... That's not a life worth living. (Adam)

**OST or death.** For half of the participants, the decision to seek OST was described as a life or death situation. Losing the will to live or witnessing deaths of drug abusing peers had made them realise that their life was on a destructive trajectory. One of the participants was on the verge of committing suicide before seeking treatment.

At the end, I felt that I didn't have the strength to carry on. 'I either get help or I will jump from the Alnö bridge.' I was that close! I was completely exhausted, in both body and soul and everything. (Jenny)

Once I woke up in a room. I had been unconscious. The heroin was so strong that I had been lying on the floor, on a carpet for about four hours until 2 AM. And my friend, he was lying dead in the bed. Many things like that. But that's life as a heroin user and heavy drug abuser. You live... Well, you're living with death at your side every day. (Isaac)

**For the sake of loved ones.** For a number of participants, seeking OST was motivated by an obligation to a loved one. Some of which were persuaded to seek treatment by a partner or family member, while others did not want to lose custody of their children due to criminal activities.
Eventually we got to the point where she said 'I can’t take it anymore. You have to promise me, or this is the last time'. And I said 'I can’t make any promises. I’m too sick, that’s impossible'. [...] But then we agreed to try it. I mean, there’s methadone. And so on. So, I called them [the staff] and got to meet them and a month later I was admitted. From that day, I was drug free. I don’t drink and I’ve never had a relapse. I mean nothing. Top student in the class. (David)

It is for that family, my family I’m doing this. It's not only me it depends on anymore. There's two more, my partner and my daughter. So even if I find it difficult visiting here every day, it's not that damn difficult when looking at my little girl and feeling that this is for her after all. (Lars)

**Perceptions of OST**

The participants were in a number of questions asked about their views on different aspects of OST. The questions ranged from the general view on OST in Sundsvall to specific aspects within OST, such as the OST staff, OST rules and routines as well as their views on OST medication. The main theme *Perceptions of OST* was found to consist of three themes: *Positive with OST, Negative with OST* and *Diversion*. In turn, these three themes were found to consist of several sub-themes.

**Positive with OST.**

The participants mentioned several positive aspects with OST, most of these concerned experienced differences in quality of life when comparing before and after OST admission. Other aspects were regarding OST staff and the rules of the program. All but one participant, who had mixed feelings, had positive views of OST in general. The specific aspects within this theme was identified in eight sub-themes: *More stable well being, Family relations better, No criminality, Mentally stronger, Planning ahead, OST as life changer, Staff and Positive view of rules.*

Within this theme, all but the two sub-themes *Staff* and *Positive view of rules* emphasise the individual and positive changes in life associated with OST. Three out of the eight sub-themes in this theme, *More stable well being, Mentally stronger* and *Planning ahead*, concerns the individual's abilities and psychological health, which are in line with a qualitative study on OST clients in Norway by Granerud and Toft (2015). Three other sub-themes, *Family relations better, No criminality,* and *OST as life changer*, concerns the context for the individual but seem to be dependent on the three sub-themes concerning the individual. The
sub-theme *More stable well being* seem essential for the participants and provides a foundation for other improvements in quality of life, in this context meaning other sub-themes identified, such as *Mentally stronger* and *Planning ahead*. These findings are similar to the study on OST patients by Lindgren et al. (2015), where participants described a gradual improvement in quality of life thanks to OST.

All but one participant had positive things to say about the treatment. The participant not coded in any of these sub-themes was the participant most recently admitted to the treatment. This participant had experienced, in his opinion, major mistreatment regarding medication in the form of medical side effects. Interestingly, this participant was not negative to OST in general but instead expressed this negative experience as a small matter compared to not being in treatment. This finding is similar to that of Granerud and Toft (2015), who found that even the most critical participants believed life would have been worse without OST.

**More stable well being.** A number of participants described their mental well being as more stable since their admission to OST. These participants stated that before admission, their mental state was uneven and unpredictable, while it had stabilised after admission to OST. This stability in mental well being was considered a basis for other improvements in quality of life.

My mental well being is much better now, because now I have a more balanced well being. I mean, I feel almost the same every day. Sure, things might happen. You might feel down sometimes, if a friend dies or something like that... But those kinds of things happen to everybody. (Adam)

The difference is I’m more stable. I experience the world with less dizziness, if you know what I mean... More stable in every sense of the word. A foundation has formed. A base to stand on, that I haven't had before... It helps tremendously. It creates possibilities... Thank god for methadone. (Erik)

**Family relations better.** A few participants also mentioned that their social network was stronger since their admission to OST. A reinforced family relationship and getting back custody of one's children were two aspects mentioned in this context.

For the first time in many years, I could be with them for the summer. We could have a vacation, you know. We could...do things together and...well...totally normal stuff, you know. I was their old son
again, you know. [...] I can do normal things. I can be with my family and stuff. I can see my son. These things, I could never do before. (Adam)

Well, practically everything. I mean, I have custody of my child... I have stuff I can keep, valuables. I have a nice apartment and a good relationship with my family. (Kristian)

**No criminality.** A number of participants reported having stopped committing crimes since OST admission. To these participants, receiving OST medication meant no longer having to buy illicitly sold drugs. Additionally, participants stated that receiving OST medication also meant avoiding for example having to shoplift or commit burglaries in order to finance their opioid addiction. This finding on desistance from illicit drug use and other criminal behaviour is in line with the results presented by Soyka et al. (2012) in a longitudinal study of individuals entering OST in Germany that showed a substantial decrease in criminal activities.

That you do good things, the right things and not being a criminal and live, like, a normal life... You don't have to steal and get money for drugs. You know, that kind of things. (Caroline)

All the criminal behaviour disappears. (Kristian)

**Mentally stronger.** A number of participants also claimed to be mentally stronger since receiving OST. Either they experienced a general improvement in psychological well being, such as better self-esteem, or a reduction of various psychological problems these participants had experienced while being addicted to illicitly sold drugs. Psychological problems, such as anxiety, were claimed to have been significantly reduced or disappeared completely since receiving OST.

