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From Cram Care to Professional Care: from handing out methadone to proper nursing care in methadone maintenance treatment

Participative action research into the development of nursing care in outpatient methadone maintenance clinics

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From Cram Care to Professional Care: from handing out methadone to proper nursing care in methadone maintenance treatment

An action research into the development of nursing care in outpatient methadone maintenance clinics in the Netherlands

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Christine Alberdine Loth

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Introduction

During my higher nursing education (the Dutch HBO-V), which at the time was still organized via the Institute for Health Care (Hogeschool voor Gezondheidszorg) in Leusden, a wise nurse taught me that nursing actually consisted of three concepts: head, heart and hands. Over the years I learnt that a theoretical knowledge of nursing cannot be applied just like that. Nursing care can only come from the hands of nurses showing compassion for the patient. I did not make that up myself; it was already written a long time ago by a wise predecessor of mine, Florence Nightingale. She is often referred to by the press as ‘the lady with the lamp’, as someone who sacrificed herself completely for doctor and patient. And as a ‘nurse’, someone who does not have their own opinion and always follows orders, without any knowledge of affairs. She also already realized that and wrote about it in 1860 in ‘Notes on Nursing: what it is and what it is not’. It was translated into Dutch in 1863 and republished in 2005.

‘It seems a commonly received idea among men and even among women themselves that it requires nothing but a disappointment in love, the want of an object, a general disgust, or incapacity for other things, to turn a woman into a good nurse’ (Florence Nightingale, 1860, page 74).

And not only that, she also had a clear opinion about it:

‘What cruel mistakes are sometimes made by benevolent men and women in matters of business about which they can know nothing and think they know a great deal’ (Florence Nightingale, 1860, page 75).

During her lifetime medicine was beginning to develop on the basis of a scientific vision. Less of a distinction was made between medicine, surgery and obstetrics, and diagnostic and therapeutic insights were growing as a result of research. The architecture of hospitals was adapted to these insights and nursing developed within this context.

During that time Florence Nightingale was inspired by the neo-Hippocratic vision of illness and health, whereby the fundamental vision to the study of infection was that people became ill because of the pathogenic influence of stale or contaminated air (the so-called ‘miasma’). She said:

‘Bad sanitary, bad architectural and bad administrative arrangements often make it impossible to nurse.’ (Florence Nightingale, 1860, page 3).

She also had a clear opinion about what a nurse should do and should not do:

‘I use the word nursing for want of a better. It has been limited to signify little more than the administration of medicines and the application of poultices. It ought to signify the proper use of fresh air, light, warmth, cleanliness, quiet, and the proper selection and administration of diet—all at the least expense of vital power to the patient’ (Florence Nightingale, 1860, page 3).

If you read these texts as a nurse in the year 2008/2009 it seems that not much has changed, even though the visions behind this have changed compared with then. The general image of a

nurse in the Dutch health care system is still based on that old idea of 'the lady with the lamp'. And I still hear opinions in the media about my profession which are not correct and are based on incorrect assumptions. Practicing my profession in the addiction care sector is still hampered by what she called at the time 'bad administrative arrangements'. In other words: financial structures and policy measures. As a nurse you cannot ignore this and in my personal opinion, as a nurse you must certainly play an active role in this as 'spokesperson' for the patient.

My thesis, based on participative action research, is an example of how the nursing discipline can gain control, and where that can lead, namely to a national guideline which has led to the national implementation of a new and improved form of care for drug-addicted patients.

January 2009

Chris Loth

Chapter 1 Nursing care in outpatient methadone maintenance treatment: from 'tap gal' to a professional nursing practice

1.1 Background of the study

There were a number of reasons which led to this thesis. The first one was the profession of the author, who started working in outpatient addiction care at a methadone clinic in 1983. In those days the Dutch CAD's (clinic for alcohol and drugs abuse) kept the supervision/counselling of drug addicts and methadone dispensing to the same group strictly separated from each other. The reasons for this separation have also been described and defended in the literature (Liefhebber, 1979; Sengers, 1987; Buisman, 1983; NRV, 1989 & 1992). A frequently given explanation was that medication distribution was not to be used under any circumstances as a means to put pressure on the patients. In those days a deliberate choice was made to keep counselling and medication separate. As the health of addicted patients deteriorated over the years, the situation in the outpatient addiction care changed. The addict population became older and there were cases of contagious diseases such as hepatitis, TB and HIV, as well as cancer, COPD and heart failure. The psychiatric co morbidity became more apparent as well. The nurses started to feel the friction between their actual job responsibilities and the required care activities. The care that often had to be given to many patients at the same time within a short period of time no longer fitted in. It also became clear to the author that something had to change. Unrest and discontent arose in the addiction centres.

In 2000 the management of one of the addiction centres (the second reason) also felt that 'something was wrong' in the day-to-day practice of methadone dispensing. However, they could not pinpoint it and called in the author for further investigation, subsidized by ZonMw's Geestkracht program. The resulting preliminary report has meanwhile been published and is incorporated in this thesis as chapter 2 (Loth, Schippers, 't Hart & van de Wijngaart, 2003). The third reason was a report by the Netherlands Health Care Inspectorate (IGZ, 2005) on the quality of the care provided at the methadone clinics. This report was not positive; the care provided was poor because the working method was not clearly described, there was no standardization with respect to doses and patient files were not properly kept up to date. In short, the inspectorate felt the medical aspects of methadone dispensing were missing.

The fourth reason was the request for a national guideline for methadone dispensing by the 'steering group for addiction care guidelines' of the nursing and medical professional bodies for addiction care. This request could be complied with, thanks to a subsidy application by two organizations¹ within the framework of a research program called 'Scoring Results' (ZonMw's special research program for addiction care, coordinated by GGZ Netherlands).

It resulted in the Guideline Opiate Maintenance Treatment (RIOB) (Loth, Oliemeulen & De Jong, 2005; Loth, Oliemeulen & De Jong, 2006) described in chapter 6. However, in 2001 this guideline was not in place yet and it was also not yet clear that the developments would lead to such a national guideline. It has been one of the results of the project discussed in this thesis.

¹ TACTUS verslavingszorg and Novadic-Kentron Network for Addiction Care. This project was carried out under supervision of Prof. dr. C. de Jong of the NISPA/Radboud University Nijmegen. The two-year subsidy was granted for research and innovation. The author was one of the executive project leaders.

1.2 Hypothesis, study design and study objectives

Since 1979 many articles have been published in the Netherlands on methadone and methadone dispensing to heroin addicts. They covered a wide range of aspects: The history and development of methadone dispensing over the years (Liefhebber, 1979; Buisman, 1983; Van de Wijngaart, 1989; Van de Wijngaart, 1991; Ball & Van de Wijngaart, 1994); The nature and scope of drug addicts and methadone dispensing (Mulder, 1987; Verbraeck, 1984); The various objectives (Hovens, Hensel & Griffioen, 1984; Driessen & van de Wal, 1993); The separation between counselling and dispensing (Buisman, 1983; Sengers, 1987); The pharmacological aspects of methadone (De Vos, Geerlings, van Wilgenburg & Leeuwin, 1993); The various programs, social workers and the various counselling programs (Driessen, 1999; Driessen, van der Lelij & Smeets, 2002); The various applications of methadone in addiction care (Minjon, 1994). Methadone maintenance was also critically evaluated in other countries (Blaney & Craig, 1999; Ball & Ross, 1991; Ball, 1991; McLellan, Leweis, O'Brien & Kleber, 2000; Kuehn, 2005).

However, what was lacking in all of this literature was a description of the content of the nursing work. If there was a reference to the nursing work it was almost always directed at the activities which nurses carried out for the benefit of another professional's work. The first articles on nursing care in methadone clinics stem from the U.S. In 1975 Dy, Howard & Kleber described the roles nurses play in methadone dispensing. Chenitz elaborated on this with a qualitative study (Chenitz & Krumenaker, 1987; Chenitz, 1989) and mapped out the interaction process between nurses and drug-addicted patients at the counter. She called this process 'managing vulnerability'. To us this literature offered a stimulating point of view. Burns & Smith (1991) researched the effects of a nursing interventions among drug addicts. Fraser (1997) did qualitative research among female drug addicts in a methadone program.

In the nineties we started to publish on this topic (Loth & Van de Wijngaart, 1997) by stating that nurses in the outpatient addiction care in the Netherlands let slip the professional responsibility for quality care in outpatient addiction care from a kind of victim role, by not sufficiently engaging in innovations and scientific research in addiction care. There was a big difference between the day-to-day practice and what nurses learned during their training. The job description for a nurse in outpatient addiction care did not correspond with what was learned in the basic nursing education. The Professional Code for Nursing provides a clear description of what a trained nurse has to offer the health care, patients, and -in the case of this study- chronic drug addicts (Leistra, Liefhebber, Geomini & Hens, 1999). They write: *'The nurse professionally supports and influences the abilities of the patient with regard to actual or potential reactions to health problems and/or related social problems, and with regard to treatment or therapy in order to maintain or restore the balance between resilience and burden.'* (page 13).

The key nursing tasks can be classified as follows (page 20):

- Patient-related tasks such as determining, planning, carrying out and evaluating the required care;
- Profession-related tasks such as enhancing the own expertise, and organization-related tasks such as contributing to the organizational policy.

Dispensing medication is not a minor nursing task, but is a component of a methodical working process and nursing supervision. The resulting bottlenecks in the daily care that could not be pinpointed right away were aggression at the counter and discontented nurses. They formed the beginnings of the hypothesis. We felt there was a collapse in the practice of methadone dispensing. The causes were not clear and neither -and in particular- were the solutions. It was clear, however, that nurses had a part in this. The hypothesis was formulated

that if professionals actively help change their own practice, their own autonomy will increase and the knowledge gained will take root. It was used as input in the choice for a study design. As means we opted for 'shaking up' the daily routine: confronting nurses with their own situation, asking questions about it and in this way encouraging teams to indicate bottlenecks, acknowledge their own part in them, and come up with solutions. The nurses had to critically reflect on the daily work, define what being a 'tap gal' involved and what impact this had on the patient care they provided. Getting out of the victim role so that -as was our supposition- they could gradually regain their autonomy and become motivated again.

We therefore opted for a practice-driven study: a study in which bottlenecks are directly related to the day-to-day practice. This means that the formulated research questions have a direct link with this daily practice (van Dijk, de Goede & 't Hart, 1995). The innovations that were started and evaluated had to be embedded in the organization's policy, which is why we opted for the participative action research design (Grundy, 1982; Hoogwerf, 2002) and, at a later stage of the study, for the cooperative design (Heron, 1998; Heron & Reason, 2001).

Chapter 3 describes the differences between both designs and the motivation behind these choices. Participative action research has two complementary objectives, i.e. increasing knowledge and improving the daily practice, in which two cycles are active: the empirical cycle for the research objective & van Strien's regulative cycle for the change objective (van Strien, 1986; van Dijk et al., 1995).

Research objectives therefore consisted of mapping out the collapse in the form of causes and effects, as well as breaking out of a degenerated situation in an active way with a major role for the teams that were confronted with this collapse on a daily basis and had a part in it. Even though we started with a local change project, our aim for the study in the long term was to achieve improvement in the methadone dispensing to all chronic drug addicts. That is why at a later stage we added a study objective, i.e. developing transferable knowledge as to content and knowledge in how to deal with the entire situation. This knowledge was to serve as input for the national methadone dispensing and as a national guideline. The way in which we pursued our objectives is described in this study, which consists of three components:

- 1) Participative action research to identify problems and solutions combined with an active input of the professionals involved.
- 2) Evaluation research of the implemented changes.
- 3) Generalization of the findings in the form of a national guideline.

1.3 Research questions

The study's research questions were the following:

Component 1:

Is it possible with the use of participative action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?

Component 2:

Does the implementation of innovations in methadone dispensing lead to changes in the care practice by nurses at methadone clinics?

Component 3:

Are there signs of improvement of clinical practice in methadone maintenance treatment elsewhere in the Netherlands after and due to the local participative action research?

Every research question is followed by several sub-questions, in chapter 4 and 5 the sub-questions of component one are described and answered. In chapter 6 the sub-questions of component two are described and answered and in chapter 7 the sub-questions of component three are described and answered.

1.4 Background of the researcher²

In action research the researcher is closely involved in the research practice (Heron, 1998; Boog, van der Meer & Polstra, 2000; Oliemeulen, 2007). It is therefore important that the researcher explains her motivation to initiate this study as a nurse and nursing scientist. Below you will find information about the researcher herself in relation to her background; it is therefore written in the first person.

‘After graduating from high school in the east of the country, I opted for a nursing education in the middle of the country. I had never seen addicts before, at least I had not recognized them as such. During my nursing education program no one talked about addiction. I met my first addicted patient during a traineeship in a hospital in Utrecht: an -in my view- elderly lady who had been admitted to the ward with a peri-orbital haematoma. My nursing colleagues told me she had been drunk and had fallen down the stairs. The fact that I remember this case very clearly indicates that it made a deep impression on me. After graduating I could not find a job. I was not the only unemployed nurse, as the ‘hog cycle’ also applied to jobs within the health care.³

After many job applications I found work at a ‘methadone clinic’ in Hilversum for 15 hours per week, each working day from 9 a.m. to 12 a.m. There is where it started: my love for nursing addicted people, my involvement in addiction care. However, I also immediately noticed at the start of my working career that the knowledge acquired during my nursing education did not correspond with the actual practice. In those days, the separation of dispensing medication and counselling was reflected in two entrances: one for the methadone clinic (often a side entrance or backdoor) and one for counselling (often the front door of the organization). The social workers were often deployed as counsellors and the nurse as a dispenser of methadone and collector of urine samples. An often-heard nickname for nurses working at the methadone clinic was ‘tap gal’. ‘Dispensing medication’ was the main task in job descriptions in those days. As I experienced myself, this could go to such lengths that after a session with a patient who was also to receive methadone, a social worker would go through the building to the methadone clinic, to order me as the nurse to adjust the methadone dose of this patient.

This would happen without first assessing his/her state of health and medical necessity. At the counter I could still pay some attention to health education and information. This task became more and more important as the number of HIV patients was increasing. Over the years needle exchange was added to the tasks. The foundation of my conviction that I could offer only minimal nursing care was laid in those days in Hilversum.

Since then I have worked in the health care sector for many years, such as in a drug rehabilitation centre and with street prostitutes. I started studying nursing science at the Hogeschool Utrecht in the Netherlands and at the University of Wales in Cardiff to obtain a

² Chapters 3 and 4 will describe in more detail in which way the researcher was present in the various stages of the research. Chapter 7 will pay attention to this as well.

³ In economics, the term hog cycle describes the phenomenon of cyclical fluctuations of shortages and surpluses of products on account of suppliers reacting en masse.

Master Degree in Nursing. In my third year I had to think up a topic for my final project, which was easy. I wanted to research methadone dispensing. People there were not familiar with addiction care and there were things that did not go well. I was not allowed to practice my profession there and for years I had felt a need deep down to provide decent care to addicted people. However, I could not really describe what kind of care that should be. The final project offered me a great opportunity to pursue this, but what I wanted to do was not possible due to lack of time and means. However, I never abandoned the idea and eventually it became the topic of this thesis.

In my career I see similarities between the projects I have carried out. They had in common that they were either new and open to creative ideas, or unknown and unpopular, or were going to be axed. I come from the region of Twente in the east of the Netherlands. A character trait of the people living there (called 'Tukkers') is that they view themselves as someone who is not known and sometimes not even loved. Such a common trait generates a lot of solidarity⁴. So from the feeling that much wisdom comes from the East, I have given shape to my work and innovations over the years. In short, I have become a nurse who practices science with a street fighter mentality.

My considerations to remain faithful to methadone dispensing and turning setbacks into change strategies stem from what was instilled in me during my nursing education: every nurse is responsible for quality care. Poor patient care may never be only something to complain about during coffee breaks; the nursing discipline should put it on the agenda and deal with it'.

1.5 Structure of the thesis

The thesis consists of three parts. The first part comprises chapters 2 and 3. Chapter 2 provides a problem analysis of methadone dispensing from the 1980s. It paints a picture of the background of the financing, the organization of medical/nursing care, and the tasks of the medical staff. The chapter describes the situation as 'a collapse of the nursing practice' and the daily practice at the counter as 'cram care': care that cannot be properly started or finished.

The professional autonomy has eroded and both nurses and patients are discontented. Chapter 3 describes the research methodology and the design and realization of the participative action research, and contains brief information on the naturalistic design of the evaluation research with regard to the various innovations, which is worked out in more detail in chapter 6.

Chapter 3 discusses a participative action research method called cooperative inquiry (Heron et al., 2001) which was chosen to set the nurses themselves to work in order to have them regain their own professional autonomy. This method was used to convert a degenerated situation providing only 'cram care' into a situation where high-quality professional addiction care is given.

The second part of the thesis (chapters 4, 5 and 6) reports on the research process. Chapter 4 analyzes the way in which nurses, together with the researcher, started looking for the causes, consequences and solutions. It describes the desired situation, which was realized in a small-scale and iterative manner by means of participative action research, as well as the way in which it was achieved and what happened during this process (process evaluation: Swanborn, 1999).

Important results of participative action research are an increase in knowledge and empowerment (Boog et al, 2000) i.e. regaining professional autonomy by increasing the own

⁴ This is not based on evidence based research but on living experiences of myself, my friends, and family.

knowledge. In our study it involved knowledge of the profession of addictions nursing, knowledge of the patient's perspective and how this can be incorporated in the care. The participative action research led to a bottleneck analysis which we called 'diagnosis model'. This model formed the foundation for the improvement actions. Chapter 5 reports on this quest. The monthly focus group meetings that played an important role are described and linked to Johns' four stages of professional growth (1999 and 2001). In addition, interviews with drug addicts were held and reported.

Chapter 6 gives an account of the evaluation research. The diagnosis model resulted in the formulation and implementation of a series of innovations. The impact of the implementation is evaluated (product evaluation: Swanborn, 1999). At the end of the chapter, conclusions are drawn about good clinical practice.

Chapter 7 and chapter 8 are the third and last part of the thesis. Chapter 7 looks back on the findings of the research and the incorporation of the results in the national Guideline Opiate Maintenance Treatment, and forms the last step in describing the desired situation.

Chapter 8 provides an answer to generalizability, and describes the shortcomings of the participative action research carried out, and puts forward improvement proposals for subsequent research.

Chapter 2 Methadone maintenance in the Netherlands on the threshold of a new era: the collapse of a nursing practice⁵

It is a cold Monday morning. At the side entrance of an old villa about 35 men and women are shivering as they queue up outside. At 9.30 precisely the door opens. A nurse lets them into the methadone maintenance clinic (because that is what it is). The group hardly fits into the small and dreary room. In one corner a door leads to the rest of the building, in the other one there is a toilet. Two nurses are working in a tiny, partitioned off and inefficiently furnished space. At the window of a counter they are pouring methadone into plastic cups, some with a label and lid. The patients drink their methadone at the counter; some are given methadone to take away. Once in a while the nurses take someone aside in the working space; meanwhile people are entering and leaving the room all the time. Occasionally a patient starts up a conversation at the counter. A man is softly telling the nurse about the AIDS test he had done, while the other people look the other way to give them a semblance of privacy. At noon the two nurses have helped 74 patients in two methadone maintenance treatment programs, one for daily patients and one for those who come to collect their methadone three times a week.

2.1 Introduction

In the Netherlands methadone has been dispensed to heroin addicts for over thirty years now, initially in so-called detox programs. The idea was that providing methadone would lead to addicts kicking their habit. However, as this hardly ever happened in practice, the switch was increasingly made to maintenance treatment. In this way, the emphasis could be placed on stabilizing drug use, decreasing dependence on the drug scene and limiting health risks ('damage control' or 'harm reduction'). Methadone dispensing thus became a component of the policy to combat the nuisance caused by addicts. Nurses did the work; after a doctor had determined the methadone dose, his involvement was minimal. Other social workers lost interest in these patients, who themselves seemed interested in little else than their dope. The management of addiction centres placed dispensing of methadone in a marginalized position, often giving it a separate entrance as well. In this article we will explain the causes and results of this course of action.

2.2 Methadone dispensing in the Netherlands

Methadone is a synthetic opiate that falls under the list of drugs with an unacceptable risk in the Dutch Opium Act (Ministries of Health, Welfare and Sport/Justice/Foreign Affairs, 1995). Methadone is taken orally, usually in a liquid form, sometimes in 5 mg tablets. Methadone takes away the symptoms ensuing from heroin withdrawal, but rarely results in a high or 'kick', if at all. Methadone has the practical advantage that its half-life is considerably longer than that of heroin (approx. 24 and 6 hours, respectively) and that it can be prescribed legally. Then again, methadone is also an addictive substance, placing users in a position of dependence. Furthermore, its use is as stigmatizing as heroin use. Dispensing methadone serves multiple purposes: detoxification, damage control, palliation (alleviating the suffering resulting from chronic heroin use) and reducing crime and nuisance to society (Van de Wijngaart, 1989 and 1991; Minjon, 1994; Gezondheidsraad, 2002).

⁵ This chapter is published in Dutch as an article in *Maandblad Geestelijke volksgezondheid* (Mental Health magazine) in 2003 (no. 12, pages 1111-1123).

When dispensing methadone a nurse talks to a woman of about 45 years old. She turns out to have incurable lung cancer. Her chemotherapy will start in two days. The woman has no friends or family that can help her and her addicted husband at home. The nurse would like to spend more time with her, but others are waiting in line. She gives the woman her methadone and a cup of coffee and says they can talk further in an hour. The woman quietly walks into the day centre to drink her coffee.

A few years after Dole and Nyswander had introduced methadone as a substitute treatment for heroin addiction in New York (Dole & Nyswander, 1965), methadone was also prescribed in the Netherlands (Schreuder & Broex, 1998). It was considered the answer to the heroin epidemic in the early 1970s. Currently, about 12,500 of the approx. 29,000 heroin addicts in the Netherlands receive methadone in outpatient maintenance treatment programs (Gezondheidsraad, 2002; Hendriks, van de Brink, Blanken & van Ree, 2000 en 2001; LADIS, 2003). Through this kind of care, a considerable number of the chronic addicts is reached. This means that of all European countries, the Netherlands has the largest visible user population (Farell, Verster, Davoli, Nilson & Merino, 2000).

The majority of the patients have multiple, strongly interwoven problems in various areas of life and as a result find themselves in social isolation (Walburg, Czyzewski, Ruth, van Kuijf, Rutten & Stollenga, 1998). In addition to their addiction many have to contend with anxiety disorders, depression, amnesia, uncontrolled aggression, psychoses or other personality disorders (Driessen, 1992; Limbeek, Buster & van de Brink, 1992; Schrijvers, Abbenhuis & van de Goor, 1997; Eland-Goossensen, van der Goor & Garretsen, 1997; Gezondheidsraad, 2002). In 2002 the National Health Council concludes: ‘...they are often very ill patients who only have a limited time to live. Their suffering can manifest itself in both somatic (serious chronic infections, COPD, AIDS, inadequate self care) and psychological areas (psychosis, depression); frequently a combination can be observed. Often their social circumstances are nothing short of miserable (homeless, isolated, debts, frequently in prison)...’ (p.76).

Due to these additional problems heroin addicts with chronic psychiatric problems are making an increasing demand on outpatient care (van Alem & Mol, 2001). The Netherlands has 22 addiction centres which together manage 85 outpatient methadone maintenance clinics/buses (Loth & Huson, 1997; Loth & van de Wijngaart, 1997; Loth 1998a; Loth 1998b; van der Wilt et al. 2000).

In Amsterdam, the area health authority (GGD) organizes the outpatient methadone maintenance treatment. In some cities methadone is prescribed by family doctors (sometimes by specialists) and dispensed by pharmacies (van Alem et al., 2001). Usually it is dispensed by nurses and in some addiction centres also by socio-psychiatric nurses (SPV-ers) or nursing auxiliaries. Variables such as the dose and the number of times it is dispensed per week are not laid down in protocols and vary significantly per centre (Driessen, 1990; Gezondheidsraad, 2002). Over half of the patients that take methadone receive a dose between 25 and 55 mg (LADIS, 2003) but on a limited scale high doses are dispensed as well (e.g. 90 or 100 mg). Most outpatient methadone maintenance clinics (MMT clinics) have between 80 and 120 patients each week. The number of actual contacts however is many times higher as patients come by several times per week for their methadone. The majority of the addiction centres dispense methadone three times per week, on Mondays, Wednesdays and Fridays (Loth, 1998a). Some addiction centres dispense methadone every day (except on Sundays). How often patients have to come to get their methadone depends on their other drug use and daytime activities. Sometimes there are special arrangements for patients who have a job or want to go on vacation (Loth, 1998b). There are considerable differences between regional centres and those in big cities with regard to the organization and running of the methadone

dispensing service, partly due to differences in patient populations. The big cities have more ill and chronic addicts whereas the MMT clinics have to deal with more aggression and crises.

2.3 Dual objective

Over the years the objectives of methadone distribution have shifted. Initially the distribution programs were set up to help individual drug addicts during detoxification and to limit the damage of drug use. In the course of the years these programs were increasingly considered a means to contain the troublesome and criminal behaviour of patients. Methadone distribution was thus given the dual objective of providing help and reducing nuisance. Hubert & Noorlander (1987) call this the schism in the dispensing practice. Earlier Jongsma (1981) discussed 'the confusion around methadone,' which he explained as follows: 'For doctors methadone is a familiar routine and a compensation for powerlessness. For laymen it is a 'medicine', for politicians it is a means to show that something is being done about a growing problem, for healthcare workers it is a magical means to build rapport, and for the user it is a safety and trade object' (p. 115).

2.4 Insufficient financing

The scope of the financing and the way in which financing is regulated clearly show this dual objective. Almost everywhere methadone dispensing is part of the outpatient addiction care, which was previously paid from a government grant. In the late 1980s a decentralization of government funding took place, giving the local authorities a great say in how it was spent (Schreuder et al., 1998). The objective of methadone maintenance as an aspect of healthcare was thus placed second to that of reducing societal nuisance.

Some years ago the Dutch Council for Public Health and Healthcare (RVZ/RMO, 1999) already proposed changes in the complex flow of funds. The individual aspects of the outpatient care, such as treatment, supervision, rehabilitation, and dispensing medicines, should be financed from the AWBZ (Exceptional Medical Expenses Act). Collective activities, such as prevention and field work, should be financed via the local authorities. Such changes are in keeping with the growing awareness that addiction should be considered a (chronic) disease which requires medical (pharmacological and nursing) interventions (Ter Haar, 2000; van Brussel, 2003). However, the proposed changes have not been implemented yet.

Apart from the way in which funding is regulated, we can state that its scope is absolutely insufficient. The way in which the required staff resources are calculated, according to the HHM method (Drouven & de Lange 1999) which is used almost everywhere, clearly demonstrates this. According to Drouven et al. (1999), who developed this method, methadone can be dispensed to 14 patients per hour. With a 1:5 ratio between doctor and nurse this comes down to less than four minutes nursing care and less than one minute medical care. It means that on a given morning two nurses can hand out cups of methadone to 90 patients in just under three hours. However, there is no time left at all for more in-depth questions on how things are or for providing comfort. This is also due to the fact that the calculation method does not take into account the care given at the dispensing window. Drouven et al. (1999) state that methadone dispensing implies that a nurse only hands out methadone doses and exchanges used syringes (p. 18).

2.5 Limited tasks

'There I saw nurses who were rude to colleagues and addicted patients. They no longer seemed to feel that they were professionals. I also noticed that they had to work in a dirty and rundown building which hardly offered any facilities to enable them to build a rapport with patients. The building was a chaos and so was their working method.' (Observation of a nurse trainer).

