Patients in Court-Ordered Substance Abuse Treatment

Studies in the involuntary process by interview, assessment and randomised trial

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<td>LVM</td>
<td>Lagen om vård av missbrukare i vissa fall</td>
<td>The Care of Abusers (Special Provisions) Act</td>
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<td>LPT</td>
<td>Lagen om psykiatrisk tvångsvård</td>
<td>The Involuntary Psychiatric Care Act</td>
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<td>LSPV</td>
<td>Lagen om sluten psykiatrisk vård</td>
<td>The Compulsory Mental Care Act</td>
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<td>SiS</td>
<td>Statens institutionsstyrelse</td>
<td>The National Board of Institutional Care</td>
</tr>
<tr>
<td>SFS</td>
<td>Svensk Författningssamling</td>
<td>Swedish Collection of Acts and Regulations</td>
</tr>
<tr>
<td>SoL</td>
<td>Socialtjänstlagen</td>
<td>The Social Service Act</td>
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<tr>
<td>SoS</td>
<td>Socialstyrelsen</td>
<td>The National Board of Health and Welfare</td>
</tr>
<tr>
<td>SOU</td>
<td>Statens offentliga utredningar</td>
<td>Swedish Government Official Report</td>
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Definitions:

Against the patient’s will

Several terms can be used to describe the situation when a patient is treated against his/her will by a legal decision. The following terms are used in this thesis:

Court-order - which stresses the fact that it is the court that makes a decision on commitment.

Involuntary commitment - which is frequently used in guidelines to describe the legal process.
Evaluation – which is performed by a social worker in order to provide a basis for the social welfare board’s decision on whether to petition the court for commitment or not.

Petition – which is the decision by the social welfare board to request a commitment at the court.

Decision – which is made by the court on whether to commit the patient to involuntary care or not. The court’s decision-making is not limited to the evaluation in the petition and the court can ask for additional information.

Diagnosis

There are systems that can be used in defining the patient’s harmful use of substances. The Swedish health care has two systems: International Classification of Diseases (ICD) by the World Health Organisation and Diagnostic and Statistical Manual of Mental Disorders (DSM) by the American Psychiatric Association. ICD, in its 10th version, uses the concept Mental and Behavioural Disorders Due to Psychoactive Substance Use and, to specify the conditions, Harmful use and Dependence Syndrome (WHO 2004). DSM, in its 4th version, uses the concepts Substance Abuse and Substance Dependence (APA 2000). There may be a future change to the DSM since the recommendation from the workgroup revising the DSM IV was that the Substance Abuse and Dependence should be combined into one disorder, Substance Use Disorder (www.DSM5.org).

The Swedish social welfare boards do not have an agreement on a mutual and specific diagnosis for this condition. Further more, in the LVM-legislation, the use of substances has not been defined aside from the requirement of harmful and continuous use.

In this thesis the patients originate from samples in health care as well as social service. Therefore there is no consistent diagnosis that could be applied for defining the patients’ use of substances with the exception of the patients in Paper IV. The presumption has been that the patients have a use that can range from risky to severe and the concept Substance Abuse includes all types of conditions in the thesis.

Substance Abuse is favoured by several major institutes such as the National Institutes of Health and the World Health Organisation who use Substance Abuse as a general term. Abuse is also a term on a high level in the hierarchy of Medical Subjects Headings (MeSH).
List of papers

This thesis is based on the following papers, referred to by Roman numerals.
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Paper I was published in the name Larsson-Kronberg.
Introduction

Commitment to involuntary care is a multistage process comprising many different aspects; legal, psychological, medical, social and ethical among others (Schottenfeld 1989; Klag et al. 2005; Kleinig 2004). It can also be analyzed from the perspective of a continuum starting from the report to the legal and social authorities, the evaluations on whether to commit or not, the actual commitment and aftercare following involuntary treatment. Enhancing knowledge on the total process of commitment requires intense research studies with an application of a wide array of research methods. To investigate the experience of the person subjected to evaluation and commitment is especially challenging because of the violation of the individual’s right to make decisions concerning his own life (Kjellin & Nilstun 1993; Eriksson & Westrin 1995; Lidz et al. 1995). The legislation can also be an impediment to apply the state-of-the-art design of randomised controlled trials due to obligating legislation and require the use of different types of designs, for example quasi-experimental (Geller et al. 1997; Maddux 1988).

Wild et al. studied in 2002 research trends in involuntary substance abuse treatment and presented an overview from a sample of 170 English-language articles obtained from the databases - Medline, Pubmed, Embase and Psychinfo. About half of the articles were non-empirical (literature reviews, policy proposals, legal and ethical commentaries on involuntary treatment). Empirical studies published between 1988 and 2001 (n = 71) were divided into different research areas with one example being “the evidence base for judging effectiveness of compulsory treatment” including 18 effectiveness studies. Among those studies there were two randomised controlled trials and one case-control, the rest of the studies had non-equivalent comparison groups. When using referral and retention as success measures the studies showed benefits for involuntary over voluntary care, while measures like criminal behaviour and substance use showed no advantages for either type of treatment.

A commission reviewing the Alcoholism and Drug Addiction Act in New Zealand commissioned a review of the effectiveness of involuntary
treatment of substance abuse in non-offenders. The conclusion from the review was that there were few identified research studies and that they were methodologically inadequate (Broadstock et al. 2008). There was no evidence for involuntary care having outcome advantages over voluntary and no evidence for harm by involuntary care.

Finally, a study from Norway evaluating systematic reviews, randomized and controlled trials of involuntary care of patients dependent on opioids (Steiro et al. 2009). The researchers concluded that no study could be included in the review because they could not find any studies evaluating effect of involuntary care of this group of patients. They also concluded that there were very few, if any, studies of involuntary care of a high quality in regard to research design.

One conclusion that could be drawn from these articles is that there exists a definite need for extensive research especially for outcome of involuntary care of patients in court-ordered substance abuse treatment. The studies need to be of higher quality in design and also include all phases of the continuum of care from evaluation to aftercare. Based on this knowledge the papers I-IV in this thesis hopefully can add some information to this field.

Mental illness and court-ordered care

**International perspective**

Involuntary care of people with psychiatric symptoms has gone through many changes both in regard to who has had the responsibility to care for the committed and when it comes to the legal framework. Previously in history decisions on commitment were often taken by the mental health system and the patient concerned had no or very little opportunity to influence or oppose the decision. The patients were isolated from the community and could be held against their will for an indefinite time living in special institutions with almost no opportunity to any private space.

At the end of the 19th century Ms E.P.W. Packard started an intensive lobbying for the enactment of laws against wrongful commitment (Sapinsley 1991). She was a woman obviously with a strong personal integrity and she was involuntarily committed by her husband to a mental institution in Maine, USA. In the 1870ties laws were passed in Maine regulating the commitment of mentally ill and protecting patient' rights.
But this was unfortunately a parenthesis in the development of new legal structure and treatment of people with psychiatric disorders. Patients continued to be involuntarily incarcerated under particular circumstances with no right to appeal. In the 50ties and 60ties the deinstitutionalization movement organisations were lobbying for a change. Among other events the book “One Flew Over the Cuckoo’s Nest” (Kesey 1962) gave the general public an insight into the conditions in the institutional treatment of people with psychiatric disorders. The movie based on the book was probably an even stronger enabler to enforce changes such as the Community Mental Health Act, passed by the US Congress in 1963 (Szasz 2007).

At the same time the development of legislation and ethical rules were driven by the work of the World Psychiatric Association (WPA) in particular through the Hawaii and Madrid declarations (Helmchen & Okasha 2000). Some of the work done by the WPA emanated from the treatment of people with deviant political views in the Soviet Union and had the aim of securing the legal process (Wynn 1983).

These large mental institutions, often a life-time home for the patients, were intensely criticized and in the 70ties and 80ties the hospitals were closed down. The focus moved to out-patient care and social psychiatry. In most countries the transfer of care from institutions to out-patient care were not met with the proper attainment of methods or relocation of resources with sometimes catastrophic consequences (Nilsson & Lögdberg 2008).

An important aspect of involuntary care has been the idea that a person with a psychiatric disease couldn’t be expected to be able to make a decision and thereby making it possible, even to the extent to be a requirement, for the professionals and families to take control over the decisions on care. The issue of mentally disordered patients’ incapability to consent or not to treatment is still controversial and debated (Hotopf 2005). Different ways to enable the patient to participate in decision-making are being developed, among those are substitute decision-making, interventions by a judge and psychiatric advance directives, PADs (Nys et al. 2004).

The issue of effectiveness is also an important issue in regard to the legitimacy when interventions are taken against a citizen’s own will. A Cochrane-based analysis of RCT-studies of involuntary community treatment for people with psychiatric illness found little evidence to indicate that involuntary care was more effective than standard care.
(Kisely et al. 2011). The outcome measures were readmission to hospital, arrest, mental state, homelessness or satisfaction with care. Neither showed results in favour of involuntary care. The risk though to be the victim of crime was decreased for patients who had been involuntarily treated.

**Swedish perspective**

The psychiatric treatment in Sweden has followed the international trends with large institutions established in the 19th century and then focusing on out-patient care in the later half of the 20th century. In Sweden we encountered the same problems as the international community did. The services caring for patients with severe mental illness in out-patient care did not have resources and methods that were adequately adjusted to the new situation after the closing of mental institutions (Dahl 2007).

Legislation on commitment that were decided on in 1966, the Compulsory Mental Care Act (LSPV), had two prerequisites for commitment; 1. serious mental disorder that required inpatient care (including substance abuse) and 2a. lack of insight and in need of care or 2b. danger to himself or others or 2c. inability to take care of himself or 2d. had a grossly disruptive way of life (SFS 1966:293). The care was decided on by two independent physicians and the patient could appeal to a review board resided by a judge.

Legislation on commitment to care of mental illness went through a major change in Sweden in the 1980ties and the focus moved from social control to the need for care through the Psychiatric Compulsory Care Act (LPT) (SFS 1991:1128). The background was the changes in the view of mental illness with less of exclusively medical interventions and more of a combination of social and medical care. The new legislation aimed at increasing the legal security for the patient by demanding that any care exceeding three months should be decided on by the review board and that a care plan should be decided on for the patients and, as far as possible, with the patient. The legislation aimed at reducing the coercive aspects of the care and increasing the legal security for the patient.

People with drug abuse could be committed by the previous legislation, Compulsory Mental Care Act (LSPV), but from 1982 the commitment of patients with drug abuse was integrated with the legislation of committed patients with alcohol abuse in a special involuntary legislation, The Care of Abusers (Special Provisions) Act (LVM) (SFS 1981:1243). But it
should be noted that if patients can be involuntary treated according to LPT if they have a substance abuse as secondary to serious mental disorder.

Substance abuse and court-ordered care

**International perspective**

Around the middle of 19th century, a person with an alcohol or drug abuse was regarded as a person with a morally failing personality, a person without character (Blume 2000). The concept of illness, that people with alcohol problems were suffering from a disease, was in the US introduced in the middle of the 19th century (Christophs 2009). Linked to this concept was the concept of treatment. The idea that a person with substance abuse could be treated changed the way one perceived and addressed the issue of alcohol abuse. Treatment institutions were established and methods developed adjusted for people with alcohol abuse (Tracy & Acker 2004). Involuntary treatment became a part of the treatment system based on the same criteria as in mental health; that the person couldn’t be expected to be able to make a decision of his own, and thus was in need of care and/or were dangerous to themselves or others (Hall & Appelbaum 2002).

According to a survey by Israelsson & Gerdner (2010) involuntary care of patients with substance was found in 82% of 90 countries. The involuntary care included civil acute care (n=25), civil rehabilitative care (n=42) and care under criminal law (n=45). The last type of care seemed to be more frequent in South America and Africa while civil commitment was more frequent in Europe.

However, the frequency of commitment may differ between countries even when they apply similar legislation. One example is Norway, where the number of committed persons is substantially lower than in Sweden in spite of the same type of involuntary legislation (Lundeberg et al. 2010). The different views and ideas in the society about substance abuse being an illness or a result of a weak personality can be reflected in the lack of support for efforts to apply involuntary care which is in contrast to the legal systems for committing the people with mental illness. Even though the concept of alcohol abuse being a disease, as are the beliefs of the Hazelden treatment and AA-movement, there still
seems to be a uncertainty among politicians and legal experts about court-ordered involuntary care. In Denmark, for example, there is no court-ordered care unless the patient with substance abuse has given a pre-consent to be involuntarily committed (Deding 2011).