If I lump together the different phases of my drug abuse, I feel much, much better. I have no anxiety, I can sleep quite well and have a healthy appetite...and I feel strong mentally and spiritually. To a large degree, I have the methadone to thank for that. (Erik)

I've had big difficulties with social anxiety. To sit and talk in a group like I'm doing now would have been impossible for me without the medication. Now, I could even hold a lecture if I had to [laughs]. Yes, it's supercool. I have no anxiety at all. (Kristian)
Planning ahead. Yet another positive change a few participants mentioned since being admitted to OST, was the possibility and ability to plan for the future. These participants claimed that as long as they were addicted to illicitly sold drugs, planning ahead was impossible for them. As previously mentioned, a significant amount of time and effort was spent to obtain these illicitly sold drugs prior to treatment.

I can plan for the future. I can function more like a normal person, you know. When I was an addict, I couldn't do that at all. You didn't operate right. This thing with planning ahead, it didn't exist. Now, I can plan what I'm going to do next month, for example. Back then, I couldn't plan what I was going to do tomorrow... The difference is huge. (Adam)

OST as life changer. Half of the participants reported OST having a strong positive impact on their lives. Among these participants, a number described this change as a major night and day difference, while a few even claimed that OST saved their lives. These participants expressed gratitude that OST had granted them the possibility to lead a sustainable and dignified life.

When I was injecting drugs, it was... You had the anxiety and were sweating at night and... When you become an injecting drug abuser, it's like night and day compared to now. There are no other people living more for the moment than junkies, because only the moment you're in matters. You have to get a fix all the time. And compared to that, I'm more peaceful now. (Erik)

When I was abusing drugs, it was like... Compared to that, it's like night and day. You can't even compare. I was very self-destructive in my abuse. Did drugs until even the other addicts didn't want anything to do with me. (Gabriel)

Well, it's like day and night. Today I wake up and I have to pinch myself and think...Yes, I got my life back...It's like I lived in hell before and I'm living in paradise now. (Jenny)

For me, I don't think there are any alternatives that would have worked in the long run... Without methadone, I would have been dead a long time ago. That's the truth. (Isaac)

Staff. The participants were also asked about their opinion on the OST staff, in order to investigate what influence staff had on their experience of the treatment. OST staff refers to all personnel directly involved with patients, meaning doctors, nurses and counsellors
working at the OST clinic in Sundsvall. All but one of the participants had a generally positive view of the OST staff.

I think the staff here is great. Great! (Adam)

Well, I have a contact here, or rather two of them, and they are just wonderful people [...] I trust them both blindly. (David)

I like the staff. They are educated, nice people. I can have an intellectual conversation and I know they have my best interest in mind. They take very good care of me. I like them very much. (Erik)

The staff here is great. Great. And I really hope that the ones that are here now will be able to stay [...] I don't think I have anything to complain about there. (Jenny)

When asked what makes the OST staff good, different participants mentioned a variety of examples. Mostly these participants expressed personal traits they considered favourable in a staff member at OST, but they also mentioned the staff going out of their way to help in this context.

A genuine interest and desire to help and support people with severe problems. And... Well...an understanding...and that they seek a good relationship between contact and patient, you know. (Isaac)

They help me with a lot of other stuff as well...my contacts. [...] They help me...well... That thing with my licence. And to talk... If it's something, that I need help with... I just have to call... I have difficulties making contact with people. (Gabriel)

He [male staff member] see things just the way we do... (Adam)

*Positive view of rules.* A number of participants expressed positive views about the rules of the OST program. Among these participants, the rules were perceived to be clearly defined and self-evident. For example, the OST rule against side abuse of illicitly sold drugs was regarded as a necessity for having a successful treatment. A few participants were also positive to the rules of admission to OST. Strict admission rules were also regarded as necessary in order to avoid those trying to obtain medication for diversion as well as individuals primarily suffering from addiction to drugs other than opioids. This is in line with OST regulations (NBHW, 2017), and is partially supported by a study on patients treated for
opioid dependence by Ferri et al. (2014) that found patients with a side abuse of benzodiazepines more likely to relapse than patients without such problems.

You're not allowed to do drugs on the side. That's pretty obvious, I think. (Bill)

I’ve never had any problems with rules. When I know what I want there are no problems. I have a positive view of urine samples because it enables me to show those helping me with the treatment that I’m taking it seriously. It’s the only way for me to show that, when I’m telling them that I’m not drinking, not taking any drugs on the side, I’m sober. And take my medication every morning as breakfast, kind of. And then I go to work. It is what it is, sort of. And it works terrifically. I’m here for me. (David)

I mean, let's say the main drug is amphetamine. Then I believe a person in that situation should primarily be treated with medication that helps against that. I believe you should be very careful with mixing in OST medication. I mean, it should only be entered in a person's life legally when there is a documented opioid abuse. So, no person is made into an opioid addict by mistake. (Isaac)

**Negative with OST.**

Even though all but one participant was generally positive to OST as a method of desistance from illicit drug use, a majority of the participants still had criticism on the treatment. This criticism was wide-ranged and encompassed both the rules and routines within OST. The criticism was identified, coded and grouped in the following 10 sub-themes: *Unequal treatment, OST not individualised, Negative to young patients, Negative to long-time patients, Feeling ignored, Lacks sufficient emotional help, Dose reduction, Worried about patients dying, Bound to treatment and Negative view of rules.*

Seven out of the 10 sub-themes within this theme refer to OST rules and routines relating to the patients, while the two sub-themes *Negative to young patients* and *Negative to long-time patients* concerns other patients. Lastly, only the sub-theme *Bound to treatment* concerns the patient’s own situation. This distribution of topics among sub-themes indicates that the participants major concerns about the treatment were regarding the OST structure. Similarities can be found in the study by Granerud and Toft (2015), where participants also reported dissatisfaction with the structure of OST even though they felt positive towards the treatment in general.
Four of the sub-themes in this theme are contradictory: Unequal treatment versus OST not individualised and Negative to young patients versus Negative to long-time patients. However, no overlaps, meaning no participant expressed contradictory opinions, were present in these sub-themes. The contradiction between these sub-themes instead exists due to the fact that some participants expressed one opinion while others expressed a contradictory one.

**Unequal treatment.** A number of participants were critical to what they considered unequal treatment of patients within OST. Most of the participants expressing this criticism opined that some patients were able to break the OST rules repeatedly without being discharged, while other patients were discharged after a single incident.