The Dutch Health Council (2002) considers the prescription of methadone a medical intervention. The handing out (dispensing) of methadone however is chiefly a nursing task (McCloskey & Bulechek, 2001, p. 510). It is inextricably bound up with a series of other nursing interventions, such as keeping records of the effects of the methadone dose. Or giving injections, such as contraceptive injections or depot antipsychotics, but also taking urine samples for analysis. Dressing and checking syringe abscesses, stab wounds or other wounds addicts may get on the street. Checking vital signs upon the first registration for methadone, or in patients who end up in the outpatient clinic in acute life-threatening situations. And testing women for pregnancy who prostitute themselves on the street to make money for drugs. It also involves stimulating them to have a tuberculosis test done or get a hepatitis vaccination. Furthermore, the nurse gives advice and information about hygiene, safe injecting practices, use of condoms, diet and the like.

However, the dispensing itself takes up almost all of the time. Not so much the actual dispensing, but talking about the doses and collecting times, the consequences of 'dirty' urine and such. In spite of the objective that it only concerns maintenance, patients are set all kinds of conditions that need to be renegotiated all the time. Making agreements about giving methadone 'to take away' in particular leads to recurrent palavering and bargaining. Nursing care requires good communicative skills, such as setting boundaries, having motivating talks, and smoothly dealing with people who are under the influence or have mood and contact disorders. How difficult this can be, is illustrated by the following practical situation:

'When dispensing methadone one of the nurses is called to the phone; her colleague continues working. A 36-year-old woman walks in. She looks very unkempt and gives the impression of being very much under the influence. Her speech is slurred and she does not finish her sentences. She is unsteady on her feet, but she does not smell of alcohol. The nurses know her and know she regularly has (borderline) psychotic episodes. In a high voice she immediately asks for her methadone, but it is not her turn yet. She flies into a rage and runs into the building. She demands her methadone, starts pounding on the glass door and uses threatening language. The nurse tells her to wait for a little bit. The patient gets angrier, bangs on the door and yells. Eventually the other nurse puts down the telephone and goes outside to speak to her.' (Observation notes of Ch. Loth).

At the dispensing counter the nurse obviously has to deal with cries of help from the patients. But this leads to what could be called 'cram care', i.e. care that is crammed into a limited amount of time so that treatment cannot be properly started or finished. It also concerns requests for help that could be provided by others, such as home care institutes, but often help is not given because the patient lacks social skills and is seen as difficult; reason enough for regular institutes to refuse him/her. Almost all addition centres have special outreach care and safety net projects for patients who cause trouble, but they are usually organized separately from MMT clinics and are carried out by other care workers.

Often patients have to be referred, whereas the expertise is present on site. It means that patients do not end up with the right care worker, leading to poorly integrated care. 'Cram care' leads to neglect of physical and psychiatric problems (Loth & Spexgoor, 2000). In 'cram

care' contacts, the privacy of patients cannot be properly guaranteed. Research shows that patients are not content either and that much needs to be improved in how they are treated and in providing tailor-made care (Verbraeck & van de Wijngaart, 1989; Driessen 1990; 1992; 1999; Driessen et al., 1993; Jongerius et al., 1994; Eland-Goossensen et al., 1997; Lilly, Quirk, Rhodes & Stimson, 1999).

The lack of psycho-social care is even more poignant as in the past few years the problems in this group of patients have become worse (Gezondheidsraad, 2002). An significant proportion of the population of heroin addicts consists of older, chronic psychiatric patients. They require more and more intensive care. For many of them, routed and ousted elsewhere, the contact with the MMT clinic is the only way to receive a semblance of (psycho-social) help. However, centres are not geared towards providing care services and limit themselves to activities that fall under the 'extended arm' of the physician (Loth & van de Wijngaart 1997; Loth 1998a). When recruiting new staff they make no secret of the extreme limitations in job responsibilities, as shown by the text of an employment advertisement of a large addiction centre in the west of the Netherlands: 'Nurse. Tasks: preparing methadone for dispensing, the dispensing itself and all related administrative duties. Minimum education: psychiatric nurse or pharmacist's assistant.' (*De Volkskrant*, 7 September 2002). Due to such tasks as 'being a dispenser' it may come as no surprise that the image of nurses in the outpatient addictions care is rather negative, both within and outside the professional field. For good reason they have a nickname: 'tap gal'.

Gradually the autonomy of the nursing profession has disappeared from the outpatient addictions care, i.e. the individual character of the profession, the expertise all nurses are proud of, and the own decision-making power according to the Dutch Individual Health Care Professions Act (BIG). Autonomy in the execution of one's professional duties means that centres enable professionals to put into practice as well as possible what they have learned during their training. Professional autonomy also means that nurses see to the organization of the daily work themselves. In fact, it means nothing less than guaranteeing a good product (De Jonge, Janssen & Landeweerd, 1994a; De Jonge et al., 1994b; Pool, 1995)

2.6 Neglect of buildings and furnishings

As a result of the problems in calculating the resources needed and the inadequate funding structure the furnishing of the clinics is lagging behind the standards of modern health care. The majority of the MMT clinics are housed in half derelict buildings, the furnishings usually dating from the 1970s and 80s. Or they are housed in converted and draughty city buses that are hardly acceptable.

When entering the clinic, you immediately smell that the place is never properly cleaned. The an unpleasant odour from the drains is pervading the whole building. There are stain marks on the ceiling caused by water leakage. The room in which the nurses have to carry out their technical procedures has insufficient storage space and is very cluttered. There is no way a physically disabled person could get through (Field work notes of Ch. Loth)

At managerial level as well facilities often leave much to be desired. Frequently coordination and supervision are limited and there is hardly any opportunity for continuing education or refresher courses. In many MMT clinics patients have no say and contracts in conformity with the Dutch Medical Treatment Contract Act (WGBO) are not drawn up. Patient file documentation often does not meet the modern quality criteria. The care protocols, which should include the dispensing of medication, are usually not written down. Patient files do neither contain a proper case history nor nursing, medical and psychiatric diagnoses based on

it. Few clinics, if any, have a schedule for interventions that can be evaluated and would make it possible to discuss progress.

2.7 Conclusions and recommendations

Due to the dual objective of methadone dispensing -health care and nuisance control- and their disproportionate funding, addiction centres and staff cannot offer the care and supervision that is needed. In addition, buildings and furnishings have been neglected, both materially and managerially. In the past twenty years this has led to a downward spiral, to a collapse in the services. Methadone provision can be considered from a medical, social and political point of view, all of which are justifiable. However, in practice they are insufficiently integrated. As a result of the current policy professionals working in methadone clinics have two roles to fulfil: social worker and nuisance control. Gradually the emphasis has shifted rather much to the latter, an area for which they are not trained.

The nurses hired to dispense the methadone are trained as professional care providers and as such attend to the care demands of clients ensuing from their total condition at that moment in time. The current organization of the methadone dispensing and facilities offer nurses insufficient room to practice their profession. It conflicts with the way in which an autonomous nurse views her profession and in particular with the needs of the patients who are given the medication. In this day and age it is not acceptable to expect a large group of marginalized people, who have no say in the matter, to come and get their medication at times that may not be convenient for them, and then have no time to pay them the attention they need.

Obviously there are also good MMT clinics in the Netherlands. Not all have deteriorated to the same extent. Some have already been improved as methadone dispensing also profits from the changes that have taken place in the addictions care in the past few years, e.g. in the framework of the Dutch policy program called 'Scoring results'. All the same, the practice of methadone dispensing in the Netherlands is open to criticism. The addictions care should make clear choices and bear the consequences. Nuisance control and healthcare can humanely go together, but the latter should have priority. Particularly as better health leads to more autonomy in physical and psycho-social respect and therefore eventually to less nuisance. The MMT clinic must become a front door again instead of a quick transit point. Dispensing medication should again be part of the entire nursing care. To achieve this the nursing profession needs a broader range of duties and a corresponding number of working hours. The centre in which the clinic is housed must create the proper preconditions, i.e. a well-communicated vision on addiction and addictions care, and support it. It must enable continuing education and refresher courses. Nurses must make better use of their professional role and incorporate more critical reflection in their work so that their autonomy as professionals remains safeguarded and the patient's autonomy will become the focal point. In the area of funding an accelerated switch must be made to funding via the AWBZ and the regional care centres. Since the amendment of this act in 1998, methadone dispensing (handing out medication) could be viewed as outpatient 'services and prevention' contacts and all other care and supervision as outpatient 'supervision contacts'. This means that normative guidelines should be developed for the outpatient addictions nurse and the addictions medical care.

Chapter 3 Research methodology: participative action research and quasi experimental evaluation

3.1 Introduction

To go from 'cram care' to 'professional care' or, in other words, from dispensing methadone to methadone maintenance treatment, a local practice-driven and quasi experimental evaluation study was carried out, occasioned by a question of the centre as bottlenecks were observed in the daily practice. Initially the nursing discipline's role and part in this were vague, as were the centre's, and the centre asked us to explore the situation. After a first visit and a number of talks followed by a few months of working along in the daily practice, the decision was taken to undertake further scientific analysis. The related research questions came from the daily practice, so the answers had to be found in that same environment. The decision was taken to carry out a practice-driven and quasi experimental evaluation study (Landsheer, 't Hart, De Goede & van Dijk, 2003).

The research took place in one centre and in a complex situation. Much was unknown; cause and effect were still hard to set apart. It soon turned out that the nurses -as the ones who carried out the work in practice- were badly needed as 'change agents' to improve the quality of care in the daily contacts with, in this case, addicted patients. They could immediately combine the necessary knowledge of the patient group based on their work experience with their knowledge of innovations that in their opinion were essential. However, due to the collapse of the daily practice their knowledge had faded away, or in other words, the nurses were no longer able to adequately use this knowledge. Knowledge development and empowerment of the team members proved essential, not only to be able to make a thorough analysis, but also to realize the quality improvement by means of innovations. These innovations had to be high quality with regard to content as well as immediately applicable in practice. Initially the nurses who participated in the research had little professional autonomy. They had lost it during the process of collapse of the daily practice; they had let it slide. From the beginning, the research assumption was that if they would develop knowledge and could motivate themselves to actively participate in the change process, the autonomy in their profession could be regained.

In other words, expanding their margin for manoeuvre by means of knowledge development. This is why participative action research (PAR) was opted for within the practice-driven study. Step by step, on the basis of bottleneck analysis, carefully trying out innovations, and their evaluation, the following research question was answered:

Is it possible with the use of participative action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?

A change process was needed to clarify the influencing factors of the experienced bottlenecks and thinking up solutions for them. The nursing discipline had to start working differently than before and the centre had to set up care processes in a different way and provide the preconditions. This process is described in chapter 4. The identified bottlenecks and the related innovations are the results of two data sources much used within participative action research, i.e. the nurses' reflection meetings and the patient interviews. These findings are described in chapter 5.

Subsequently an evaluation was carried out within the same study, a naturalistic follow-up (Bouter, van Dongen en Zielhuis, 2005; Hutjes & van Buuren, 1996) within which a quasi-

experimental design was followed as much as possible in order to be able to assess the innovations for their effect⁶. The research question was:

Does the implementation of innovations lead to changes in the care provided by nurses at methadone clinics?

The workers were given all the space they needed to develop knowledge themselves about their daily work, the bottlenecks they experienced, feasible solutions, and the impact of these innovations. Chapter 6 describes the results.

At the end of this participative local research project the outcome were translated into a national guideline. The following research question was answered:

Are there signs of improvement of clinical practice in methadone maintenance treatment elsewhere in the Netherlands after and due to the local participative action research?

This process is described in chapter 7.

3.2 Participating centre and research population

Early 2000 the research started with an assignment for the researcher to make an analysis of the existing problems in one centre and its two MMT clinics. In meetings with the management these problems were described as complex, such as high absenteeism, many incidents of aggression at the counter, and nursing teams that did not seem to enjoy their work. The total research took place at two MMT clinics, also called dispensing units.

The Netherlands have 22 addiction centres, 18 of which have facilities for outpatient methadone maintenance treatment. Furthermore, the area health authority (GG&GD) in Amsterdam is a large institute that coordinates the major part of methadone dispensing in the city itself from so-called outposts, in addition to a number of family doctors and a MMT clinic of the local addiction centre (Loth, Schippers, 't Hart & van de Wijngaart, 2003; Loth et al., 2007). The centres employ nurses to dispense the medication. It proved to be very difficult to obtain a valid picture of all nurses. An estimated 250 nurses from the approx. 83 MMT clinics (including the nurses with the GG&GD Amsterdam) are responsible for the care of chronic heroin addicts (Loth et al, 2003).

The research group (Bouter et al., 2005) consisted of two MMT clinics that participated in the research. They are located in the east of the country and are both part of the same addiction centre.

Approximately 800 heroin users live in the east of the Netherlands (about 300 of them are in reach of methadone treatment provided by three outpatient clinics). In this region all methadone maintenance treatment is delivered by one centre (in total 7 MMT clinics). Two of the three regional MMT clinics participated in the study. The third clinic (35 patients and one part-time nurse) could not be included as it opened halfway through the study. Clinic 'one' is situated in a town with 152,000 inhabitants in an industrial area. About 150 heroin users obtain their daily methadone in this clinic, staffed by five part-time nurses. Clinic 'two' is situated in a town with 72,000 inhabitants, in the rural part of the region. About 100 heroin users get their methadone in this clinic, where three nurses work part-time. The methadone is administered in oral doses and differs only on 'home methadone' days. Both clinics deal with chronic heroin users, most with severe co morbidity problems such as psychiatric disorders and somatic illnesses (Loth et al. 2003).

The research units (target population according to Baarda & de Goede, 1995) to which the research questions related consisted of these two projects. They employed a total of 8 nurses,

⁶ Please refer to chapter 6 for a detailed description and further details of the research design.

all working part-time: five in project 1 and three in project 2. All nurses had several years of work experience after their basic training, in hospitals, homecare or institutes for mental health care (GGZ). Both projects had one nurse with over ten years of work experience in the addiction care.

An important question is to what extent both MMT clinics are a reflection of all clinics of the centre and other MMT clinics in the country, and to what extent the nurses of both nursing teams are a reflection of the total number of nurses working in the outpatient addiction care in the Netherlands. Its answer is of importance to the generalization of the content and the transferability and scope of the findings (Morse & Field, 1996; Landsheer et al., 2003; Boeije, 2005).

Two MMT clinics of the centre where the research took place were involved in the study. One clinic (project one) has a 'big city problem', meaning a large population of chronic drug users who have severe problems in their daily life due to their drug use and the attendant way of life (Wolf, Mensink, van der Lubbe & Planije, 2002; van den Brink, Hendriks, Blanken, Koeter, van Zwieten & van Ree, 2003). The other clinic (project two) had an important regional function, such a clinic is situated in small city and draws patients from a large region around this city, from villages and hamlets. These client centred problems are as severe as those of the patients in the big city; they differ only in number and clustering. Both kinds of projects are present in the studied centre (three of the seven MMT clinics have a big city problem and the other four have a regional function). This situation is no different in the rest of the country. The report of the Netherlands Health Care Inspectorate confirms this (IGZ, 2005). All MMT clinics employ nurses that are comparable to those of both research projects with regard to training and work experience.

The centre is one of the addiction centres in the Netherlands and had the same problems as other centres: merger processes, a growing organization, and difficulty in finding medical professionals who are well trained in addiction nursing. As a result of continuous mergers most addiction centres have grown into large centres that often cover an entire region. The structure and culture of these centres are often still in a process of change or have just went through a similar turbulent stage.

The initial situation and the reasons for the study are however similar to those of other addiction centres, as is shown by the report of the Netherlands Health Care Inspectorate (IGZ). In many centres the care for chronic drug addicts and its organization were found lacking on the same points (IGZ, 2005).

A main cause proved to be the financing of the care, namely through the Welfare Act and the central municipalities. Until the end of 2004 the policy was aimed at nuisance control and not at adequate medical care and counselling (Loth et al., 2003; Loth et al., 2006).

Consent

As mentioned before, the study started with the assignment to conduct a further analysis. However, when it became clear that this analysis and finding solutions would require more time and in-depth study, a research plan was submitted to the centre's scientific committee, which granted permission for the research. Special attention was paid to the design and execution of the patient-oriented part of the research, in particular to the steps required to arrive at informed consent. The research design was discussed and formulated together with both teams.

3.3 Practice-driven research: participative action research⁷

The answers to our research questions directly involved the daily practice of two MMT clinics. The objectives were to break out of the degenerated situation and subsequently determine if this had had any effect. The best research design for such objectives is a practice-driven design. Researchers in practice-driven research projects try to answer questions that arise in daily practice. Such situations can have very diverse characteristics which in turn influence the research options (Landsheer et al. 2003). Answers must be found in that same daily practice to often complex questions that have several perspectives, this means that various characteristics have to be measured. However, small-scale local research carried out in daily practice makes it possible to carry out thorough and in-depth analyses. The researcher can consider the issues from various points of view and visions, innovations can be immediately tested in a situation that enables adjustments after evaluation. The answers to the research questions lead to concrete decisions for the bottlenecks in daily practice. Outcome of practice-driven research can also be translated to other comparable situations, in our case MMT clinics, if during the local research sufficient methodological measures are taken (Landsheer et al., 2003). In the local MMT change project one of the aims was to disseminate the outcomes.

Practice-driven research can be distinguished from practice-directed research and from practice-acting based on experiences. The first is applied research and aimed at testing theoretical insights into practice. The latter is not research and aims at finding solutions for specific practical situations without evaluation (Landsheer et al., 2003). The MMT research did not aim at only finding solutions for the local problems and because of the fact that solutions could not be found in existing literature the project aimed at finding these solutions in the existing practice grounded in theory and as much based on evidenced as possible.

The focus lay on the nurses, who had an active role, and their activities. The project had to choose a specific suitable design within the practice-driven paradigm. Research, act and change simultaneously leads to an participative action research design (Hart & Bond, 1999). The latter is a research method focused on an iterative search for solutions to bottlenecks encountered in daily practice. The data collection, the data analysis, and taking action on the basis of the results follow each other in a cycle to provide a basis for the results. Grundy (1982, page 28) says about this: *'It is through the development of action-oriented critique that the mediation of theory and practice is possible'*. And on page 29: *'Knowledge personalized in this way can empower the individual to act because it brings with it responsibility, since it is now 'owned'*.

The fact that nurses should participated both in the research and in the acting leads to a participated action research design (Heron & Reason, 2001). Heron describes this form of research as follows (1998, page 19): *'It is a form of participative person-centred inquiry which does research with people not on them or about them. It breaks down the old paradigm separation between the roles of researcher and subject'*.

The chosen method participative action research, makes a connection between the individual participants and the organization in which they live/work, whether it is facilitative or not (Reason & Bradbury, 2001). The starting point is that not only the participant should change, but the system as well (van Dijkum, 1981; Hoogwerf, 2002; Landsheer et al., 2003). An important objective of this type of action research therefore is the emancipation of the participants. According to Coenen (1989), Boog, Van der Meer & Polstra (2001), Boog (2002)

⁷ Please refer to chapter 4 for a description of the local situation, the participants, and the ethical considerations.

& Heron (1998) the starting point of emancipation and awareness is that people start to strive for equality. Boog (2000 and 2001) calls this 'joint action' and 'joint reflection', indicating that participants and the researcher are equal partners in the research. Elements in the research process include (Heron, 1998):

- participants and the researcher must try to discover the causes and foundations of the unequal balance of power and the search process must be supported by those who directly experience the inequality and have the least power,
- then they should not only find that problems and inequality exist, but they should also start looking for solutions.

Participative action research stems from the radical democratic paradigm and from the critical theory (Heron, 1998). Understanding the actors/ participants in their daily living environment is a central given, but the difference with theories such as the G.T., Grounded Theory (Strauss, 1987) is how this 'understanding' is worked out. Within action research, 'understanding' has a radical democratic angle, which stems from the philosophies of Freire (1970 and 1972) and Lewin (1951) and focuses on two concepts. Namely equal communication, here emancipation is of importance. And secondly everyday life where increasing the acting space is put first. In this respect the participation of a researcher in action research differs from that of GT researcher: participation is actively aimed at change/improvement, it has an emancipatory character.

3.3.1 *Research and change stages*

Action research involve a complex research situation that cannot entirely be assessed beforehand, as the route is determined by the nature of the practical problem and not by the nature of the research. Three cycles run parallel: a change cycle, a learning cycle, and a research cycle (Boog, 1996; Van Dijk, De Goede, 't Hart & Teunissen, 1995; Hart & Bond, 1995, 1996a, 1996b and 1999; Loth, Meijer & de Jong, 2002). Data are collected on the actual situation and the change process. Lewin (1951) states that the following steps are important in the iterative and spiral search process: in the first step a general idea and objective with a design are formulated, followed by research into the ideas in relation to the means that must make the objective feasible.

Then an overall plan must be formulated how to realize the objectives, and stating the decisions that support the first actions. This is followed by the first evaluation, called the plan evaluation. The second step forms the cycle of planning, realization, collecting facts, evaluation, planning, and so on. The third step involves adjustments on the basis of the worked out evaluations; then the cycle of planning, etc., starts again. These steps are comparable to Van Strien's regulative cycle (1986):

- problem definition
- analysis and diagnosis
- plan of action
- intervention
- evaluation.

They differ in the degree of the researcher's participation and research population. PAR does not have a clear-cut design of action and reflection, but wants the participants to develop them as they go along, in consultation with the researcher.

We started with an open PAR design approach as at that moment in time the chaotic situation did not offer any structure to go on; from the chaos critical reflection was started. Chaos and loose structures were in fact needed to be able to start such reflection on the daily practice. At a later stage the loose structure became a pitfall and the decision was taken to go and follow the opted for Heron's (Heron, 1998 ; Heron & Reason in Reason & Bradbury, 2001) co-

operative inquiry. CI is a method of doing research through participation and action. Applying CI one can expect to go through 4 stages. See figure 3.1:

Figure 3.1: Heron's action stages

Heron (1998)
1: First reflection stage
2: First action stage
3: Experiential immersion
4: Second reflection stage

Four stages form an action cycle. Heron and Reason in Reason and Bradbury (2001) state that 6-10 action cycles are required to be able to guarantee the validity of the findings.

In the first stage the researchers and participants explore a research area. They must agree on it and formulate a joint definition. The workers must define a new area in their daily practice and formulate research questions and hypotheses for it. Then a research method for further exploration is looked for, with the workers playing an active role. All must agree on how the data are collected and stored. In this first stage the researcher and participants together are the research team, and the participants act as researchers. In the MMT clinic research this stage took the most time; it was also the most chaotic time (Loth, 2002). Chaos was also necessary to be able to distinguish between cause and effect (Johns, 1999 and 2001) and form an opinion about the state of affairs. However, at the end of this process it was clear what we understood by 'the collapse of methadone dispensing' and a diagnostic model was presented.

In the second stage the workers become research objects. They start to participate in innovations/actions and must record and analyze their own findings and those of others. Observing and listening comes first in order to gain a better insight in how it goes, trying out actions and keeping good records of the results of the changes well, so that they can start explaining them. In this stage of the research the nurses became active data collectors. For example, during their work at the dispensing counter they registered each activity they carried out next to handing out methadone for a year. In a log the nature and scope of incidents of aggression were recorded.

In the third stage the workers are in the middle of the research process and start to acquire new knowledge. Practical skills are fed by new knowledge. This stage proved important in our study. Both teams were confronted with their own wishes and the difficulties the changes created on the shop floor. Differences in the pace of change became visible; one team wanted to move quickly ahead and the other opted for a standstill (team 1).

The fourth stage is characterized by an exchange between the theoretical knowledge and practical skills. In this stage all initial and final data have to be compared, in order to enable evaluation and adjustment. The team that continued with the research (team 2) developed enormously; mutual discussions became more and more structured and substantive, the patient's perspective was considered professionally and carefully integrated in the treatment.

In chapter 4 these research stages are worked out in more detail.

In our research these phases were the basis for the scheme describes in table 4.1 in chapter 4.

3.3.2 *Ending PAR, the relation of research and practice*

There are roughly four reasons to discontinue action research (Landsheer et al., 2003). The first one is the realization of the predetermined objective. In principle, action research is completed when the objectives are achieved, but it is difficult to determine its exact end as new questions and new objectives emerge all the time. The conclusion can be clearly

pinpointed if the researcher and the other participants are in agreement and if a final report has been written.

The second reason to discontinue the research is when it becomes clear that a different path has been taken and, in fact, a new research has been started. The third reason is when a saturation point has been reached and nothing new emerges.

Finally, the research is discontinued if the circumstances change. For example, the funding is stopped, there is an argument or one of the parties is disheartened, the used working method is not effective, or the results turn out negative for the institute or organization.

The research at both MMT clinics was funded by ZonMw's Geestkracht program. This two-year subsidy had a clear beginning and end, and had to be concluded with a final report. It marked the end of the local project. However, it did not mean that the study itself had come to an end as well. From a local point of view it was very clear what the causes of the problems were and which innovations could contribute to solving them. The implementation of these innovations however was far from completed. One of the teams could no longer participate and pulled out, so the study continued at one MMT clinic. When the final report was finished, the need for innovation still existed. In this respect the subsequent commission was of great help, namely developing a national guideline for opiate maintenance treatment in collaboration with other addiction centres. One of the active MMT clinics that set to work with it was the clinic involved in the local project. Nurses of this clinic brought in their own, already ongoing learning and development process.

3.3.3 *Role of the researcher in participative action research*

In the research at the MMT clinics the deliberate choice was made to actively involve the researcher (and to use the Co-operative Inquiry Design) in order to be able to get a difficult change process going. After all, as a nurse she not only had much knowledge but also much experience with a professional field that was hard to change. However, it can also become a drawback.

That is why the researcher actively participated in the research, resulting in her own learning and change process. She had particular knowledge of methadone dispensing and the related daily work activities. For example, as an insider she could quickly join in with both nursing teams, and as a nurse she was able to quickly notice that the work pressure at the counter had many causes and that the set tasks were incomprehensible. During the entire research she felt connected with the struggle to clarify the tasks and to implement difficult innovations. The team and the researcher spoke the same language, enabling them to stay focused. It offered the possibility for the researcher as an outsider to translate the analyses for the department heads, managers and other researchers with an inside look. However, this role also has a drawback: not being able to maintain sufficient distance from the research situation so that a 'biased viewpoint' will be developed (Morse & Field, 1996) and the researcher will 'go native'; distance and reflection are no longer possible (Denzin et al., 1994; Morse et al., 1996). Furthermore, researchers may neglect their research role owing to the fact that they start to participate to an extreme level; they step too much in the other's shoes and hardly stimulate them to change their actions, if at all. They can also go on to allow vague objectives, which means that vague results are achieved, if at all, and that the change or progress cannot exactly be determined. Or the science is neglected and the theory development cannot be described. Chapter 4 describes the effort to prevent all this from happening.

PAR makes high demands on researchers. They need a certain affinity with the field of practice, including knowledge of the culture and structure of the institute where the study is taking place, and knowledge of, and skills in dealing with the persons concerned. In addition, they must find it a challenge to contribute their own experiences and knowledge and to start their own learning process (Landsheer et al., 2003). Hoogwerf (2002) adds that the researcher

must have knowledge of, and skills in dealing with group dynamics, must be able to facilitate the group's progress, must have knowledge of change management and therefore be able to deal with unforeseen circumstances and outcomes.

Abma et al. (2002 and 2006) discuss a number of roles researchers have to take up in the course of a research. These roles will change slowly but surely as to content, responsibility and focus, and include:

- from technician (measuring) to descriptor (describing);
- from assessor (judging) to interpreter (interpretation);
- from teacher (educating) to Socratic guide (guiding/counselling).

Four main activities are of importance in these roles: explaining causes and effects using the collected and analyzed data; on this basis predicting which effects and processes can be expected and immediately creating conditions that enable change (preparing policy decisions), as well as starting up a dialogue and keeping it going, so as to facilitate an open discussion on the basis of respect that enables reaching agreements as well as tapping new perspectives. In this context three tasks are of importance: listening, asking questions and deliberating. Chapter 4 further describes the researcher's roles.

3.3.4 *Generalization*

Transferability

The generalization of the research findings from local situations (the external validity) means that the conclusions of the research also apply to other situations that were not studied, i.e. the scope of the findings.