Swedish perspective

In the 1880ties the Swedish physician Magnus Huss adopted the idea that a person with alcohol problems had an illness and introduced new treatment methods in Sweden. Hospitals were built to provide treatment but were mainly for the more wealthy population due to the expensive fees.

Another influential person on the development of Swedish alcohol policy was Ivan Bratt. His idea on fighting alcohol abuse was to use ration cards (1914-1955) and monopoly on distilleries and trading of alcohol and both ideas were implemented in the beginning of the 20th century.

About at the same time, in 1913, a new legislation “The Act on Alcohol Abuse” was decided on. Even though the word care was used in the law the focus remained on the threat that the person with a severe substance abuse could be to society (Almkvist 2006). The criteria were drunkenness and danger to his/her own safety or to other’s safety or if he/she became a strain on the public or his family. The time of commitment was for one year and could be expanded in case of relapse.

The need to construct a legislation with a set of interventions was due to the idea that alcohol abuse could be caused by many different factors. In preparation of a new legislation in 1954 a continuum of interventions was made necessary prior to commitment. The use of a multi-perspective on alcohol abuse lead to interventions in several fields of treatment; social, psychological and medical. The legislation also comprised paragraphs on preventive work and that both voluntary and involuntary actions could be taken. The time in involuntary treatment though remained one year.

Ten years later, in the 60ties and 70ties, the social movement demanded a different approach to treatment. The treatment should be based on voluntary intervention and with an avoidance of violation of the personal integrity. The idea that voluntary treatment may have a more positive effect on the abuse had its origin from experience of clinical social practise. In 1982-1983 new legislation separated the voluntary actions in the Social Service Act (SoL) from the involuntary in the Care of Abusers (special provisions) Act (LVM) actions (SFS 1981:1243, SFS 1991:1128).
Drug abuse was included in the legislation and alcohol abuse was no longer the only type of substance abuse. The treatment period was two months and could be prolonged once with an additional two months.

Six years later, in 1989, the treatment period was expanded to six months and the commitment criteria “impairing his/her future” especially with younger persons with substance abuse in mind was added to criteria, and abuse of solvent was added as a substance abuse (SFS1988:870).

The present legislation on involuntary care has gone through some changes since the enactment in 1983. Among those there is one of a major importance; in 1994 the responsibility to petition the court for care was transferred from the county administration to each welfare board in the municipalities.

Table 1 - LVM-commitments in total numbers, acute only numbers and rates of acute/commitments in percentage

<table>
<thead>
<tr>
<th>Year of commitment</th>
<th>Total number of committed patients including acute care</th>
<th>Number and percentage of committed patients with only acute care</th>
</tr>
</thead>
<tbody>
<tr>
<td>1989</td>
<td>1803</td>
<td>267 (15%)</td>
</tr>
<tr>
<td>1990</td>
<td>1605</td>
<td>235 (15%)</td>
</tr>
<tr>
<td>1991</td>
<td>1615</td>
<td>308 (19%)</td>
</tr>
<tr>
<td>2008</td>
<td>895</td>
<td>199 (22%)</td>
</tr>
<tr>
<td>2009</td>
<td>807</td>
<td>235 (29%)</td>
</tr>
<tr>
<td>2010</td>
<td>717</td>
<td>235 (33%)</td>
</tr>
</tbody>
</table>

Sources:
2008-2010 the National Board of Health and Welfare (SoS)

That same year, the National Board of Institutional Care (SiS), was established with the responsibility to be in charge of institutions providing care for patients court-ordered to care by LVM.

In conclusion, the Swedish model of involuntary care of patients with substance abuse has for a long time been a part of the social service system and expanded together with and as a result of the growth of the
social welfare. But during the last twenty years there has been a dramatic decrease in the number of commitments.

The National Board of Institutional Care, in charge of the institutional involuntary care, has been forced to reduce the number of beds and to close down institutions. The reduction of involuntary care can be regarded as an important change in the Swedish society since involuntary care of substance abusers traditionally has a strong support among citizens (Palm et al. 2002).

There has also been a change in the process preceding the decision to commit. During the first years of the new legislation (LVM) the normal routine for the social worker was to perform an evaluation that could take several weeks, sometimes months. The idea was that the social worker would get an opportunity to motivate and advise the patient to take part in voluntary interventions.

During the last years the absolute number of cases of acute petitions has stayed relatively unchanged but the relative number has increased. In 2010, 33% of involuntary acute actions were taken without the decision for acute care to be followed by a petition for a full involuntary commitment compared to 15% in 1989 (table 1). This could be interpreted as the legislation in an increasingly higher degree has been used as an acute intervention. Concerns about this development were brought forward by Gustafsson in her thesis already in 2001.


Present legislation

Short description of the present legislation - LVM: The general criterion stated that involuntary treatment had to be decided on if someone, due to ongoing abuse of alcohol, drugs or volatile solvents, was in need for treatment to stop misusing these substances and a voluntary intervention is not possible. To the above general criterion, one or more of three additional sub-criteria were required; endangerment to his/her physical or mental health, or run an obvious risk of compromising his life, or was likely to cause harm to self or significant others. The professionals, including physicians, police and social workers, were obligated to report such abuse to the social services. Any concerned citizen could also apply to the social services for a petition. A social worker evaluated the
patient’s social situation including a physical and psychiatric examination by a physician. The decision on whether to petition the court for commitment for involuntary care was made by the social welfare board (elected politicians) in each municipality. After petitioning the county court, a hearing at the court was performed and thereafter the judge decided to commit or not commit the patient to involuntary care. The care took place in special institutions run by the National Board of Institutional Care and lasted for a period of six months maximum. According to legal requirements aftercare was a responsibility for the social service in cooperation with the institutions with an obligation to provide continued substance treatment in out-patient care in combination with housing and some kind of activity (studies, work etc.).

Proposal on new legislation

In April 2011 a commission appointed by government presented a proposal on a new legislation for court-ordered care of patients with substance abuse (SOU 2011: 35). The suggestion in the proposal was to terminate the separate legislation for involuntary care of patients with psychiatric illnesses and patients with substance abuse. Instead, the patients with substance abuse would be committed to care within the existing LPT-care. This would include in-patient care as well as out-patient care.

The reasons for the suggested changes were several; one was the presence of psychiatric co-morbidity among the committed patients in both involuntary substance abuse care and involuntary psychiatric illness care. There had not been any systematic registration of diagnosis neither in LVM-care or LPT-care. The information about co-morbidity in the two involuntary systems came from different types of sources and comprised different groups of patients and had been collected by different assessment systems and registers.

In order to provide more information about the frequency of patients with co-morbidity, The National Board of Health and Welfare recorded all diagnosis for patients in involuntary care due to psychiatric illnesses during one specific day, the 8th of May 2008. During that day there were 1,548 patients who had been committed to involuntary care due to mental illness. Of these patients, 60% had previously been diagnosed with substance abuse and 20% had a current substance abuse diagnosis. Unfortunately, this information about the presence of substance abuse among patients committed due to serious mental illness was a one-day recording which could not provide a more long-term perspective.
In regard to patients committed due to substance abuse and diagnosed with psychiatric illnesses six studies were compiled by Gerdner (SOU 2011:6). Patients in these studies had been interviewed by a structured clinical interviews for DSM-IV-axis I disorders. The result showed that approximately 72-83% of the patients had life-time prevalence of psychiatric illnesses. Using another method, self-reports, 43% of patients committed due to substance abuse reported that they had at some point also been patients in psychiatric care due to other types of psychiatric diagnosis. Another source of information was official registers conveying that 60% of patients in involuntary substance abuse care also had previous experience as patients in psychiatric care due to psychiatric illnesses (Gerdner 2004a; Sallmén 1999).

Another reason to the proposed change of legislation was the differences between social welfare boards in regard to the rate of petitions for commitment in relation to evaluations of patients with substance abuse. In spite of the legal criteria being applied to all cases large differences were registered between municipalities. The rate could be as low as 10 committed cases out of 100 reported cases to municipalities where a majority of the reported cases were taken to court (Lindahl et al. 2010). There was no obvious explanation in the different municipalities’ characteristics or type of treatment provided by health care and social service.

The county administrations, in charge of supervising social services in the municipalities, had also reported concerns about the way the legal criteria were applied (Länsstyrelsen 1996). The legal uncertainty also included the absence of psychiatric as well as legal competence since the decision to petition the court for commitment was a responsibility for politicians and the decision to end the commitment a responsibility for an institutional director (who could be an administrator without formal competency in the psychiatric or legal field).

Yet, another reason for the proposed new legislation was the challenge of the continuity of care as well in out-patient commitment as in the aftercare following commitment. The aftercare which had to be organised between different care providers was criticized for the low number of aftercare plans being carried out (Larsson-Kronberg et al. 2005; Gerdner, 2004a). A project, Vårdkedjeprojektet [Chain of care] tested a systematic approach to aftercare by using a Community reinforcement approach-program (CRA). Five social welfare boards, three involuntary institutions and one unit for homeless people participated in the project that carried on from 2004 until 2006 (Fäldt et al. 2007).
Another project, *Kontrakt för livet* [Contract for life], provided the municipalities with financial compensation for any costs they had for aftercare in connection with commitment. This financial support gave a temporary increase in number of commitments and aftercare plans (Hajighasemi 2008). The projects seemed to increase the participating organisations’ focus on aftercare and showed some positive results in regard to structured aftercare planning. A third project, *Eftervård i SiS södra region* [Aftercare in the southern region of SiS] is presented in Paper IV in this thesis.

The proposal to terminate the LVM-legislation and include patients with substance abuse in the involuntary legislation of psychiatric illnesses will, as suggested by the commission, require a strengthening of competences in substance-related issues for the staff in LPT-care. Another requirement will be that the care plan has to have a special section on treatment and support if it involves a patient diagnosed with a substance abuse disorder. In addition evaluations and follow-up studies will have to be executed for results and outcome in order to consider the effect, for example by quality management using standards and indicators as well as internal and external audits.

Overall, demonstrating effects of involuntary care for substance abuse should be a priority because of the uncertain results published hitherto and because involuntary care has tremendous personal consequences.
Aims

General aim
The general aim of the thesis was to study court-ordered care for patients with substance abuse in respect to patients’ experiences and outcome of care.

Specific aims

Paper I
To investigate the patient’s emotional reactions to evaluation, experiences of coercive measures during care, opinions on the involuntary care and, finally, aftercare plans.

Paper II
To investigate the social welfare petition and actual court decision on commitment compared to expert assessment in regard to legal criteria. Also, to study the influence of commitment on survival.

Paper III
To investigate if global outcome and mortality differs between patients who reside in municipalities with a low or high rate of petitions/evaluations.

Paper IV
To compare case management to treatment as usual in the aftercare following court-ordered care regarding abstinence and service use.
Materials and Methods

The studies were conducted in southern Sweden, the county of Skåne, with approximately 1.2 million citizens. It is the third most populated county in Sweden including the third largest city – Malmö, with the well-established Addiction Centre at the University hospital. There has been several attempts to estimate the number of persons with substance abuse or substance use disorder. An estimation from 2003, based on hospital records, suggested that there were 8.600 persons with heavy alcohol abuse and 3.700 persons with severe drug abuse in the county (SOU 2005:82). That same year, 2003, the number of persons with substance abuse committed by court to involuntary care was 54 (SoS 2004).

The studies began with an interest in how the patients’ experienced the LVM-process, to an opportunity to compare criteria for and outcome of the involuntary commitment and, finally, to study an intervention in the transition between in- and out-patient care by LVM. All of these studies originated from clinical practise and from the experiences of professionals, patients and patients’ families.

Although the LVM-process defines all the studies, and consequently the topics in all the papers, some papers have a stronger focus on specific parts of the process for measurement and analysis (table 2).

Table 2 - Main focus of papers in relation to LVM-process

<table>
<thead>
<tr>
<th>LVM-process</th>
<th>Paper I</th>
<th>Paper II</th>
<th>Paper III</th>
<th>Paper IV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaluation</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Court</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Care</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Aftercare</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>
Patients, who were included in the studies, have experienced different parts of the process of involuntary commitment. All patients have been reported and evaluated¹ due to substance abuse. For some patients this resulted in commitment, for others the evaluation resulted in voluntary care or no care at all. Finally, patients who have been committed have also experienced aftercare and a group of patients participated in a specific aftercare-intervention.