In my opinion, some get a great deal of chances doing the same mistakes repeatedly. While others, that may struggle even more, don’t get as many chances. They sometimes get discharged right away.

(Adam)

It’s different for different people, actually. Some get kicked out easily, while others get to stay. So, I think it’s unequal and I don’t know why that is. (Harry)

**OST not individualised.** Additionally, but from another perspective, a few participants criticised OST for not considering the individual patient’s needs. The treatment of patients was perceived as largely focused on preventing patients from misbehaving, making the routines too strict and inflexible. These participants considered such routines to have negative consequences for patients that do obey OST rules. This is in line with prior studies on OST patients (Lindgren et al., 2015; Mitchell et al., 2011), who found a desire among participants for OST to be more individualised and flexible.

There are so many formalities surrounding it all. I think they should be able to see the individual as well. To see who really wants to make a change [...] They’re [the staff] not stupid, they see where people are in life. What motivation they have. But then, we all get, like... You’re one number out of two hundred and fifty that comes and receive medication, unfortunately. (Lars)

For us well-behaved patients... We are tarred with the same brush. It would be better if these things were handled individually. I mean, if they treat the patients in accordance to our behaviour instead. That would be better. (Gabriel)
Negative to young patients. Another matter that a number of participants viewed as negative was that in the last few years, in their opinion, there had been a growing number of young people both seeking and being admitted to OST. The participants expressing this critical view were all between the ages of 41 and 54 years. These participants argued that individuals around 20 years of age are not as susceptible to OST as older patients that, in their opinion, genuinely want to desist from illicit drug use. The belief that younger patients are more prone to illicit drug use is partially supported in a study on patients at 11 other OST programmes in Sweden by Johnson and Richert (2015a), who found that illicit drug use, in the form of diversion, was associated with younger age in patients.

Many are too young. I think that, first and foremost, you should have tried a few other treatments that definitely didn't work. (Bill)

I think there are a great deal of young people that goes here [to OST]. They perhaps should try something else before starting on this kind of medication. The social services send 20 year olds here... They haven't even tried a regular treatment. (Gabriel)

Those that are younger, around 20 years of age, that are in the team [OST]... Many of them aren't done abusing drugs... That's what I think. (Jenny)

They should send those younger patients someplace else before they send them here. To start with medication isn't the first you should do. Their life will be ruined. You know, it’s ‘quite cool’ to get in here [in OST]. I don't know why they think so, but that’s the way they think. The guys think it's cool...and the girls wants to save them. (Gabriel)

Negative to long-time patients. One participant, on the other hand, was critical to what he considered to be a too lenient attitude towards patients treated at OST for a long time. Specifically, the routines for urine samples from patients were criticised.

Those that have been in the program a long time almost never have to give urine samples and there are many that smoke marijuana and other things, like daily. Even though they come here to receive their medication and never are ordered to pee. I think that is wrong. (Kristian)

Feeling ignored. A few of the participants stated that they for different reasons did not feel recognised by the staff at OST. These reasons included the staff not having the time to notice the patients, especially patients that had been in OST for a longer time and were more
independent, as well as the feeling that members of the OST staff didn't trust the patient or listen to their needs.

Like I said, I haven't taken any relapses, and I can kind of feel like, and I’ve told my contact, that I get somewhat forgotten but they are aware of this. (Jenny)

They [the staff] don't listen to me at all, therefore I have stopped [talking to the staff]. Instead, I ’bite my knuckles’ and I self-medicate sometimes... There are many [patients] that I know are feeling down. There are many patients in Sundsvall that have died because they don't have the strength to carry on... Some say that they [the staff] don't listen to them and maybe they [these patients] stop communicating. At least that's what I did. (Harry)

I feel like...they're not listening to you as an individual, the doctors. [...] They knew how critical it was to admit me, but they didn’t take it seriously. It really was as if they didn't listen. [...] When I have talked with the chief physician here, I had to bring another adult, because ‘There's no use for me to explain this to you, you don't understand anyway.’ And then they throw some medical terms around. (Lars)

**Lacks sufficient emotional help.** One other matter of criticism from a few of the participants was regarding, in their opinion, the lack of help for emotional problems within OST. One of these participants disclosed having emotional problems and viewed the supportive talk sessions he had been offered as ineffective. This sub-theme has importance for desistance from illicit drug use, since the study by Ferri et al. (2014) found a significantly higher rate of relapses among patients with comorbid anxiety disorders compared to patients without such comorbidity.

I don't feel well psychologically, plain and simple. And I’m not getting any help with that here. (Harry)

Participants also opined that OST focus too much on medication and should add other types of treatment and support for the patients. One participant for example, reported a need of support for female patients in OST with a history of sexual abuse:

When you have come this far, I have some requests regarding the team [OST]. They should develop a bit more. It shouldn't end with medication [...] I think that a women's group would be desirable. Because there are many of the women here that have been sexually abused. [...] That maybe once a
week or once a month the group could meet, we’d bring some crafts or something and just sit and talk.
(Jenny)

A few of the participants felt discouraged from talking about various emotional problems they might have due to lack of trust in the staff. The unwillingness of these participants to disclose sensitive information was either due to not feeling socially attached to the staff or fear of potential consequences for their treatment.

If you have thoughts of relapse, you don't want to tell that to people you hardly know... So, who would you open up to, without feeling you're being judged and they [OST staff] will hit the alarm button and get locked in or be refused medication and punishment. Like... for normal feelings, you know...
(Felicia)

I have, what many girls have... That you... cut yourself...like...you know...self-injury. If you cut yourself...everything else disappears. I mentioned that here [at OST]. Maybe they could help? 'But then you might be kicked out'... So, I didn’t say anything more. You don't want to talk about problems when they say stuff like that. Because that’s also a part of the addiction. Even though you’ve stopped abusing drugs... You might feel even worse and injure yourself. Because you know... When it hurts, you don't think about much else. I think there should be more... I mean, it’s better if you could talk to a counsellor or whatever. That might help. (Gabriel)

Dose reduction. Yet another issue that a few participants deemed as negative was the routine of reducing the dose of medication when a patient’s side abuse has come to the attention of the OST staff. This was perceived as a punishment for not following the OST rules, as exemplified by one participant:

It’s not sensible, if you have started side abusing, to reduce the dose [of medication] or in the worst case get kicked out. That's quite counterproductive. But I don't know what punishment you could use instead. There need to be a consequence to your actions... But to immediately punish a person by reducing dose I believe is very bad. That will make the person feel even worse...and continue to slip, continue the side abuse, when you don’t get the dose you need... It’s a downward spiral. (Erik)

Worried about patients dying. A few participants also had criticism regarding the death of individuals associated with OST. These individuals had either died while awaiting treatment or were patients in treatment dying due to circumstances that the participant considered being related to OST. Such circumstances were patients suffering from heart
complications or blood clots and not receiving proper treatment from healthcare due to, according to these participants, being an OST patient.