There are two kinds of generalization:

- transferability (Leiniger, 1985; Morse et al., 1996) which is created by a good comparability and analogy/correspondence between the different research situations enabling the transferability of the findings and conclusions.
- theoretical generalization (Boog, 2001 and 2002) which ensures that the theoretical insights and notions that emerge from local studies are applicable in other situations, because of the fact that integration and abstraction of the research findings take place.

The research was conducted locally with regard to data collection, data analysis, and the development and evaluation of innovations. During the entire research corroboration was sought time and again at two levels.

Firstly, desk study was carried out during the entire study. Initially literature was sought on the ins and outs of the funding of methadone maintenance treatment; at the end of the study the focus shifted to international literature on case management, care processes and addictions nursing. All literature that provided answers and/or explanations to questions posed in the focus group meetings was discussed by the group in the next meeting.

Then, when the model started to show some coherence, the first results were submitted to nurses working at a number of other MMT clinics. It was a non-random sample, namely the other five MMT clinics of the same centre: two big city clinics and three regional MMT clinics.

The first findings were discussed in the focus group meeting, the main question being whether they recognized the bottlenecks and could provide the information that was still missing. This select group of people was chosen deliberately. The nurses from the projects participating in the research wanted to carefully test the first results and opted to involve their immediate colleagues within the centre in the research. From a research point of view it seemed a good choice; a step-by-step check of the results was the best option before the results would be

presented in an article (Loth et al., 2003) and broadly-oriented meetings. After this step the analysis was presented to sister centres at a national meeting on methadone maintenance treatment.

The centres present were mainly from the west and the north of the country. Subsequently two presentations were given at two addiction centres in the centre and south of the country. Beforehand all participants were told that additions and improvements were more than welcome. Each time the participants recognized the findings, which led to substantive debates. The discussion criterion was that these debates had to end in joint results. The selection criterion was that all proposed improvements had to be usable in other centres as well. In this last step the various care organization processes within centres were compared which led to substantial improvements in the solutions for the identified bottlenecks.

Objectivity

In participative action research, the researcher has to work in a reflective manner and clarify the personal and theoretical perspectives in the research (Wester, Smaling & Mulder, 2000; Boog, 1998, 2002 and 2007). Action researchers, in particular in the co-operative inquiry, can never be value-free; the actors will have noticed this and reacted to it. The position of researcher in the co-operative inquiry is a special one (Heron, 1998).

In the research at both MMT clinics two positions played an important role: the position of scientist and the position of addictions specialist nurse. The researcher's personal motivation, experiences and intentions play an important role in the entire study.

The researcher had already been working for years in the addiction care, first as a nurse and later as a nurse scientist. Her actions were influenced by:

- her personal belief that people can change by acquiring new knowledge;
- the realization, fanned by her studies, that the personal stories of patients are not only fascinating to listen to, but are also of great importance for the setup of nursing care, in particular for chronic heroin addicted patients;
- her personal experience in the health care sector that both patients and nurses rank low on the hierarchical ladder;
- her view that research and practice are not as far apart as is often assumed and that a nurse scientist should play an active role in this respect.

In order not to let her own ideas rule the roost the researcher has made frequent use of peer review during the entire research (Morse, 1996; Wester, 1990, 1995 en 2000; Wester et al., 2000; Boeije, 2005). A second researcher checked all first analyses. During these meetings the researcher's journal was discussed in which she laid down her experiences, doubts and rough ideas. Most meetings were taped and then typed out, as verbatim as possible.

All interviews, including the group interviews/discussions, were checked using the so-called member check (Morse, 1996; Wester et al. 2000) and, after analysis, were presented to the interviewees. With regard to individual interviews the typed analysis was presented and with regard to group interviews an oral summary was given of the analysis results (Kingry, Tiedje & Friedman, 1990).

Triangulation

In the total study the daily practice was looked at from various angles and in different manners: triangulation (Maso, 1989; Hutjes et al., 1996; Boeije, 2005). Three kinds of triangulation were used: data triangulation, methodological triangulation and investigator triangulation. The identification of bottlenecks and the search for solutions took place using various manners of consecutively planned data collections and from out various data sources.

This provided insight into the nature and scope of the bottlenecks and the various aspects of innovations. A second researcher participated in the patient interviews and the last round of focus group meetings with the nurses; two persons were involved in the analysis of the patient interviews (the researcher herself and a social worker, who was chosen for her insight in the target group). The focus group meetings were also analyzed by two persons (the researcher and a nurse scientist with experience in addiction care). Both were directly involved in the collection of this data as well.

Validity

In action research representative results mean first of all that the researchers have been able to paint a complete picture of all possible opinions, attitudes, and behaviours regarding the studied subject matter. Within action research, the regulating principle for validity is called 'reciprocal adequacy' (agreement by means of dialogue, called 'double hermeneutics' by Giddens, 1984 and 2001). Reciprocal adequacy can be reached in three steps (Giddens, 1984; Coenen, 1989, 1996 and 1998; Boog, 2002). Firstly the one-sided interpretation of the daily life of the subjects by the researcher herself. In the second step the subjects and the researcher together reassess the results of the first round and, after analysis, complete and/or adjust them. In this step it is also of importance that the role of the researcher in relation to the interpretation is analyzed (Pyett, 1999). In the third step the subjects once again make an analysis, but now the group is joined by other key experts who are not directly involved. The angle of this analysis is the direct applicability in daily practice.

Data collection and analysis took place in accordance with the hermeneutic-dialectic circles (Boog, 1996 and 1998; Boog et al., 2000; Richardson, 2000; Abma & Widdershoven, 2002 and 2006). During the group meetings data was collected by means of interaction and dialogue between participants and the researcher. First the researcher put an interpretation on these dialogues and then presented them to the group of nurses in order to collect data again through dialogue. The dialogue could yield consensus on viewpoints but also provide insight into the various views on a topic. The regular feedback of the analyses to the active participants of the study ensured that the results were increasingly based in the daily practice.

3.4 Evaluation research

The initial stage of the participative action research yielded information on the causes and effects of bottlenecks and solutions/improvements were formulated for these bottlenecks. This is why in the next stage the impact of these improvements could be assessed. Within the participative action research set-up five innovations were tested for effects. Two field situations (project one and project two) were studied, within which five innovations were set up and several measurements were carried out. In order to be able to prove causal connections and effects, if any, we opted for a naturalistic follow-up whose design was in principle non-experimental. However, in the analysis a quasi-experimental design was followed. Chapter 6 reports in-depth on this evaluation research (6.3 supplies further information on the research set up and 6.5 on the measurement design).

Chapter 3 described why practice driven research was opted for. Practice driven research with a participative action research set up as a type of research in the actual daily practice with an active involvement of the researcher. An important point of departure in this type of research is that the actors, in our research the nurses, increase their knowledge by acting in practice. The CI was applied in two MMT clinics. How the change process and knowledge development were achieved will be discussed in the chapter 4 and 5. Simultaneously a product evaluation was carried out to measure the effects of several innovations. The outcome of this evaluation are reported in chapter 6.

Chapter 4 Enhancing the quality of nursing care in two outpatient methadone maintenance clinics with the help of participative action research: A process evaluation⁸

4.1 Introduction

4.1.1 Background

Methadone maintenance treatment (MMT) has been the main medical treatment for heroin addiction since the early 1980s. In the Netherlands (16.1 million population), about 32,000 people have severe problems due to their use of illicit drugs, such as heroin and cocaine. Currently about 13,000 people take methadone on a daily basis, prescribed by one of the 85 methadone clinics in the Netherlands (Hendriks, van de Brink, Blanken, Koeter, van Zwieten & van Ree, 2003).

In the past decade, besides detoxification, harm reduction and palliation, aims of MMT have also focused on reducing crime and nuisance to society (Loth, Schippers, 't Hart en van de Wijngaart, 2003). Due to a lack of interest and funding, the MMT clinics have been marginalized within the larger substance abuse treatment institutions of which they form a part.

4.1.2 Deterioration

Deterioration in methadone provision is demonstrated by a range of phenomena: the large number of patients to be served per hour, high staff turnover, many incidents of aggression at the counters, and limited facilities. Nursing staff have had to restrict themselves to distributing methadone. In this field, process aspects, such as interactions between patients and healthcare workers, patients perspectives embedded in care strategies, and the effects of rules and regulations on patients and workers are seldom researched although these aspects are understood to be critical (Chenitz, 1989; Curtis & Harrison, 2001; Bell, 2000; Lilly, Quirk, Rhodes & Stimson, 2000).

Two MMT clinics located in the eastern part of the Netherlands adapted a participated action paradigm, which made it possible to observe interaction processes. This study reports the strengths and weaknesses.

4.2 The study⁹

4.2.1 Aims

Like others (Happal & Taylor, 1999) we observed a decreasing professional attitude in addictions nursing. The overall aim of this study became the enhancement of nursing care strategies embedded in institutional policies. A bottom-up guided change strategy was expected to best facilitate the improvement processes using the models of both Heron and Johns (Heron, 1998; Johns, 2001). This method gives nurses a major role in enhancing the quality of their services by playing a active part in analyzing the bottlenecks, developing applicable innovations, and evaluating the effects of these innovations. Participative action research (PAR) enhances professional awareness and it is also a strategy to overcome opposition against changes on the shop floor. The research question was:

⁸ This chapter was earlier published in 2007 as an article in the Journal of Advanced Nursing, 57, 4, 422-431.

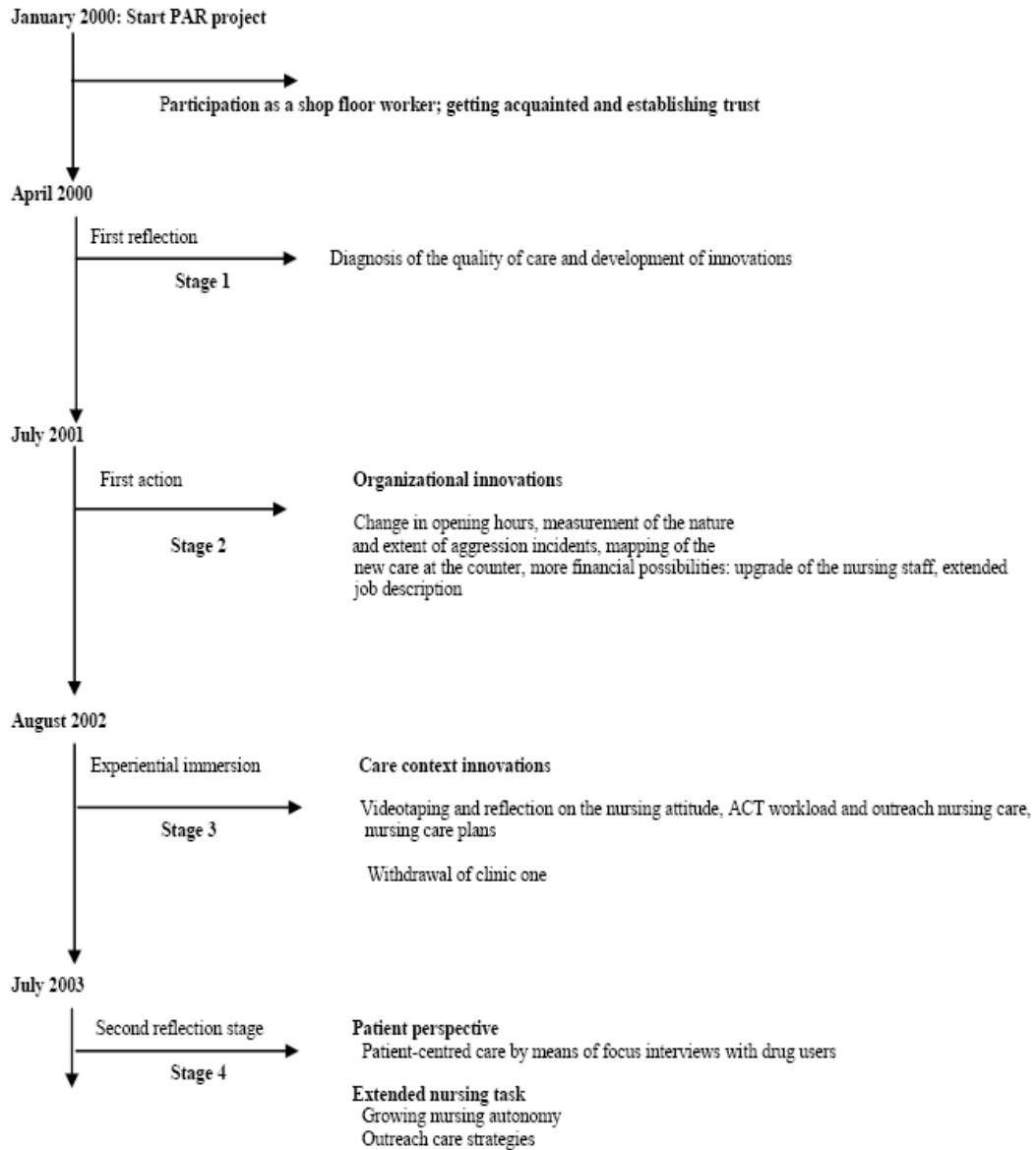
⁹ This project was funded by the Dutch Research Fund ZonMw. CL would like to thank Hillie van de Peppel, RN, MsN, for being her critical friend and companion during the study.

Is it possible with the use of participative action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?

Sub-question became:

Can PAR help to halt the deterioration in MMT and develop new care strategies which are better geared toward the patients' needs?

Table 4.1: Procedure of the study in MMT linked to the four stages of cooperative research of Heron



In November 2003, the reporting period started: national discussion paper on addictions nursing in MMT including the necessary innovations, work method and nursing outcome, research report, lectures, conferences. Start of the development of the Dutch MMT Guideline.

4.2.2 Methodology

The situation in the clinics was quite complex. Bottom-up procedures with the help of participative action research (PAR), and in particular the cooperative inquiry design (CID), were considered the best way to support quality improvement, and to gain knowledge on the processes that could be grounded in institutional procedures. And in the care processes during daily contacts between nurses and patients, nurses as active change agents were needed to enhance the quality of care. PAR is derived from the participative knowledge paradigm or constructivism (Heron, 1998; Reason & Bradbury, 2001). The aim is to empower workers and facilitate identified modifications in practice. Heron (1998) characterizes PAR as research done in daily practice for and by workers. An articulated form of PAR is CI (Reason & Bradbury, 2001). CI specifies dialogues, processes, and levels of cooperation between the researcher and health professionals, subsequently establishing procedures for reflection and action.

Six months into the project we adopted this cooperative design strategy because more structure was needed to show us the way forward. Especially, more structure in the dialogues between nurses and between nurses and the researcher, in the development of professional knowledge, and in planning innovations and accompanying evaluations. PAR and CI are transferable (Heron, 1998). Within CI, Heron distinguishes four stages, see box 1.

Box 4.1: Model of Heron with stages

1. First reflection: a launching statement is formulated and the first action plan including innovations, and data collection methods.
2. First action: innovations are explored and tested. Data are gathered and analyzed.
3. Experiential immersion: the first innovations are evaluated and, if necessary, amendments are made.
4. Second reflection: the acting space of the workers is expanded, and innovations are implemented into daily practice.

Empowerment is enhanced by the growth of knowledge (Johns, 2001). Johns' model focuses on knowledge development in four stages; the model can be helpful in detecting knowledge deficits and in selecting knowledge enhancement techniques. See box 2.

Box 4.2: Model of Johns with stages

1. Workers have little knowledge and few ideas; the voices of more powerful groups are dominant.
2. 'Received voice': workers repeat the ideas and opinions of others, they are not yet capable of expressing their own ideas and opinions.
3. 'Subjective voice': workers are now capable of voicing their own opinions, but these opinions are not clearly thought through, without reflection.
4. 'Procedural voice': critical reflection is possible.

The four action stages of Heron with the emphasis on acting complement the Johns' model.

Table 4.2: Models of Johns (reflection stages) and Heron (action stages)

Reflection stages Johns (1999 and 2001)	Action stages Heron (1998)
silence (no voice)	first reflection
received voice	first action
subjective voice	experiential immersion
procedural voice	second reflection

4.2.3 Participants

Approximately 800 heroin users live in the eastern province of the Netherlands (about 300 of them are in reach of methadone treatment from out of three out patient clinics). In this region all substance abuse treatment is delivered by one institute. Two of the three regional MMT clinics participated in the study. The third clinic (35 patients and one part-time nurse) could not be included because it opened half way through the study. Clinic 'one' is situated in a town with 152,000 inhabitants in an industrial area. About 150 heroin users obtain their daily methadone in this clinic, staffed by five nurses working part time. Clinic 'two' is situated in a town with 72,000 inhabitants, in the rural part of the region. About 100 heroin users get their methadone in this clinic, where three nurses work part time. The methadone is administered in oral doses and differs only on 'home methadone' days. Both clinics deal with chronic heroin users, most with severe co morbidity problems such as psychiatric disorders and somatic illnesses (Loth et al., 2003).

The study started when the chairman of the regional substance abuse treatment institute asked the author for advice on how to improve MMT clinics, to address the high absence rates and sickness leave, low job satisfaction, poor patient satisfaction, and lack of cooperation among the staff. Following approval to undertake this study from the scientific board of the institute a series of orientation meetings started to gather more information about the situation, the management invited the first author to become actively involved in a quality improvement process. She started with participative observations during a three-month period, working as a nurse in one of the clinics. The management succeeded in gaining funding. It became apparent during the observation period that the negative situation generated from the attitudes of the nursing staff was a direct result of the organizational and practical working conditions. She found that the professional autonomy of the nurses was low, and that staff and management were willing to improve the situation.

4.2.4 Data collection

The information needed in this study was obtained from several sources. Individual short interviews (17), based on 8 topic questions concerning the daily organization of the clinic, with patients at the counter during dispensing time. The researcher invited the patients to give information while the nurse was preparing the methadone. Further onwards in the study two focus group interviews with patients were used to gather information about patients perspectives. These interviews were carefully planned and scheduled under the supervision of the researcher and a meeting leader and were based on two topic questions: cooperation with the nurses and patients' wishes. The invited patients (exclusion criteria were severe psychiatric and physical problems) came to the clinic twice and gave their informed consent. In-depth interviews (10) with nurses and other healthcare workers were held for information on perceived bottlenecks. Focus group interviews (2) with nurses were used to put the first outcome into a broader perspective (Nyamathi & Schuler, 1990). Participative observations (3

months) during methadone dispensing were done for gathering in-depth information about present workload and nursing tasks. Video recordings (4 dispensing moments) were used to get more insight into the interactions at the counter between nurses and patients. During the whole study, reflection meetings (24) with the nurses were held to gather in-depth information about needed innovations and their effects.

All interviews were taped and typed out verbatim, observation notes were taken and the researcher held a personal diary for her coloured view on daily practice during the study.

4.2.5 Rigour

Role of the researcher in participative action research: change moderator. In this participative action research the researcher departed the tradition of objectivity and took part in the study and in the research outcome (Koch & Harrington, 1998). She chose position beside the nurses, give them a voice by mediating between them and the managers and between them and the patients, and so facilitated change processes in the two clinics. After an observation period in which she acted as a fellow-worker, she initiated reflection processes with the workers. As a 'facilitator' she helped to link the outcome to the present nursing work and she was able to start reflective thinking by bringing in her own experiences (Titchen, 2000, 2003a, 2003b, and 2003c). She also became a translator from the healthcare workers to several management levels and back again.

As an addictions specialist nurse, the researcher was part of the change process. Researcher bias as personal motivation, previous experiences, and malicious intent can have a detrimental effect on research. This bias can influence the study outcome in a negative way. Corrective actions were taken during the data collection and data analysis stages; the personal reflection took place at four levels. The *first* level of reflection was with colleague health workers and was characterized by strong personal commitment. To avoid 'going native' during this thought sharing stage (Morse & Field, 1996), memos were taken and a diary was kept and these were reviewed by peers. On the *second* level reflection there was less personal commitment, it took place in focus group meetings with nurses from other MMT clinics and in discussion meetings with managers and other healthcare workers. The proceedings of these meetings were recorded.

The *third* level was an important learning process for the researcher. She needed to reflect at a distance in order to ground the developed theory and consider her doubts and questions critically. A second researcher became her critical companion in monthly meetings outside the clinic (Titchen & McDinley, 2003). Reflection on the total research process and outcome (*fourth* level) was established in meetings with two university professors. The first supervisor is an addiction expert and the second supervisor is an expert in research methodology.

4.2.6 Fittingness

Outcome of qualitative research has to be explained into the context of usefulness in daily practice (Koch & Harrington, 1998). In this participative action research this was done in the following ways; a two-step and structured analysis and member check. All interview outcomes, after analysis, were given back to the actors for a member check. After both focus group interviews with the patients, the patients and the first researcher discussed the outcome (Morse et al., 1996; Heron, 1998).

For preventing bias we applied data triangulation and peer review, a second researcher became a critical companion. And two focus group interviews were held for validation with external nurses from five MMT clinics which were not involved in the study. Both the researcher and the nurses of clinic one and two wanted to explore the present outcome in a broader perspective. The preliminary outcomes of the study were presented, discussed and acknowledged in these groups.

4.2.7 Ethical considerations

All data collected in this study were only used for the research purposes described earlier and were saved anonymously.

Chenitz (1989) called the nursing process in MMT 'managing vulnerability' and that is exactly what it is. Chronic heroin addicts are vulnerable patients and nurses must gain their trust step by step. When doing research with these patients care must be taken when obtaining informed consent. Each patient received written information about the study and a nurse explained to the patient what it involved while dispensing the methadone. Then written permission was requested for videotaping the interactions at the dispensing window. Only a few patients (6%) gave no permission and were not filmed. Because of this vulnerability, the nursing teams decided to tape only their own interventions, the patient could not be seen. They also decided not to be present during the focus interviews with patients, we concluded this might influence the patients' answers. Patients with severe co morbidity problems such as HIV/AIDS and psychiatric disorders were not asked to take part in the study. Each patient who participated in the focus interviews received a personal present.

The most important part of the study was the open discussions with patients at the counter, when we explained all about the study. Interactions between nurses and patients started here. Ethical issues concerning the healthcare workers focused on the reflection meetings; we decided that data could only be disseminated after discussions had taken place and consent had been received during the reflection meetings with both teams. The new care strategies were carefully researched on two issues. The legal status, nurses must be competent and qualified to perform certain care strategies, and of course the ethical considerations towards the individual patient.

Participative action research can cause commotion on the shop floor, which is usually the beginning of new ideas and try outs. But commotion can harm individuals and as an action researcher one must always be aware of how to use these outcomes and how to present the contents and what to leave out. In every meeting, time was reserved for personal remarks by the members or for team processes which needed attention. The central theme during all meetings was the effect of the changes on the ongoing professionalization process of the nurses and the effects on patients.

It is quite common in action research to write at least two reports. One for the 'community' and another for research purposes (Gibbon, 2002). The addictions nursing theory, the new practical knowledge, was therefore written down in plain language in a discussion paper for other MMT clinics. Lectures at various conferences and a published literature review (Loth et al., 2003) disseminated the results. A thesis will complete this spread.

4.2.8 Data analysis

A two-step analysis was used. Firstly, qualitative data such as the recorded and typed out interviews were analyzed on themes and peer reviewed with help of a second researcher (Morse et al, 1996). Secondly, all nursing staff or patients involved in the study critically reflected on the first analysis, and drew conclusions in consultation with the researcher who performed the initial analysis.

4.3 Results

After adopting the CI, four research stages were marked by an increase in knowledge. By identifying breaking points that marked the transition from one stage to the next we labelled the stages by the theme that characterized the process. Especially the increase in knowledge brought about energy and enthusiasm in both teams.

4.3.1 Stage 1

Implementation of the action plan

The launching theme became: 'Lack of professional autonomy means dissatisfaction and diminishing professional responsibility'. Data were gathered on interaction issues at the counter by means of interviews and participated observations. A literature study helped the teams to put the outcome into context, leading to a full diagnosis on the problems in the clinics.

Knowledge development

As co-researchers, the nurses provided feedback on the data analysis. Both teams worked at formulating and developing statements about care, care for addicts, and the organization of this care. The professional knowledge of the nurses was still based on assumptions and lacked a theoretical base. For the nurses, there was a huge discrepancy between the ideal situation and the reality concerning their professionalism. They had no fixed opinions.

In retrospect

Chaotic scenes were the norm in the earlier days of the study and these scenes were very inspiring. Setting limits to the work environment is of utmost importance in this stage, otherwise chaos will take over from the planned actions. In this first step of action research, if limits are not set or the following steps forward are not planned very carefully, change will create chaos because too few actions are grounded in institutional policies and in theory-based interventions. This takes time.

4.3.2 Stage two

Implementation of the action plan

The emerging theme was 'Growing professionalism means struggling and then reaping the first fruits.' Changes in organizing the daily work were needed to create more space or time for patient care. The opening hours of the clinic were extended.

Knowledge development

In the meetings, the nurses reflect on changing their focus to a more structured and critical way of thinking. After analyzing the recorded interviews, it became clear that they listened to each other and frequently entered into debates.

In this second stage the increase in practical knowledge became noticeable. The team members changed their vocabulary and started to give their opinions using terms they had read or heard elsewhere.

In retrospect

The growing empowerment at this stage had its limits. Changes often create instability. For instance, the extension of the opening hours initially created more chaos than was foreseen. Most nurses in clinic one started showing signs of boredom because they had extra time but instead providing care they discussed non-work-related issues. Box 3 shows an example of the team differences and the necessity for institutional conditions (policies).

Box 4.3: Example of the team differences and the necessity for institutional conditions (policies)

Problem statement

Extension of the opening hours had an inspirational effect on the nurses in team two. They filled the extra time with new nursing care. In contrast, this resulted in boredom in team one.

Analysis and Diagnosis

The workers of team two felt free to develop their nursing professional care strategies. Their manager encouraged them to do so (external condition). A growing feeling of freedom and pride started at this point in time (internal condition).

The healthcare workers in team one hesitated to develop new care strategies. They simply did not know what to do first and what last. They did not have enough knowledge, enthusiasm and sometimes the courage to change their own practice (internal conditions). They stopped changing and landed in the threshold oscillation phase. Their manager did not take action, but sat back (external condition) and no institutional policy was made for new care strategies (external condition).

The liberalization of patient-directed rules and regulations was a second example of chaos. This led to more freedom in decision-making so the nurses had to find a new equilibrium in their general attitude towards patient-centred exceptions. This led to discussions, conflicts, and to failures at the counter. It was a period full of new activities without knowing where it will end and what the effects will be. The growing knowledge was not yet grounded enough in practice-based experiences; the professional knowledge needed to grow but it did contain a wealth of data about, for instance, addictions nursing theory. The learning point emerging was that in future research, this chaos must be discussed more, so actors will be better prepared and more time can be spend on analysis of these data so theory can emerge and could be better grounded and used.

4.3.3 Stage three

Implementation of the action plan

According to Heron, the third stage is crucial, as the touchstone and bedrock. The nurses had to cope with two major processes. ‘The bright spots with the continuing growth’ and the ‘step back’.

After the organizational changes the nurses were ready to discuss innovations in their interactions with patients. Analysis of the group dynamics revealed that the two teams had grown apart. The first signals of withdrawal in clinic one were a reduction in data collection and increasing absence rates in group meetings. Nurses in clinic one stopped being co-researchers. On the other hand the nurses in clinic two made huge steps forward in their professional ideas and were held back by their colleagues. Because of a lack of funding, which was certainly a pressure point at this moment in the study, we decided to stop the action research in clinic one and start it up at a later stage when the team was ready for it. The manager appointed a supervisor/trainer for this team to support a healthy group process and the development of the individual nurses.

Knowledge development

In both clinics videotaped recordings were made at the dispensing counter to determine the attitudes of the nurses towards the patients. The review only took place with the nurses in clinic two. These tapes were used as discussion material (verbal and non-verbal communication was analyzed). It became possible to analyze the disruptions in the patient-nurse interactions at the counter. The first impression of most participants was a feeling of shame concerning their attitudes towards patients. For example, the short contacts were filled with computer activities and not with patient-directed conversations. On the other hand they discovered a lot of humour in their daily contact with patients.