Table 3 – Studies in relation to papers

<table>
<thead>
<tr>
<th></th>
<th>Interview only n=24</th>
<th>Interview+ Assessment* n=50</th>
<th>Assessment only n=56</th>
<th>Randomised n=36</th>
</tr>
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<tbody>
<tr>
<td>Paper I</td>
<td>X</td>
<td>X</td>
<td></td>
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<tr>
<td>Paper II-III</td>
<td></td>
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<tr>
<td>Paper IV</td>
<td></td>
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<td></td>
<td>X</td>
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</tbody>
</table>

* Only results from the interviews were presented in paper I

Different types of measurements have been used to investigate and study the phases of the LVM-process (table 3). In order to do so we have used techniques such as interviews in papers I+IV, expert assessment in paper II, estimation of global outcome in paper III, and finally, a randomised trial in paper IV.

¹ In the original article the word assessment was used to describe the social worker’s evaluation. In this thesis assessment has been replaced by evaluation to adapt to international terminology.
Paper I (the patients’ experiences)

Setting and patients
The purpose of the study was to design questionnaires that could collect more information about patients’ experiences of the whole continuum of the LVM-process and by this, increase the knowledge about patients’ experiences of the evaluation and involuntary care.

The sample consisted of 74 patients who had experiences of evaluation according to LVM-legislation (table 4). The patients were interviewed in two different settings; at the hospital and in the municipality. The patients in the hospital group were interviewed after visiting the psychiatrist for a physical and psychiatric examination during evaluation (n=11) or while at a detoxification unit (n=13). All patients were recruited consecutively at the Addiction Centre in Malmö during a period of three months. The patients in the municipality group were interviewed after evaluation and/or involuntary care in connection with the study presented in paper II-III (n=106). Of the sample of 106 patients in the municipality group, 50 patients consented to be interviewed.

Table 4 - Social characteristics of hospital and community samples in percentage

<table>
<thead>
<tr>
<th></th>
<th>Hospital group (n = 24)</th>
<th>Community group (n = 50)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Evaluation (n = 11)</td>
<td>Follow-up (n = 13)</td>
</tr>
<tr>
<td>Men/women</td>
<td>82/18</td>
<td>77/23</td>
</tr>
<tr>
<td>Age 18-35</td>
<td>27</td>
<td>23</td>
</tr>
<tr>
<td>36-55</td>
<td>45</td>
<td>62</td>
</tr>
<tr>
<td>56 -</td>
<td>28</td>
<td>15</td>
</tr>
<tr>
<td>Some type of housing</td>
<td>82</td>
<td>77</td>
</tr>
<tr>
<td>Living with partner</td>
<td>9</td>
<td>0</td>
</tr>
<tr>
<td>Work/studies</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Alcohol/drug abuse</td>
<td>73/27</td>
<td>85/15</td>
</tr>
<tr>
<td>&lt; 9 years school</td>
<td>63</td>
<td>77</td>
</tr>
</tbody>
</table>
Each main group had two subgroups; “evaluation group” - patients presently or previously in the process of being evaluated according to LVM, and “follow-up group” - patients previously in LVM-care and followed-up after discharge. At the time of the interview the evaluation-group had no previous experience of involuntary care contrary to the follow-up group.

In all groups, except for the community follow-up group, 4/5 of the patients with substance abuse were men and approximately 80% abused alcohol. The typical patient in this study was a man, single, 36-55 year old, with low education, un-employed and with an alcohol abuse.

The selection of groups was based on a presumption that patients interviewed at the hospital could differ in characteristics compared to patients interviewed in the community.

**Measurements**

Two questionnaires were constructed to generate new information on patients’ experiences of evaluation and commitment.

1. One structured questionnaire focused on the patient’s social situation and his/her experience of the LVM-evaluation.

Here are a few examples of questions:

- What was your initial reaction after being informed about the ongoing assessment?
- What was your initial reaction with regard to your alcohol and drug abuse?
- Did you have any contact with the investigator prior to the decision on involuntary care?

The questions had categorised response alternatives. The questionnaire also had a few open-ended questions focusing on the patient’s knowledge of the law and general opinion on involuntary care.

2. One structured questionnaire focused on the patient’s reaction to the admittance to the LVM-institution, the care at the institution and aftercare.

A few examples of the type of questions asked:

- Did you physically resist admittance?
- Did you verbally resist admittance?
- Did you have contact with social worker during care?
The response categories were Yes or No.

3. Finally, a questionnaire constructed to measure patients’ experiences of coercive treatment and restraints was used (Eriksson & Westrin 1995). In the analysis only one question from the questionnaire was included: i.e. concerning experiences of coercive measures or not.

**Statistical analysis**

Chi square test was used to compare evaluation-group to follow-up-group in order to detect relationships between experiences and the different phases of the LVM-process. Chi square test was also used to study the relationship between patients interviewed in different settings and their experiences of evaluation and care.

**Paper II-III (outcome of social welfare board petition and assessment by experts)**

**Setting**

An amendment of the LVM-legislation in 1994 included a transfer of the responsibility to petition the court for commitment from central authority (county) to local authorities (municipalities). A year later, in 1995, a report from the county administration drew attention to the large differences that had emerged between the municipalities in relation to the rates of petitions, i.e. how many of the evaluated cases led to the social welfare board petitioning the court for commitment.

An analysis of the number of cases, evaluated by the municipalities in the Skåne county between July 1994 and December 1995, revealed that most municipalities had very few cases. The majority of cases were reported in the seven largest municipalities by approximately three-fourths of all cases. Compared to the situation prior to the change in legislation the two with the highest rates had a slight increase (from 45% to 55%) and the two with the lowest rates had a substantial decrease (from 45% to 12%). The two municipalities with the most decreased rate of petitions and the two municipalities with a small increase in rates of petitions were contrasted in order to estimate outcome.
In paper II these two types of municipalities were named “stable” (no change) and “decreased” (decreased rate) and in Paper III “high-rate” (no change) and “low-rate” (decreased rate). In the thesis the variables high- and low-rate are used.

The two types of municipalities did not differ in regard to socio-demographic variables such as percentage of families on social welfare, average income or residents with education > 12 years.

Patients

The study included 114 persons reported to the social services due to substance abuse between July 1994 and December 1995 in the four municipalities in Malmohus county. After exclusion due to false identity (n=1), lack of information (n=3), and emigration (n=4), 106 patients were included in the study (table 5).

Table 5 - Characteristics of patients in high- and low-rate municipalities by numbers and percentage

<table>
<thead>
<tr>
<th></th>
<th>High rate municipalities (n=56)</th>
<th>Low rate municipalities (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Men/women</td>
<td>29/27</td>
<td>34/16</td>
</tr>
<tr>
<td>Age M ±SD</td>
<td>39 ±12</td>
<td>41 ±13</td>
</tr>
<tr>
<td>Alcohol misuse</td>
<td>45%</td>
<td>36%</td>
</tr>
<tr>
<td>Drug misuse</td>
<td>55%</td>
<td>64%</td>
</tr>
<tr>
<td>Single</td>
<td>80%</td>
<td>63%</td>
</tr>
<tr>
<td>Homeless</td>
<td>46%</td>
<td>42%</td>
</tr>
<tr>
<td>Unemployed</td>
<td>98%</td>
<td>95%</td>
</tr>
</tbody>
</table>

The number of patients that were homeless and unemployed was similar between the two types of municipalities. In the high-rate municipality, there was a tendency to higher rates of women and single persons.

Measurements

Two experts at the central county administration with long-term experience of monitoring the LVM-process were asked to review the
cases. They were blinded in regard to municipality and final decision to petition the court for commitment. Separately, each expert made assessments of the strength of the legal criteria in each individual case i.e., the coercive indicator using a 10-point scale with 10 as a maximum indicator and 0 as a minimum indicator. A 0-point minimum indicator was applied for cases that did not fulfil the legal criteria and that could be resolved using voluntary interventions. A 10-point maximum indicator was used for cases that without any doubt fulfilled the criteria and where the municipality should have petitioned the court for commitment.

The blinded expert assessments of fulfilment of criteria were also compared to the actual social welfare board petition in relation to age, gender, type of abused substance and homelessness.

A follow-up was performed after two years using the case file at the social services made by the social worker in charge of the individual case during the two years following the first evaluation. Additional information was collected from medical files at the Addiction Centre at the University Hospital in Malmö. A form was constructed in order to collect information on the three variables:

1. substance abuse (worsened situation, no change, improved situation)
2. type of income (social welfare, temporary employment, steady income)
3. housing (homeless, transitional housing, stable housing).

In order to be rated as improved the substance abuse had to be substantially reduced, by at least 50%. In addition, type of income or housing should not have worsened.

After initial training, the first author (MLL) and a research assistant (KT) assessed all cases separately and blinded. The ratings of MLL and KT corresponded in all but seven cases. These seven cases were reviewed by MB (principal investigator) and a majority decision was made. In order to validate the results, the information from the social and medical file was compared with information from the personal interviews.

Death certificates were collected from the National Board of Forensic Medicine. Survival rates between the committed and non-committed were analyzed and also the effect of risk factors on survival.

**Statistical analysis**

Chi-square test was used to test proportion of commitments by levels of coercive indicator and type of municipality, the global outcome by level of
coercive indicator and by type of municipality. Chi-square was also used to compare patients’ characteristics in the two municipalities.

An inter-rater reliability analysis using Cohen's Kappa test was performed to determine consistency among experts. Fisher's exact test was applied to comparisons of the social welfare boards decisions and expert assessments.

A binary logistic analysis was used to analyse dependent variables (expert assessment to commit or not and court's commitment or not) in relation to age, gender, type of substance and homelessness.

Kaplan-Meier test was used to compare overall survival rates between the committed and non-committed and Cox regression for analyzing the effect of risk factors on survival.

Paper IV (case management in aftercare)

Setting
After a conference on involuntary care, a network was created in order to discuss and take initiative to research projects around different stages of involuntary care and aftercare. Eleven municipalities in Skane county and three involuntary institutions in southern Sweden agreed to participate in a study of a method to improve the transition between institution and outpatient care. The choice of methods was case management, specifically strength case management (Rapp et al. 1997).

The study started in September 2003. The case manager intervention lasted for six months following the patients’ discharge from in-patient care. The inclusion of patients continued for approximately 15 months, and the last included patient's intervention ended in September 2005.

Patients
The inclusion criteria were as follows:

1. citizen in a participating municipality,
2. committed to treatment by a court due to substance abuse,
3. allocated to treatment at one of the three participating institutions for court-ordered treatment.
After intake-interview patients were randomly assigned to support during aftercare by a case manager or by treatment as usual (TAU). The Um Randomization Program was used by the research unit’s administrator to allocate the patients to either study group (Stout et al. 1994). At randomisation the following covariates were used: age groups (18-24, 25-39, 40-), gender (men, women), housing (yes, no), substance abuse (alcohol, heroin, others) and MADRS (0-7 points, 8-10 points).

While at the involuntary institution, all patients received the regular treatment provided by the staff at the institutions during 3-6 months.

There were no significant differences in baseline characteristics between the case management-group and the TAU-group (table 6). The patients were predominantly single males with an average age around 40 and almost half of the group received disability/sickness benefits.

Table 6 - Patients’ baseline characteristics by intervention and treatment-as-usual (TAU)

<table>
<thead>
<tr>
<th></th>
<th>Case management (n=13)</th>
<th>Treatment-as-usual (n=23)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age (mean, sd years)</td>
<td>34 (12.26)</td>
<td>40 (11.31)</td>
</tr>
<tr>
<td>Age (median, min-max)</td>
<td>43 (21-64)</td>
<td>38 (23-61)</td>
</tr>
<tr>
<td>Gender, women</td>
<td>3 (23%)</td>
<td>6 (26%)</td>
</tr>
<tr>
<td>Alcohol abuse</td>
<td>5 (39%)</td>
<td>14 (60%)</td>
</tr>
<tr>
<td>Drug abuse</td>
<td>8 (61%)</td>
<td>9 (40%)</td>
</tr>
<tr>
<td>Homeless past 30 days</td>
<td>4 (31%)</td>
<td>9 (40%)</td>
</tr>
<tr>
<td>Disability/sickness benefits</td>
<td>6 (46%)</td>
<td>11 (48%)</td>
</tr>
<tr>
<td>Marital status, single</td>
<td>13 (100%)</td>
<td>21 (91%)</td>
</tr>
</tbody>
</table>

Interventions

*Case manager:* The intervention manual was written in accordance with TIP 27: Comprehensive Case Management for Substance Abuse Treatment (31), chapter 2 (Center for Substance Abuse treatment 1998). As a part of the training the case managers used the manual (KEYCREST) from the University of Delaware for substance abuse in prison as well as the training manual developed by the Swedish National Board of Health and Welfare for personal assistants (Inciardi 2006, SoS 2002).
The first conference was attended by the patient, staff at the institution, social worker, and case manager. The aim was to agree on a service plan encompassing 10 domains: physical and mental health, legal status, relationship-family, relationship-friends, occupation, substance abuse, housing, budget and skills. The patient decided on goals that he/she wanted to achieve during the first week and month after leaving the institution.