I can understand that they [OST staff] need to see that this person really has a problem with this substance [opioids]...but on the other hand there are other documentation that might prove that... I mean, like, the thing about getting a spot [in OST], I think It should be easier. Because there are a lot of people that die waiting. For example, during this admission stop that, I think, lasted over four years. I know of 15 to 20 people who died waiting just during that time... It was like they just stood there watching people die. I think that was completely insane. (Adam)

Many of those [OST patients] that have died have visited the hospital with physical pains but have been referred to OST 'You’re admitted at OST, go there!' They [medical staff outside OST] don't take you seriously. (Felicia)

Bound to treatment. Another matter a few participants considered negative with OST was the fact that they felt bound to the treatment. These participants opined that the requirement to visit the clinic on a regular basis affected their life in a negative way. For example, participants felt these visits prevented them from planning their lives freely. Similar results were found in a study on OST patients in England by Notley et al. (2014) where flexibility and gradually less supervision was important to the participants for a sense of trust and reward as an OST patient.

Actually, it’s like chemical shackles. I can't just leave. I have to come here and get the medication and such... Therefore, sometimes it just feels like 'I can't stand this', but then I think 'No, I don’t have the guts.'... You can't go on a vacation... Just being without [medication] for one day makes you start feeling bad. (Caroline)

I am really happy for this treatment...and really don't want to lose it, that's not what I'm saying, but you are extremely tied up. But that’s nothing compared to being on the streets. But that was then and now is now, and now I wish for something better. So, my wish would be to get it [the medication] once every six months. (Jenny)

Negative view of rules. This sub-theme was formed by the negative views regarding the rules of the OST program, and were expressed by a majority of the participants. These negative views on OST rules varied. For example, the rules against side abuse were both regarded as too strict as well as too lenient. Similarities can be found in the study by Granerud
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KR033G

and Toft (2015), where patients felt dissatisfied with being forced to follow the rules of the OST program. Granerud and Toft (2015) concluded that the patients felt objectified and that they had no influence on their treatment.

Recently, unfortunately there was a guy who was discharged [...] who died. I'm fully convinced that if he'd been allowed to stay he would have sat here alive today. Unfortunately. But I understand them [OST staff] too. I mean it becomes a risk. Perhaps they want to save their own skin a bit too. If a patient is on a pretty high methadone dosage and start mixing in pills and die, I mean... Then it's like 'it's your fault' kind of. (Adam)

[The rules] are a bit too nice actually. There are many running around in the city centre, drinking and swallowing all kinds of things. I believe they are ruining it for the rest of us that aren't misbehaving. (Gabriel)

Perceiving the admission process as being too strict was the most recurrent negative view of OST rules. Among these participants, the demand on a documented opioid addiction was viewed as too strict and there was a belief that the treatment should be available to anyone in need of it. This view was shared both by participants with documentation on prior treatments or drug convictions and by those having no such documentation. Long waiting lists and strictness on documentation when seeking OST was also criticised by the participants in a qualitative study by Richert and Johnson (2015) on illicit use of OST medications in Sweden. For some participants in the present study, the critique was mainly directed towards the use of urine samples during the admission process to ensure that the individual seeking OST solely used opioids and no other illicitly sold drugs. This routine was viewed as problematic, since opioids were not always available on the illegal market in Sundsvall.

You have to give urine samples for one to three months and they have to only be positive for opiates. And I believe that's a really stupid rule, because then they haven't familiarised themselves with the real problem. There is nothing that causes worse withdrawals than opiates. And when you're that ill and perhaps have money and stuff. It's there and then I mean. To ease that, you're prepared to do exactly whatever it takes. Exactly whatever it takes. And if there are no opiates to get hold of, then you take something else. (Adam)

This documentation fundamentalism... It's all about documentation. It's absurd! I understand society is founded on some sort of evidence-based ground for investigations, but this is pure absurdity. They
[OST staff] wanted me to have failed treatments, prison convictions and prosecutions. All this to receive treatment! It's completely insane! (Erik)

Some aren't admitted due to not enough documentation, they say. Or because they also abuse other drugs. But I have also abused other drugs, so it's really weird. I believe this help should be available to anyone who wants it. (Kristian)

**Diversion.**

A criterion for desistance from illicit drug use is not breaking OST rules by illicitly selling or sharing prescribed medication during treatment. For this reason, participants were asked how they viewed rumours of OST medication being sold illicitly on the streets of Sundsvall. By answering this question, all 12 participants expressed their view on diversion. The theme of diversion was found to consist of eight sub-themes: *Critical view of diversion, Diversion unavoidable, Limited diversion, Other sources, Major diversion, Motive – poverty, Motive – helping friends* and *Current OST routines ineffective*. A few participants viewed diversion as a major occurrence within OST, while a number of other participants viewed it as a limited occurrence. There were no overlaps, meaning no participant expressed both views, between these contradictory perceptions of diversion. Interestingly, all but one of the participants included in these two groups with contradictory views also believed most opioids on the illegal drug market in Sundsvall have other sources than the OST program.

**Critical view of diversion.** Half of the participants expressed critical views towards patients diverting their medication, while the remaining participants either perceived diversion to be an unavoidable phenomenon or did not express any clear opinion. To the participants perceiving diversion negatively, not following the OST rules against diversion was viewed as an unacceptable behaviour. Participants perceiving themselves as well-behaved also feared that rule-breaking OST patients would cause undesirable attention from media or the police. By extension, such negative public attention on diversion was feared to have consequences such as diverted types of medication no longer being prescribed or the whole OST program shutting down. The most commonly criticised type of diversion was selling medication to people in their youth, since this was believed to entice people into drug use and addiction.