Feelings of pride grew when they started to work as case managers and allocated some nursing actions as outreach care. They registered these care strategies in case records. Discussions arose about all the ethical considerations and uncertain policy regulations because of the new interventions; the nurses spoke emotionally and with no distance. Uncertain feelings arose about these applied new care strategies because of insufficient existing practical experience, but their knowledge grew from theory with no practical experience towards practical experience embedded in used/applied theory. The nurses expressed this new professional knowledge in a more subtle approach towards patients. The following interview fragments are examples:

Nurse: *'So the signals are telling us that he (author's note: the male patient) is a victim of the scene and that he is regularly abused by other drug users. That is extra difficult for him to cope with on top of his other problems (researcher: addiction and psychiatric problems)*

Nurse: *'It is important to keep a low threshold in all contacts with her (researcher: a young gypsy woman with a new heroin addiction), trying to be as accessible as possible. That is the way to do this. But here are my questions. She has to give some urine samples because she is a new patient. And her father wants us to do the tests. He wants to see the results. Technically I can explain all this to him. I can tell him that only the patient is authorized to see the test results. But I wonder how I will be able to maintain contact with this woman without her father. It is a very grey area'*

In retrospect

The process of retreating is called 'falling asleep' and is followed by a relapse into ignorance or 'exhaustion' (Heron, 1998). Team one was able to cope with the organizational innovations but failed to develop more patient-centred care and their attitude showed a single loop pattern, quick reflections on fast eroded problems (Heron, 1998; Johns, 2001). Those nurses needed more time. On the other hand, nurses in clinic two managed to develop new care strategies and established double loop learning.

What made the difference between the two clinics? It became clear that dysfunctional relationships were one of the causes of the exhaustion phase. In clinic one we observed 'bullying' and 'mobbing' as dysfunctional forms of a professional relationship (Taylor, 2001). The workers in clinic one spoke about a sense of powerlessness. These feelings turned into oppressed personal behaviour against colleagues and patients. Communication in clinic two was open; in clinic one the communication was too closed. Housing conditions in clinic two were far better than in clinic one, and the nurses in clinic one lacked a strong manager who was able to coach them. Epidemiological differences between patient groups could also have had an effect. Clinic one had to cope with more patients than clinic two and most patients had more co morbidity problems. And finally, clinic one was the primary change agent, and clinic two followed. Being the primary change agent may have been too demanding.

The researcher's role could have been of influence too, although her input was critically analyzed in the form of peer-review meetings and her actions were carefully planned at this

stage of the research. A critical statement about her role is that she probably gave the team members too much space, earlier carefully planned critique on their behaviours possibly could have prevented or reduced the mobbing.

According to Heron (1998) the actors become fully engaged at this stage and have to cope with threshold oscillation. The model explains and forecasts the fall back but is quite vague about foreseeing this at an early stage. It is very important to watch for early signs and deal with them as an action researcher.

4.3.4 Stage four

Implementation of the action plan

The theme became 'Satisfaction and becoming critically reflective practitioners'. Two focus group interviews with patients from clinic two speeded up the process. At the start of the first interview most patients were negative about the nurses:

Patient: 'They (author's note: the nurses) don't have any clue about our lives.'

But by the end this attitude changed into understanding:

Patient: 'I care for the nurses so I don't tell them everything, that is impossible because some information is too dangerous also for them'

The stock-taking of these patient perspectives and the confrontation with these perspectives gave the nurses a shake-up. In the last reflection meetings, critical reflection improved with the help of these patients' perspectives.

Nurse: 'The patients told you (author's note: the researcher) that for them handing out methadone was like feeding pigs. They experienced our work at the counter as working on an assembly line. I do not like their opinion about my work but in fact they are right. I do not know how other nursing colleagues feel about this, but I cannot find any good professional argument any more for forcing most patients to come every day for their methadone doses.'

Knowledge development

Team two found out that at first they spoke with two separate 'voices' and perceptions about nurse-patient communication. In the reflection meetings the team members succeeded in listening to each other and after discussion they decided as a team to reflect more on the performance of professional attitudes towards drug users.

One voice represented a more moral condemnation of heroin users

Nurse: 'But in fact for most patients it is a big problem to be responsible for their own lives. Most of them are not capable of being responsible and they blame us for that. I want to control and dominate them.'

The second voice represented the conviction that addiction is a psychiatric disease.

Nurse: 'My aim is to put patients on a par with myself. On the one hand I have to set limits to their addictive behaviours. They have severe problems in daily life. Maybe I can help them a little. They are people like me.'

In retrospect

In the last stage the nurses in clinic two managed to make a movement towards the patients. An example of this is that nurses and patients discussed an arrangement concerning home methadone days.

4.4 Study limitations

Action research has its focus on change. In this study the scientific evaluation had its weak points, especially the analysis of the transcripts from the reflection meetings. These transcripts contain rich data. Further qualitative analysis most certainly would help to appear a beginning micro level theory about addictions nursing; about phases in the interactive process of nurses with vulnerable patients, and different steps into the nursing process which could contain information about handling care aspects in concern with drug misuse.

The role of the action researcher in the withdrawal process of team one could be researched in more depth in future research, especially in relation to restarting a study after a forced stop.

The outcome of this study must be seen from a local point of view, although during the study much attention was given to national and international research outcomes. Further research needs to be done on these outcome before validation is proved.

4.5 Conclusions

A problem statement was made concerning the deterioration in the nursing care in MMT. By choosing participative designs we presumed that bottom-up initiatives by the nurses would be helpful. In this study we applied two models. The cooperative inquiry method was partly successful. Only one of the two clinics managed to complete the four stages and enhance their professional autonomy. The four reflection stages of Johns were helpful in defining the development of both teams, for the researcher in analyzing different ways of acting in practice and for the nurses in recognizing their progression and growing feelings of pride.

The main conclusion should be that this method is not applicable to all participants. One could conclude that teams are not alike and that action researchers should take that into account.

Action research is by nature aimed at bringing about change; in this study new nursing interventions were implemented which were embedded in institutional policies and on the other hand in a growing professional awareness of the nursing team members. The development of knowledge is inextricably connected with the growth of new care strategies.

By systematic data collection concerning reflection on action, roles in a multidisciplinary environment, and the newly developed care strategies knowledge emerged. The actors in this study were the active players. It is best to start with innovations aimed at the care organization before patient-centred innovations are grounded. The proof of the pudding is in the eating, also for other healthcare workers.

Information from local change projects should be better disseminated by published articles and lectures, because a wealth of data can be gathered which can be used for more nation-wide quality assurance. The outcome of the action research described here provided important input for the development of a Dutch national MMT guideline. Nursing interventions, besides handing out medication (such as methadone), are described in this multidisciplinary guideline (Loth et al. 2005).

Further research is also needed in addictions nursing, especially the nursing contribution in this special field concerning the growing physical, social, and psychiatric health problems of patients with long-lasting addictions (Happell & Taylor, 1999; Mutasa, 2001). We might build on earlier work of for instance Chenitz (1989) and so make a methodological foundation of the knowledge development. These outcomes certainly contribute to the ongoing discussions

about drug users and the perceived inconvenience caused by their behaviours. And about the needed care facilities for these patients.

Evidence-based interventions are needed for improving the quality of care. And world-wide methadone maintenance treatment needs to be evaluated on its process and patient outcomes (Fisher, Rehm, Kim & Kirst et al., 2005). Patient perspectives on addiction treatment have been neglected, in further (nursing) research this subject should be an important topic in developing new care strategies.

Local studies, where shop floor workers play an important role in quality improvement in psychiatric healthcare and where critical reflective thinking is used as a strategy for knowledge development, are recommended.

Chapter 5 Enhancing the professional autonomy of nurses in two outpatient methadone maintenance clinics by means of knowledge development

5.1 Introduction

Our study aims to improve the quality of care with the aid of action research. The previous chapter described the implemented action research as a process. This chapter and the next one describe the concrete actions that were taken and the results they yielded. Some of these actions were analytic and diagnostic in nature, others were aimed at change. This chapter mainly reports on the former, the next chapter mainly on the latter.

In the first stage of the participative action research, as described in the previous chapter, we determined that the practices within the MMT clinics were far below standard ('collapse') and that this was closely connected with the work of the nurses. We found that professionalism of the nursing teams was poor, and that team members felt victimized and behaved accordingly. The nursing discipline had collapsed as well, and this expressed itself in the nurses taking the underdog role (Foucault, 1997). This role can best be described as taking on the attitude that one has ended up in an impossible situation due to the actions of others. This role leaves no room for reflection on one's own actions. The result was a complete lack of boundaries in how the nurses approached their work; not only with regard to the patients, but also with regard to each other, other colleagues, and the daily organization of the work. This led to chaotic situations in the MMT clinics. The collapse also expressed itself in an unprofessional attitude towards patients: impoliteness, moral judgment, and an approach best described as giving up on the patient. Some nurses no longer believed things could change for the better.

In line with the intention of participative action research and in close cooperation with the nurses, we determined a number of themes in this first stage within which the unsatisfactory ('collapsed') practices could be clearly pinpointed. These themes were the following:

1. Lack of insight into the patient's perspective.

The patient and his/her perspective hardly played a role in the clinic's day-to-day care; nurses were not familiar with this concept and therefore did not factor it in when formulating and carrying out treatment plans (van den Boomen, 1993).

2. Insufficient awareness of the nature and diversity of the provided care.

Observations of the work at the counter showed that nurses carried out many interventions that they themselves recognized but were not acknowledged by the management as being part of the professional nurse's tasks. Nursing interventions and activities carried out at the counter above and beyond the handing out of methadone were neither acknowledged by the centres nor by the financiers of the outpatient addiction care facilities (the central municipalities up to 2005). The only activities acknowledged by previous research into the activities in the outpatient addiction care included handing out methadone and carrying out urine analyses (staff calculation method according to the HHM method; Drouven & De Lange, 1999).

Due to their increasingly deteriorating health, the patient population in the outpatient addiction care required more care than just a daily dose of methadone. Both teams called this unacknowledged care 'ad hoc care'.

3. Insufficient contribution of nurses to the centre's policies.

The third theme that emerged was that both nursing teams hardly had any influence on their organization's policies. Or if they tried to have an influence, they offered input and ideas at the wrong time and the wrong place. In addition, the nurses of both projects were inclined to go

into detail and lose sight of the big picture, i.e. the long-term objectives. Whenever they entered into a discussion with the management about the state of affairs at that moment, both teams reacted from a victim role and showed a lack of insight into their own performance and role in the situation as it stood. Furthermore, both teams expressed their discontent about their work and their position within the addiction care.

The next step in the participative action research was therefore aimed at determining and working out these aspects of the unsatisfactory practice (diagnosis), initiating reflections on these issues, and stimulating and inciting change. Using this input we formulated research questions for each of the three themes (5.2). Before discussing these reflections and their results we will first elaborate on a number of theoretical concepts about the role of autonomy, and the importance of reflection and incorporating the patient's perspective into the care (5.3). Then we will describe how the data were collected (5.4-5.7) and the results they yielded (5.8-5.12).

Finally we asked ourselves if the participative action research would actually lead to changes in the perceived autonomy and job satisfaction of the nurses involved. In the first stage of the study the nurses of both teams expressed their discontent about their work and the related preconditions. In addition, they all said the day-to-day work did not involve much professional autonomy (initial measurement of both concepts). We therefore decided to include a second and third measurement of their job satisfaction and perceived autonomy at the end of the study in order to be able to assess whether there was any improvement. For these measurements, too, we formulated research questions (please refer to 5.2) and described how the pertaining data were collected (5.7). The second last section of this chapter reports on the results (5.12).

5.2 Objectives and research questions

In chapter 4 the researcher showed that it was possible to initiate change within the professional practice. Does this process lead to knowledge development?

Research question was:

Is it possible with the use of participative action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?

Objectives and research questions were formulated for themes described in the introduction. With regard to the lack of insight into the patient's perspective these objectives were: listening to the patients, increasing the patients' contribution to the care they received, and making their perspective visible in order to help nurses take it more into account in their approach. This would enable the development of more individualized support and care. The standard became a broad patient's perspective on methadone dispensing and counselling, which is seen as necessary to achieve a proper patient contribution. Seven sub-questions were formulated :

- 1) *Which aspects in the care are of importance from the perspective of patients?*
- 2) *Can the patient's perspective be put across to the nursing teams of the MMT clinics so that they can adjust their approach to, and opinion about the patients accordingly?*

With regard to the theme of insufficient awareness of the nature and diversity of the provided care, the first objective was to map out these care activities based on the standard that this unacknowledged care should no longer be denied and instead should be reflected in the job responsibilities of nurses in the outpatient addiction care. The second objective with regard to making this ad hoc care visible was to build convincing arguments to prove that the work at the dispensing counter involved more than just handing out medication (including methadone) and collecting urine samples, on which the municipal funding had been based for years

(Drouven & De Lange, 1999). The third and long-term objective involved removing a number of care interventions from the care at the counter and incorporating them into individual care trajectories that nurses could take on as a case manager. The research question was formulated as follows:

- 3) *What is the nature and scope of the unacknowledged ad hoc care provided when dispensing methadone at the counter?*

The objective formulated for the theme 'insufficient contribution of nurses to the centre's policies' was to increase the nurses' contribution to policy meetings and policy decisions by teaching them to present well-founded arguments from daily practice at such meetings. The standard became a letting go of the victim role by making a thorough analysis of the current situation and submitting well-founded proposals for improvement. Both teams decided to use our monthly meetings, called focus group meetings, to learn step by step how to gather arguments and thus prepare a solid contribution. These meetings also involved a critical reflection on their own actions by means of group discussions.

In the first stage an additional objective was to make a bottleneck analysis of the current situation, in order to subsequently be able to influence policies with well-founded and feasible innovations. The related research questions were the following:

- 4) *Is it possible to improve the professional communication among nurses working in outpatient methadone maintenance treatment by planning group meetings at set times?*
- 5) *Are nurses working in outpatient methadone maintenance treatment able to make a solid and communicable analysis of their daily care practice and offer feasible solutions?*

The research objective with regard to mapping out job satisfaction and perceived autonomy was not directly linked to an innovation. However, we did want to see whether such a research program, in which nurses themselves actively participated in all stages of the research, would influence the job satisfaction and perceived autonomy of the team members. The research questions with regard to a change in job satisfaction and perceived autonomy were the following:

- 6) *Are there any changes in the job satisfaction of nurses working in outpatient methadone maintenance treatment after having been actively involved in changing their own daily practice?*
- 7) *Are there any changes in the perceived autonomy in and over the work of nurses working in outpatient methadone maintenance treatment after having been actively involved in changing their own daily practice?*

5.3 Theoretical perspectives

5.3.1 Gaining knowledge and increasing autonomy

One aspect of the observed deterioration in the care was that both nursing teams did not feel they had professional autonomy. More and more often nurses saw very ill patients at the dispensing counter who required more care than just their daily dose of methadone. Particularly in the case of somatic problems ensuing from the addiction combined with psychiatric disorders, nurses felt they had to provide much more care and counselling. Their real job responsibilities did not correspond with the tasks and roles as described in the professional code for nursing (Leistra, Liefhebber, Geomini & Hens, 1999). The term of address often used for a nurse (in vacancies as well) was 'methadone nurse' or -even more often- 'dispenser'. Their tasks were based on the collective labour agreement for addiction care in force at the time, which included the following job characteristics: dispenses

medication at the counter, collects urine samples, is responsible for the medication dispensing administration, and is responsible -under supervision of the doctor/psychiatrist- for drawing up treatment plans.

An example of an internal job description of an outpatient methadone clinic:

- *The nurse collaborates with other disciplines in the immediate care process in the addiction care;*
- *The nurse is responsible for the proper management and execution of methadone dispensing;*
- *The nurse identifies problems and on the basis of the clinical picture that has been formed of the patient, passes on information to other health care workers and, if necessary, provides for referral or transfer;*
- *The nurse dispenses within the centre methadone according to the doctor's instructions.*

The subtasks of this job description make clear that cooperation means that the nurse has to contribute information for the benefit of the work of others. It is not the intention that the nursing discipline offers care and counselling on the basis of their own knowledge and skills, next to dispensing medication and providing education:

In order to realize change it was important for the nurses to gain insight into their own performance, and thus be able to increase their knowledge of the day-to-day work required of them and create the opportunity to expand their margin for manoeuvre and increase their professional autonomy. By means of critical reflection on action (Schön, 1987) shop floor workers enlarge their acting space with help of the communicative action theory of Habermas (2001) in which group discussions, with dialogue (consensus decision making) play an important role.

In cooperation with the group of nurses, the indicators of the desired autonomy were determined. Consensus was reached on:

Autonomy and a professional attitude:

- maintaining a methodical communication with each other as a team;
- reading and disseminating specialist literature;
- active contribution when discussing patients.

Autonomy with respect to the content and organization of one's own work:

- giving advice and arguments based on a vision for expanding the opening hours;
- mapping out the unacknowledged but still provided care activities.

Autonomy in interactions with patients:

- the nurses' approach and demeanour is focused on fitting in with the patient's perspective based on professionals arguments.

Such a change process is not realized overnight. In our research the required insight has been developed step by step. By regularly holding reflection meetings, knowledge was gained on the patient's perspective as well as the hidden and unacknowledged care activities. Gradually an inventory of the bottlenecks was made (called 'the diagnostic model' by both teams). Only then did it become possible to turn bottlenecks into improvement actions on the basis of feasibility.

The central theme in all action-related research is knowledge transfer (Boog, 1996; Reason & Bradbury, 2001; Titchen, 2003c). Three sources of knowledge are well-known nowadays:

- propositional knowledge and research-based theory;
- personal knowledge is based on the experience in daily life and is linked to individuals;
- professional knowledge is the outcome of the learning process of each individual worker in daily practice.

Professional knowledge is mostly based on intuitive learning and tacit knowledge, and is influenced by the personal knowledge of each worker (Benner, 1984). This knowledge source has to be made more explicit in practice-based theories because too many experiences, the professional intuition, are too often in the heads of individuals (Benner, 1984; Cox & Titchen, 2003). If professionals succeed in translating theory into their daily activities with patients, this can be observed in their use of language and attitudes towards patients. Heron (1998) and Reason (1994) labelled this new knowledge as 'practical'. In the Netherlands there is an old saying in nursing education concerning these knowledge sources and the learning process: 'Nurses learn theory by using their brains; it then has to pass through their hearts before they can really apply it in practice.'

5.3.2 Gaining knowledge by means of critical reflection

Building up knowledge and applying this new knowledge in daily practice are two important objectives of participative action research. The literature on reflection shows that the stages of gaining autonomy by reflecting on the daily work progress step by step. By employing reflection the teams also develop their own opinions (Schon, 1991; Johns, 1999). In other words, as more knowledge is acquired, an individual/team will reflect in a different way on their own actions or those of others. It is a change process from a position of reflecting from a 'single loop pattern' (a quick reflection without much depth on ad hoc problems that surface at that moment) to a 'double loop pattern' in which all the ins and outs of one's own actions in relation to those of others is dealt with at length. One of the important components of the double loop approach is long-term planning (Heron, 1998; Johns, 2001).

The CI design pays much attention to the group discussion that should help participants to progress further in this development (Heron, 1998; Heron & Reason, 2001). The entire research is underpinned by these meetings; the same applies to the research at the MMT clinics. This is understandable if you realize that the variables in the research were taken from daily practice and were not all known beforehand, but emerged gradually during the research. The identification of the variables, the description of the content of these variables, and the underlying motives and relationships gradually took shape. Step by step a diagnosis was made and put in a model, and then feasible improvements were thought out.

Johns (2001) developed four stages in reflection capacity growth; silence, received voice, subjective voice and procedural voice. These stages are comparable with the learning stages developed by Freire (1970). The listening phase (identifying problems and the whys), the participatory dialogue (generating ideas regarding solutions in a broader perspective) and the last phase 'the reflection' (testing and reflecting collectively on the effects).

Johns' model focuses on knowledge development in four stages; the model can be helpful in detecting knowledge deficits and in selecting knowledge enhancement techniques:

- Stage 1: 'Silence', workers have little knowledge and few ideas; the voices of more powerful groups are dominant;
- Stage 2: 'Received voice', workers repeat the ideas and opinions of others, they are not yet capable of expressing their own ideas and opinions;

- Stage 3: ‘Subjective voice’, workers are now capable of voicing their own opinions, but these opinions are not clearly thought through, without reflection;
- Stage 4: ‘Procedural voice’, critical reflection is possible.

1) *Silence*

Workers have little knowledge and few ideas. Usually a worker feels isolated and overruled by the knowledge of others. They have internalized the values of the dominant group (Foucault, 1997; Goffman, 1975).

A team that has not developed its own voice yet and places its own responsibility outside itself from a victim role, needs an open-structured narrative reflection (diary) allowing the team to follow its own pace. It should result in a dialogue with itself from a feeling of safety. The focus of the reflection is yourself in the context of the specific practical situation.

2) *Received voice*

In this stage of growth the worker is only parroting the words (values, standards, opinions) of others. They listen and talk from someone else's perspective and do not yet feel strong enough to develop and voice their own knowledge; their opinion is not strong enough and they cannot find the words to express it.

In the reflection meetings narrative reflection is still a good solution, combined with charring it loosely and acknowledging uncertainty. The accent should now lie on the health care nurses provide in the here-and-now and not on theoretical concepts from which they have drifted so far away. The importance of the current but sometimes invisible practical knowledge must be emphasized time and again; that what workers do in the here-and-now situation is good enough. In this respect the reflection on the workers' experiences is of importance: making the current way of working visible and transferring knowledge by recording it.

3) *Subjective voice*

In this stage the individual worker has developed his/her own opinions, but cannot sufficiently underpin them with arguments yet; it is an emotional voice without enough distance.

In the reflection meetings the accent should lie on narrative reflection and the team must be encouraged to express their own ideas, feelings, opinions, and insights. Through discussion, opinions can become better grounded. In this stage, critical questioning can have a stimulating effect as well.

4) *Procedural voice*

This stage of growth is characterized by two consecutive developments. First the development of the ‘separate’ voice (4a). The workers' subjective voice gains more knowledge and authority. The workers develop the ability to criticize the knowledge of others. Relevant theory is scrutinized for its significance for the daily practice and this knowledge is turned into personal knowledge which can be found again in their daily actions. However, this knowledge still has a small reach, i.e. workers’ own practices at the MMT clinic. The teams do not sufficiently compare their opinions with those of other workers, for example in the national methadone maintenance treatment, or of non-nurse colleagues. Gradually the team develops

the ability to connect their own knowledge with the experiences of others by means of empathy ('experiential knowledge' by Heron in 1998). By understanding others their own knowledge increases with regard to patients, members of their network, other disciplines, and colleagues.

Then the worker acquires a 'constructed' voice (4b). In this last stage the team and the workers have developed their own opinions and the ability to express a well-informed opinion. The knowledge is contextual and the workers know that they generate knowledge themselves, and in their daily work they appreciate both the objective and subjective knowledge. They are able to distinguish between these kinds of knowledge and link them.

In this fourth stage the character of the reflection changes. In order to stimulate the exchange of knowledge and the posing of critical questions, a reflective dialogue is required, as well as a methodical reflection proceeding along strict steps that gradually evolves into creating and maintaining a personal reflection. The own contribution is becoming more important; it is stimulated by a strict structure.

In the research these stages have been the guideline for the daily organization of the meetings as well as a tool to interpret the development of both teams.

5.3.3 Gaining knowledge and the patient's perspective

To better incorporate the patient's perspective in the daily contacts between nurses and patients the first action was to conduct a desk study into the perspective of drug-addicted patients. It yielded the following information.

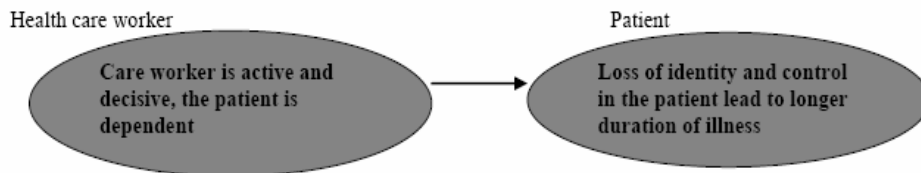
Haaster defines patient participation in the care as follows (Haaster 2001, pages 51-52):

The patient participates in the daily care practice. The patient codetermines the content and shape of the support systems important to him/her by participating at all levels and exerting influence. Patient participation is based on active and competent patients. Its additional objective is to increase the patient's competence.

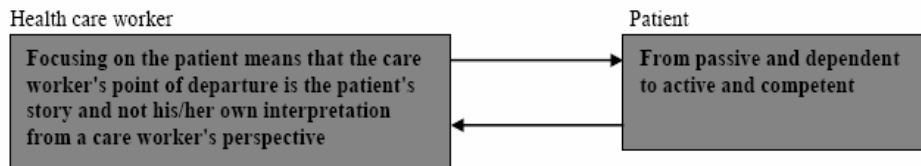
This definition invites patients to participate and in this way become more active, get to know their own boundaries, and gain more knowledge so that the room for negotiation can be increased.

The dependence in the relationship between health care worker and patient stems from a overactive attitude of the health care worker which does not fit in with the patient's condition. According to Haaster (2001):

Figure 5.1: Interaction health care worker-patient



In a situation where the health care worker tries to depart from the patient's intrinsic autonomy and attunes to the patient's situation, the following relationship is created:



Patient satisfaction in addiction care in the Netherlands has been mapped out regularly in the past years; often these measurements included participation in one's own treatment.

These studies show that patients are not satisfied and that they would like to see improvements in the areas of how they are treated and customized care (Verbraeck & van de Wijngaart, 1989; Driesen 1990, 1992 and 1999; Driesen & van der Wal, 1993; Jongerius, Hul & Derks, 1994; Eland-Goossensen, van der Goor & Garretsen, 1997; Luijting 2002; van der Gouwe & Cornelissen, 2004). In general patients are not very satisfied with the manner in which they are treated. Particularly the individual approach of health care workers in outpatient addiction care and methadone dispensing does not get high marks. Patients often feel flooded with hard and fast rules in an impersonal manner; making exceptions to these rules is almost never permitted.

In 1999 Stussgen (1999) and Breemen & Eeland (1999) investigated the quality of nursing and care from a user's perspective. These research projects showed that users found the personal approach of the nursing staff the most important aspect, followed by expertise, the organization of the care, the autonomy of the patient, the provided support and information, and lastly the evaluation of the care. The conclusion can be drawn that addicted patients, particularly in the outpatient addiction care where they come to collect their methadone, are hardly listened to. Consequently, the nurses lack all kinds of knowledge about their patients. Another finding was that the patients hardly contributed to their own treatment plans. So signing a treatment contract does not at all mean that the treatment is well-coordinated and that the health care worker is well aware of the patient's perspective.

5.4 Data collection: patient's perspective

The research was centred around the nurses. The objective was for them to better integrate the patient's perspective into their daily care. To answer sub-questions one en two therefore the decision was taken to inventory the patient's perspective, and to ask after the patients' wishes and their criticism on the daily procedures. The patient interviews served two objectives. Firstly to gain a better insight into the largely unknown perspective of the patients, and secondly, to make their opinions and wishes better known. The findings also served to increase awareness of the patient's perspective among the nurses. However, the patients in both projects were no longer accustomed to airing their opinions. Some were even startled

when asked for their opinion in the framework of the ongoing research. They had to be 'shaken up' a little bit, which involved stimulating the patients to more clearly express their own opinion and wishes than in the past by adopting an inquiring attitude during the daily contacts at the counter or the planned interviews. This also made possible an inventory of solutions from the patient's perspective. To this end it was decided to first hold a series of short interviews during the methadone dispensing at the counter. The resulting themes were then explored in follow-up interviews. The findings of all three data sources (desk study, short interviews and focus group interviews) were discussed in the monthly meetings with the nurses.