During aftercare the patients and the case manager met weekly. The case manager organised when and where interventions were to take place, offered support during transitional stages, intervened to avoid crises, encouraged independence and developed external supportive structures. The case manager had a specific focus on relapse prevention using Väckarklockan [The Alarm clock], a manual based on Cognitive behavioral coping skills therapy from Project Match (Project MATCH Research Group 1993). A core component in case management is linkage to care and the service plan was used to make decisions on specific in- or out-patient care that the patient needed to have access to.

The case manager gave the project manager the weekly checklist for each patient. The project leader provided immediate feedback to the case manager on whether the interventions taken during the week were in accordance with the manual.

Treatment as usual: Control group had an institution conference with social worker, staff and the patient in order to decide on a service plan. The social welfare office was obligated to support the patient with housing, substance abuse treatment and occupation.

Measurements

Interviews

Interviews with the patients were performed at intake and after six months of intervention and finally, six months after completion of intervention. The interview material consisted of questionnaires covering a wide spectrum of information about the patient’s status.

1. Substance abuse:

   The Addiction Severity Index (ASI) was used to assess the severity of problems related to substance abuse (McLellan et al. 1992). The Alcohol Use Disorder Identification Test (AUDIT) is a screening test with 10 questions about use of alcohol (Bohn et al. 1995). AUDRUG, a predecessor to Drug Use Identification Test, is a
screening instrument for drug use (Berman et al. 2007). Short Index of Problems (SIP) is an instrument for assessing adverse consequences of alcohol (Miller et al. 1995). Time-Line Follow-back was used to collect information about the amount of alcohol used during the past month (Sobell & Sobell 1992). DSM IV-TR was used in order to establish a diagnosis of substance dependency (American Psychiatric Association 2000).

2. Psychological functioning:

Mental disorder was assessed by Symptom Checklist (SCL) (Derogatis et al. 1973; Feightner & Worrall 1990). Global Assessment Functioning Scale (GAF) was used to rate the social, occupational, and psychological functioning (American Psychiatric Association 2000). The questionnaire Readiness to change was used for exploring which stage of change the patient was in – pre-contemplation/contemplation/action (Rollnick et al. 1992). Finally, the Montgomery-Asberg Depression Rating Scale (MADRS) with 10 items was used to evaluate symptoms in relation to depression, i.e. anxiety and sleep (Montgomery & Asberg 1979).

3. Involuntary care:

Questions were asked about the experience of coercive measures taken during involuntary treatment (Eriksson & Westrin 1995).

Substance use measures included the number of days the patient reported use of drug or alcohol according to AUDIT/AUDRUG during the past six months and Time-Line Follow-Back for the last 30 days. If the patient reported no use he was coded as abstinent. Additionally, the patient, a significant other and the social worker in charge of the case were asked to estimate the patient’s use of in- and out-patient care in order to measure access to care.

Statistical analysis

Fisher’s exact test was used to examine presence and absence of substance use during the first six months in aftercare in relation to the TAU-group.

Fisher’s exact test was used on hospitalisation versus no hospitalisation and the number of days in inpatient care was measured by Mann-
Whitney. Chi square test (with Yates Continuity Correction) was performed on type of care and intervention.

A binary logistic regression analysis was used to analyse three dependent variables (inpatient care/outpatient care, health/social care and medication-assisted care) in relation to intervention/control, age groups, alcohol/drugs and gender.

In a subgroup analysis of abstinent patients the Mann-Whitney was used to test number of days of inpatient treatment and chi-square test to test the association between abstinence and access to care.
Results and Discussion

Paper I

Results

Paper I described the reactions from patients who were interviewed about their experiences of being reported and evaluated (table 7). A majority of the patients had been informed of the ongoing evaluation through personal contact with hospital staff or a social worker. Approximately half of the patients reported initial feelings of anger and

Table 7 - Experiences of LVM-evaluation in 74 subjects by subgroups expressed in percentage

<table>
<thead>
<tr>
<th></th>
<th>Hospital sample</th>
<th>Community sample</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Evaluation (n=11)</td>
<td>Follow-up (n=13)</td>
</tr>
<tr>
<td>Initial reaction, emotions (n=66)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Angry/violated</td>
<td>30</td>
<td>62</td>
</tr>
<tr>
<td>Passive</td>
<td>40</td>
<td>15</td>
</tr>
<tr>
<td>Positive</td>
<td>30</td>
<td>23</td>
</tr>
<tr>
<td>Initial reaction, substance abuse (n=65)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing</td>
<td>20</td>
<td>39</td>
</tr>
<tr>
<td>No change</td>
<td>50</td>
<td>45</td>
</tr>
<tr>
<td>Decreasing</td>
<td>30</td>
<td>16</td>
</tr>
<tr>
<td>Contact with investigator (n=52)</td>
<td>40</td>
<td>54</td>
</tr>
<tr>
<td>Expressed opinions (n=67)</td>
<td>54</td>
<td>27</td>
</tr>
<tr>
<td>Agree with decision (n=35)</td>
<td>-</td>
<td>23</td>
</tr>
</tbody>
</table>

Chi square test *p<0.05 comparing evaluation to follow-up, **p<0.01 comparing hospital to community

32
violation, a third were passive and a fifth of the patients were positive. During evaluation only half of the group had contact with the social worker. Comparing patients who had been committed to those who had been evaluated only, the committed patients reported less opportunity to express opinions. A majority of the patients who were evaluated but not committed agreed with the decision contrary to a fourth of the patients who were evaluated and later committed to care.

Table 8 - Experiences of involuntary care and aftercare by subgroups and in percentage by Yes-response

<table>
<thead>
<tr>
<th></th>
<th>Hospital sample (n=13)</th>
<th>Community sample (n=22)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Did you experience coercive measures during care? (Westrin)</td>
<td>92</td>
<td>47*</td>
</tr>
<tr>
<td>Did you physically resist admittance?</td>
<td>8</td>
<td>55*</td>
</tr>
<tr>
<td>Did you verbally resist admittance?</td>
<td>8</td>
<td>28</td>
</tr>
<tr>
<td>Did you abscond during care?</td>
<td>46</td>
<td>65</td>
</tr>
<tr>
<td>Were you satisfied with the staff at the institution?</td>
<td>89</td>
<td>80</td>
</tr>
<tr>
<td>Did you express any wishes for treatment while at the institution?</td>
<td>89</td>
<td>62</td>
</tr>
<tr>
<td>Were the wishes you expressed also fulfilled during care?</td>
<td>75</td>
<td>80</td>
</tr>
<tr>
<td>Did you have contact with social worker during care?</td>
<td>92</td>
<td>82</td>
</tr>
<tr>
<td>Were the obligatory aftercare plans made during care?</td>
<td>61</td>
<td>67</td>
</tr>
<tr>
<td>Were these plans in accordance with your wishes?</td>
<td>55</td>
<td>57</td>
</tr>
<tr>
<td>Were the plans fulfilled in aftercare?</td>
<td>43</td>
<td>70</td>
</tr>
</tbody>
</table>

Chi square test *p<.05 comparing hospital to community

The patients’ self-reported substance abuse did not decrease in frequency or amount of alcohol and substance use among the majority of the interviewed patients. But, compared to the municipality sample, the
patients at the hospital showed a significantly higher increase in substance abuse.

The hospital group reported in a significantly higher degree that they experienced coercive measures compared to community group (table 8). There were also significantly fewer patients in the hospital group that resisted admittance physically and showed a tendency to not resist verbally compared to community group.

A majority of the patients had ideas and suggestions for the treatment intervention during their stay at the institution and these wishes were often granted. The patients also expressed satisfaction with the institutional staff and most of the patients had the same contact person during the whole involuntary care period.

Most patients had contact with social worker during their time at the involuntary institution and two thirds of the patients completed after-care planning together with the social worker. Approximately half of these plans did not reflect the needs and wishes of the patients. Less than half of the patients had their aftercare plans carried out, every fourth in the hospital group and somewhat less than half in the community group. Patients expressed dissatisfaction with the visits with the social worker and felt that the visits were more of a perfunctory nature.

**Strengths and limitations**

First of all the study adds important results to the very scarce knowledge about the patients’ experiences of the whole process of court-ordered care in Sweden. It is particularly unusual that patients are interviewed during the evaluation process. Two questionnaires were developed for this specific group of patients where no previous instruments existed with the intention to cover the continuum of care, including different aspects of the evaluation and commitment process in relation to the individual patient’s experiences.

There were a fairly high percentage of women (50%) in the group with previous experience of commitment compared to the other three groups of patients as well as a higher rate of patients with drug abuse. One possible explanation could be that men and women are not admitted to the same institutions and different type of organisational issues can have had a non-controlled effect on the results.

The questionnaires have not been validated even though several measures were taken to ensure as good rapport as possible and thus,
hopefully, increased the credibility. Adding the questionnaire by Eriksson and Westrin on coercive measures could have provided an attempt to validate the two new questionnaires but in this analysis only one of the Eriksson/Westrin questions were used.

Another weakness in the study is the different settings in which the patients have been interviewed and that some interviews were performed during evaluation contrary to the majority of the interviews that were performed after completion of evaluation or involuntary commitment. This could raise some questions about the comparability of the groups of patients.

An important point is that results from research that involves legislation concerning involuntary care always have to be the object of careful consideration since the legislation can differ greatly between countries. The generalisation of results is a specific challenge in different legislative settings and therefore, also in involuntary care of patients with substance abuse.

Discussion: patients’ experiences of evaluation and involuntary care

Evaluation

Swedish involuntary substance abuse care (LVM) includes an evaluation that can last for months in contrast to the time of evaluation in Swedish involuntary psychiatric care (LPT) which is generally very short, often a question of hours. This could account for different outcomes measuring negative reactions to coercion in substance abuse and psychiatric care. At follow-up the perception of coercive measures that were regarded as being unjustified remained in a higher degree among people committed due to substance abuse compared to people committed because of mental illness (Sallmén 1998; Eriksson & Westrin 1995).

It was the legislator’s intention that the LVM-process would provide time for the investigating social worker to encourage and motivate the patient to participate in voluntary care. In the preparatory work for the legislation and by Swedish “Officialprincip”¹ it was emphasized that the evaluation

¹ A non-regulated principle in Swedish administrative system promoting the correctness of evaluations in order to provide an objective view of the case.
should include facts that confirmed the need of involuntary care as well as facts that spoke for voluntary or no intervention (Westerhäll 1990, SOU:1981:7).

In this respect the application of the legislation did not seem to fulfil the intentions of an active participation of the investigated patients in Paper I since the social worker only had contact with approximately half of the patients. The patients who had been evaluated felt that the investigating social worker gave them the opportunity to express opinions on possible interventions. This experience was not shared by the patients that had been committed to treatment after the evaluation. Not being listened to during the admission process could be associated with higher levels of perceived coercion (Lidz 1995).

Different experiences of the evaluation could also be explained by the expectations provoked by a specific confounding factor. The patients could have been mislead by the social workers' frequent use of “ansöka om vård” [apply for care] instead of “ansöka om tvångsvård” [apply for commitment], which would have been a more correct terminology (Gustafsson, 2001).

Procedural justice may be an important concept for reducing the perception of coercion (Wales 2010). One keystone in procedural justice is information about the applied legislation. The feeling of coercion can be reduced by providing adequate information about the admission procedure and using a non-threatening persuasion (Iversen et al. 2002; Bonsack & Borgeat 2005). However, even though the LVM-legislation does not explicitly require the investigator to inform the evaluated patients about the legislation, the advice from the National Board of Health and Welfare is that information about the process should be presented to the patient both in writing and by personal contact (SOFS 1997:6).