Despicable. I think it's despicable. I think it's beyond criticism. And the worst part is those selling to sixteen or seventeen year olds. I mean that's frightening. If I would witness or find out about it, I would
report it directly. On the spot. They can call me whatever they want. Those not needing their medication should be thrown out. (Jenny)

They shouldn't be here, those ruining it for the ones who are motivated. Perhaps someday they will close this place and then what will the rest of us do? (Bill)

**Diversion unavoidable.** Diversion was seen as an unavoidable problem within OST by a few of the participants. In their view, no matter how aware OST staff was of diversion there was no way of preventing it. Patients diverting their medication would keep on doing it in the foreseeable future as an unfortunate side effect of the treatment, according to these participants.

I feel sorry for them. I can understand why they sell. And they're drug abusers, they will sell now and they will sell in fifty years and in ten years and in twenty-five minutes. That's the way it works. (David)

I mean that's how it is. What could they do about it? I mean, there isn't much you can do, I believe. Honestly, it's that way in larger cities too. It's that way everywhere. (Isaac)

**Limited diversion.** According to a number of the participants, the occurrence of OST medication being diverted was limited. Some stated that the OST medication was rigorously controlled and therefore believed the rumours of diversion to be exaggerated. Other participants believed the diversion to be limited due to minimal demand of diverted OST medication on the illegal drug market in Sundsvall. One participant, who viewed diversion as limited, had been in OST for several years and declared she had only been asked to sell prescribed medication once or twice during her treatment.

Even if it were a leakage of medication from here, which I know is very, very limited, I don't think there would be...any demand, because that demand is already met...by what's already there. The supply is bigger than the demand. (Adam)

If this was a huge problem right here, I believe I would have received more offers. Therefore, I believe it comes mostly from outside. Actually. Because those who has medication are often very, very protective of it. (Felicia)

**Other sources.** A majority of participants stated that most illicitly sold buprenorphine in Sundsvall had sources other than the OST program. While some believed that these opioids
were mostly ordered through the Internet, France was mentioned several times as a source in this context. These participants either had experience of buying buprenorphine smuggled from France or believed the buprenorphine had been smuggled from France for several years, since the brand of buprenorphine available on the illegal drug market was different from the one used in OST. One participant also believed this brand of buprenorphine smuggled from France had replaced the market for heroin in Sundsvall. These findings are in line with the report by NBHW (2015) who found that only 10% of the traceable illicitly sold buprenorphine seized by the police in Sweden originated from OST.

And all the web pages you can go to... There aren't any real drug dealers left in this city anymore. It's just brats running around at 'Navet' and...well...have ordered from the internet. There's a lot of that. (Gabriel)

It's because they have noticed that most of these drug rings make more money by smuggling one pill, this big. They pay less for them and earn more, make more profit. If they can smuggle a hundred thousand of these pills, it makes up a third of the prison sentence time when compared to what sentence time a kilo of heroin would lead to. And it's three times the profit. (Adam)

There's a lot that comes from France. (Kristian)

France is where the Subutex usually comes from. The kind that's illegal here, it comes from France. (Lars)

**Major diversion.** In contrast to participants believing diversion to be limited, a few viewed diversion as a major occurrence within OST. This included participants who believed medication was frequently either shared with acquaintances or sold on the illegal drug market. One participant who held this view had experience of buying medication from OST patients prior to treatment and also disclosed having diverted on a few occasions during treatment. This finding was supported by a study that found having had an OST patient as a primary source of illicitly sold opioids prior to treatment to be a risk factor for diversion (Johnson & Richert, 2015a).

There are many that get medication here, who sell or share medication to help others. (Lars)

I mean, if people hadn't been able to smuggle and sell on the street, I wouldn't have started using the medication in the first place. I bought from people in treatment. (Kristian)
**Motive – poverty.** For a number of participants, economic desperation was believed to be the most common motive behind diversion. One expressed belief was that there were OST patients asking to have their prescribed medication changed into one easier to divert. The typical diverting patient was viewed as living in poverty and homelessness. The participant that disclosed having diverted his medication in the past supported poverty as a motive for diversion. Interestingly, need of money was the second most common motive for diversion in a previous study of OST patients (Johnson & Richert, 2015b).

There are a lot of people that have changed to Subutex, just to earn money. Just to go down town and sell. (Caroline)

I understand why they do it. Because this is people on welfare and like...Well, they have nothing. They have nothing. They may not have a place to live and receive financial support of three thousand crowns a month and that's supposed to cover everything [...] They get, I don't know what they get, maybe five, six hundred crowns for one of those bottles [of methadone] and that's an extreme amount of money for someone who has nothing. (Erik)

But I’m not selling now. If I were, I would be honest and admit it. But I have sold on a few occasions when I couldn't afford food. (Kristian)

**Motive – helping friends.** Instead of poverty, a few participants believed the main motive behind diversion was helping acquaintances suffering from opioid withdrawal. These acquaintances could be other OST patients unsatisfied with their dosage. They could also be friends not having access to OST medication and therefore having to buy impure drugs on the street to treat their opioid addiction. Similarly, this was the most commonly reported motive for diversion in the previously mentioned study by Johnson and Richert (2015b).

Additionally, other studies have found that buprenorphine was primarily used illicitly to treat withdrawal sickness or as a substitute for other drugs rather than seeking euphoric states (Cicero et al., 2014; Håkansson et al., 2007).

In my experience, it's... there are those who help each other, like, within the programme. Those who don’t think the dosage is enough and stuff like that. (Felicia)

In my experience, they're not running around trapping new people into drug abuse. They are selling it to those not being allowed treatment and getting a dose in the morning and spending the rest of the day
doing something productive, like a job. […] To many, it’s not all about making money, it's about helping others so they don't have to abuse illegal drugs and die after buying a bag of shitty drugs. (Lars)

**Current OST routines ineffective.** A few participants criticised the current diversion prevention routines. Despite the staff watching patients closely, the routines for supervising the medication were seen as ineffective according to these participants. The participant who admitted having diverted medication in the past also disclosed smuggling part of the dose when staff had their back turned, for later self-medication purposes. This participant believed the staff were closely monitoring some patients but were too trusting in others.