1st round: short, unplanned interviews at the dispensing counter

In the diagnostic stage of the research a number of patients were interviewed concerning their opinion about the methadone dispensing. 17 short and unplanned interviews were held at the counter. The decision was taken to first interview the patients who came to collect their methadone for an entire week, a rather calm group. They can be characterized as more or less integrated. They have work or other useful daytime activities, good housing, and in most cases they hardly ever use illegal drugs, if at all. Upon entry they were immediately given information on the objective and set-up of the interviews and were then asked if they would want to participate in the research.

On the basis of this informed consent all patients gave permission to hold the interview (17). In a short period of time (5-10 minutes) they answered questions on:

- the degree of satisfaction with the procedure;
- the way in which they received the methadone;
- the opening hours;
- the present contacts with the health care workers;
- the nurse's monitoring task versus ensuring the patients' privacy.

The interviews were recorded and analyzed for themes. The analyses were presented to the second researcher and an employee of the LSD (the national support centre for drug users). Due to logistic reasons it was impossible to present the results of the analyses to the interviewed patients.

2nd round: focus group interviews

The decision was taken to repeat the interviews at a later stage of the research, when more knowledge was gained on the local situation and the patients knew the researcher better and would trust her more. These interviews were held with a different group of patients: they were less integrated, had to come to the MMT clinic daily, and went to the adult day care centre often. Their opinions were insufficiently mapped out yet. Two (group) meetings were held. The focus group technique was opted for, as a broad patient's perspective on methadone dispensing and counselling was deemed necessary to arrive at a proper patient input. Focus group interviews are also used to better relate the perceptions and attitudes of people with their needs, in this case the organization of methadone dispensing and collaboration with the nurses (Byrne, 1999; van Eyk & Baum, 2003). The interviews were therefore used to better understand the daily life of the participants, i.e. the drug-addicted patient who comes to collect his methadone (Nyamathi & Flaskerud, 1992). The dynamic group interaction is an essential component in obtaining the necessary information. The discussions and hearing each other's often divergent opinions result in all kinds of insights leading to a unanimous opinion or opinion pattern. However, this requires a predetermined plan and set agreements on the roles of the interviewer(s).

In the research at hand this process went as follows. Both groups were led by two interviewers (the researcher and an assistant). This was necessary to avoid that a single patient or a group of patients would monopolize the interview. The roles were as follows: the assistant posed the questions and the researcher only stepped in to give examples or clarify questions. Both interview sessions were recorded and then listened to and analyzed by both interviewers at the same time. If their opinions differed, agreement was sought by discussing the differing results. The topic of the first interview was the organization of the methadone dispensing; the second was the level of cooperation with the nurses. The main theme in the first interview was the patients' opinion on the procedure of methadone dispensing. Subthemes were:

- waiting time at the counter;
- collecting methadone to take home;
- making appointments for help;
- opening hours and the patient's life/work;
- layout and interior of the MMT clinic;
- hygiene in the MMT clinic;
- satisfaction about the opening hours;
- satisfaction about the methadone maintenance program;
- ensuring privacy;
- having a say.

In the second interview, the first interview was looked back on and discussed. Then the patients' input in their own counselling and the cooperation with the nurses was discussed. The main theme constituted their wishes with regard to methadone dispensing and counselling. The subthemes were:

- the nurse's knowledge of the patients;
- the nurse's available time;
- the space the nurse has for individual patients;
- feeling welcome/not welcome;
- respect for the patient;
- the extent to which the patients' wishes are taken into account;
- the degree of acceptance of the patients' own expertise;
- hearing the reactions (and complaints) of patients;
- the care protocol and the patient's say in this issue.

Patient selection

In the spring of 2003 a number of patients were selected from the total patient base of project 2. The exclusion criteria were: serious physical or mental problems, not being able to answer questions or have a conversation without running into problems or being unintelligible to others. The ten patients selected (a larger group would make a discussion impossible) consisted of eight men and two women.

The patients were selected on the basis of the different programs they were classified in so as to have a good representation of the total population (patients who could come in only once a week for their methadone on account of their day time activities/work were not approached). The other patients have the most contact with the nurses and need the most care from a nursing perspective. The same patients were invited for the second interview and the nursing team selected a few patients to augment the group. The decision was taken to increase the group of patients with a few patients from the three-day dispensing to obtain a better picture.

Informed consent

All patients received a personal invitation. It described the objective of the interview and stated that participants would receive a small present by way of thanks. They were then asked if they would like to participate. The nurse handed this letter to the patients when dispensing methadone. Each patient was asked for permission to record the interview and was told that they could hear the analyses afterwards so they could add to it, if so desired. All data analyses were made anonymous and cannot be traced back to individual patients.

Role of the interviewers

Beforehand the interviewers agreed not to slip back in the health care worker role, so as to ensure equality during the interview. When they listened to the tapes, the interviewers critically listened to their own input. Although immediately after the interview they both had the impression they had steered the interview too much, in the sense of emphasizing the communality to win the patients' trust (stepping too much in the patients' shoes), the analyses did not confirm this.

However, they noticed that the researcher frequently changed roles and announced it each time:

'Stepping into the patient's shoes' (e.g. by saying that she could imagine that the patients felt a week's vacation per year was not enough)

Or on the other hand:

'Stepping into the nurse's shoes' (e.g. by explaining what a nurse does and why, and how the team experiences the actions of patients)

It also stood out that the assistant kept asking questions so that the patients were stimulated to express their opinions. In both interviews interviewers and patients have talked seriously, sometimes with anger, sometimes with a lot of humour, often by speaking at the same time or calling each other 'a wimp' or 'a jerk', but in the end both interviews ended in harmony. See the memo below.

(Memo of the researcher)

Most patients arrived on time. Two patients came later and joined in after they had been given a summary of what had happened so far. At the beginning of the first interview a third patient, a man, was too late and almost fell into the room as he stumbled at the door. He clumsily excused himself and almost fell again while talking, and staggered like someone who has drunk too much. Some patients started to tell him that he had used too many drugs to participate in this interview. He told us he was late because he could not find his bicycle which he had left somewhere in the city. Everybody started laughing; he admitted he was stoned and left. The next interview this patient was on time and before we started he apologized to us, said he had not had used any drugs before this interview, and participated in earnest.

5.5 Data collection: critical reflection by nurses

To answer sub-questions four and five, in total there have been hold 24 monthly meetings. Three were loosely structured, three were more tightly structured, eight were structured with an agenda drawn up in advance, and ten were structured and had the same discussion leader. All meetings were planned in advance in consultation with the nurses (in total five nurses from project 1 and three nurses from project 2) and they received the agenda on the day of the meeting. The researcher drew up the provisional agenda, in the first instance in consultation with the nurses present and later in consultation with the external discussion leader. At the meeting itself the definite agenda was decided upon. The researcher was always present. The third and fourth series of meetings were planned long in advance. Attendance was not obligatory, but very advisable, as was emphasized repeatedly.

Analysis

Nearly all meetings were taped (see appendix 4 for a total overview). The recording was only stopped at the request of a nurse or if the meeting was interrupted by someone entering or if someone got a call. The tapes were typed out verbatim. An analysis preceded the next meeting to enable feedback. The two themes for analysis in the first two rounds were:

- progress of professional reflection, experienced growth in professional attitude;
- results of diagnosis of bottlenecks in methadone dispensing.

The results of the first analysis carried out by the researcher were summarized in diagrams. After discussing them with the nurses they were completed, if necessary. In this way, the diagnostic model was created step by step (see figure 5.4) which served as a basis for filling in the content of the follow-up meetings.

The third and fourth series of meetings were analyzed and discussed in advance with a second researcher, who would be the discussion leader in the fourth round as well. The fourth series had a tight structure for the benefit of the analysts: first, two weeks for typing out followed by a first separate analysis by each researcher. Then followed a joint analysis and preparation for the next meeting, which was usually recorded as well in order not to lose any information. In this way the agenda for the next meeting was put together.

For both researchers, permanent items for analysis in all third and fourth series meetings included:

- bottlenecks in the daily care;
- likely causes;
- which knowledge is lacking and how to acquire it;
- solutions for bottlenecks;
- innovations;
- evaluations of the effects: data collection and analyses feedback;
- vision on addiction care.

Informed consent

All nurses attended the meetings and gave permission to have them taped. Only in the meetings themselves was data discussed that could be traced to individuals. The group took a decision in advance on how to make data public. The meetings were always aimed at reaching a group decision.

5.6 Data collection: ad hoc care at the dispensing counter

Ad hoc care is unexpected and unplanned care that must take place in short moments of contact. To provide more insight into this care and to answer sub-question three the decision was taken to record it by means of registration forms. No measuring instrument was available to record this ad hoc care. In previous research (by the researcher herself; not published) an extensive form had been developed to register care at the counter. On the basis of in-depth interviews with eight nurses of six MMT clinics the care they provided in addition to handing out methadone was described. These clinics were scattered across over the Netherlands, were either easily or not easily accessible and part of either small or large regional addiction centres.¹⁰

The central question in these interviews was:

'What other nursing care activities do you carry out in addition to handing out a cup of methadone?'

¹⁰ By the end of the 1990s the Dutch addiction centres were still subdivided into CADs, GGDs and KGODs. Three CADs, three GGDs and two KGODs participated in the interview.

All nursing activities distilled from these interviews were presented to the respondents for the purpose of reviewing whether they were accurate enough and/or needed additions (member check). The activities were subdivided into health education, nursing interventions, psycho-social counselling, and organizational activities. Using the Lynn method (1986) the content validity of the list was ensured. Lynn developed a consensus method to ensure content validity/face validity based on a number of experts and a quantitative rating system. The registration list was set up as follows:

Figure 5.2: Types of ad hoc care

<p>Ad hoc care: psycho-social activities</p> <ul style="list-style-type: none"> • carrying out brief activities with regard to a patient's living situation, work situation, and financial situation • acting as an intermediary: the nurse passes on information from and to other health care workers and/or patients • acting as a referee (when a sanction is imposed) • brief and unscheduled contacts
<p>Ad hoc care: health education</p> <ul style="list-style-type: none"> • needle exchange • distribution of condoms • keeping educational material up to date • motivating patients to have a tuberculosis screening • giving information on: injecting safely, safe condom use, the effect and safe use of drugs, how contraceptives work, diet and eating habits; • information on hepatitis B vaccination
<p>Ad hoc care: nursing interventions</p> <ul style="list-style-type: none"> • determining and monitoring the methadone dose in addition to dispensing methadone • distribution of medication • giving injections • taking urine tests and administrating them • dressing wounds and monitoring them • checking vital signs, taking pregnancy tests
<p>Ad hoc care: organization of the work at the counter</p> <ul style="list-style-type: none"> • seeing to the immediate environment of the dispensing unit, the MMT clinic • transfer (face to face, by telephone, fax or e-mail) and consultation with internal colleagues • calling external colleagues, patients, family/friends of patients and referring doctors • ordering medication from the pharmacy • ordering other materials • filling in the doctor's consultation hours (making appointments during dispensing) • referring patients, making appointments with organizations such as general hospitals; • preparing patient reviews, monitoring the patients and recording any particulars that emerge during dispensing • recording patient data

Prior to the start of the registration in both projects, the form was critically reviewed in a focus group meeting. Agreements were made on how to fill in the form. The decision was made that filling cups of methadone in advance for patients who were living in a Salvation Army shelter would be considered a regular activity instead of an ad hoc care activity.

Providing information on the hepatitis B vaccination was added to the health education component. To be able to keep tally quickly at the counter the choice was made to only register the main items and not the sub-items. For example, if a syringe is exchanged at the patient's request, it is registered under 'health education'. To promote quick completion and increase the reliability of the measurement, an overview of all tasks was hung on the wall near the counter in large print. With a single glance the nurses could see what they were doing and where to register it. The public display of these tasks provoked comments from other colleagues and from many patients, too, who thought along with the team at the counter. Repeatedly the nurses explained what they were doing, and that they were doing it for the study. This openness greatly increased the informed consent. Other colleagues were astonished at this registration: they did not know that the nurses' work at the counter entailed so many things. Gradually a relationship emerged between the many different activities and the dissatisfaction of patients with the waiting time and the sometimes impersonal treatment/attitude of the nurses.

The centre's own 'general registration form' was added to the developed form. This form records the date, the number of patients per day, and the number of nurses present.

In total, the following details were recorded per day:

- the number of nurses present when dispensing methadone;
- the number of patients that received methadone;
- the number of patients that next to the methadone were given extra care. The latter was defined as: health education, psycho-social counselling, nursing interventions, organizational/coordinating activities, and miscellaneous care.

Data collection

The registration took place over a period of 260 days (12 months). Both projects were opened 5 days per week from Monday through Friday. On some days the clinics were opened at different times throughout the day (different times per project), but per day only one registration form was used. The data was entered into SPSS and analyzed. The table below shows how many forms were entered in the database and how many of them pertained to extra care¹¹:

Table 5.1: number of observed days (260)

Place/ Completed forms	Project 1	Project 2
Total number of completed and entered forms	242 (230 including ad hoc care; 12 general registration forms)	248 (238 including ad hoc care; 10 general registration forms)
Missing cases ¹² ; total number of completed forms per day	18	12
Total number of completed forms with ad hoc care registration ¹³ per day	230	238

¹¹ Care patients are patients that received extra care at the counter next to their methadone.

¹² In this study, missing cases are defined as calendar days on which the clinics were not open due to holidays, study days, meetings, or shortage of staff. No registration took place on these days.

5.7 Data collection: job satisfaction and perceived autonomy

The short and unplanned interviews at the beginning of the study and the in-depth interviews showed that nurses were dissatisfied with the way they had to give shape to their work, the degree of autonomy they had to do this and their place in the organization. In their perception the job title 'dispenser' or the nickname 'tap gal' did not fit in with the importance they attributed to their work. At some point during the study we developed the idea to use both concepts as a measure of result of one of the interventions, i.e. 'critical and professional reflection on the nursing work in the outpatient methadone maintenance treatment'. Two sub-questions were formulated for this purpose (six and seven). As it was not possible to apply the same measurement as the zero measurement which consisted of qualitative interviews, we decided to use two measurement instruments and apply them in two post measurements in order to observe a trend, if any.

*Measuring instruments: Maastricht Job Satisfaction Scale for Health Care (MAS-GZ)*¹⁴ Boumans (1990) developed this job satisfaction questionnaire on the basis of Hackman & Oldham's Job Characteristics Model (1975 and 1976), the Hinshaw & Atwood's Nurse Job Satisfaction Scale (1984), and the Index of Job Satisfaction (Brayfield & Rothe, 1985).

The list was adapted to the nursing practice in the Netherlands. The MAS-GZ classified 21 items into 7 factors:

1. Satisfaction regarding the department head
2. Satisfaction regarding career opportunities
3. Satisfaction regarding the quality of the care
4. Satisfaction regarding development opportunities
5. Satisfaction regarding contacts with colleagues
6. Satisfaction regarding contacts with patients
7. Satisfaction regarding clarity

Scores

1 stands for very dissatisfied, 2 stands for dissatisfied, 3 stands for neutral, 4 stands for satisfied, and 5 stands for very satisfied. It is a Likert-type scale.

Psychometric quality

The questionnaire was tested for validity and reliability in 15 general and mental health care institutes and was found to be valid and reliable. The internal consistency of the questionnaire is good (Cronbach's Alpha 0.85). The item-total correlations were acceptable to good (0.40-0.60).

Standard scores

A normal general satisfaction score for MAS-GZ lies between 3.08 and 3.86, which is 68% of the population (95% of the dispersion lies between 2.69 and 4.25). Only 2.5 % scores above 4.25. In 2002 nurses filled in the questionnaire, scoring an average of 3.4, which ranges between neutral and satisfied.

¹³ In a number of cases the extra care given when handing out methadone was not registered due to work pressure/shortage of staff. However, in those cases the general registration form was still filled out: number of patients, number of nurses, and opening hours.

¹⁴ For further information see appendix 1

Measuring instruments: the Maastricht Autonomy Questionnaire (MAQ)¹⁵

The Maastricht Autonomy Questionnaire consists of 10 questions and is based on the following definition of autonomy: 'The possibilities (freedom) an employee actually has in his work with regard to determining the various aspects of his work, including work pace, working method, the order of the work, and the work objectives.' It is based on the two constructs of autonomy: operational autonomy and structural autonomy. Operational autonomy consists of options within the limits of one's own work situation, the choices in one's work. Structural autonomy is understood to mean the options in the gray area between one's own work situation and the environment, the autonomy over one's work (De Jonge, Janssen en Landeweerd, 1994).

Scores

1 stands for very few opportunities, 2 stands for few opportunities, 3 stands for some opportunities, 4 stands for many opportunities, and 5 stands for very many opportunities.

Psychometric quality

The questionnaire was tested for validity and reliability within three professional nursing groups. The validity was sufficient (criterion validity: the subscales are closely connected with autonomy scales of other measuring instruments and the job level of the respondent; construct validity: the subscales strongly correlate with reaction variables such as job satisfaction and motivation). The reliability of the instrument was tested by measuring the internal consistency using Cronbach's Alpha. The subscales and the total list scored > 0.70. The correlation between both scales was 0.74. The test-retest reliability scored between 0.58 and 0.66.

Data collection

In February 2003 a total of 8 nurses filled out the first round of questionnaires. The second round followed in June 2003, when 7 nurses filled out the form. One of the nurses of project 1 had left in the meantime. The total analysis was based on 7 respondents.

The data were entered in the Statistical Package for the Social Sciences (SPSS); a score was calculated with the aid of averages and standard deviation (dispersion). Then the variances were tested for significance using a t-test.

5.8 Patient interview results and feedback to nurses

1st round results

In general the patients were dissatisfied with the procedures during the methadone dispensing. A good example of this dissatisfaction were the problems they mentioned when collecting the methadone. Patients feel ashamed to go to the MMT clinic and would like a quick dispensing where they are not confronted with their old lives.

'Sometimes I have to wait as long as 20 minutes. The nurses cannot help it, but often there are people that have many questions. It would be better if they would make an appointment with them.'

'Why don't the nurses put out the methadone beforehand, so that you can take it away immediately after you come in.'

'I'm happy with a regular day and time, we need that.'

'I come once a week in the evening. I've taken much trouble at the factory where I work to be able to leave early on Monday afternoon so that I can be here in time.'

¹⁵ For further information see appendix 2

After a year they've finally accepted that (CL: the nurses) but they've given me a hard time.'

Another frequently heard complaint was the impolite and impersonal attitude. According to the patients, insufficient distinction was made between the various patients in that respect. In general, the interviewed patients did not think that they were classified in a group that actually was 'not doing very well', meaning that from the nurses' attitude it was apparent that they did not expect much improvement in the patients.

Please make a better categorization: there is a group that has a more structured and regular life. There is also a group that makes fun of everybody. It sort of goes with addiction. You (CL: the nurses) should make a better distinction.'

According to patients this was not visible in the attitudes of the nurses.
'I've often shown that I'm doing well, you try so hard.'

2nd round results

The analysis showed the following themes and the patients' opinions about them:

- the MMT clinic;
- the opening hours;
- collecting methadone to take away;
- vacation dispensing;
- various methadone maintenance programs;
- the staff.

The MMT clinic

Patients think negatively about the MMT clinic; it is too small and *prison-like*. It makes them feel *claustrophobic*. They experience the dispensing itself as 'feeding pigs' and 'conveyor belt work'. There is not enough privacy, while the patients sometimes feel they are forced to reveal personal information.

Opening hours

All patients are pleased with the extension of the opening hours. They feel they can now come in when it best suits them.

Collecting methadone to take away

The patients say that taking away methadone doses for a few days is 'not up for discussion'. They feel there is hardly any room for negotiations, if at all. According to them the message is that the patient always lies and therefore has to prove he is being truthful. The evidence has to be on paper:

'Always take the camp site receipt if you went there to visit your grandma.'

The interviewed patients experience this as punishment. According to them the methadone dispensing thwarts the care. They experience the extra care offered next to dispensing as quite random.

'There is no care.'

'Methadone was introduced for the addict to function better, but presently it doesn't work that way.'

'You have to be in their good books if you want to achieve that. And I am not, but I want normal, human contact.'

Vacation and taking methadone away

The patients tell that there are few options with regard to vacation, and that they have a choice between going along or staying away. They say they are dropped from the methadone maintenance and as a consequence have to buy methadone on the black market. Not all patients opt for this solution. A small number say that they do not do this because it is a pitfall for them. When they opt for not continuing with the program, they have to register again when coming back, which is experienced by the patients as an annoying process they have no choice but to go along with, involving a set of agreements the patients do not see as serving any useful purpose.

The suggestion of a vacation card entitling the patient to as many day's vacation as a working person in the Netherlands is greeted as a great improvement during discussions. However, everybody agrees that rules should then be formulated about how to apply for these vacation days, so that the nurse can take care of it. An idea for giving 'off-days' meets with approval. The underlying idea is that an addict has his own responsibility. One of the patients says:

'If this would be possible, it would be good for us, I would function better then. They don't treat me as an adult now, I'm used to this position of dependence. You have to wait and see and have no choice.'

Various methadone maintenance programs

The objectives of the various programs as well as enabling a career for addicted patients also force them to continuously prove that they are doing better. The patient must show something and the nurse decides whether it is the right or wrong thing. Obviously the patients know that if they have to come every day, they are not doing well. On the other hand, they argue that they do not change overnight and in fact, do not always want to change.

'Tomorrow I am the same guy I am today.'

'If I have to come every day, I will never do better.'

'If I have to come every day I'm always confronted with my addiction, sitting among addicts every day.'

Having to come each day tempts addicts to start using. They say this issue cannot be discussed with the nurses. They experience it as an infringement on their own responsibility. They do not manage to bring this issue up for discussion in a mature way.

The staff

The interviewed patients say the following about the nurses' expertise:

'They shouldn't make such a routine of everything.'

The patients do not want to be served by an automaton. They experience rigidity in the nurses with regard to dispensing and the rules, in some nurses more than in others.

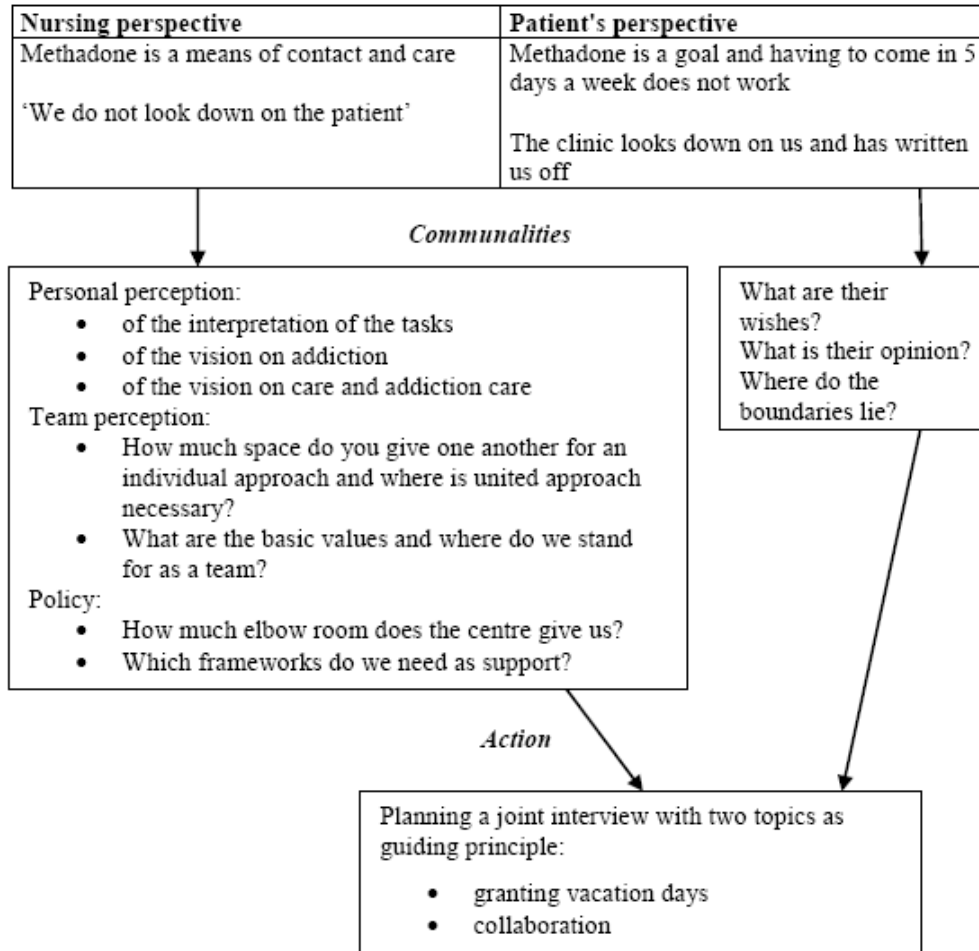
They say about all the nurses that they know all the excuses patients make up. The participants told that after entering the clinic they first listen carefully to how the nurse asks them how they are doing. If they feel it is rude, impolite, insincere or uninterested they do not answer or tell a lie. The patients first listen carefully to the intonation and the intention of what the nurse says and then consider how they will respond. In general the patients feel the nurses do not give enough positive feedback, and that they do not talk enough about ordinary things. Contact also means sticking your head around the door of the clinic and having a chat. According to the

patients this becomes a lot more difficult when that door is closed. Some do not have the nerve to do it, while others will.

Bringing perspectives together

The nurses chose not to be present at both interviews because they feared the patients would not feel safe enough and would not fully open up. However, they did not consider an increased patient input as a matter of course. Each time the researcher brought up the interview results in the focus group meetings, discussions ensued about their veracity. The interview results were brought up for discussion¹⁶. Step by step the analyses were brought up in the monthly meetings, eventually resulting in a step-by-step plan formulated by the nurses, as worked out in the figure below.

Figure 5.3: Bringing perspectives together



¹⁶ At that time it also became clear that team 1 could not continue with the research. This also put a stop to the patient participation. After team 1 had stopped with the research, the other team's work on increasing the patients' input was sped up.

The participants in the focus group interviews had a vision on the dispensing, the nurses' approach, the options they were offered and room for initiatives. This vision was discussed with the nurses in a focus group meeting and in accordance with the patients' wish a group discussion was planned between the nurses and a number of patients about the introduction of vacation days and the continuation of the 'off-days'. They agreed on 21 vacation days and a maximum of five 'off-days'¹⁷ per year. The attendant rules were thoroughly discussed as well.

5.9 Results of the nurses' critical reflection

At the beginning of the research it was found that there was insufficient clarity about which bottlenecks there were, which changes were required and which room there was to achieve them. The first meeting showed that in the eyes of the nurses there was insufficient insight in the work they carried out. In addition, there was insufficient insight in the patient's perspective, even though the nurses saw them regularly. Regular critical reflection on the work was not common practice in the centre, nor in either of the two nursing teams. Besides, there was no time for such reflection due to the hectic daily work schedule. In addition, the structure of the meetings that were in place did not allow for reflection and if anything, caused more chaos than a healthy distance. Often the meetings had no agenda, no chairperson/discussion leader and the way of communicating was simply chaotic. They hardly listened to each other, interrupted each other, and brought up irrelevant subjects. If there was agenda, it contained too many items so that subjects were moved to the next meetings.

Observation note of a nurses meeting:

'A meeting is planned after the afternoon dispensing, all nurses who are working that day are present. During the meeting they walk to and fro, sometimes patients come in with questions. The nurses go away to help them, the telephone is ringing several times and is answered...'

Observation note of a nurses meeting:

'The fixed time and making minutes are the only structured elements of the meeting. The agenda is drawn up during the meeting, there is no chairperson and people are all constantly talking at the same time.'

The meetings also showed that nurses did not make a proper stand for their own discipline: they often did not know how to begin, they poorly prepared for the meetings and were passive during the meetings.