O’Donoghue et al. reported in 2010 a positive change in patients’ knowledge of their rights under the Mental Health Act 2001 that provided patients with an information booklet about legal rights and the procedure of admission. A majority of the patients could identify different official roles in the process of commitment and perceived that their case was presented in a correct way to the Tribunal. Two thirds of the patients also reported that treatment was discussed with them and 73% knew that they had the right to appeal.
It could be of interest to study if this type of legislative change in information about legal rights could have a similar impact on involuntary care of patients with substance abuse.

**Involuntary care: institution**

The involuntary intervention has a strong impact on the patient’s life and feeling of autonomy. To diminish the negative experience of coercive in-patient care it could be of great importance to help the patient profit from the treatment. The patient should be given the opportunity to participate in the planning of the care and feel that his/her opinions are heard and respected. Patients who experience more of treatment satisfaction will report less of coercion (Olofsson & Jacobsson 2001). It may also be that less of experienced coercion at admission can lead to a higher level of satisfaction of treatment (Katsakou 2010). In a study of four care facilities, involuntary patients in one of the facilities reported less of violation in combination with a higher degree of satisfaction with the staff and of personal well-being after the completion of care (Kjellin et al. 2004).

In our study a majority of patients interviewed at the hospital and almost half of the patients in the municipality reported that coercive measures were applied during treatment but at the same time reported satisfaction with the in-patient care. The differences in results could reflect the type of definitions that have been used in the studies in order to identify coercive measures since such measures can range from the staff checking the patient’s personal belongings to the patient being forced to take medication.

Another study, by Ekendahl in 2001, reported that patients in LVM-care felt that the care was meaningless and that the time spent at the institution was but a form of “storage”. The patients did not believe that coercion could promote motivation to future treatment. These results may be reviewed in the perspective of a good quality in the relationship between the patient and the staff, especially the patient’s need of being understood and respected by the staff (Johansson 2002). A good quality of care can be related to variables such as the patient’s dignity being respected, the patient’s participation in care and the patient being regarded as just anyone (Schroder 2006).
Involuntary care: social services

The feeling of being coerced during treatment does not need to be a predictor of a poor engagement in aftercare in the community (Bindman et al. 2005). But, even though almost all patients in our study had a visit from a social worker, only every third patient experienced taking part in aftercare planning. The patients described the visits as perfunctory and this, by patients experienced low level of engagement, may explain why only every fourth to every second patient reported that their planned aftercare had been carried through.

Another explanation could be the patients’ negative experiences of evaluation and contact with social worker prior to admission to the involuntary institution. Since it was not unusual that the social worker in charge of evaluation also were the social worker preparing aftercare, non-resolved issues could be a strain on a long-term relationship between patient and social worker (Järvinen & Skretting, 1994). Similar results were presented by O’Donoghue et al. in 2010, when a fourth of the committed patients regarded the relation to their doctor negatively affected by the involuntary admission.

Considering the chaotic lifestyle of an evaluated patient with substance abuse, it is understandable that it can seem to be difficult to involve the patient in decision-making and care planning. But the research results in this field points at the necessity to keep trying in order to reduce the feeling of violation and increase the patient’s benefit of care.

Paper II

Results

All cases brought to court by the social welfare board were committed to involuntary care. There was a significant difference between the rates of commitments in the two types of municipalities. In the low-rate municipalities 12% (n=6) of the patients were committed compared to 55% (n=31) of the patients in the high-rate municipality (p<0.001).

The inter-rater reliability for the two expert individual assessments of the 106 cases was good, Cohen’s Kappa = 0.66. According to the expert assessments 56% (n=28) of the patients in the low rate municipalities and 77% (n=41) of the patients in the high rate municipalities should have
been committed. The coercive indicator’s cut-off for expert decision on commitment was 5.5.

The difference between the social welfare boards’ petitions and the expert assessment was significant, p < 0.001 (table 9). The expert assessments agreed with the social welfare boards’ petitions in 63 cases, but disagreed in 41 cases.

The analysis showed that age (p=0.005), gender (p=0.020), and type of substance abuse (p=0.031) were associated with the decision to court-order patients to involuntary care. No such association was found in regard to homelessness. The expert assessment for commitment showed no significant differences between patients in any of the investigated variables.

**Table 9 - The number of committed patients by social welfare petition and expert assessment**

<table>
<thead>
<tr>
<th>Social welfare board petition</th>
<th>Expert assessment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No commitment</td>
<td>No commitment</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>Commitment</td>
<td>39</td>
</tr>
<tr>
<td>Commitment</td>
<td>4</td>
<td>33</td>
</tr>
</tbody>
</table>

A majority of the cases where the social welfare board and experts agreed were from the high-rate municipalities. There were significant differences for the variables gender (p=0.017), municipality (p=0.003), but not for age, type of substance use or homelessness between the groups where the social welfare board and experts agreed or did not agree on commitment.

Ten years after the commitment evaluation, it was confirmed that 36% of the patients were deceased, 28/63 (44%) of the men and 10/43 (23%) of the women. No significant differences were observed between the committed and not committed patients with the exception of type of abused substance. A significant number of patients with alcohol abuse, compared to patients with drug abuse, had deceased (p=0.046).

Among those patients who had been committed 70% of the patients were survivors, while in the group not-committed 61% were alive. In the high rate municipality 26% of the committed compared to 36% of the non-committed were deceased. Compared to high rate municipality, fewer patients in the group with residency in a low rate municipality had
survived, 41% among non-committed and 50% in the committed group. Committed patients did not have longer survival times than those who were not committed.

According to expert assessment 25 patients of the deceased patients should have been committed contrary to the 11 that were petitioned by the social welfare board and consequently committed by court (table 10).

With the reduction of one patient, that the court committed but who did not fulfil the criteria by expert assessment, the group consisted of 10 men and 5 women. Eight patients with alcohol abuse and 7 with substance abuse whereof 11 patients were in the age group 36-55, 3 patients were between 26 and 35 and, finally, one patient was between 18 and 25 years of age.

Table 10 - The number of deceased patients who should have been committed according to expert evaluation

<table>
<thead>
<tr>
<th>Expert assessment</th>
<th>Not committed</th>
<th>Committed</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deceased</td>
<td>13</td>
<td>25</td>
<td>38</td>
</tr>
<tr>
<td>Alive</td>
<td>24</td>
<td>44</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>72</td>
<td>106</td>
</tr>
</tbody>
</table>

Fisher's exact test $p = 0.542$

**Strengths and limitations**

A strength and condition for this study and the comparison was the identified differences in commitment rates between the different types of municipalities. An additional important strength was the assessments of the experts who were blinded in relation to the actual decision to commit or not and to type of municipality. There was also a good inter-rater agreement between the two experts' assessments and this could assure a correct evaluation of the cases in relation to criteria. Since these assessments took place in connection to the amendment of legislation the experts were still well informed about the procedure after being in charge of this type of decisions during several years.
Contrary to several other studies in the field this was an assessment of real cases that had been evaluated by social welfare board and, in some cases, committed by a judge to involuntary care.

There are some limitations to this study. Additional information on the social welfare boards’ reasoning before commitment decision would have added valuable information to the interpretation. Another limitation is the focus on the one major outcome variable, mortality, thereby overlooking a possible effect of involuntary care on social or psychological conditions. A third may be that additional variables in the analysis such as psychiatric symptoms could have added to the information on the factors that influenced the social welfare boards’ decision.

An analysis of the decision-making of the social welfare board in relation to evidence-based knowledge and guidelines could have contributed with a perspective of the possible gap between evidence and practise.

Even though the investigated groups of patients were identified by expert assessment and by so comparable, a randomised trial would have ensured a higher level of evidence in relation to commitment and criteria and patients’ social variables.

A limitation was that the number of patients was too small to evaluate minor differences. However, the study size was sufficient for identifying the influence of other factors than the legal criteria in the decision-making in civil commitment of patients with substance abuse.

**Discussion; assessment of petitions**

Commitment for substance abuse has existed for many years in many different contexts (Gerdner 1998; Hall & Appelbaum 2002). As an example, most states in the US (38 jurisdictions) permit involuntary substance abuse treatment, which is separated from the criminal penalty system (Pinals 2011). The criterion for substance abuse commitment varies substantially, as well as time in treatment. The criteria can be, aside from substance abuse, likely to cause harm to self or others, lack of capacity to make informed consent, failure to manage personal affairs, loss of control, incapable of making rational decisions with respect to treatment, destroy one’s life, risk of causing substantial damages to property of another and so forth.
Even though the existence of commitment due to substance abuse has a fairly long history the research on application of the criteria does not seem to be as near as common as the research in criteria for commitment due to mental illness.

**Variable: Decision-makers**

Psychiatrists in Canada were presented with three hypothetical case vignettes and asked to make commitment decisions (Bagby et al. 1991). The result showed that the psychiatrists made the correct commitment decisions based on legal commitability and psychotic symptoms. The weakness of this study was that it did not concern real cases and probably represents the knowledge of criteria rather than actual real commitment decisions. In the study presented in Paper II the experts’ assessments of the cases were based on real cases which strengthened the design of the study and the results.

Another study of criteria included 18 social workers and psychologists at a mental health center who were asked to complete the Risk Assessment Questionnaire for 169 patients (Engleman et al. 1998). The decision-making process seemed to be significantly associated with factors as the clinician’s detention ratio and the availability of beds and not strictly based on criteria. Even though the results did not contradict the legal criteria, there could be a correlation between available beds and detention and the clinicians’ years of experience which was not investigated.

The correlation between the organisational structure and commitment decisions could have provided an interesting addition to the results in our study. An aspect could have been to correlate the years of experience that the social worker had evaluating patients and the same social worker's previous experience of commitment results. In regard to the comparatively few cases of LVM-commitment, among patients with substance abuse, the social worker's experience of each individual case may have an impact on the evaluation process.

Besides the professional experience and in which way this could affect the decision to seek commitment, there is also the actual knowledge of the criteria to consider. A 33-item questionnaire was sent to probate judges with, among other questions, a brief quiz with questions regarding the legal and mental legislation for commitment. Only 13% of the judges managed to respond correctly on the multiple-choice alternatives on legal criteria (Ferlauto & Frierson 2011).
In our study the experts with profound knowledge of the legal criteria assessed the coercive indicator, which was an overall assessment and not focusing on elements of decision-making. The experts, though, were not asked questions that would reveal their actual and specific knowledge about the commitment criteria but this would be an interesting topic for future research including court judges as well as social welfare board members.

An additional finding was the legal process in which the responsibility to petition the court for commitment was carried out by the same local authority that assessed the patients and that the court, in an absolute majority of cases, decided on commitment. The same local authority is also partly responsible for the costs of the care at the involuntary institution and in charge of providing aftercare. This may limit the legal security for the individual patient in regard to objective evaluation and needs to be investigated further.

**Variable: Patient**

The condition of our study emanated from the association between having one’s residency in a specific municipality and social welfare boards’ petitions for commitment, an association that could not be detected in the expert assessment of the same cases. The results were confirmed by another Swedish study, where patients from 9 different municipalities were compared in regard to rate of commitment. Even after excluding factors such as patients’ social variables and substance use, a difference remained based solely on residency (Storbjörk 2010).

In the same study patients with substance abuse in voluntary care (n=363) were compared to patients in involuntary care (n=361). The results of the multivariate analysis showed that there were certain social variables that were more frequent among the involuntary patients. The probability to be committed increased if the patient was young, with a low level of education, homeless, no work or study, had HIV, a woman living with another person who had substance abuse or if the patient had a drug addiction. Older men with an alcohol abuse were instead more likely to be in voluntary institutional care.

This result confirms our results that other factors than social variables may have been considered and could have influenced the decision of the social welfare board to petition for commitment. In our study there was a significant association between social welfare board’s petition for
commitment and the patient being young, a woman and abusing drugs. An association that did not exist when experts assessed the cases.

Consequences

Little, if any, knowledge exists about the outcome for patients with substance abuse if the legal criterion is not applied the correct way. This applied to commitment of patients with mental illness as well as substance abuse.

In this study we used mortality and analyzed survival over time in relation to commitment. No significant relationships were found between patients who had been committed or not, which could suggest that commitment did not increase the rate of survival. Nor did we find any relationship between the experts assessment and survival or between the cases disagreed by experts/social welfare board and survival.

Since involuntary treatment itself can be conceived by patients as a negative experience affecting the relationship with care giver, the fact that there was no significant relationship needs to be considered by the legislature.

Paper III

Results

The ratings of coercive indicator, i.e. severity of the addiction according to legal criteria, were similar between the two types of municipalities (table 11).