It’s the Subutex that...they save in their mouth. Still you're supposed to sit there in twelve minutes and the pill is supposed to melt, but some wipe their mouths dry and... keep it. (Caroline)

They can place the cup on the table and turn their backs. Get it? I guess some have worked here for too long. [...] And then they kind of just sit in front of their computer screen. How difficult is it in that case? (Kristian)

**Recipe for Successful Desistance**

A third main theme was also identified in the data. A majority of the participants addressed necessary components for desistance from illicit drug use as an OST patient. These vital components were related to the treatment itself, as well as to individual factors. The components were analysed and grouped into seven sub-themes: Having an occupation, Having a strong will, Stability in social network, Having a home, Positive alliance between patient and staff, Examining causes behind relapse and Having the right medication. As a side note, a majority of the participants reported more than one component considered necessary for successful desistance from illicit drug use, suggesting that desistance is not dependent on one component alone.

**Having an occupation.** A majority of participants stressed the importance of having some type of occupation, for example a job or being a student. For instance, one of these participants had experienced a relapse after being fired from his job. Having an occupation was associated with being pleased with oneself and taking pride in having a purpose. This was also seen as providing a comfortable daily routine that served as a distraction from thoughts of relapse into illicit drug use. Involvement in work and other daily activities has
correspondingly been reported to increase self-esteem in OST patients (Granerud & Toft, 2015).

It [OST] worked really well, it did actually. Up until, about two and a half years in, several things created a chain reaction. I lost my job, I lost a serious relationship with a girl and such. And then I started side abusing a little bit and completely spiralled out of control. Finally, they [OST] discharged me. It took me five years to get myself back here again. (Adam)

I know how it is just sitting at home and boredom kicks in. Then it’s easy to relapse. (Kristian)

And to have work, [...] to be proud over oneself and what you do. Because I mean, these [OST patients] are no dummies, they also want to be a productive part of society. (Gabriel)

**Having a strong will.** Half of the participants expressed a necessity of having a strong determination when deciding to desist from illicit drug use. Moreover, this decision required having the discipline to maintain desistance. This sub-theme might be an important precondition for the other reported components to have an effect on desistance, since there is strong scientific support for the importance of inner motivation when trying to change a problematic behaviour (Farbring, 2014).

You have to show real will power. That ‘I am ready to do whatever it takes to be in this treatment’. You have to be ready to give up everything you have out there. You have to let go of friends, everything. (Bill)

And I also feel that now that I’ve been granted this possibility. Then it’s actually up to me to show the gratitude, the discipline to ‘This is what matters now’. I’ve never had that view that many drug abusers have, that ‘I only demand this treatment’ but not showing any motivation or will for anything more or even gratitude at all in receiving it [OST]. (Erik)

First of all, you need a will to stop. To want a different life. That's number one. Because if you don't want that, you keep doing other things as well. Then this just becomes another drug to use. (Lars)

**Stability in social network.** A number of participants also believed OST patients need to have a stable social network. Stressful interpersonal circumstances, such as relationships ending or having partners with an active illicit drug use, were seen as risks for relapse.
Exposure to negative influence from drug abusing peers was also seen as an obstacle from having a successful treatment.

At first it worked great, but then...when my daughter was three, things were hard with my partner. He was side abusing and I was stressed out from taking care of the children and our home and stuff, so I started taking pills [...] Later I started injecting the methadone [...] it was terrible and I just wanted to kill myself. (Caroline)

Well the way I see it, the first rule is to not associate with active drug users. Break contact with everything and everyone bad around you. You should have a positive network around you. (Kristian)

**Having a home.** A number of participants perceived having a home of their own as a vital condition for desistance from illicit drug use. These participants stressed the importance of escaping the hardships of living without a shelter.

You need a home, in order to have structure. (Kristian)

Back then I was homeless for eight months. It was the worst time of my life. I had to use every day. It didn’t matter what kind, as long as they were numbing. (Harry)

**Positive alliance between patient and staff.** A few participants felt that there must be teamwork between patient and staff if the treatment is to be successful. To these participants, a successful treatment consists of more than just medication, it also entails getting guidance and emotional support through supportive talk sessions on a regular basis. Being honest and trusting in the staff was opined to result in the best possible treatment and might facilitate desistance. This finding was supported in the study by Granerud and Toft (2015), who found that the building of trust with OST staff was an important resource for their participants.

I believe that if you’re going to help heavy drug abusers, serious drug abusers, you have to meet them wherever they are in life. Take it from there and really be there and guide them. I mean, there has to be more than just medication. (Isaac)

**Examining causes behind relapse.** A few participants believed the best way to handle a relapse of a patient is to examine the causes behind the relapse. This approach was opined to manage the patient’s problem constructively and potentially prevent future relapses.
If you relapse, perhaps the medication shouldn't be stopped. Instead, raise the question and ask what is going on. What is the reason behind the relapse? (Lars)

**Having the right medication.** A few participants thought having the right type of medication and dosage was essential for a successful treatment. This meant feeling balanced and not experiencing any negative side effects of the prescribed medication. According to these participants, having this balance lead to trust in the effectiveness of the medication and not experiencing withdrawals.

You feel well as an OST patient if you get through the first phase, being set on the right dosage. So, you're stable. (Isaac)

**Discussion**

The purpose of this study was to investigate the patients' views on opioid substitution treatment as a method of desistance from illicit drug use. The findings generated three main themes, *Motives for desistance*, *Perceptions of OST* and *Recipe for successful desistance*, which in turn consisted of several themes and sub-themes. The main theme *Motives for desistance* was established on the basis of the relevance these motives had on initiating the participants' desistance process. According to Laub and Sampson's (2001) definition, the desistance process likely started prior to the participants' OST admission. The main theme *Perceptions of OST* was established on the basis of it concerning the patients' views on the current situation regarding OST. Lastly, the main theme *Recipe for successful desistance* was established on the basis of it comprising the participants' views on requirements for desistance from illicit drug use by means of OST.

**Motives for Desistance**

Since the participants recurrently emphasised that their lives were unsustainable prior to seeking treatment, either due to criminality or life-threatening circumstances, having dissatisfaction with the quality of life was found to be an important incentive for having the will to seek OST in the first place. In summary, viewing life with illicit opioid use as problematic seemed to be a vital incentive for deciding to seek OST and thereby initiating the desistance process. This also supports OST regulations having a demand on a proved opioid addiction during the admission process (NBHW, 2017). Individuals without a history of
problematic opioid addiction may lack this incentive and in such cases OST perhaps should not be prioritised over other suitable interventions.