Observation note of a multidisciplinary meeting:

'Everyone arrives, and when they have coffee they all fall silent. The nurses look to the doctor, it seems like he has to start the meeting.'

As a discipline they did not really succeed to take a firm standpoint. Internally they did not manage to clearly formulate these standpoints and externally they did not seem to succeed to clearly form a front as a profession.

Observation note of a meeting:

'It seems as if the nurses feel they are taking last place. On the other hand, they do not stand up for themselves, and do not break out of the established decision-making process. They do want to form a front, but do so in a hasty way during the break. They have too little peace and time to formulate standpoints. During the meeting they often look at each other, do not bring subjects to a conclusion and hurriedly proceed to the next agenda item.'

¹⁷ Off-days are days patients can take without having to justify their absence so that they do not have to come in that day but still receive their methadone.

This had an impact on the profession's content development and methadone dispensing in particular: subjects were not properly analyzed, they rushed into adopting solutions that were often poorly underpinned and fell outside the nurses' sphere of influence so that actions did not get off the ground (ad hoc decisions). In the framework of the participative action research the decision was taken to hold regular, structured meetings to talk in-depth about these daily problems in peace and quiet and to be able to collect and analyze the research data.

Beforehand the standards were determined that represented a minimum quality to the teams (Segers & Hagedaars, 1980; Swanborn, 1999a):

- having less chaotic meetings;
- bringing about a critical reflection of one's own and each other's work, aimed at getting out of the victim role;
- analyzing, planning and carrying out care from one's own professional responsibility.

A long-term objective was formulating a joint vision on caring for/counselling chronic addicts in which both the patient's and care worker's perspectives are incorporated.

The critical reflection took place in three different ways. Two loosely structured reflection rounds (often only one question, no agenda or the possibility was offered to deviate from this), one slightly more structured reflection round (a more or less set agenda and structured discussion) and the final, structured reflection round (a set agenda, no deviation possible, and the same discussion leader).

First round of reflection: loosely structured

The narrative reflection method (*Dionysian* method, Heron 1998) with its narrative character and not too rigid structure fitted in well with this first reflection round. In this stage of the research the perspective of reflection in daily practice has been the narrative way of forming an opinion. In meetings the nurses needed much time to arrive at a conclusion due to the insufficient reflective skills of the team at the time. A too standardized reflection would have backfired at this stage. Both teams had not sufficiently developed their own opinions yet and had to go looking for information on existing working methods. Furthermore, the nurses were looking for the strength, direction, and content of innovations at the time. A new objective was to provide information at their own pace in their own way and to be able to critically consider the information in a safe environment. This meant that the researcher had to move along with the strength of the team and participated as a nurse. The meetings helped form opinions, provided insight and offered the nurses the opportunity to make well-considered choices. There was a difficulty in that the agenda often had to be adapted to the existing ad hoc problems. Frequently the meetings were chaotic and participants often talked a lot before they could put an opinion into words.

Second round of reflection: slightly more structured

The second round of reflection meetings was still loosely structured, but having an agenda settled things down. The theoretic model for the research took on more shape in this stage and provided much-needed structure. More and more often the researcher could step into the role of 'critical interviewer' in order to steer the subjects to be discussed. However, the safety to say whatever the participants wanted in a chaotic way, if so desired, was as important as a rigid structure. This second round was characterized by the strong point of the team, i.e. their vast knowledge of the patient group. This triggered positive reactions.

Third and fourth rounds of reflection: structured

The third and fourth rounds of meetings had a rigid structure with an agenda with items that could not easily be deviated from. In these rounds the researcher took on the role of discussion leader. Her task as a researcher was to explain the research model and give feedback on the data. The role of 'the nurse with know-how' was taken on less and less. Furthermore, these meetings were sometimes led by an external discussion leader so that the researcher could attend them as an observer and could continue to ask critical questions.

Heron (1998) calls this the *Apollonian* reflection method. A rational, linear and systematic method that follows the reflection cycle in a controlled and explicit manner: reflection, planning, action, observing, reflection, and again planning, in order to be able to present a well-considered opinion (Johns, 1999). The diagram in appendix 5 has been a tool in this reflection method. By means of clearly laid out steps the patient's care was mapped out and the nurses were supervised every step of the way in formulating a care protocol.

The details of the meetings can be found in appendix 3. Per meeting a description is given of the agenda items, and who were present. Particularly in the first round of meetings the nurses needed much time to form an opinion, often by saying out loud what came to mind, talking about it and eventually forming an opinion. Below you will find two examples.

Example 1:

Researcher: *'This means that when we have selected the group, we have to make a kind of agenda for you. So that as soon as you see the patients, because they all have to be invited for a meeting...'*

Nurse: *'And we have to do all that by 7 January?'*

Researcher: *'I don't know, that's not possible, is it? I think you first have to start with the dispensing and plan those contacts gradually.'*

They are all talking at the same time

Nurse: *'You have to make a planning, you have to make an agenda, and the moment you have done an intake interview with someone you can start with the next one...'*

They are all talking at the same time

Example 2:

Nurse: *'I just don't have the time... You're going a bit... your own... your own boundaries are very important to me at the moment.'*

Researcher: *'How far will you...'*

Nurse: *'Go along with that? Indeed.'*

Researcher: *'Obviously this applies to you as a team as well.'*

Nurse: *'What in God's name am I supposed to do with that?'*

Researcher: *'I don't know, you have to tell me.'*

They are all talking at the same time

Nurse: *'Then what is the problem? Because you say...'*

Nurse: *'It is very hard for us too, we no longer see it clearly either. It is very busy...'*

They are all talking at the same time

The third and fourth round of meetings show that participants listen better to each other and ask more questions. When the discussion leader provided structure the nurses could immediately go into subjects and bring them to a conclusion. This put an end to rambling from one subject to another. The subjects for discussion started to gain more depth. See the example below.

Example:

Nurse 1: *'I think we shouldn't look at it as if we're the bad guys and they the good guys. They have their opinion, only we don't share it. I can imagine that you want something and have to deal with someone who decides on it, and that you cannot get through, for whatever reason. That is very frustrating. I am never angrier than when I want something, go to great lengths to achieve it, and some else is in the position to say no to it.'*

Nurse 2: *'You are talking about the difference between power and responsible professional behaviour.'*

Researcher: *'I think that is very much the issue. You express it wonderfully. When do you react from a position of power and when not, and do you say that it is your professional responsibility to have to take a certain decision. To clients that difference is not yet clear. Indeed, they view everything in terms of power. But then my question is: can you imagine with regard to the example of Y. that a patient experiences it that way?'*

Nurse 2: *'Yes.'*

Discussion leader: *'That is the value of the document. Nothing more and nothing less, I think.'*

Nurse 2: *'I always find it easier to say yes when one person asks something. To say: here you go. To me it is more difficult, and the trick, to substantiate something and to get it across to the patient, and then I think: how in heaven's name do I get it across?'*

Nurse 3: *'And patients often consider that as power.'*

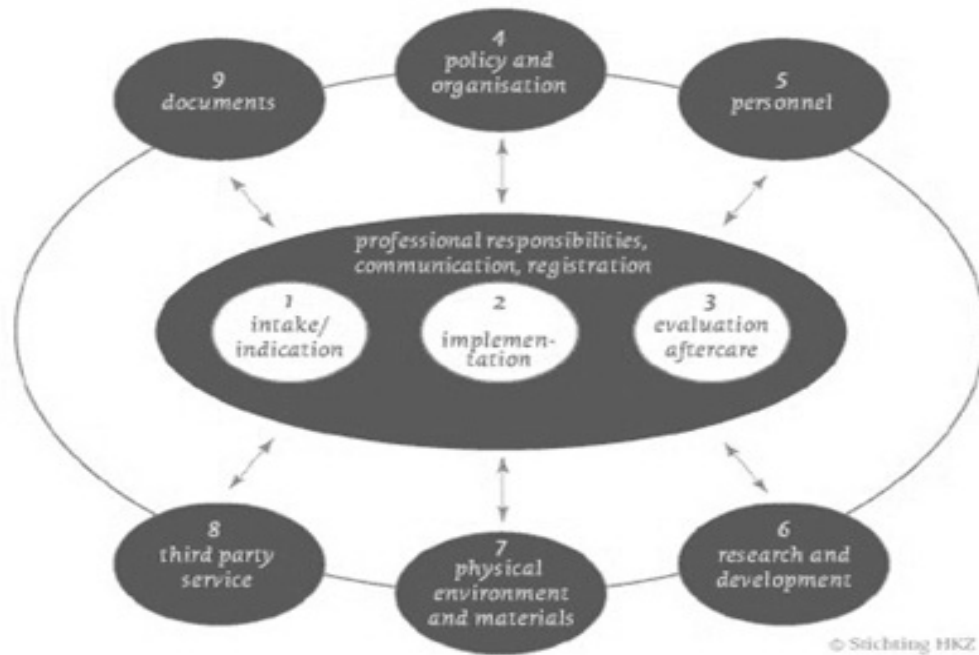
Nurse 2: *'Yeah, and that we're not willing to cooperate.'*

5.10 Products of critical reflection

The focus group meetings produced two bottleneck analysis diagrams that have been important in determining the interrelationship of the problems and in choosing which innovations were desirable and feasible in which stage of change.

In the addiction care the quality of treatment and counselling is mapped out and monitored using the HKZ model (Quality Harmonization Model of the Stichting HKZ, 2003). This model is a schematic representation of the care in daily practice and clearly shows which preconditions should be in place to enable care at the micro level (interaction care worker - patient, the care at patient level). See the figure 5.4.

Figure 5.4: The HKZ model¹⁸



The HKZ model was used to look at the daily care in the outpatient addiction care from a schematic reality and to identify bottlenecks, classify them in a set of preconditions and interrelate them. This diagnostic model is worked out in more detail on the next page (figure 5.5). The analysis diagram distinguishes between bottlenecks in the nurses' professional attitude and bottlenecks in the daily care organization (dispensing medication). In the next stage of the research innovations were linked to improvement actions on the basis of feasibility in the daily practice. This diagram was the guiding principle for the activities of both teams (figure 5.6).

¹⁸ www.hkz.nl/englishsummary.

Figure 5.5: Diagnostic model/Bottleneck analysis

Professional attitude

External¹: centre facilities

1. no centre vision on professional training & development
2. no well-founded centre vision on addiction in daily practice

Internal: professional attitude

3. insufficient addiction care expertise
 - nurses do not read specialist literature
 - no critical team reflection on their own actions
 - insufficient professional attitude with regard to patients

9. low job satisfaction and perceived autonomy of

Content of care

- central problem: cram care at the counter
4. next to no patient participation in treatment plan and methadone dosing
 5. minimal nursing input in patient reviews
 6. incomplete nursing and medical case history, diagnosis, objectives and interventions

Dispensing procedure

External: finance and job description

7. limited financial means aimed at limited opening hours and job description based on dispensing methadone and carrying out urine analyses: many unknown/unregistered care activities at the counter

Internal: organization of the care at the counter

8. limited opening hours: too many patients per hour, aggression incidents at the counter

10. no national Guideline Opiate Maintenance Treatment that offers uniformity in working methods and treatment

¹ 'External' refers to the centre responsibilities. 'Internal' refers to the professional responsibilities.

Figure 5.6: Bottlenecks and innovations

No.	Bottleneck¹⁹	Background	Solutions/ innovations
1	No centre vision on professional training & development.	Insufficient adequate training courses and a small budget per nurse for the advancement of professional ability.	Increasing range of training courses by submitting wishes to management, and setting up and implementing courses.
2	No well-founded centre vision on addiction in daily practice.	Centre vision not reflected in the daily work.	Making centre vision, bio-psycho-social model, addiction model a component of training and focus group meetings.
3	Unprofessional and insufficient critical reflection on the work.	Participative observations and observations in the focus group meetings: nurses are not critical enough of their own work.	Setting up and holding monthly reflection meetings.
4	Insufficient insight in the patient's perspective.	Short structured interviews with patients at the counter: the nurses' attitude is not aimed at patient participation and patients do not contribute much to their own treatment.	Focus group interviews with patients and confrontation with nurses in focus group meeting.
5	Unstructured/non-methodical patient-related input by nurses in the multidisciplinary patient reviews.	Observations of the multidisciplinary patient reviews and interviews with nurses: almost no structured patient-related input in the meetings.	Training and supervision with regard to a active preparation and input of a treatment plan in the meetings.
6	Nurses keep patient files in an unstructured and non-methodical way. Files and the individual treatment plans are incomplete.	File research: no to incomplete individual treatment plans.	Training and supervision with regard to keeping files and registration of the treatment progress.
7	At the counter nurses carry out unacknowledged care activities.	Interviews with nurses and observations at the counter: the centre's job description does not correspond with the activities at the counter.	Recording care activities at the counter.

¹⁹ These ten bottlenecks are related to the same ten bottlenecks in the diagnostic model.

No.	Bottleneck ²⁰	Background	Solutions/ innovations
8	In their daily work nurses have to deal with incidents of aggression.	Interviews and observations at the counter: limited opening hours and high number of patients lead to incidents of aggression at the counter.	Extension of opening hours.
9	Nurses report low job satisfaction and perceived autonomy.	Interviews with nurses and observations during the execution of the daily work.	Monthly reflection meetings.
10	No uniform opinion in our country on methadone maintenance treatment.	No national guideline that enables uniformity in working methods.	

5.11 Results of the ad hoc care inventory

The tables below provide insight into the nature of the care activities at the dispensing counter.

Table 5.2: Number of patients and total number of opening times per day per project²¹

Opening days project 1: 242 (230 with ad hoc care registration)²²

Opening days project 2: 248 (238 with ad hoc care registration)²³

Patients with and without ad hoc care	Project 1				Project 2			
	Average	Standard deviation	Min.	Max.	Average	Standard deviation	Min.	Max.
Number of patients with medication only	58 (rounded up from 57.6)	19.2	7	107	55 (rounded up from 54.9)	11.2	20	80
Number of patients with medication as well as other care (ad hoc care)	26 (rounded up from 25.5)	11.6	3	60	16 (rounded down from 16.1)	5.1	5	41

²⁰ These ten bottlenecks are related to the same ten bottlenecks in the diagnostic model.

²¹ On some days the clinic was opened at different times, e.g. extra early or extra late for people with jobs.

²² In project 1 the counter was always manned by 2 nurses (on average 2.4, standard deviation .7).

²³ In project 2 the counter was almost always manned by 2 nurses (on average 1.9, standard deviation .7).

Table 5.3: Nursing interventions related to the total number of opening moments per project

Ad hoc care activities	Project 1				Project 2			
	Average	Standard deviation	Min.	Max.	Average	Std Dev.	Min	Max.
Nursing interventions	9.8	5.4	0	25	5.6	2.8	0	18
Health education	7.4	5.3	0	37	0.9	2.7	0	31
Psycho-social care activities	7.1	6.3	0	29	9.5	4.2	1	23
Organizational activities	12.4	8.6	0	57	4.9	3.6	0	18
Other activities	1.1	2.2	0	13	0.6	1.0	0	5

The analysis does not explain how these care activities relate to the opening hours per project.

Table 5.4: Average number of patients, kind of ad hoc care activity per opening hour (60 minutes)

	Project 1	Project 2
No. of patient contacts	21 (21.1)	22 (21.5)
Ad hoc care activities		
No. of nursing interventions	3.7	1.9
No. of health education activities	2.7	0.3
No. of psycho-social activities	2.6	3.3
No. of organizational activities	4.7	1.7
No. of other activities	0.4	0.2

Based on the one-year registration the average time spent per patient at the counter in project 1 is 2.8 minutes; in project 2 it is 3.1 minutes. So at the counter nurses have on average three minutes available per patient. In these three minutes, the medication must be prepared and labelled (sometimes several cups per patient). All other required care is provided in that same time. This means that if more time is spent on a care patient, the average time available for other patients will be less than three minutes.

Table 5.5: Interventions per opening hour (60 minutes) and per project related to the attendant nurse

	Project 1		Project 2	
	Max.	Average	Max.	Average
No. of patients per 60 minutes dispensing	33 (32.5)	21 (21.1)	43 (43.4)	22 (21.5)
No. of patients per 60 minutes dispensing per nurse	30 (30.0)	10 (9.5)	43 (43.4)	14 (13.7)
Interventions per 60 minutes per nurse				
	Max.	Average	Max.	Average
No. of nursing interventions	7.6	1.7	6.9	1.4
No. of health education activities	5.2	1.2	4.0	0.2
No. of psycho-social activities	5.7	1.2	10.3	2.3
No. of organizational activities	11.4	2.1	7.4	1.3
No. of other activities	2.6	0.2	2.0	0.1

The objective in both projects was for two nurses to be present during dispensing. Project 1 realized this almost always. However, in project 2 it was not always the case. The table shows that in one hour at the counter the nurses carry out many other interventions in the available three minutes besides dispensing medication.

Differences between the projects

First the significance of the differences between both projects was determined. It is shown in the table below, based on a difference calculation of the averages.

Table 5.6: Significance calculation of the variances between projects 1 and 2 using the t-test

	Significance (two-tailed)	Mean Difference	95% Confidence Interval of the Difference	
	p-value		Lower	Upper
Total number of patients	0.056	2.7	-.07	5.5
No. of care patients	<0.001	9.4	7.8	11.0
Nursing interventions	<0.001	4.3	3.5	5.0
Health education	<0.001	6.6	5.8	7.4
Psycho-social activities	<0.001	-2.3	-3.3	-1.4
Organizational activities	<0.001	7.6	6.4	8.8
Other activities	0.004	0.5	0.2	0.8

The table shows that all observed differences between both projects are significant and not coincidental. However, the causes of these differences are widely divergent and cannot be attributed with certainty to one or more of them.

5.12 Results of job satisfaction and perceived autonomy²⁴ and ²⁵

Job satisfaction²⁶

The results²⁷ of both measurements in the two projects are shown in the tables below

Table 5.7: MAS-GZ: job satisfaction

Variable	Project 1			Project 2			Total both teams		
	Average	N	SD	Average	N	SD	Average	N	SD
First job satisfaction measurement	2.9	4	0.2	3.6	3	0.3	3.2	7	0.4
Second job satisfaction measurement	3.2	4	0.2	3.7	3	0.1	3.4	7	0.3
Clarity 1	2.2	4	0.3	3.6	3	0.5	2.8	7	0.8
Clarity 2	2.7	4	0.3	3.7	3	0.3	3.1	7	0.6
Contacts with clients 1	3.3	4	0.8	3.8	3	0.2	3.5	7	0.6
Contacts with clients 2	3.7	4	0.4	3.9	3	0.2	3.8	7	0.3
Contacts with colleagues 1	4.2	4	0.6	4.3	3	0.3	4.2	7	0.5
Contacts with colleagues 2	3.7	4	0.7	4.3	3	0.3	3.1	7	0.7
Development opportunities 1	3.4	4	0.9	3.8	3	0.2	3.6	7	0.7
Development opportunities 2	3.4	4	0.7	3.8	3	0.2	3.6	7	0.5
Quality of care 1	2.3	4	0.3	3.2	3	1.0	2.7	7	0.8
Quality of care 2	2.9	4	0.3	3.8	3	0.2	3.3	7	0.5
Career opportunities 1	2.8	4	0.3	2.7	3	0.3	2.8	7	0.3
Career opportunities 2	2.9	4	0.2	2.8	3	0.4	2.9	7	0.3
Satisfaction with department head 1	2.2	4	0.7	3.5	3	0.8	2.8	7	1.0
Satisfaction with department head 2	3.0	4	0.5	3.8	3	0.4	3.3	7	0.6

²⁴ This chapter only describes the results of both the satisfaction and perceived autonomy. The increase or decrease of the scores of both outcome measures are described in chapter 6.

²⁵ Appendix 5 includes all raw results of both questionnaires.

²⁶ Chapter 6 discusses the significance of the differences.

²⁷ See appendices 1, 2 and 3 for the questionnaires and raw data.

In a number of large national studies among Dutch nurses (van der Windt, 2001, 2002 and 2003) nurses stated that they were neutral to satisfied with their jobs (3.4). The nurses in our study scored 3.2 and 3.4 in the first and second measurement, respectively, which is neutral. The nurses were the most satisfied with the contacts with colleagues and patients. In the first measurement they were the least satisfied with the clarity, the career opportunities and the department head. The latter also emerges in the national research; the interviewees were the least satisfied with the career opportunities (2.7) and the most satisfied with their contacts with colleagues and patients (3.7).

Table 5.8: National job satisfaction measurements over several years

	2001	2002	2003
Job satisfaction national research	3.4	3.4	3.6
Job satisfaction projects1 and 2			3.2
action research MMT clinics			3.4

Autonomy

Table 5.9 shows the results of both measurements in both projects.

Table 5.9: Perceived autonomy of both teams: results

Variable	Project 1			Project 2			Total both teams		
	Average	N	SD	Average	N	SD	Average	N	SD
First measurement perceived autonomy	2.6	4	0.5	2.8	3	0.5	2.7	7	0.5
Second measurement perceived autonomy	2.5	4	0.3	3.0	3	0.6	2.7	7	0.5
Operational autonomy: autonomy in the work (1)	2.9	4	0.6	3.3	3	0.5	3.1	7	0.6
Operational autonomy: autonomy in the work (2)	2.8	4	0.4	3.5	3	0.4	3.1	7	0.5
Structural autonomy: autonomy over the work (1)	2.4	4	0.6	2.6	3	0.4	2.4	7	0.5
Structural autonomy: autonomy over the work (2)	2.3	4	0.4	2.7	3	0.6	2.5	7	0.5

Although the national research used a different instrument to measure autonomy there are some points of similarity with the MAQ results. In all years nurses in the national research experienced a certain degree of autonomy (a score between 2-3). The nurses of both MMT clinics do not deviate much from this score (2.7).

5.13 Conclusions

The main result of the participative action research is that it helped nurses gain knowledge and insights which were translated into improvement actions. To the nurses, these first steps on the way to an improved nursing practice meant a larger professional space in the daily activities and professional autonomy.

The research questions (sub-questions one and two) that applied to the patient's perspective were:

Which aspects in the care are of importance from the perspective of patients? And can the patient's perspective be put across to the nursing teams of the MMT clinics so that they can adjust their approach to, and opinion about the patients accordingly?

Patients think it important that nurses better gear their care to the patient's capacities and that they should not always base their actions on general rules and agreements. They want to be viewed as individuals. They do realize that in general their behaviour is clumsy and can arouse anger and irritation. They said they showed consideration for the staff at the other side of the counter.

It was notable that the first interviews led to surprised and sometimes anxious reactions among the addicted users. They were not used to giving their opinions and were surprised they were being suddenly asked to do just that. In the focus group interviews there were much fewer surprised reactions. The patient's perspective deserved more attention in the addiction care, since gearing the care towards the patients' wishes and needs offers opportunities for increasing compliance, for example, thus improving the effect of the care. The focus group is a good instrument to encourage the patients to contribute their thoughts and insights and serves as an intermediate step for direct consultation between the patients and the care workers. The results of all interviews do not differ from previously carried out research into the patient satisfaction with this kind of care (Verbraeck & Van de Wijngaart, 1989; Driesen 1990, 1992 and 1999; Driesen et al., 1993; Jongerius et al., 1994; Eland-Goossensen et al., 1997; Luijting 2002).

Both short and in-depth interviews offer possibilities for formulating a patient's perspective. When their results are put before the care workers, they will gradually develop an understanding for each other's viewpoints. This process will not be an easy one. The nurses, too, had to get used to the patients' opinions and soon lapsed into judging their opinions on the basis of the addiction behaviour observed in patients at the counter. However, both teams won margin for manoeuvre through jointly determining rules with regard to medication and vacation, and were happy with that.

The selection of patients also yielded a limitation. The first and unplanned interviews were held with patients from project 1. The in-depth interviews were held with a group from the region of project 2 only. Project 1 was dropped. However, the selection was made taking into account the various methadone maintenance programs and therefore also the degree of severity of the addiction.

The research question (sub-question three) formulated for the, hitherto unacknowledged, ad hoc care was the following: What is the nature and scope of the unacknowledged ad hoc care provided when dispensing methadone at the counter?

The number of patients in project 1 as well as project 2 varies. The number of patients per opening day varies as well. There are opening times with very few patients and opening times

with a lot of patients. The fact that project 1 put much more effort into care organization at the counter could account for the differences in patient groups. On average almost half of the patients (44.8%) who came to the MMT clinic during a given opening hour required extra care at the counter. The extra care mainly consisted of organizational activities directly related to patients, such as calling the police station, consulting with other care workers, making appointments with the hospital or referrals to other care workers. For project 2, the average care patient percentage per opening hour was 29%, with the focus of the extra care lying on the psycho-social support of the patient and/or his/her partner. The observed differences in care activities between projects 1 and 2 can also have something to do with the fact that project one gradually withdrew from the participative action research. The analysis showed that the team was not really able to draw boundaries in its own work. It partly seems to be a flight into activities at the counter that do not immediately lead to more patient-oriented contacts.

Identifying the extra care served three purposes: supporting the process of increasing autonomy, gaining insight into all provided care, and preparing the separation of care at the counter and other care. The data show that a large number of patients was offered extra care because their state of health required it. Much more ad hoc care than anticipated was carried out. This also surprised other non-nurse care workers and the management. As a result of this outcome the care at the counter in project 2 was divided into short care at the counter and more time-consuming care beside the counter. The nurses started to counsel patients in longer conversations in addition to the care at the counter as case managers, albeit on a modest scale.

The two teams themselves came up with an analysis of the current state of affairs which was not positive. The analyses were presented to managers and colleagues and the teams were given time and space to experiment with new interventions. In the course of time the innovations were accepted and translated into new centre policy, which gave the nurses more margin to manoeuvre.

The research questions with regard to critical reflection were the following (sub-questions four and five):

Is it possible to improve the professional communication among nurses working in outpatient methadone maintenance treatment by planning group meetings at set times? Are nurses working in outpatient methadone maintenance treatment able to make a solid and communicable analysis of their daily care practice?

The meetings considerably improved the communication; with some help the nurses were very well able to make an analysis of their own work situation and discuss it in a professional way. It resulted in two products: the diagnostic model with a bottleneck analysis and an overview of feasible innovations.

These products enabled the nurses to submit policy proposals to the management, which were approved and supported. Both products then became leading in the continuation of the participative action research. The focus group meetings must be properly attuned to the degree of autonomy that the team perceives and actually has in practice. The slowly built-up rigid structure contributed to the development of a vision within the team. It was fascinating to see that more and more often increasingly difficult and sensitive topics were broached and openly discussed.

The professionals themselves must realize the expansion of their professional acting space. It starts with an increase of know-how, followed by letting go of the victim role. The meetings resulted in two important products, i.e. the diagnostic model in which the bottlenecks are

identified and an exhaustive plan of action to solve them consisting of innovations and the evaluations.

The research questions with regard to job satisfaction and perceived autonomy were the following (sub-questions six and seven):

Are there any changes in the job satisfaction of nurses working in outpatient methadone maintenance treatment after having been actively involved in changing their own daily practice? Are there any changes in the perceived autonomy in and over the work of nurses working in outpatient methadone maintenance treatment after having been actively involved in changing their own daily practice?

To map out the impact on the perceived autonomy and job satisfaction three measurements were carried out. The first qualitative measurement at the beginning of the participative action research showed low job satisfaction and low perceived autonomy. At the end of the participative action research two follow-up measurements were carried out. The findings show an average job satisfaction and average perceived autonomy which were not really on the increase. The unrest caused by changes probably translates in a job satisfaction and perceived autonomy that are still poor.