Table 11 - Patients from high and low rate municipalities assessed by experts according to coercive indicator

<table>
<thead>
<tr>
<th>Coercive indicator</th>
<th>High rate municipalities (n=56)</th>
<th>Low rate municipalities (n=50)</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.5-10</td>
<td>27%</td>
<td>32%</td>
</tr>
<tr>
<td>5.5-9</td>
<td>34%</td>
<td>28%</td>
</tr>
<tr>
<td>0-5</td>
<td>39%</td>
<td>40%</td>
</tr>
</tbody>
</table>
The files at the social office and the records at the hospital were compared to information from the personal interviews. A majority of the interviewed patients, 60%, were registered in the high-ratio municipalities.

A total correspondence was found between patients who showed global improvement at the interview and those who were rated as globally improved by experts.

In the group with a high and medium coercive indicator (5.5-9/9.5 – 10), significantly more patients were committed from high-ratio municipalities compared to low ratio municipalities. In the low coercive indicator group (0-5) no significant differences were found (table 12).

Table 12 - Percentage and number of commitments by levels of coercive indicator and type of municipalities

<table>
<thead>
<tr>
<th>Coercive indicator</th>
<th>Municipality</th>
<th>0-5</th>
<th>5.5-9</th>
<th>9.5-10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-ratio (n=56)</td>
<td>13%</td>
<td>42%</td>
<td>95%</td>
<td></td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>2/15</td>
<td>8/19</td>
<td>21/22</td>
<td></td>
<td>31/56</td>
</tr>
<tr>
<td>Low-ratio (n=50)</td>
<td>10%</td>
<td>7%</td>
<td>19%</td>
<td></td>
<td>12%</td>
</tr>
<tr>
<td></td>
<td>2/20</td>
<td>1/14*</td>
<td>3/16***</td>
<td></td>
<td>6/50***</td>
</tr>
</tbody>
</table>

Chi square test * p<0.05 *** p<0.001

Excluding seven patients, who were deceased at follow-up, the overall outcome was rated as improved for 31 patients of whom three patients had reduced their abuse by more than 50% and 28 patients did not have any abuse at follow-up compared to baseline. Among these 31 patients, 10 patients improved their situation in all variables. Another 10 other patients improved in two variables and 11 patients improved in one variable — the substance abuse exclusively.

In the group of non-improved survivors, n=68, substance abuse for the absolute majority of the patients were at the same level or had worsened compared to baseline (n=67). There were some positive changes in regard to the housing situation (n=3), employment (n=1) and substance abuse (n=1). For 63 patients the situation had not improved in any variable.
Global improvement at the 2-year follow-up showed no significant differences between patients from the two types of municipalities in relation to level of coercive indicator (table 13).

Table 13 - Global improvement by level of coercive indicator and by type of municipality in percentage and number

<table>
<thead>
<tr>
<th>Coercive indicator</th>
<th>Municipality</th>
<th>0-5</th>
<th>5.5-9</th>
<th>9.5-10</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-ratio (n=56)</td>
<td></td>
<td>33</td>
<td>16</td>
<td>36</td>
<td>29</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5/15</td>
<td>3/19</td>
<td>8/22</td>
<td>16/56</td>
</tr>
<tr>
<td>Low-ratio (n=50)</td>
<td></td>
<td>45</td>
<td>7</td>
<td>31</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9/20</td>
<td>1/14</td>
<td>5/16</td>
<td>15/50</td>
</tr>
</tbody>
</table>

The non-significance between the municipalities indicated no outcome differences in relation to commitment to coercive care.

At the 2-year follow-up, two patients from high-ratio municipalities and five patients from low-ratio had deceased. None of the deceased patients had been committed and they died of substance abuse related causes. Three of the patients were assessed by experts (social inspectors) with indicator 9.5-10.

**Strengths and limitations**

The impediments to perform randomized controlled studies compel the use of other research strategies. In our study we had experts (social inspectors) who rated the patients’ social situation in relation to coercive indicator, i.e. need to commit according to legal criteria which was a unique method.

The good correspondence between the experts strengthened the assessment of the patients and enabled a comparison of patients who had been committed or not and patients who should have been committed and, finally, different municipalities actions on commitment decisions. Another important factor was that we had information sources.
from both medical and social service files and were able to compare this information to information from face-to-face interviews thus confirming the outcome results. Also, death certificates have provided information on cause of death for all deceased patients.

There could have been a difference between the number of service and care intervention offered to patients in the included municipalities. But since the evaluated patients were included in the study immediately after the legal amendment this could instead speak for that the level of service probably was at the same level as prior to the legal change. There were also no differences detected in Sweden in relation to the interventions offered by social services. But the lack of knowledge about the specific municipalities could also be considered a weakness, since we do not have information about the range of treatment and support that each municipality could provide to their patients.

Another weakness was that the patients had not been randomised prior to intervention which would have minimised the chance of a biased result. Yet another weakness was that the measures that were used to analyze the outcome were categorical and global. If psychiatric measures had been used that could have added another perhaps important dimension to the outcome for example patients with co-morbidity in relation to intervention.

It’s also noteworthy that the study group includes a fairly large percentage of women though with a substantial difference between high- and low-rate. In LVM-care approximately a third of the court-ordered patients are women while in the study presented in papers II-III the percentage of women was 48% for the high-rate municipalities.

The information about the patients’ situation prior to and after intervention came from non-systematic sources and a pre-test post-test with precise instruments would have ensured a stronger base of information.

The sample of deceased patients was also too small to make any definite conclusions regarding mortality.

**Discussion; outcome**

The committee preparing the LVM-legislation noted that there was no conclusive scientific evidence confirming the benefit of involuntary legislation. The law was instead based on the presumption that the patient’s benefit of the involuntary care would be higher than the cost.
Today, 30 years later, it is still a challenge to find strong and conclusive evidence in favour (or not) of court-ordered care intervention and the research in the field presents conflicting results. This is a situation that of course does not apply to court-ordered care only but is shared with several other types of care interventions. In an analysis of 1016 reviews from the Cochrane Collaboration Review Groups, 49% of the reviews “did not support either benefit or harm” of the interventions and in 96% the recommendation was further and more research (El Dib et al. 2007).

Randomised studies and mental illness

But when it comes to court-ordered care there is a particular challenge in using evidence methods such as randomised clinical trials due to the legal situation. If a person is court-ordered to care and, presuming we are all equal in the eye of the law, there should be a difference between those court-ordered and those not. To engage the courts to participate in randomised trials during their decision-making does seem to create a legal uncertainty that may not be ethical and acceptable but there are a few examples of this type of research.

In an American study, conducted between 1993 and 1996, involuntarily committed patients (n=331) participated in a study of aftercare intervention. The experimental group continued in aftercare under court-order and at the same time patients in the control group were immune from commitment by court. The analysis did not show any significant differences in outcome between the two groups of patients with the exception of patients who had their court-order prolonged beyond the first 30 days and who also received intensive treatment.

In another study, 235 patients with serious mental illness and taken to jail/gaol, were randomised to assertive community treatment (ACT) or treatment as usual (regular mental health service) (Cosden et al. 2003). Both groups improved in life satisfaction but the ACT-group also reduced substance abuse and criminal activity. This study was included in a Cochrane review from 2008, that showed little evidence for interventions in prison and community when only RCT were used in the review (Perry et al. 2008).

Other types of research design and substance abuse

In Sweden involuntary legislation makes it obligate for the court to decide on involuntary actions if the criteria has been met. This impediment has
lead to the use of other types of research designs such as quasi-experimental, a design that includes the experimental approach but lacks the random allocation to study-groups (Robson 2002). One example could be the study presented in paper III with a pre-test post-test non-equivalent group design. Baseline information about the patients came from the evaluation by the social worker. The experimental group was committed to involuntary care. Post-test information came from interviews and medical/social files. The conclusion was that no differences could be detected between the experimental group and the control regarding the global outcome including substance abuse, housing and means of support.

Other Swedish studies have used case-controls and register, all with the same challenges in selection of sample, intensity of intervention and other confounding factors. A Swedish review included 32 studies of LVM-care from 1982-2000 (Gerdner 2004b). All of the studies had outcome measures including one or more of three variables: deceased, improved in regard to substance abuse and abstinence. The studies were divided into three groups whereof included one included studies from 1995. This was the year that the National Board of Institutional Care was formed with the responsibility to organize and run the LVM-institutions. The studies from 1995-2000 were compared to the study in this thesis. The patients in Gerdner’s review showed better outcome in regard to substance abuse, not as good in percentage of abstinent patients and slightly better in survival compared to the patients in our study.

The difference between the rates of patients with improved substance abuse and abstinence at follow-up may have been due to different instruments that had been used to measure outcome. The studies that were included in Gerdner’s review had collected follow-up information in various ways, for example by personal contact with professionals, different types of questionnaires and official registers. Our study had access to information from official records from both hospital and social services and the personal follow-up interviews showed a good correspondence with the information from the files. On the other hand this type of information was only accessible for those interviewed which was approximately half of the studied group which weakened the results on this point.
Mortality

In our study of global outcome we also noted that seven patients out of 106 patients were deceased at the 2-year follow-up. None of the deceased patients had been court-ordered to treatment and all of the deceased patients died by alcohol- and drug related causes.

In a follow-up of 700 substance abusers in Stockholm, 227 of the patients had been committed to care and 7% deceased already during the first year after commitment (Ågren 1994). Patients with alcohol abuse had a lower mortality rate and few of the heroin abusers had died of overdose. Another study reported that no patients had deceased during the first year after leaving institutional LVM-care at Runnagarden (Gerdner & Berglund 1997). This is in agreement with our study where no patients who had been committed died during the first year after involuntary commitment.

The difference in results from the studies may depend on a change in the social welfare’s decisions on when to apply for care. It could be that patients in our study committed during recent years in a higher degree have housing and a functional social network compared to patients for example in Ågren’s study.

Even though the results from the study may be mainly applicable to the Swedish LVM-system it would be interesting to study the result of a replication of the study in another legal system with the same impediment, i.e. where a randomised controlled trial may not be executable.

Paper IV

Results

There were 41 patients who fulfilled the inclusion criteria. Four of these patients declined to participate and one patient was lost due to conflicting opinions on the use of interpreter in combination with the questionnaire Addiction Severity Index (figure 1). Two patients in the TAU-group was lost to follow-up and the patients to be analysed were 13 in the case manager-group and 21 in the TAU-group.
At the first follow-up, at 6 months after the beginning of the intervention, significantly more patients from the case management-group were abstinent compared to the control group (46% versus 14%, p<0.05) (table 14). The effect size was measured by the phi coefficient, 0.35, indicating a medium effect of the association between the two variables.
Table 14 - Abstinence in the two study groups at 6 months’ follow-up by numbers and percentage

<table>
<thead>
<tr>
<th></th>
<th>Case management (n=13)</th>
<th>TAU (n=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstinent</td>
<td>6 (46%)</td>
<td>3 (14%)</td>
</tr>
<tr>
<td>Not abstinent</td>
<td>7 (54%)</td>
<td>18 (86%)</td>
</tr>
</tbody>
</table>

Fisher's Exact Test $p<0.05$

All participating patients except one had had some contact with health services and/or social services during aftercare (table 15). In regard to the different caregivers, patients in the case management-group did not have more contact with health and social services’ outpatient care (92%) than did the patients in TAU-group (76%) ($p=0.23$). Nor did they have medical assisted treatment ($p=0.46$) or inpatient care ($p=0.27$) in a higher degree than patients in the TAU-group. A Mann-Whitney test of the number of days in inpatient care revealed no significant differences ($p = 0.41$).

Table 15 - Access to care at 6-month’s follow-up in relation to improvement of alcohol and drug use

<table>
<thead>
<tr>
<th>Follow-up 6 months</th>
<th>Abstinence (n=9)</th>
<th>Some improvement (n=9)</th>
<th>No improvement (n=16)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inpatient health care</td>
<td>2</td>
<td>4</td>
<td>8 *</td>
</tr>
<tr>
<td>Institutional care program</td>
<td>2</td>
<td>2</td>
<td>16 **</td>
</tr>
<tr>
<td>Outpatient health care</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Social services</td>
<td>1</td>
<td>2</td>
<td>15 **</td>
</tr>
</tbody>
</table>

Chi Square test ** $p<0.01$ *** $p<0.001$

There were no significant association with predictive factors as gender, alcohol/drugs and age groups but there was a small tendency for the dependent variable inpatient care and intervention at $p=0.15$.