**Perceptions of OST**

**Positive with OST.**
The theme *Positive with OST* demonstrates the importance of OST for the participants. The treatment had improved the participants’ quality of life in several aspects. Primarily, these improvements concerned the individual but they also encompassed the individual's ability to operate in a pro-social context. The sub-themes *Mentally stronger* and *Planning ahead* suggests that OST strengthens the individual's ability to suppress negative impulses and make contemplated decisions. Interestingly, Bell et al. (1997) found a relationship between illicit drug use and other criminal behaviour. With this in mind, the sub-themes *Mentally stronger* and *Planning ahead* might be what provides the basis for the sub-theme *No criminality*, which indicate that OST enables the individual to desist not only from illicit drug use but also desist from having to commit other crimes in order to support the drug habit financially.

Findings in the theme *Positive with OST* are similar to the results presented by Lindgren et al. (2015), in which participants described both desisting from drugs and a process of healing and improvement in quality of life. They are also similar to that of the study on discharged OST patients in Malmö by Svensson and Andersson (2012). The participants in that study described OST as having resulted in improvements in mental health, improvement in family relations and desistance from criminality. Unfortunately, these improvements had later deteriorated after discharge from the treatment (Svensson & Andersson, 2012), making these benefits of OST all the more apparent.

**Negative with OST.**
When talking about the negative experiences associated with OST, the participants had concerns regarding several aspects of the treatment. The findings in the sub-theme *Lacks emotional help* suggest that there were anxiety-related problems among the participants. For this reason, the staff of OST should increase efforts to reach patients with anxiety issues and more effectively communicate that the treatment is beholden to provide psychological support by regulations (NBHW, 2017). This is of particular importance since it has been reported that 74% of individuals in this specific group of patients suffer from psychiatric comorbidity (Augutis & Hillborg, 2011). In a systematic review, it was shown that structured psychosocial
Interventions in combination with OST medication had efficacy in treating opioid addiction (Dugosh et al., 2016). These findings suggest that more efforts in OST should be directed towards better communication with patients with anxiety problems and to motivate them to participate in psychosocial interventions, this in order to improve these patients’ potential for continued desistance.

For a majority of the participants, the OST rules were viewed negatively. Similar to the participants in the study by Richert and Johnson (2015), the participants in the present study requested less strictness in the OST admission process. In the conclusion of their study, Richert and Johnson (2015) argued for more generous inclusion criteria in the patient admission process. However, since the purpose of OST medication is to treat opioid addiction solely (NBHW, 2015), it is important to ensure that the individual seeking OST in fact suffers from an opioid addiction. This is of particular importance since it has been shown that OST patients with an active side abuse were not only more likely to relapse (Ferri et al., 2014), such patients were also more likely to divert medication regularly when compared to other patients (Johnson & Richert, 2015b).

**Diversion.**

Half of the participants in the present study viewed diversion negatively in general. A majority also believed most illicitly sold buprenorphine to have other sources than OST, regardless of their view on the extent of diversion from OST. The main concern regarding diversion was selling OST medication illicitly to people in their youth and thereby enticing them into illicit drug use. The participant who had diverted medication in the past shared this specific critique on diversion and also disclosed having bought opioids illicitly from OST patients prior to entering treatment. However, the results in the study by Richert and Johnson (2013) indicated that OST medication were not a major problem among young individuals with illicit drug use.

**Recipe for Successful Desistance.**

When the participants discussed components that were important for an OST patient to desist from illicit drug use, half mentioned the importance of having a strong will and a majority mentioned having an occupation. Interestingly, all 12 participants in the present study seemed to be on a successful path in their treatment at the time of the study, but only three participants had any type of occupation. Therefore, being unemployed did not appear to be
that important for desistance in this particular sample. However, having an occupation also entails other components mentioned by the participants, such as being able to afford having a home. A stable income and a productive daily routine could also provide distance from peers with active illicit drug use. Having a stable social network is a particularly important component, since socialising with individuals using drugs illicitly has been shown to be associated with diversion (Johnson & Richert, 2015a). For this reason, it is important that OST patients receive sufficient support in managing these social factors in their lives. Another component for successful desistance was having the right prescribed medication and dosage. This could not only be necessary for treating the patient’s opioid addiction, having the right medication dosage might also have importance regarding diversion (Johnson & Richert, 2015b). It has been shown that not feeling in need of the entire medication dosage was more common among patients diverting medication on a regular basis when compared to those not diverting regularly (Johnson & Richert, 2015b).

**Applying the Theory**

By taking the patient's view on OST into consideration, the developmental ecological action theory of crime involvement by Wikström (2005) may provide an explanation for why some OST patients break the rules of the program while other patients achieve desistance from illicit drug use. According to the theory by Wikström (2005), development of executive functions and moral judgement is major sources for change in the individual's propensity to commit criminal or immoral acts. The findings regarding participants feeling mentally stronger, more stable and able to plan ahead since admission to OST suggests such change in a patient's executive functions (Wikström, 2005). Furthermore, having a stable well being and a strong will to follow the rules of OST may lead to a higher threshold of self-control, which could provide individuals with low thresholds for temptation with an improved process of choice and the ability to steer life in a positive direction (Wikström, 2005). In addition, participants were motivated to desist from illicit drug use and seek OST by realising that having to commit acquisitive crimes in order to support their drug habit was unsustainable. This realisation could be viewed as a change in moral judgement (Wikström, 2005), which in turn influence the action alternatives the individual’s perceives in any given situation. These findings emphasise how OST might assist the individual in becoming strong enough mentally to suppress destructive impulses and make contemplated decisions, which in turn may provide the individual with the tools to desist from illicit drug use (Wikström, 2005).
Another major source for change in criminal propensity is the activity field (Wikström, 2005). The findings regarding the influence of family and loved ones when being motivated to desist from illicit drug use emphasise the importance of factors in the individual’s activity field. Consequently, improved family relations after OST admission may represent changes in the activity field that encourage the OST patient to continue the desistance process (Wikström, 2005). Additionally, having a positive alliance with OST staff further stress the potential of the treatment to develop the part of the patient’s activity field that inhibit illicit drug use (Wikström, 2005).