Appendix 1: MAS-GZ

The questions were classified as follows:

- 1) Satisfaction with the department head:
 - The extent to which the department head understands his business (19);
 - The extent to which you feel the management of the department is going well (13);
 - The extent to which the department head is abreast of the state of affairs at the department (11).
- 2) Satisfaction with career opportunities:
 - The extent to which you as a nurse have good career opportunities in the hospital (3);
 - The extent to which you have opportunities for career advancement in this hospital (7);
 - The extent to which there is a fair promotion policy in this hospital (14).
- 3) Satisfaction with the quality of the care:
 - The extent to which you generally have time to take good care of your patients (2);
 - The extent to which you can provide individual care to your patients (6);
 - The extent to which you feel you provide psycho-social counselling to your patients (20).
- 4) Satisfaction with development opportunities:
 - The extent to which the work makes you feel that you have valuable skills (4);
 - The extent to which you can use your skills and abilities (9);
 - The extent to which the work stimulates you to give the best you can (15).
- 5) Satisfaction about the contacts with colleagues:
 - The extent to which you like your colleagues (5);
 - The extent to which you work with colleagues who like you (18);
 - The extent to which you can show in your work that you like your colleagues (10).
- 6) Satisfaction about the contacts with patients:
 - The extent to which you feel patients find you the right girl/guy for the job (17);
 - The extent to which you work with patients who like you (21);
 - The extent to which you like your patients (8).
- 7) Satisfaction with clarity:
 - The extent to which you know in advance what work you will be instructed to do (1);
 - The extent to which there are set and clearly described rules which you can stick to (12);
 - The extent to which you are told what is expected of you (16).

Scores

1 stands for very dissatisfied, 2 stands for dissatisfied, 3 stands for neutral, 4 stands for satisfied, and 5 stands for very satisfied. It is a Likert-type scale.

Appendix 2: MAQ

The MAQ consists of 10 questions that measure the extent to which the work you do offers the opportunity:

- to chose your own working method;
- to leave your work station whenever you want;
- to determine the work objectives yourself;
- to determine the order of the work yourself;
- to assess yourself whether you have done a good job;
- to interrupt the work whenever you want;
- to determine yourself how much work you carry out in a given period of time;
- to increase or decrease the working pace yourself;
- to determine your office hours yourself;
- to determine yourself which work you will carry out.

Scores

The questions have the following scores:

- 1) very few opportunities;
- 2) few opportunities;
- 3) some opportunities;
- 4) many opportunities;
- 5) very many opportunities.

Operational autonomy

Operational autonomy consists of options within the limits of one's own work situation, the autonomy in one's work. It is mapped out by means of the following items:

- to chose a working method yourself (1);
- to determine the work objectives yourself (3);
- to determine the order of the work yourself (4);
- to assess yourself whether you have done a good job (5).

Structural autonomy

Structural autonomy is understood to mean the options in the gray area between one's own work situation and the environment, the autonomy over one's work. It is mapped out by means of the following items:

- to leave your work station whenever you want (2);
- to interrupt the work whenever you want (6);
- to determine yourself how much work you carry out in a given period of time (7);
- to increase or decrease the working pace yourself (8);
- to determine your office hours yourself (9);
- to determine yourself which work you will carry out (10).

Appendix 3: Raw data MAS-GZ and MAQ

MAS-GZ: Job satisfaction

Variable	Project 1			Project 2			Total both teams		
	Average	N	SD	Average	N	SD	Average	N	SD
First measurement job satisfaction	2.9	4	0.2	3.6	3	0.3	3.2	7	0.4
Second measurement job satisfaction	3.2	4	0.2	3.7	3	0.1	3.4	7	0.3
Clarity 1	2.2	4	0.3	3.6	3	0.5	2.8	7	0.8
Clarity 2	2.7	4	0.3	3.7	3	0.3	3.1	7	0.6
Contacts with clients 1	3.3	4	0.8	3.8	3	0.2	3.5	7	0.6
Contacts with clients 2	3.7	4	0.4	3.9	3	0.2	3.8	7	0.3
Contacts with colleagues 1	4.2	4	0.6	4.3	3	0.3	4.2	7	0.5
Contacts with colleagues 2	3.7	4	0.7	4.3	3	0.3	3.1	7	0.7
Development opportunities 1	3.4	4	0.9	3.8	3	0.2	3.6	7	0.7
Development opportunities 2	3.4	4	0.7	3.8	3	0.2	3.6	7	0.5
Quality of care 1	2.3	4	0.3	3.2	3	1.0	2.7	7	0.8
Quality of care 2	2.9	4	0.3	3.8	3	0.2	3.3	7	0.5
Career opportunities 1	2.8	4	0.3	2.7	3	0.3	2.8	7	0.3
Career opportunities 2	2.9	4	0.2	2.8	3	0.4	2.9	7	0.3
Satisfaction with department head 1	2.2	4	0.7	3.5	3	0.8	2.8	7	1.0
Satisfaction with department head 2	3.0	4	0.5	3.8	3	0.4	3.3	7	0.6

MAQ: Perceived autonomy

Variable	Project 1			Project 2			Total both teams		
	Average	N	SD	Average	N	SD	Average	N	SD
First measurement perceived autonomy	2.6	4	0.5	2.8	3	0.5	2.7	7	0.5
Second measurement perceived autonomy	2.5	4	0.3	3.0	3	0.6	2.7	7	0.5
Operational autonomy: autonomy in the work (1)	2.9	4	0.6	3.3	3	0.5	3.1	7	0.6
Operational autonomy: autonomy in the work (2)	2.8	4	0.4	3.5	3	0.4	3.1	7	0.5
Structural autonomy: autonomy over the work (1)	2.4	4	0.6	2.6	3	0.4	2.4	7	0.5
Structural autonomy: autonomy over the work (2)	2.3	4	0.4	2.7	3	0.6	2.5	7	0.5

Appendix 4: Description of all focus group meetings

First round of focus group meetings, loosely structured

No.	Agenda	Present
1	5-day dispensing: background, stopping and refinancing it, existing criteria	Department head, 3 nurses of project 1
2	Feedback research analyses April-November and validation in the group	Department head, physician, 6 nurses (3 of project 1 and 3 of project 2)
3	Old and new criteria 5-day dispensing, new view on dispensing, actions/innovations and how to begin and planning evaluations	Department head, 5 nurses (3 of project 1 and 2 of project 2)

Second round of focus group meetings; slightly more structured²⁸

No.	Agenda	Present
4	1st client review for selection	2 nurses (1 of each project)
5	2nd client review for selection	3 nurses of project 1
6	3rd client review for selection	2 nurses of project 1

Third round of focus group meetings; structured

No.	Agenda	Present
7	Frequency of meetings, explanation of research, set up focus group meetings	4 nurses (2 of each project)
8	Casuistry, five-day project 1 (set up and start client selection, preconditions and collaboration Day Care Centre), start of client participation and women's care	5 nurses (3 of project 1 and 2 of project 2)
9	Preconditions, content of care and progress with the aid of recording care in cases, diary of one's own learning process	3 nurses (1 and 2, respectively)
10	Women's care feasible?, care plan system and multidisciplinary client review	4 nurses (2 of each project)
11	Advancement of expertise, evaluation of care plan system meeting, research set-up, registration ad hoc care, care trajectories and the individual learning process	4 nurses (2 of each project)
12	First evaluation ad hoc care registration, care plan system refresher courses, feedback research/framework autonomy, start of measurements	4 nurses (2 of each project)
13	Review previous meeting: registration, start of peer review, implementing changes and setting store by this. Autonomy and the diary	4 nurses (2 of each project)
14	First results of ad hoc care registration, interviews with clients, care plan system: evaluation first study day, winding up season and how to start in September	3 nurses (2 and 1, respectively)

²⁸ Please refer to appendix 2 for the structure thought up to this end.

Fourth round of focus group meetings; tightly structured²⁹

No.	Agenda	Present
15	Explanation and set-up afternoon, overview of research so far, care clients; who do we select and which structure	6 nurses (3 of each project)
16	Measurements in the study and all nurses bring forward a care client (casuistry)	Discussion leader, 6 nurses (3 of each project)
17	Discussion of the centre's vision document, two nurses put forward a care client (casuistry) and an actual case DD problem (ad hoc problem)	Discussion leader, 6 nurses (3 of each project)
18	Did not take place	-
19	Review refresher course motivating discussion technique and future development & training needs and the job profile of the ambulatory addiction care nurse	Discussion leader, 7 nurses (4 and 3, respectively)
20	Structure of recording care of care clients ³⁰	Discussion leader, 3 nurses (2 and 1, respectively)
21	The action research and the results so far from the focus group meetings: the way of communicating, the developing vision on addiction, the way in which boundaries are set in the organization of the work and in the interactions with clients. Start of methodical communication about the content of setting boundaries, who is responsible, who will provide for a solution, how do you start, when will actions be evaluated and how.	Discussion leader, 6 nurses (3 of each project)
22 ³¹	Feedback of the results of the study so far: assistance of 2nd analyst in analyses, sanctions and analyses, ad hoc care and analyses so far, video recordings and when analyses, conferences Feedback actions last focus group meeting: Hepatitis B: invested hours and granted extra hours, client increase Enschede, new department head Care trajectories versus preconditions: care worker role versus back into the role of tap gal? Which choice are we going to make?	Discussion leader, 5 nurses (2 and 3, respectively)

²⁹ Ten meetings were planned. The one in December did not take place due to insufficient staff. Two meetings have not been recorded on tape: the first one in September as it was the first time after the vacation period and the meeting in February about deciding on the structure of the new care.

³⁰ See appendix 1.

³¹ This meeting was the last one for the nurses of project 1. In that month the decision was taken to cease the planned action research.

Fourth round of focus group meetings; tightly structured: continued

No.	Agenda	Present
23	<p>Feedback of the results of the study so far: overview of the actions started in project 1: cutting short the innovations to first improve the preconditions. Consequences for the study and the related research question: all circumstances were the same; department head, care coordinator, researcher, innovations. Why then the difference? Sanctions: state of affairs</p> <p>Client group interview: results so far and reactions of the nursing team: further planning of second interview and, if so desired, joint discussion with clients.</p> <p>Permission for a motivating discussion technique training: The researcher explains this way of communicating with addicts and hands out literature to read.</p> <p>Watching videos and application motivating discussion techniques.</p>	Discussion leader, 3 nurses of project 2
24	<p>State of affairs in the study: turning changes into policy decisions, making a route planner for the advancement of expertise of nurses and new colleagues, and the team's requirements of such a planner, the step towards the clients, looking for communality.</p>	Discussion leader, department head, 3 nurses of project 2

Appendix 5: Structure for recording the care used in the focus group meetings

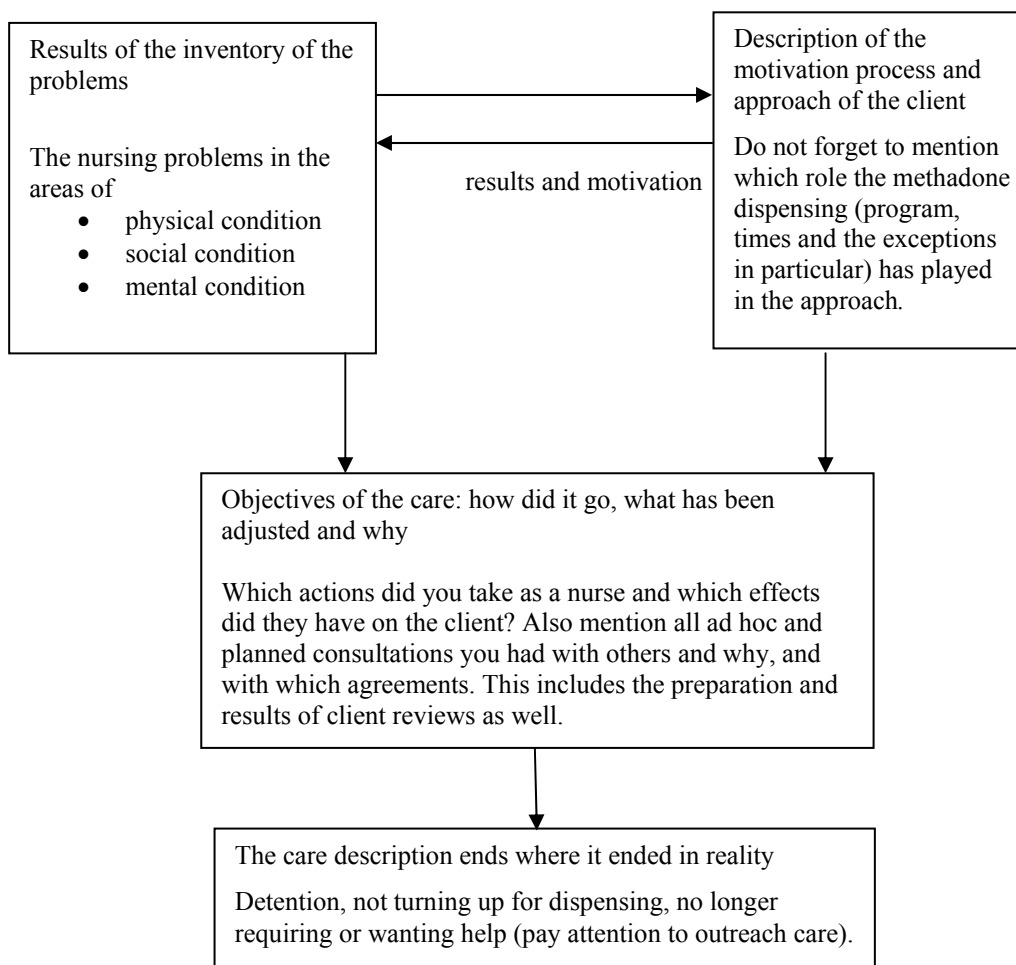
Each nurse works out the case on paper.

General description of the person:

- ❑ A fictitious name
- ❑ Age
- ❑ Education: completed or not completed, in which case why not
- ❑ Family situation
- ❑ Housing situation
- ❑ Addiction history: length, to what, started when, care history (what, succeeded or failed and why, how long in care at the MMT clinic and what was the reason) and a description of the addiction behaviour

Figure 5.7 gives insight in the methodological process in making a nursing care plan in MMT.

Figure 5.7: Structure/step-by-step recording care in plan



Chapter 6 Local innovations and their impact: the breakthrough

6.1 Introduction

This chapter reports on the quantitative evaluation of the initiated changes. These changes ensued from innovations that were set up and implemented after, and on the basis of, the inventory of bottlenecks made together with the nurses. This overview can be found in chapter 5 (figure 5.6). Not all stated innovations could be turned into actual improvements due to lack of time and/or possibilities and could therefore not be evaluated. The ones that could are stated in figure 6.1.

The general question was:

Does the implementation of innovations in methadone dispensing lead to changes in the provided care by nurses at the MMT clinics?

For each innovation sub-questions were formulated. This chapter the researcher describes how they were answered and discusses if changes were observed after introduction of the innovations and if there were differences between both projects.

In this participative action research not all bottlenecks could be immediately turned into innovations due to lack of staff and time. In consultation with the management both teams opted to solve five specific bottlenecks, which were chosen because of the high chance of success of the interventions in relation to their feasibility and the limits of the centre. Table 6.1 describes these bottlenecks, the innovations, the related evaluation parameters, and the desired results. The five bottlenecks are the following (with the same numbers as in table 5.6):

- 5: unstructured patient-related input by nurses in patient reviews;
- 6: incomplete files;
- 7: an excess of ad hoc care at the dispensing counter;
- 8: incidents of aggression at the dispensing counter;
- 9: low job satisfaction and perceived autonomy (experienced freedom to act and to plan the work).

After management approval the teams started working on the following innovations:

- Ad 5: training and supervision with regard to working with treatment plans
- Ad 6: training and supervision with regard to keeping patient files up to date
- Ad 7: mapping out the ad hoc care
- Ad 8: extending the opening hours of both MMT clinics
- Ad 9: encouraging critical reflection in both teams.

The order of the innovations was determined by the nurses' development process. The innovation of the organization of care proved to be a leg up to patient-oriented innovations that required more reflection on the nurses' own actions (Johns, 1999 and 2001). The order was also determined by the HKZ model and the related secondary, conditional process (e.g. education, time for meetings and keeping files). Patient-oriented care required a number of improvements in the care organization. Sections 6.2 through 6.7 describe the research method.

Figure 6.1: Bottlenecks, innovations, evaluation parameters and results³²

No.	Bottleneck	Innovations	Evaluation parameters	Method/data collection	Desired result
5	Unstructured/non-methodical patient-related input by nurses in the multidisciplinary patient reviews.	Training and supervision with regard to an active preparation and input of treatment plans in the meetings.	Preparation of treatment plans for selected patients and bringing them forward in the meetings by putting them on the agenda. Discussion of the treatment plans in the meeting by nurses.	Observations in the patient reviews. Analysis of the minutes. Contribution in meeting: qualitative analysis on the basis of predetermined criteria. Minutes: qualitative analysis on the basis of predetermined criteria.	Nurses' input in the meetings in project 2 became more active and better structured.
6	Nurses keep patient files in a unstructured and non-methodical way. Files and the individual treatment plans are incomplete.	Training and supervision with regard to keeping files and registration of the treatment progress.	Treatment plans in the files with case history, diagnosis, interventions and evaluation criteria for selected patients by nurses.	File research with qualitative analysis on the basis of predetermined criteria.	Good treatments plans for the selected patients in project 2.
7	At the counter nurses carry out unacknowledged care activities.	Recording care activities at the counter.	Nature and scope of the ad hoc care.	Analysis of care recorded on a registration form.	Division of care in care at the counter and treatment trajectories within which interventions take place.

³² The numbers used in this table are based on figure 5.6

No.	Bottleneck	Innovations	Evaluation parameters	Method/data collection	Desired result
8	In their daily work nurses have to deal with incidents of aggression.	Extension of the opening hours.	Nature and scope of incidents of aggression.	Analysis of log entries and sanction letters by means of a retrospective analysis of the nature (qualitatively) and the number (quantitatively) of the incidents.	Nature of the incidents is less fierce. Scope reduces.
9	Nurses report low job satisfaction and perceived autonomy.	Monthly reflection meetings.	Job satisfaction and perceived autonomy.	Analysis of two questionnaires mapping out satisfaction and perceived autonomy: quantitative analysis.	Change in satisfaction and perceived autonomy.

6.2 Differences between the participating MMT clinics

It was already decided beforehand which MMT clinics (of one addiction centre) and nurses would participate in the research. We refer to them as project 1 (methadone dispensing by a team of (5) nurses from a big city clinic) and project 2 (methadone dispensing by a team of (3) nurses from a small town clinic with a regional function). However, as described in chapter 4 their development processes did not proceed in the same way. The change process, development of knowledge and increase of autonomy differed, which bore consequences for the research. In the course of the research one project was found to be unable to implement the innovations and it withdrew from the research. The patient-oriented innovations in particular were unsuccessful. The team of the other project continued with the innovations. These differences created a chance to compare both projects, so at a later stage we formulated a number of additional research questions.

6.3 Research design

Initially we opted for qualitative research in which we allocated an important research role to the people most involved: the nurses.

The point of the study was that the parties involved were willing and able to shape the intervention. During the intervention they could determine if they were indeed able to design it and if they thought they would benefit from it.

During the process evaluation of this contribution two reasons were brought forward to also carry out a product evaluation in addition to a process evaluation. The first reason was that although it would obviously be nice if the participating nurses would be happy with what they had accomplished, we also wanted to be able to assess if this led to satisfying changes. The second reason was that the withdrawal of one the projects also increased the chance of making plausible statements on the changes that had taken place. The early stages of the study centred on collecting information and taking decisions on the practical bottlenecks to be formulated (van Dijk, de Goede, 't Hart & Teunissen, 1995). It resulted in information on causes and

effects of bottlenecks and the desired innovations. In subsequent stages the changes were implemented and evaluated for their impact.

As during the process evaluation the decision was taken to set up a product evaluation as well, the design involved a number of methodological bottlenecks. No manipulation was possible of the participating clinics, nurses or patients.

The intended behavioural changes took place in two nursing teams whose composition could not be changed. Therefore we had to take into account the existing differences in the number of patients, the nature of the health problems, the composition of the teams, the degree of collaboration with other disciplines, and the preconditions, such as the building.

One important condition for an experimental design could not be realized: randomization.

Therefore, we opted for a naturalistic follow-up study to be able to establish relationships and effects. Two field situations were studied, within which innovations were set up and measurements were carried out. Designs with such a structure may result in more systematic differences than the results of the treatment only. Therefore, researchers should always take into account other factors that could cause the effects found (van Dijk et al., 1995; Landsheer, 't Hart, de Goede, & van Dijk, 2003). The search for alternative explanations of the observed differences remains.

6.4 Research questions and objective

The objective in this stage of the research was to determine if the quality of the care was increasing.

Sub-questions for the five innovations were the following:

- 1) *Are the nursing teams working in the MMT clinics able to prepare treatment plans and actively bring them forward in the patient reviews after training and supervision on the centre-related and profession-related³³ formulation of treatment plans?*
- 2) *Are the nursing teams working in the MMT clinics able to carry out treatment plans and record them in files after training and supervision on keeping files and recording carried out activities?*
- 3) *Can a decrease be observed in the ad hoc care at the dispensing counter in the course of time?*
- 4) *Does the nature and/or the scope of the incidents of aggression at the dispensing counter change thanks to the extension of the opening hours?*
- 5) *Can a change be observed in the perceived autonomy and/or job satisfaction of the nurses working at the MMT clinics in the course of the change research?*

6.5 Measurement design

The innovations will be assessed for their effects per project. This was the initial design, but as project 1 gradually withdrew from the research (the organization-related innovations were still tried out, but they withdrew from the patient-related innovations) the decision was taken to look at the differences between the projects as well.

It is difficult to compare the zero measurement with the post-measurements because they differed. The zero measurement consisted of qualitative strategies, the post-measurements usually did not. The following overview shows the various research designs:

- 5) the effects of training and education on the nurses' input in the patient reviews
- 6) the effects of training and education on the quality of the content of the individual patient files
- 7) the ad hoc care and the desired decrease in the course of time

³³ This refers to the standards used in the nursing profession when formulating a care/treatment plan.

- 8) the effects of the extension of the opening hours on the incidents of aggression
- 9) the job satisfaction and perceived autonomy of the nurses and observed changes in the course of time.

The following design applies to the interventions described in the table:

- P: project (1 or 2),
 X: independent or experimental variable (training/supervision, extension opening hours and reflection meetings)
 T₀: time of the observation before the intervention
 T₁: time of the observation after the intervention
 T₂: time of the second observation after the intervention.

Table 6.1: Design of the measurements

No.	X	Project 1		Project 2	
		T ₀	T ₁	T ₀	T ₁
5	Training /supervision and their effect on bringing forward treatment plans by nurses	3 meetings observed and analyzed	2 meetings observed + analysis of minutes	3 meetings observed and analyzed	2 meetings observed + analysis of minutes
6	Training/supervision and their effect on keeping files by nurses	20 files selected at random	12 selected patient files versus 12 patients files selected at random	20 files selected at random	7 selected patient files versus 7 patients files selected at random
7	Recording care activities at the dispensing counter		care activities at the dispensing counter recorded on 230 days		care activities at the dispensing counter recorded on 238 days
8	Extension of the opening hours and its effect on incidents of aggression	The results of T ₁ could not be compared with the old situation (T ₀) because the records of the incidents of aggression up to the intervention were unreliable. However, the results will be compared with each other.			
9	Critical reflection and its effect on job satisfaction and perceived autonomy	Qualitative interviews with nurses	Maastricht Job Satisfaction (MAS-GZ) in team 1 and Maastricht Autonomy List (MAL) in team 1 ³⁴	Qualitative interviews with nurses	Maastricht Job Satisfaction (MAS-GZ) in team 2 and Maastricht Autonomy List (MAL) in team 2 ³⁵

³⁴ For this measurement a second post-measurement was carried out: T₂

³⁵ For this measurement a second post-measurement was carried out: T₂

6.6 Innovations

6.6.1 Training and education (for the benefit of sub-questions 1 and 2)

The choice was made to build on the knowledge and skills of the participating nurses. Furthermore, we looked at the need for refresher courses arising during the participative action research and which continuous training and development program had to be developed at a later stage. The following step-by-step plan was formulated and carried out:

- 1) The first and brief training course on motivational development started during the research.
- 2) This was followed by a training course on methodical nursing. The themes were keeping files, treatment plan system and registration of care activities.
- 3) Then a refresher course on methadone, methadone doses and reducing doses.
- 4) The third refresher course was 'dual diagnostics' (psychiatric co morbidity in addition to addiction) and the training course 'Dealing with mental disorders'.
- 5) Then a half-day course on rehabilitation and developments in public mental health care.
- 6) The final course started with 'care mentorship', aimed at intensive case management for chronically addicted patients.

The focus group meetings showed that the nurses thought the extra time investment worthwhile. The new knowledge was useful to them. All nurses attended the training courses and both teams emphasized that more and regular training courses were needed to keep their knowledge and skills up to date. Meetings with the Human Resources department and management were initiated to formulate an external training and development policy for a number of nurses.

Objectives became:

Every nurse who starts working in the addiction care has a certain level of knowledge and skills acquired during her basic nursing education (bachelor of nursing) which, within the addiction care, should be developed to the level of an accomplished addiction nurse, in such a way that he/she can bring forward a professional patient-related input in patient reviews and is able to formulate proper treatment plans for patients, and, in the long term, to ensure a more efficient provision of daily care.

6.6.2 Mapping out the ad hoc care (for the benefit of sub-question 3)

Nursing interventions and activities carried out at the counter above and beyond handing out methadone were neither acknowledged by the centres nor by the financiers (the central municipalities up to 2005) of the outpatient addiction care facilities. The only activities acknowledged by previous research into the outpatient addiction care activities included handing out methadone and carrying out urine analyses (staff calculation method according to the HHM method; Drouven & de Lange, 1999). Mapping out the provided but unacknowledged care activities served to support the process of increasing autonomy. It also served to provide insight into all care provided (diagnostic query) in order to be able to assess which care could immediately be provided at the counter or on the spot by another health care worker or at a later time by the health care worker dispensing the medication, and for which care an appointment could be made.

The objective became:

Increasing the own professional awareness with regard to the content of care of addictions nursing. This involves increasing the awareness of managers with regard to all care activities that are carried out, but are neither registered nor financed. Providing good professional nursing care means that the observed care demands (at the dispensing counter) are divided into short and adequate activities that are embedded as 'counter care' in long-term planned care in a treatment trajectory, and are coordinated by the case manager.

6.6.3 Extension of the opening hours (for the benefit of sub-question 4)

The opening hours of both projects were extended from 9.30 a.m.-12.30 p.m. (3 hours) to 9.30 a.m.- 3 p.m. (5.5 hours). Project 1 was the first to start in May 2002 and project 2 followed in June that year.

The objective became:

Realizing a reduction of the aggression of patients in the waiting room and at the dispensing counter. Incidents of aggression occurred because patients had to wait too long with too many people. The assumption was that extension of the opening hours would change the nature of the incidents of aggression at the dispensing counter and/or would reduce the number of incidents.

6.6.4 Monthly focus group meetings (for the benefit of sub-question 5)

From the beginning of the research monthly meetings with the nurses have taken place. They are described in sections 5.5 and 5.9 of chapter 5.

The objective became:

Improvement of the job satisfaction as well as the perceived autonomy of the nursing teams.

6.7 Data collection and analysis

Below we discuss the data collection method and analysis on the basis of the five research questions.

6.7.1 Contribution of nurses to the multidisciplinary patient reviews

The research question related to this innovation was the following:

Are the nursing teams working in the MMT clinics able to prepare treatment plans and actively bring them forward in the patient reviews after training and supervision on the centre-related and profession-related³⁶ formulation of treatment plans?

As the two teams drifted apart and project 1 withdrew from the research, the following sub-question could be formulated:

Is there a difference between projects 1 and 2 with regard to the structured active input in the patient reviews?

The nurses' input was evaluated by means of:

1. Analysis of the minutes made of each meeting;
2. Observations during several meetings.

Both teams gave permission to perform these measurements.

³⁶ This refers to the standards used in the nursing profession when formulating a care/treatment plan.

Ad 1: Analysis of the minutes

After the start of the innovation all minutes and agendas were read thoroughly.