In a subgroup analysis of patients who had maintained abstinence (n=9) in comparison with patients with continued substance abuse (n=16), the group that had continued with heavy substance abuse had significantly higher access to inpatient care as well as support from social workers.
The abstinent patients had a tendency towards fewer days in inpatient care compared to the non-abstinent sample ($p=0.13$).

The study was terminated due to too few committed patients in the participating municipalities during the first study year compared to expected numbers (table 16).

Table 16 - Expected sample size derived from the number of cases of court-ordered patients in the county, in the participating municipalities, consenting to participate and randomised

<table>
<thead>
<tr>
<th></th>
<th>Number of court orders at the county court</th>
<th>Number of court orders in the participating municipalities</th>
<th>Estimated number of consenting patients</th>
<th>Estimated number randomised to case management-group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average/year</td>
<td>155</td>
<td>100</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>Total/3 years</td>
<td>465</td>
<td>300</td>
<td>240</td>
<td>120</td>
</tr>
</tbody>
</table>

Strengths and limitations

One of the strengths was that it proved possible to perform a randomised trial in an involuntary setting and with several participating units. The instruments and interventions were well-received by the patients and the case management-intervention had a 100% retention which has previously proven related to good outcome in treatment.

A systematic approach has shown to improve follow-up rates and the Engagement, Verification, Maintenance and Confirmation Protocol (EVMC) protocol achieved > 90% follow-up rates when applied to seven different studies (Scott 2004). However, without a specific protocol, the systematic and intensive actions in our study, with frequent phone contact and great flexibility when scheduling interviews, lead to an equally high frequency of follow-up, 94%. This study showed that an experienced social worker, with good knowledge of this specific community, can achieve a high rate of follow-up interviews in spite of the chaotic lifestyle of people with intensive substance abuse.

A limitation for this study was that patients eligible for inclusion were less than the expected number and the three year-study had to be terminated
after two years. The low number of patients may result in overlooking otherwise significant differences. In respect to the small sample it may be almost impossible to have a p-value which is less than 0.05 no matter the actual difference between the values and this is an impediment to significant results in small sample studies (Motulsky 1999).

A weakness is the relative unequal number of patients randomised to the two study groups which probably arises from the urn-randomising technique. This technique can be sensitive to small samples especially when using several covariates simultaneously which, in case of a small sample, can lead to an imbalance (Stout et al. 1994).

On the other hand, this study may also include a type-1-failure in regard to the significant results of abuse reduction, because it is (to our knowledge) the first to evaluate case management for alcohol and drug abusers in involuntary treatment.

Discussion; case management

Outcome

The results of the first comprehensive review of aftercare programs pointed at the challenge of achieving continuity in care by motivating patients to stay in aftercare since only approximately 20% of the patients continued in aftercare programs (Donovan 1998).

Many different aftercare programs have been developed to support and aid patients in the transition between in-patient and out-patient care as well as in order to stay in aftercare for a longer period of time. One of these methods is case management which has been in use in psychiatry since the 70ties and in substance abuse care since the 80ties as a method to provide patients with efficient aftercare. There are though some mixed results in the outcome of case management. In psychiatric care a randomised study of case management in aftercare had positive results in regard to a lower number of readmissions to the psychiatric inpatient care and fewer hospital days (Swartz et al. 2001). A meta-analysis of case management from 2000 including 44 studies showed that patient with case management support had reduced symptoms, less drop-out and increased satisfaction with service (Ziguras and Stuart 2000).
In substance abuse care, especially when the care is provided while in prison, the case management in aftercare reduced the number of convictions caused by criminal acts (Butzin et al. 2002). Patients randomised to group support or case management showed improvement in alcohol abuse, work and family relations for the case management intervention (McLellan 1999). A Cochrane review found evidence for case management enhancing linkage to service but no conclusive evidence in regard to reduction of substance abuse (Hesse et al. 2007).

Models

One challenge with case management is that as a method it includes many variations. One is the case-load that for a case manager can be as few as 10 patients and as many as 100 patients or more. Another is the type of hours when the service is provided: regular office hours or available all hours during the week. The brokerage model, for example, is a brief intervention where the case manager during a few meetings helps the patient to identify his/her needs and link to appropriate service, a model that is not applicable to patients with extensive needs of interventions (Morse et al. 1997). An intensive case management, on the other hand, will work with a low case load (< 20) and develop a comprehensive, individualised service plan by the case manager and the patient mutually (Hangan 2006; Dieterich et al. 2010). A third model is the assertive community outreach which consists of a team of case managers who actively participate in, among many different interventions, also family consultations and skill-building.

The core components in case management, what defines the method, is the systematic approach including assessment, planning, linking, monitoring and advocacy. In our study, as presented in paper IV, a strength-based case management methodology was applied. The strength-based approach is a one to one model that is based on a focus on the patient’s abilities rather than the patient’s failures and weaknesses (McDonald 2005). The case manager is not office-based and has a pro-active rather than a re-active role, which may have facilitated relapse intervention and promoting abstinence.

The model has been proven effective for patients with substance abuse and seems to prolong treatment retention and promote a high patient satisfaction (Vanderplasschen et al. 2007). Those results were in accordance with the results in paper IV since none of the patients in the case management intervention discontinued the contact with the case manager. It may be that the zero drop-out from the case management-
group was a result of the low case ratio and not the specific model. Also, the overall feedback from the patients about the case manager intervention in our study was positive and the patients highly appreciated the contact with the case manager as did the families and friends (Lindahl & Berglund 2008).

**Abstinence, linkage and use of care**

Addressing the issue of abstinence in relation to case management intervention there has been several studies with significant results for reduction of substance abuse which confirms the results from our study (McLellan et al. 1999, Morgenstern et al. 2006).

Besides abstinence and reduced substance abuse, the linkage to care is an essential case management outcome. In our study there was a significant result for case management intervention in relation to abstinence but not in relation to access to care. However, the subgroup of patients with continuous substance abuse had access to treatment and the absolute majority of substance abusing patients had several service providers. The linkage to care though is an often reported successful outcome in American studies (Vaughan-Sarrazin et al. 2000; Godley et al. 2002). It may be that a case manager’s role in Scandinavia and Europe differs from the one in US since private enterprises are not as common (Alexander et al. 2003; Nahra et al. 2009). In Paper IV study, the case manager did not need to secure and contract aftercare support which is common in American studies. In our study this was mainly provided by the social welfare office and is by Swedish involuntary care legislation, an obligation for the social services.

There may also be a difference between access to different types of care – health care and social services. In a study of the relationship between case management and the use of health care and social services showed an effect and positive results specifically to health care though not to social service (Alexander et al. 2007). In our study, patients who continued to abuse substances had significantly better access to both social services and in-patient health care but not to out-patient health care. For abstinent patients there was no significant difference between type of care-provider but the number of patients in each investigated group is too small to draw final conclusions from.
Finally, since aftercare following initial substance abuse use treatment can be associated with improved outcomes and the rates of patients that actually continue in aftercare is low in spite of methodology, there is definite a gap between evidence and clinical practise (Lash 2011). It may be necessary to find new ways to enhance implementation of the knowledge we have in order to improve the interventions for patients in substance abuse. One way is to emphasise in which way the evidence is relevant to clinical work, which has been one impediment recognized by clinicians (Sorensen et al. 2003). In the case of case management it could also be necessary to be more specific in describing the interventions, to develop manuals and to connect the interventions to groups of patients with defined needs of the interventions.
General Conclusions

The findings in this thesis suggest that:

Patients who are informed about the ongoing evaluation mainly react with anger, can not reduce their substance abuse and only every second patient have contact with the social worker in charge of the evaluation.

Patients, who do not physically resist admittance, report more of coercive measures. Patients feel that they can participate in the planning of their care at the institution and they are also satisfied with the care at the institution.

Patients are not satisfied with the contact with the social worker in charge of planning the aftercare. Only a small majority of the patients have aftercare planned before leaving the institution and approximately one to two quarters of these patients had their plans fulfilled.

Social welfare boards’ petitions to the court for commitment seem to be influenced by other factors besides legal criteria. Evaluated patients from municipalities with a high-rate of commitment and patients from municipalities with a low-rate of commitment do not differ in regard to improvement of substance abuse, housing and means of support. Involuntary care does not seem to increase survival.

It has proved possible to successfully implement and carry through a randomised trial in an involuntary setting and in collaboration with several different care-givers. Case management interventions were well-received by the patients.

Significantly more patients with case management assistance were abstinent at follow-up compared to patients who got treatment as usual. Even though linkage is one of the basic dimensions of case management it did not seem to increase the patients’ use of in- or out-patient care. Patients with continuous severe substance abuse had access to care regardless of intervention.
Clinical Implications

In the beginning of the 1980ties, I worked as a social counsellor on a psychiatric ward. Patients admitted to this ward, were committed to involuntary care due to mental illness or drug abuse, and stayed approximately one week before being transported to a regular ward. The group, “mental illness”, by the way, also included a patient who had a tumour but refused surgery. I can not recall that I ever heard a discussion about the patients’ experiences of admittance, staff attitude, outcome, legislation or commitment as a measure in health care. During several years there had been an ongoing discussion among researchers, but very little information, if any, trickled down to staff and patients.

Today, 30 years later, there is a strengthened focus on what works and how it works and why it works. Guidelines are being published with recommendations for care of patients with different types of diagnosis (Gaebel 2009; Cath et al. 2011; Forsner 2010; Janssen 2010). Ethics is an important part of the discussion as well as the participation of representatives from patient organizations in clinical practise and research. In order to provide guidelines on best evidence-based practice we need information from patients, professionals and from research.

When it comes to research, involuntary care is an especially challenging field in which to perform projects, since the legislation reduces the usual possibilities to use established randomised trials of involuntary care compared to voluntary care. In addition, the patients who were coerced to care have experienced violations and other traumatic situations creating a feeling of worthlessness and giving no sense of coherence in life (Arlebrink 2004). But this is also why it is of the outmost importance to continue the search for information that can provide a basis for making the best decisions on care. It requires a professional attention to every step in the process and a perspective of care that regards the process elements as a whole continuum of care. How can information from the studies in this thesis be of assistance to patients who are reported, evaluated and committed to involuntary care and to professionals who want to make good decisions based on evidence?
Evaluation

During evaluation it is a challenge to provide the patient with satisfying information about the process. In the study presented in Paper I half of the group of evaluated patients did not have contact with the investigating social worker during evaluation and only approximately 25% felt that they had an opportunity to express opinions on care. The patients reacted with anger and also with continued or increased substance abuse. But we know from other studies that patients, who received information from a professional, orally as well as in a written form, felt that they had an opportunity to have opinions on care (O'Donoghue 2009). An active contact between the investigating social worker, with the help of an outreach team, could have provided an opportunity to inform the patient about legal rights.

Adequate information provided by clinicians about the admission procedure and non-threatening persuasion can also reduce the experience of coercion (Iversen et al. 2002; Bonsack & Borgeat 2005). This recommendation applies not only to patients who are interested in receiving information, but also to patients who do not seem to be able to understand the process. Since the absolute majority of patients have an examination by a physician during the evaluation this is, besides the contact with the social worker, another opportunity to inform the patients about the legislation and process as well as to encourage voluntary interventions. The formal right to information though is not included in the present legislation of involuntary care of substance abusers and including the right to information could be an important step to take.

Motivational interviewing may have been a useful tool in the efforts to reach and include the patient in the evaluation and consideration of different treatment options (Martino 2002; Yahne 2002). The combination of motivational interventions and involuntary care was analyzed by Gregoire and Burke in 2004. The analysis indicated that legal coercion could be associated with greater readiness to change. Patients with substance abuse entering treatment forced by legal coercion were over three times more likely to have been in some kind of motivational interventions four weeks prior to the admission. This could result in outcome being more positive due to the patient being mentally prepared to change. But this could be in conflict by the legal criteria in the Swedish legislation which promotes voluntary intervention, if the patient is willing to participate in such an action.

The attitudes toward involuntary treatment for alcohol and drug abuse among professionals can be of importance when assessing the reactions
among the admitted patients. When comparing the opinions among the public (N=994), substance abuse counsellors (N=700), probationers (N=35) and judges (N=89), they all believed that involuntary care was less effective than voluntary (Wild et al. 2001). The reactions and attitudes among the professionals need to be addressed and studied in relation to the patients’ experiences of coercion during admission.

The legal criteria seem to be influenced by factors as gender and the application differs from one social welfare board to another (Paper III). For the legal certainty and in protection of civil rights this must be one of the top priorities in future research studies.