The theory by Wikström (2005) claims to explain why individuals break moral rules and commit crimes, in this context exemplified by breaking OST rules, by making intentional choices. These intentional choices may occur when individual characteristics of the patient interacts with the activity field in which the patient participates daily (Wikström, 2005). The findings regarding diversion suggests that this form of illicit drug use is primarily influenced by the OST patient’s activity field (Wikström, 2005). For example, the participant that had diverted in the past also disclosed having bought OST medication from another patient prior to treatment admission, which suggests that other persons in the activity field can be a promoting factor for diversion (Wikström, 2005). This participant also belonged to those reporting that OST staff failed in preventing diversion by being inconsistent in monitoring the patients when taking medication. According to the theory by Wikström (2005), these situations presented patients with tempting opportunities to commit diversion. Having an activity field characterised by peers with illicit drug use and an insufficient monitoring by OST staff may therefore promote diversion, even for individuals with a moderate threshold for such illicit drug use (Wikström, 2005).

These explanations for rule breaking and desistance by the theory of Wikström (2005) postulates that all decisions are intentional choices made by the individual. However, drug addiction may be viewed as a chronic illness where a drug has taken control of the individual’s life (Agerberg, 2014). Therefore, there is reason to question whether individuals suffering from drug addiction truly have free will regarding their illicit drug use. This is an issue that the theory by Wikström (2005) fail to consider. Additionally, the theory by
Wikström (2005) does not include biological factors (Farrington, 2005). This is of importance since addiction, at least partly, is hereditary (Agerberg, 2014).

In summary, this theoretical framework by Wikström (2005) provide an explanation for how changes in cognitive functions, moral judgement and activity field assist the patient to achieve desistance from illicit drug use by means of OST. Diversion could also be explained by factors in the patient’s activity field (Wikström, 2005). However, the theory failed to provide an explanation for how opioid addiction influence the patient’s ability to make intentional choices.

Methodological Considerations
There are some considerations regarding the quality of the present study that need to be addressed. Since the interviews were semi-structured, occasionally less open-ended follow-up questions were used in order to probe specific aspects of topics brought up by the participants. This potentially affected the participants’ answers to these questions. In order to minimise loss of credibility in the study (Cope, 2014), interpretations and conclusions from answers to these less open-ended questions were drawn extra carefully and with less certainty.

Furthermore, the interviews were conducted in Swedish. The quotes included in this study were later translated into English. Translation of quotes is a limitation to this study, since it may produce a bias in the content of the quotes presented (Al-Amer, Ramjan, Glew, Darwish & Salamonson, 2015). However, in the analysis process the data was in the original language and was therefore not affected by this potential bias.

Another concern was that the studied population might not be identical to those of the studies cited. In addition, the term OST is not universal and varying terms were used in different studies on this type of treatment. Furthermore, four articles cited might be considered outdated (Bell et al., 1997; Braun & Clarke, 2006; Håkansson et al., 2007; Laub & Sampson, 2001). However, three of these articles were cited mainly for definitions of terms and concepts important for the research topic, while the study by Håkansson et al. (2007) was cited due to the sparse research on illicit use of OST medication in Sweden (Richert & Johnson, 2013). Four articles by the same authors have been cited to support findings in the present study (Johnson & Richert, 2015a, 2015b; Richert & Johnson, 2013, 2015). Nonetheless, only one of these studies was cited to support the same particular finding and the
studies were deemed of high relevance to the research topic. Therefore, discarding these studies was considered to impair the quality of the present study.

Notwithstanding the previously mentioned limitations, the study has several strengths. No participant in the study was offered any form of compensation, minimising the risk of ulterior motives for participation. Participants disclosed very sensitive personal information regarding their past, indicating a sense of trust in the researchers. Therefore, there is reason to believe that the participants’ disclosed views were sincere. Cooperation with the OST staff in Sundsvall during the data collection improved the quality of this study by facilitating recruitment of participants presumably not available otherwise.

**Recommendations and Conclusions**

There is a need for more longitudinal research on OST patients to gain a further understanding of individual factors important for desistance from illicit drug use in this population. Regarding the controversy surrounding OST (Johnsson, 2010), research that advance the knowledge on what makes a successful case in OST is imperative. Should successful treatment be considered in terms of the OST patient's law-abiding social conformity, physical opioid addiction symptoms or psychological well being? These questions are important to address and could provide fruitful information to public awareness of OST. When collecting data, a need for further research on the attitudes towards OST patients in the Swedish healthcare system and other governmental agencies was also evident.

In conclusion, despite addressing several aspects within the treatment perceived as lacking, the participants viewed OST as an essential method for desistance from illicit drug use by providing mental strength and support for an improved lifestyle. Viewing their past illicit opioid use as problematic was central in initiating desistance and motivated participants to seek OST. A sincere will was found to be a vital component to achieve desistance from illicit drug use. Additionally, participants had a critical view of diversion and feared it might have negative consequences on the treatment. Furthermore, the results indicate a need for an improved communication between patient and staff for the treatment to be as successful as possible in helping the patient in desisting from illicit drug use. Opioid substitution treatment brings motivation for seeking the treatment in the first place, OST yields motivation for
discipline during treatment and motivates the patient to further pursue a higher quality of life without illicit drug use.
References


Appendix: Interview Guide

1. Would you like to start by telling us briefly about yourself?
   How old are you?
   Do you have any family?
   (If YES) Would you like to describe your relationship with your family?
   Do you have any occupation?
   (If NO) Have you had a previous occupation?
   What are your living arrangements like?

2. Why did you seek OST in the first place?

3. What are your thoughts about the OST program in general?

4. Would you mind telling us what medication you have?

5. What are your thoughts about the OST staff?

6. How long did you wait before being admitted to OST?

7. What are your views on the OST rules for being admitted in the treatment?

8. How do you view the OST rules for staying in the treatment?

9. To our understanding, the types of medication used in OST are being sold on the illegal drug market here in Sundsvall. What are your thoughts on that?

10. In your experience, how do people in general view OST patients?

11. Before we finish the interview, I would like to ask you if there is anything important that we have missed to ask?