Treatment

The involuntary intervention has a strong impact on the patient’s life and feeling of autonomy. To diminish the negative experience of coercive actions can be of great importance in order to help the patient profit from the treatment. Patients who reported more of coercive actions during treatment seemed to be more passive in reactions on admittance (Paper I). Understanding that less of open reactions during the first hours after arriving at the institutions could be connected to a higher risk of feeling violated during treatment, should lead to the staff adjusting their interventions to minimize the impact of coercive measures. There is also a subjective factor in the coercive experience which can be unrelated to the actual practise of the legislation. The use of force, being given orders or threatened, will increase the negative feeling of coercion (Lidz et al. 1997) and needs to be used very rarely and with restraint. During treatment the feeling of being coerced to care and an opportunity to talk about it could be a part of the programme at the ward or the institution. The physical environment can be arranged to limit the feeling of coercion and this in combination with a good attitude among staff are some of the most important aspects according to patients (Borbé 2010; Wallsten 2006).

A study of how patients perceive quality of care in psychiatry used an in-depth interview technique (Johansson & Eklund 2003). The result pointed at the importance of good quality in the relationship between the patient and the staff and the patient’s need of being understood by the staff. The sense of being part of and participating in the provided care is also an important aspect (Schroder 2006). To feel that there is a respect for autonomy may contribute to the feeling of a benefit of the care (Kjellin 1997). In Paper I the patients reported satisfaction with the programme at
the institution and the opportunity to have their own requests for interventions met. An important aspect to reduce feelings of violation could be to make sure that the patients can participate in the treatment planning as has been regulated by the legislation. The patients in Paper I reported a higher rate of participation in planning the in-patient care but fewer patients experienced taking part in aftercare planning with the social worker. Similar findings are also reported in psychiatric care where only a minority of patients in a study of four care facilities in Sweden participated in planning (Kjellin et al. 2004). The patient should also be given the opportunity to participate in the planning of the care and feel that his/her opinions are heard and respected. Since a higher percentage of patients felt that they could participate in in-treatment planning than in aftercare-planning it could be of importance to strengthen the relationship between the patients and the professionals in charge of aftercare.

**Aftercare**

The feeling of being coerced during treatment doesn't need to be a predictor of a poor engagement in aftercare in the community (Bindman et al. 2005). But in our study only a small percentage of patients reported that their planned aftercare had been carried through. It may be the result of many different factors of which one could be the patients’ negative experiences of evaluation and contact with social worker prior to admission to the involuntary institution. In substance abuse treatment it's not unusual that the social worker in charge of the LVM-evaluation is responsible for the aftercare planning too. This requires special attention since there may be issues to deal with prior to the actual planning. The patients may still not agree with the decision by the court and needs to be given time to discuss the process that took place before the admittance to the institution. Patients in our study felt that the visit by the social worker was more of a perfunctory nature, which could be interpreted as the relation between patient and social worker lacked in alliance.

There are different systematic methods to perform aftercare planning and structured aftercare interventions, one being case management. The participation in aftercare programs generally will improve abstinence rates and reduce relapse in criminality (Siegal et al. 2002; Prendergast et al. 2008; Frydrych et al. 2009). In Paper IV, this was successfully tested and the methodology agreed well with the patients. Event though case management has been used in psychiatric and substance abuse care since the 70ties as a method to provide patients with efficient aftercare, there has been few randomised trials of case management in European
setting. The application of a case management methodology can be a way to ensure the patients the right to participation and that the transition between the stages is done in a way that will enforce recovery. Our study can hopefully add some pieces of information to the competence of aftercare interventions. Since aftercare is one by law obligated assignment for the social services and specified to the provision of housing, treatment and work/studies, the social services need to apply a methodology serving the purpose.
Direction of future research

People with a substance abuse, who are evaluated and in some cases committed to care, experience many different situations that can be very stressful. It's important to study interventions that can reduce the feeling of violation and increase the respect for the patient’s needs. It's also of importance to study different ways to strengthen the patient’s participation in decision-making both during evaluation and during treatment.

Recently, the concept of continuum of care has been introduced as a new way to regard interventions (Sullivan et al. 2006; Rosenheck et al. 2003). The importance of not having a fragmentation of the care is stressed since such a discontinuum may lead to poorer outcome especially for individuals with co-morbidity of substance abuse and mental health disorders (Lee et al. 2006). Since one stage in the continuum of care can have effect the other, the whole coercive process has to be included in order to enhance the understanding of the patient's reactions to measures being taken in care. Research needs to include the entire process from the evaluation, the decision to apply for involuntary care or not as well as during the involuntary treatment and during aftercare. In order to fulfil this, researchers may have to develop new instruments in order to investigate all aspects of the coercive process.

There is a particular need to find a systematic way to study and measure the period of evaluation prior to the decision on involuntary care, but also to measure what effect of interventions in one stage can have on the outcome of the interventions in the following stages. One way may be to follow individual patients continuously on their way through the system in order to map the association and effects between different interventions. We also need to know more about the severity of the substance abuse in relation to interventions.

In Paper II the patients with the highest indicator for coercive care were comparable to patients with the lowest indicator in relation to outcome. The group in-between did much worse with a very low rate of overall
improvement. It may that the interventions we use today are tailored either for patients in early stages of misuse and patients with severe substance use disorder and that we need to investigate and test interventions that can be functional for patients who do not belong to any of these groups. This may also call for more cross-disciplinary collaboration with support from academic disciplines in both mental health and social services and needs to be considered for future research studies.

Another future challenge in the perspective of evidence based research is the question of too small samples. In countries, such as Sweden with a population of not more than 9 millions, and in relation to the specific legislative setting of court-ordered care, we will always have the smaller numbers of patients compared to many other countries. This stresses the importance of collaboration between health- and social-services and research groups nationwide, for example by establishing specific competence centres for project in the involuntary process.

And, finally, to quote the Swedish Drug Users’ Union (Svenska brukarföreningen) “Nothing about us without us”. Future research will have to include representatives from patient organizations in the planning of research projects, since the representatives can provide a dimension to research studies that is not captured within the professional knowledge of today.
Sammanfattning på svenska
(Summary in Swedish)


Forskningen kan idag ge ett bättre underlag för beslut än för 30 år, sedan men det finns fortfarande många obekanta faktorer inom vård och specifikt om den vård som bedrivs under tvång. Denna avhandling är förhoppningsvis ytterligare ett steg i riktningen mot att kunna fylla de kunskapsluckor som kvarstår för att kunna bedriva en vård och behandling på kunskapsbaserad grund.

Avhandlingen består av fyra delarbeten.

Det första arbetet innehåller intervjuer med patienter¹ som har blivit anmälda och är under utredning eller som tidigare har varit omhändertagna för tvångsvård jämlikt lagen om vård av missbrukare i vissa fall (LVM). Patienterna var vid intervjuutfallet antingen patienter på sjukhuset eller befann sig i hemmet eller på behandlingshem.

¹ "patienter" är ett begrepp som används i avhandlingen oavsett om personen ifråga är inlagd på sjukhuset, intagen på en tvångsvårdinstitution, får stöd av socialtjänst eller inte har någon kontakt med någon offentlig inrättning med anledning av missbruk/beroende.
De hade i huvudsak ett alkoholmissbruk/beroende, levde ensamma och var utan sysselsättning. Patienterna svarade på frågor om hur de upplevde att bli anmälda, utredda och/eller omhändertagna. När det gällde att vara anmäld och under utredning så kände sig de flesta patienter arga och kränkta men en tredjedel uppgav sig vara passiva inför utredningen. Man skulle kunna tänka sig att patienterna skulle försöka bryta med missbruket/beroendet, men majoriteten av de intervjuade patienterna har ett fortsatt och ibland ökande missbruk.


Bakgrunden till arbete två och tre är lagändringen 1994 då de enskilda socialnämnderna övertog ansvaret att ansöka om tvångsvård hos länsrätten, ett uppdrag som länsstyrelserna tidigare ansvarat för. Något år senare publicerades en rapport som visade att skillnader hade uppstått mellan socialnämnder när det gällde antalet utredningar i förhållande till antalet ansökningar om tvångsvård, en skillnad som inte funnits före lagändringen. Vi valde att kontrastera två kommuner med betydligt minskat antal ansökningar (12% av alla anmälningar) med två kommuner med så gott som bibehållna nivåer (55% av alla anmälningar).

Två socialkonsulenter/experter genomförde bedömningar av samtliga anmällda och utredda patienter under en 18 månaders period (n=106) från dessa kommuner. Experterna hade inte information om vilket beslut som socialnämnder tagit, ej heller kände de till vilken kommun som patienten bodde i. Skattningarna visade på en diskrepans mellan de bedömningar som experterna hade gjort och de beslut som socialnämnderna tagit. Det fanns således patienter i kommuner med låg andel ansökningar där socialnämnden valde att inte ansöka om tvång trots att patienterna uppfyllde tvångsvårdsriter.
De bedömningar av 106 patienter som gjordes av socialkonsulenterna/experterna blev föremål för en fördjupad analys i arbete två. Socialnämndernas utredningar och beslut om ansökning till domstol visade sig vara relaterade till faktorer som kön, ålder och typ av missbruk. En liknande association kunde inte upptäckas när experterna gjorde bedömningar av socialnämndens ärenden, vilket kan tolkas som att socialnämnderna delvis grundar sina beslut på andra faktorer än lagens kriterier.

Ett försök att mäta eventuella effekter av beslut om tvångsvård i förhållande till experters bedömningar var en analys av överlevnad. Vid uppföljningen, 10 år efter utredningen, hade 36% av de undersökta patienterna hade avlidit. Därav hade 44% av gruppen män avlidit och 30% av samtliga som dömts till tvångsvård. En analys av överlevnad inom gruppen resulterade i att man inte kunde upptäcka några signifikanta skillnader mellan tvångsvårdade och icke-tvångsvårdade, dvs att det inte kunde bevisas att tvångsvård, på längre sikt, innebar någon större skyddsfaktor än annat stöd/inget stöd.

I avhandlingens tredje arbete undersöktes skillnaderna i utfall mellan patienter som anmälts till socialtjänsten i olika kommuner med anledning av sitt missbruk/beroende. De två kommuner som hade ett högt antal ansökningar i förhållande till antal anmälningar (55%) jämfördes således med två kommuner med lågt antal ansökningar (12%). Uppföljningen genomfördes två år efter anmälan och utredning med avseende på missbruk, boende och försörjning. Vi fann ingen signifikant skillnad i förbättrad utfall mellan patienter i kommuner med hög andel ansökningar jämfört med patienter från kommuner med låg andel. Cirka en tredjedel av patienterna hade, oavsett kommunställheter, en förbättrad situation inom områdena boende, sysselsättning eller missbruk/beroende. Dock hade sju patienter, samtliga frivilligt vårdade, avlidit på grund av sitt missbruk/beroende.

Det fjärde arbetet i avhandlingen är en randomiserad kontrollerad studie, s.k. RCT, av case management i eftervård efter tvångsvård jämfört LVM. En konferens om LVM-forskning resulterade i att det bildades ett nätverk av representanter från kommuner och Statens institutionsstyrelse. En fråga som kommit upp vid flera tillfällen under tidigare studier av LVM var svårigheter att få länkandet mellan tvångsvården och eftervården att fungera. Inom LVM-institutionerna upplevde man att det behandlingsarbete som utfördes där inte följdes upp av socialtjänsten i eftervården. Socialtjänsten å andra sidan upplevde att patienterna återföll i missbruk när de lämnade institutionen. I
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And most of all, my four sons

this is for you

ab imo pectore, ad infinitum

And Varga, my first and most beautiful grandchild
References


Kesey K (1962). One Flew Over the Cuckoo’s Nest. Viking Press, USA.


Prendergast ML (2009). Transitional case management model for substance-abusing parolees: outcomes at three months. Presentation at the Annual meeting of the American Society of Criminology, 4-7 November 2009, Philadelphia, USA.


SFS 1966:293, Lag om beredande av slutten psykiatrisk vård i vissa fall, LSPV. [Act on the preparation of psychiatric care in some cases, LSPV.]
SFS 1981:1243, Lag om vård av missbrukare i vissa fall, LVM. [Act for the care of substance abusers in some cases, LVM.]

SFS 1988:870, Lag om vård av missbrukare i vissa fall, LVM. [Act for the care of substance abusers in some cases, LVM.]

SFS 1991:1128, Lagen om psykiatrisk tvångsvård, LPT. [Act for compulsory mental care, LPT.]


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