Minutes patient reviews project 1

All agendas and minutes made within the new structure (October 2002 through April 2003) were collected from the files of the minutes secretary. This resulted in minutes of 20 meetings. According to the schedule there should have been 26 meetings. This difference of six meetings was caused by three reasons: two were planned on holidays on which the centre was closed, no minutes were made of three meetings and one meeting was cancelled due to lack of staff.

Minutes patient reviews project 2

All agendas and minutes made within the new structure (October 2002 through April 2003) were collected from the files of the minutes secretary. This resulted in minutes of 15 meetings. According to the schedule there should have been 24 meetings. This difference of 9 meetings was caused by lack of staff (7 meetings) and two were planned on holidays on which the centre was closed.

Operationalisatie of minutes criteria

The minutes were coded on the basis of the following criteria determined in the focus group meetings:

- Did the meeting start on time?
- How long did the meeting last?
- How many nurses were present (compared with the total nursing team)?
- Have the agenda items been dealt with?
- Have minutes been made?
- Have agreements been made?
- Did participants come back to them (has action been taken)?
- Was a written preparation of a patient present?
- Which contribution did the nurse made?
- Was the care coordinator present?
- Was the same minutes secretary present?

On the basis of this operationalization the patient reviews were divided into three quality categories. They are further worked out in section 6.8.1.

Ad 2: Observation of input in meetings

The choice was made to carry out two observations per project (four meetings in total) with two weeks between observations. In addition to the researcher the following people were present: a nurse, co-workers of the adult day care, trajectory supervisors, the treatment coordinator and a minutes secretary. In project 2 the physician was present both times as well. The meetings lasted 1-1.5 hours. The researcher was an observer only and did not sit at the table. During the observations she made notes that were coded on the basis of the predetermined criteria. These codes were given to a second researcher (peer review) and then discussed with the nurse who had been present (member check).

The data from the analyzed minutes were divided into three kinds of input by the nurses (the nature of the input). We distinguish three categories ranked 1, 2 and 3:

- 1) No preparation and no actual input by the nurse.
- 2) Bad preparation and vague input.
- 3) Good preparation and actual and related input by the nurse.

Operationalization of observations

The desired effect was described as follows: a more substantial and active patient-related input of the nurses present at the patient reviews. This effect could be measured on the basis of:

- a detailed plan on the agenda of the patient review meeting;
- actual patient-related input by the nurse;
- minutes giving an account of the planned actions.

The nursing input was defined as the presence and input (patient-related or otherwise) of the nurses and the instrumental professional communication (Boumans, 1990; Caris-Verhallen, Kerkstra & Bensing, 1998 and 1999). Using this as basis, a list with observation criteria was specified and approved by both teams in order to evaluate the actual input. The researcher observed the following:

Figure 6.2: Observation criteria multidisciplinary patient reviews

<p>Presence nurses</p> <ul style="list-style-type: none">• Yes/no;• Present on time?; <p>What: Input nurses</p> <ul style="list-style-type: none">• Yes/no;• Is the subject an agenda item?;• Does she ask for time if it is not on the agenda?; <p>If yes, patient-related or work/job-related</p> <ul style="list-style-type: none">• Patient-related?;• Work/job-related?; <p>If patient-related</p> <ul style="list-style-type: none">• Is the patient prepared beforehand in writing?;• Is the input underpinned with arguments based on nursing observations and the patient's behaviour?; <p>How: Instrumental professional communication</p> <ul style="list-style-type: none">• Does the nurse give a summary, if necessary?;• Does the nurse provide information when co-workers ask for it?;• Does the nurse answer the questions?;• Does the nurse put questions to her co-workers?;• Does the nurse ask for her co-workers' opinions?;

6.7.2 Patient file documentation

The research question related to file innovation was the following:

Are the nursing teams working in the MMT clinics able to carry out treatment plans and record them in files after training and supervision on keeping files and recording carried out activities?

As the two teams gradually drifted apart and project 1 withdrew from the research, the following sub-question could be formulated for the analysis of the files (and for the actual input by the nurse in the patient reviews):

Is there a qualitative difference between projects 1 and 2 in the structured registration in the files?

After the training and in consultation with the addiction specialist both teams selected patients that required more intensive care on the basis of professional standards. A complicating factor in this selection was that the number of nurses and the time available to provide this extra care were limited.

The selected patients are hereafter referred to as 'care patients': patients who need extra care and supervision due to their poor physical and mental health ensuing from their long-term and chronic use of various drugs, on the basis of a clinical assessment by the nurses in collaboration with the addiction specialist, in contrast to the 'standard' care, i.e. the daily care provided at the dispensing counter.

The team members put forward the initiated activities (data collection, problem definition and the related interventions) as subjects of discussion in the monthly reflection meetings.

In addition, in both projects a number of files were selected at random in order to be able to compare the care patients (formulation of treatment plans and, if possible, the related care activities from the nursing discipline) with patients who received standard care. The formulation of treatment plans continued to the end of the participative action research; the measurements were carried out in the spring of 2003. As the innovations really took off from January 2002 (extension of opening hours and selection of care patients) the decision was taken to choose this date as the dividing line between the old and the new situation. The commencing date of the old situation is fixed at 1 January 2001 for this file research. The files of all 'regular' standard patients have been examined from January 2001 (from the first discussion notes to the end).

To increase the reliability of the analysis results all files have been examined by two persons. In this way, if there were doubts the researcher and the assistant could come to an agreement by discussing them and/or performing a second check.

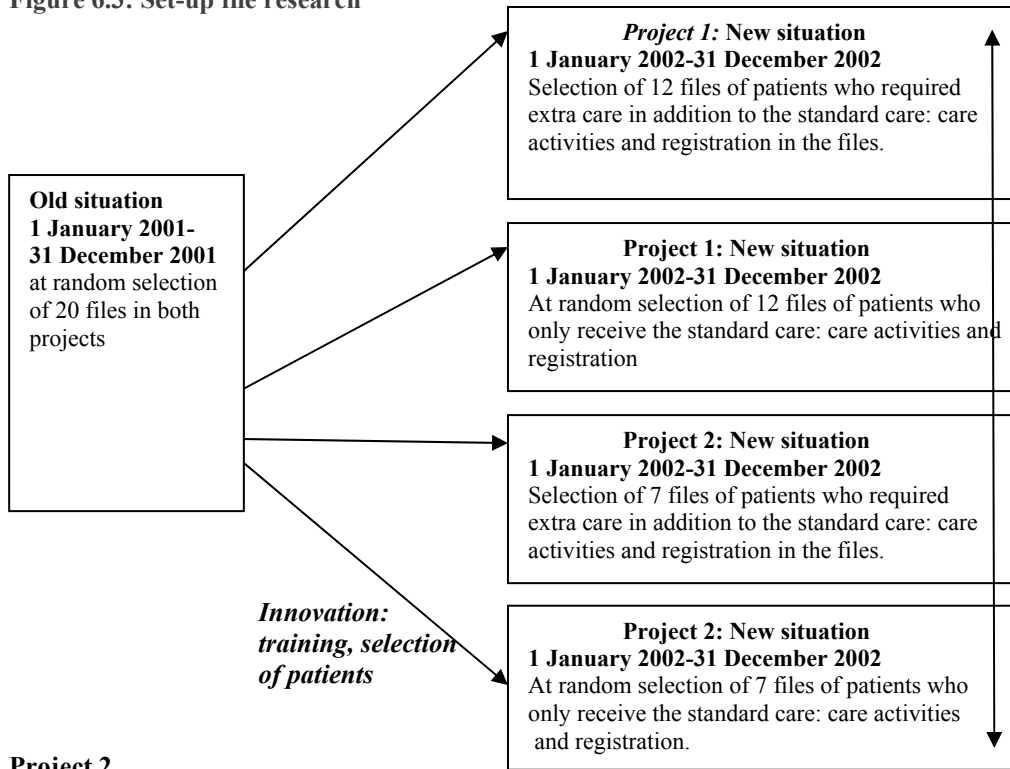
The table below provides information on the number of files that were examined.

Table 6.2: File analysis

Project	1 st measurement, before innovation	2 nd measurement, after innovation		
		N = files of the selected care patients	N = at random selected files of standard patients	N = total number of analyzed files in 2 nd measurement
Project 1 (N = 150 actual patient files, 100 patients of which received methadone)	20 files on op qualitative structure data	12 (9 men and 3 women)	12 (11 men and 1 woman)	24 (20 men and 4 women)
Project 2 (N = 100 actual patient files, 80 patients of which received methadone)	20 files on qualitative structure data	7 (5 men and 2 women)	7 (7 men)	14 (12 men and 2 women)

The figure (6.3) below provides insight into the set-up of the research.

Figure 6.3: Set-up file research



Project 2

As a result of the predetermined standard a number of criteria were formulated on the basis of the current theory on methodical nursing and its translation within the centre. The files were examined on the basis of these criteria.

Figure 6.4: Analysis of file items

Analysis of file items
<ul style="list-style-type: none"> • Frequency of the contacts • Yes/no: a written plan in the file <ul style="list-style-type: none"> ○ How actual is the plan: starting date, modification date? • Components of the treatment plan: <ul style="list-style-type: none"> ○ Case history/ data collection ○ (nursing) diagnosis ○ Interventions ○ Objectives and care evaluations • Are the notes based on the plan? • Does the file include a written preparation for the benefit of the multidisciplinary meetings and summaries of those meetings?

The monthly focus group meetings in this period of time were centred around patient reviews. All nurses put forward patients and after reviewing them they were usually given specific homework assignments. An example:

Fragment of an interview from the 8th focus group meeting:

Nurse 1: *'He was born in 1963 and has been coming to the centre for several years now. He requires a considerable amount of attention at the dispensing counter and is pushy. Up until now he has broken off several hospitalizations and left against advice. The past few months he has been fairly aggressive and several times we had to take disciplinary measures against him on account of this behaviour. He is very rude, picks his nose, spits on the floor, snatches medication out of the other patients' hands and approaches me in a way that makes me very uncomfortable.'*

Nurse 2: *'Do you happen to know which drugs he has been using lately?'*

Nurse 1: *'At present he uses quite a lot of different drugs: heroin, cocaine, a lot of alcohol, and all kinds of other medication, both prescribed and illegally obtained pills.'*

Nurse 3: *'He has a serious personality disorder; he has recently been tested for it. For that matter, in addition to these problems he is a victim on the streets. He does not show it to us, but he is being seriously abused by others. For example, that burn on his forehead, he says he did it himself, but I know that he has been assaulted on the streets by someone else.'*

Nurse 2: *'We should try to keep contact with him in spite of his rude behaviour because he is a lonely and frightened man.'*

Nurse 1: *'Okay, I will try to set boundaries in a friendly way. My personal learning point is to accept him the way he is and not immediately refuse him when he comes in like that.'*

6.7.3 Registration of the ad hoc care activities

The research question related to mapping out the ad hoc care at the dispensing counter was the following:

Can a decrease in the ad hoc care at the dispensing counter be observed in the course of time?

The definition and method of data collection and the ad hoc care are described in sections 5.6 and 5.11 of chapter 5. They focused on the analysis of, and awakening to, the problems surrounding the provided care at the MMT clinic. The observations in the course of a year also made it possible to assess if any changes had taken place in that period of time and to what extent and if the care activities at the dispensing counter had indeed decreased.

6.7.4 Incidents of aggression

The research question related to the extension of the opening hours was the following:

Does the nature and/or the scope of the incidents of aggression at the dispensing counter change thanks to the extension of the opening hours?

To gain insight into the nature and scope the nursing logs and sanction letters to patients (patients were informed of temporary sanctions in a letter) were analyzed. The definition of an incident of aggression was:

A verbal discussion between a nurse and a patient at the dispensing counter, or between patients, which turns into threatening language or physical violence by the patient. Such incidents should result in disciplinary measures imposed by the centre, depending on their severity.

We collected data of all incidents in both MMT clinics with patients who came to collect their methadone. Each incident of aggression was recorded by describing it in the MMT clinic's log. Nurses used the log to inform each other of matters in writing. The centre replied to some incidents by imposing sanctions, which were registered by means of a letter to the patient involved. All incidents were collected by analyzing the log and comparing it to the sanction letters.

The starting date of the extension of the opening hours differed for both projects: project 1 started on 1 March 2002 and project 2 started on 1 July 2002. Afterwards we based the analysis on six months in 2002 and six months in 2003. Due to a poor registration of the incidents of aggression it turned out to be impossible to obtain reliable zero measurement results; a retrospective analysis of all incidents in 2001 was impossible. There are therefore no pre- and post-measurements, only a mapping out of a trend after an intervention (of early and late effects). Furthermore, the assumption was that an intervention such as an extension of opening hours needs time to have an effect. This is why measurements were carried out of the incidence of incidents of aggression for one year after the intervention (intervention effect).

The researcher made an initial analysis of the incidents. These results were discussed in the monthly focus group meeting. After discussion in these meetings the participants first reached consensus that the following three categories were to be distinguished, in order of severity:

- rude and clumsy behaviour
- verbal insults without disciplinary measures
- physically threatening behaviour with disciplinary measures.

Subsequently all incidents were assessed accordingly and classified. If necessary, participants decided on the basis of consensus to which category a specific incident belonged.

6.7.5 Mapping out job satisfaction and perceived autonomy

The research question related to the introduction of the monthly focus group meetings was the following:

Can a change be observed in the perceived autonomy and/or job satisfaction of the nurses working at the MMT clinics in the course of the change research?

The data collection and part of its analysis are already described in sections 5.7 and 5.12 of chapter 5. Here we present some additional analysis.

6.8 Findings

6.8.1 Nursing input in the multidisciplinary patient reviews: analysis of minutes and observations of the meetings

Appendices 1 and 2 detail the analyses of the minutes of the patient reviews for projects 1 and 2, respectively. We will first discuss the nature of the input. Then we will discuss the differences between both projects, both quantitatively and qualitatively.

The 35 meetings in total were analyzed and subdivided into three categories ranking 1, 2 and 3. An overview is given for both projects in table 6.3. The significance of the differences is calculated using the Mann-Whitney *U* test.

Table 6.3: Number of structured patient files brought forward in reviews in projects 1 and 2 according to kinds of input

Kind of input ranked from poor to good		Project 1 (20 meetings)	Project 2 (15 meetings)
1	No preparation and no input	9	1
2	Poor preparation and vague input	9	5
3	Good preparation and input	2	9
Result of the Mann-Whitney <i>U</i> test: $p = 0.03$			

Results of the analysis of minutes of project 1

The minutes of 20 meetings of project 1 were analyzed in the observation period. Nine meetings were not prepared and did not show any input by the nursing discipline. Nine other meetings were prepared (three of which by a nurse), but showed no active input. Only two meetings showed both a written and actual input by the nurse. The minutes of the patient reviews did not show if the meetings started on time. Many patients were put on the agenda, only to be moved to the next agenda in the meeting itself because the promised written documentation had not been submitted.

Putting items on the agenda did not always mean that the patient was actually discussed.

An example: a patient is scheduled to be discussed in December. From that moment on he is moved to the next agenda in each meeting until March the following year, because the care worker does not supply information on this patient. Then the patient is finally discussed and the minutes show he is an aggressive and unreliable patient; the staff cannot get anywhere with him.

Results of the analysis of minutes of project 2

Of the 15 meetings in project 2 nine were prepared by the nurses; they made an actual contribution. Five meetings did not show a prepared input, but did have an active patient-related nursing input. One meeting did neither show a prepared input nor an active input by the nursing team. The minutes did not clearly show if the meetings started on time and how long they lasted. At each meeting a member of the nursing team (a total of three nurses) was present. There was one meeting with only one nurse, at all other meetings at least two nurses were present. Minutes were made of all meetings by the same minutes secretary.

To be able to assess the difference in quality of the meetings between both projects a significance calculation was made using the Mann-Whitney *U* test (Siegel and Castellan, 1988). A *p*-value smaller than 0.05 is considered significant (please also refer to table 6.3). This comparison shows that the nurses of project 2 succeeded in increasing their active professional and patient-related input in the patient reviews, whereas the nurses of project 1 only realized a slight improvement in their active nursing input, which continued to be poorly structured. The preselected patients were hardly discussed in the patient reviews, if at all. The observation accounts below give an impression of the input of the nurses in the patient reviews in both projects.

Text box 6.1: Observation example project 1

The meetings begin too late; one nurse is present each time. The nurses' input:
A nurse says that a very ill patient has died and that his file will be closed.
When discussing the next patient, the nurse says that an appointment with the family has been planned, and then says that this will put a strain on the methadone dispensing with regard to staffing that day, due to a planned holiday of one of the nurses.
For one of the next patients the nurse complements the story of a colleague, who asks a question about the medication the patient uses; it may cause problems with regard to the planned admission.
Via this patient the nurse reflects on a general viewpoint on dispensing medication to patients when they are admitted elsewhere in the centre; the transfer often goes awry, the nurse points out there is no good policy in place.
A patient treatment plan, prepared by the nurse, is discussed. The nurse provides additional information. Two points stand out. The nurse says she has not talked it over with the patient yet; this is planned for the next week. Living conditions and daytime activities are a problem for this patient and the nurse asks if someone has suggestions for improvement. Then the patient's mental problems are discussed. There is much uncertainty about the medication prescribed at the time and the DSM-IV that was diagnosed. The treatment coordinator wants to first do an extensive file research for this patient. The nurse adds information by mentioning this patient's behaviour at the MMT clinic. The nurse says that the usually bizarre and agitated behaviour of this patient has clearly improved. In contacts the patient still shows this behaviour, but when things are explained, it quickly improves. In three months' time the nurse will provide a follow-up report.
The next patient is brought forward by a colleague. The nurse listens attentively and asks a question about the methadone dose. The conversation is about stabilizing the patient by means of a longer admission to the IMC. The nurse puts a question to the physician about the fast medication reduction which should lead to termination of the methadone treatment and which has been suggested by the patient himself. The nurse wonders if this is feasible for this patient and asks if the patient does not need help to do this and suggests to discuss this with the patient, followed by a discussion between the physician and the nurse about the function of this conversation and the consequences for the patient.
It stands out that this nurse interrupts the discussions several times, and shouts down a colleague to tell her own story, to which subsequently no attention is paid.

Text box 6.2: Observation example project 2

Both patient review meetings start on time. Each time two of the three nurses were present. The nurses' input:

During a review of an incident of aggression a nurse asks if it is possible to see at an earlier stage that this patient is becoming psychotic and how to keep the aggression under control at an earlier stage.

With regard to a number of patients brought forward by other disciplines the nurses provide additional information. They mention the behaviour of these patients during methadone dispensing as well as aspects of their physical health.

A patient is on the waiting list for admission and has to hold out for a number of weeks and cut down on her use. Both nurses take on the role of 'spokesperson' for the patient and say that it will be hard for her to see it through. Her strong points are mentioned as well as the fact that the nursing team has offered to support her with regular talks, which will focus on her wishes. In addition, she is offered urine tests.

The nurse asks for time and attention for a patient and has him put on the agenda for today.

A nurse reports on her actions with regard to a patient discussed in the previous meeting. She has had supportive talks with the patient in question. The nurse asks the social worker for support.

A patient is brought forward by a non-nurse. The nurse provides additional information on the patient. She tells that his ability to cope for himself is deteriorating and mentions his behaviour as an example. In addition she describes his behaviour, on the basis of which the team concludes he becoming more agitated.

A number of things stand out. The nursing input in project 1 often consists of brief, unplanned statements that were not entered on the agenda. The meeting skills are unprofessional; discussions are interrupted and subjects are broached that are of no importance. The active input with regard to treatment plans slowly gets going during the course of the research, but remains unstructured, is often not planned, and the plans are not put forward in a methodical way.

The meetings in project 2 start on time and both times two nurses are present. The input of the nurses is almost always professional; it is patient-related or based on their own prepared input or on the input of another discipline. Their meeting skills are good and are used; the nurses listen, have critical comments and have action items placed on the agenda via the minutes.

Conclusions

The research question related to this innovation was: *Are the nursing teams working in the MMT clinics able to prepare treatment plans and actively bring them forward in the patient reviews after training and supervision on the centre-related and profession-related formulation of treatment plans?*

Later a sub-question was added: *Are there qualitative and/or quantitative differences between projects 1 and 2 with regard to the structured active input in the patient reviews?*

The patient reviews in project 1 did not show much nursing input. Already at an earlier stage the team was found to be unable to translate patient care into methodical treatment plans. The major difference between both projects was the number and frequency with which these treatment plans were put on the agenda. In project 1 the own prepared treatment plans were put less frequently on the agenda than in project 2. The input of the nurses of project 1 became more structured, but remained focused on the input of ad hoc issues.

Conversely, the team of project 2 was able to relate its input to prepared patient plans and care activities: critical reflection on patient behaviour and additional health-related information for the benefit of other, non-nurse colleagues. The nurses took on a role that can be described as 'spokesperson' on behalf of the patients. An aid to this was the improved structural communication. As the nurses brought forward an increasing number of prepared patients in a multidisciplinary patient review, they were able to prove that these patients needed nursing case managers on account of the care demands of these patients and the severity of the problems.

A training followed in advance on the formulation of methodical treatment plans and the agreement that an evaluation of the patient's progress -prepared in writing in advance and submitted in advance- would serve as a guideline in the meeting itself, were both measures that had a positive influence. As these evaluations were put on the agenda, the meetings became more structured and offered the nurses maximum space to bring forward their treatment plans.

Both teams differed in number, education, and years of service. The latter two in particular may have been of influence on the speed with which this innovation was implemented. The conclusion is therefore that the composition of both teams differed, which may have influenced the measurements.

After the first measurement and in the framework of the treatment plan system within the entire centre as decided on by the board, the management and main therapists decided to give more structure to the multidisciplinary patient reviews using a treatment trajectory evaluation worked out in advance. In this way the nurses' innovation became embedded in the centre's policy.

6.8.2 Nursing input in the patients' treatment plans

File analysis project 1

Figures 6.5 and 6.6 below show the results of the analysis of the files of projects 1 and 2, respectively.

Figure 6.5: Project 1: Number of files containing treatment plans

Population	Before training and patient selection	After training and patient selection
N = 150 files; 12 at random selected standard patient files	0: None of the files contained a treatment plan, only descriptions of ad hoc problems for which a quick solution was thought up, e.g. incidents of aggression or a report of a doctor's visit. Mostly anonymous notes.	0: None of the files contained a treatment plan, only descriptions of ad hoc problems for which a quick solution was thought up, e.g. incidents of aggression or a report of a doctor's visit. Mostly anonymous notes.
N = 150 files; 12 selected care patient files	0: None of the files contained a complete treatment plan, nor a plan in the making	6 (50%) files contained treatment plans in the making; they were incomplete because there were no evaluation criteria.

The at random selected patient files of project 1 contained only few notes, if any. If there were notes, they were about dealing with ad hoc problems that required quick solutions. Several notes were not signed by a care worker and had to be considered anonymous. The care patients files contained more notes. However, the nursing team did not succeed to realize this for all selected patients (for only 6 (50%) of the 12 patients a plan was formulated). Two examples:

Example of a patient selected for formulating and carrying out a treatment plan:

Patient 1

The old situation ran from 11/11/99 to 12/05/01 and contained 18 conversation notes. The new situation ran from 01/18/02 to April 2003 and contained 26 conversation notes, 13 of which made by the physician. The content of the notes dealt with the medical/physical situation. There is no treatment plan nor a preparation for a patient review.

Example of a patient who did not get an extra treatment plan:

Patient 13

Not one conversation note can be found for 2002. From 01/10/03 to 04/18/03 five conversations are entered, three of which by the physician. Content: the death of a family member, methadone dose, aggressive behaviour, and physical condition. There is no treatment plan nor a progress report.

File analysis project 2

Figure 6.6: Project 2: Number of files containing treatment plans

Population	Before training and patient selection	After training and patient selection
N = 100; 7 at random selected standard patient files	0: None of the files contained a treatment plan, only descriptions of ad hoc problems for which a quick solution was thought up, e.g. incidents of aggression or a report of a doctor's visit.	0: None of the files contained a treatment plan, only descriptions of ad hoc problems for which a quick solution was thought up, e.g. incidents of aggression or a report of a doctor's visit.
N = 100; 7 selected care patient files	0: None of the files contained a treatment plan.	All 7 (100%) files contained treatment plans, 2 files contained incomplete plans: one did not have a good problem description and one did not have evaluation criteria. All treatment contacts were mentioned in the reports.

Here as well the number of care contacts and the number of conversation notes increased compared with the old situation. After training/intervention project 2 formulated treatment plans for all selected patients (100%), planned treatment meetings and reported on them.

Example of a patient selected for formulating and carrying out a treatment plan:

Patient 5

From 04/10/01 to 12/06/01 20 contacts were reported on in the file. Then all contact ceased until 02/04/03, when a new intake was held and an outreach care trajectory was started via the MMT clinic. The plan resulted in an admission to the IMC; it is a recent treatment plan with an admission query and a clear subdivision: health education, support by the nurse and support of the home situation by the social worker. The file contains a sketchy preparation for the patient review.

Example of a patient who did not get an extra treatment plan:

Patient 10

From 02/12/02 to 03/18/03 the file contains four conversation notes; there is neither a treatment plan nor a preparation for the patient review. The reports deal with increasing and decreasing the methadone dose.

Conclusions

The research question related to this innovation was: *Are the nursing teams working in the MMT clinics able to prepare treatment plans and actively bring them forward in the patient reviews after training and supervision on the centre-related and profession-related formulation of treatment plans?*

And: *Is there a qualitative difference between projects 1 and 2 with regard to the structured active input in the patient reviews?*

It was hard for project 1 to put into practice the innovation, which consisted of formulating treatment plans for patients who urgently required more care. They did not succeed. Project 2 was more successful; gradually the team became more skilled in formulating these plans.

Training nurses in formulating treatment plans and recording them in individual patient files has been a success. However, we must comment that in the course of the research project 1 dropped out. Because of this, the progress of project 2 seems to be especially positive. In addition, hardly any of the patients received care when the research started, so all extra care that was provided and recorded, resulted in an improvement. Therefore, not all changes can be attributed to the training.

The number of actually formulated treatment plans proves to be dependent on the number of nurses and the time they could spend on them. It took a lot of effort to take this time away from the dispensing hours. The number of care patients was and remained small, and their files had to be compared with a very small group indeed, be it selected at random. However, assigning a caseload of patients needing care to a nurse has had a positive effect; the provided care could directly be traced back to the patient's treatment plan.

We have the impression that the innovation (selection of care patients) yielded more results in project 2 than in project 1. However, the differences between them should be taken into account. Project 1 was a big city project and had a larger group of patients that could be regarded as care patients. This meant that the total caseload of the team seemed to be heavier in comparison to the caseload of project 2. The following differences between both nursing teams must also be taken into account:

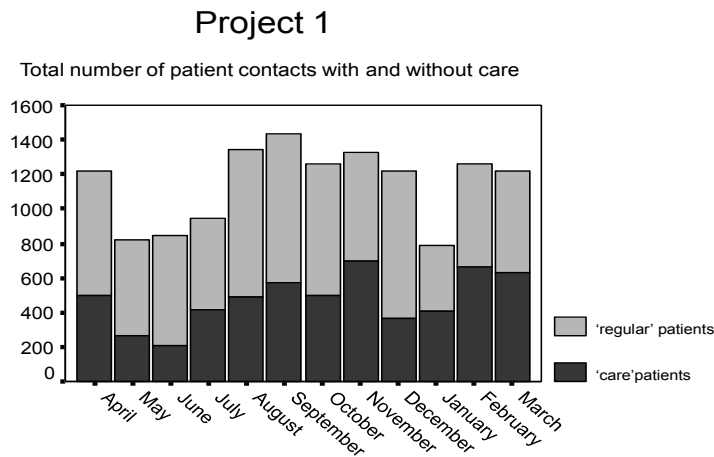
- their number
- their education
- their years of service.

Education and experience in addiction care in particular can be of influence on supplying qualitatively good treatment plans.

6.8.3 Ad hoc care

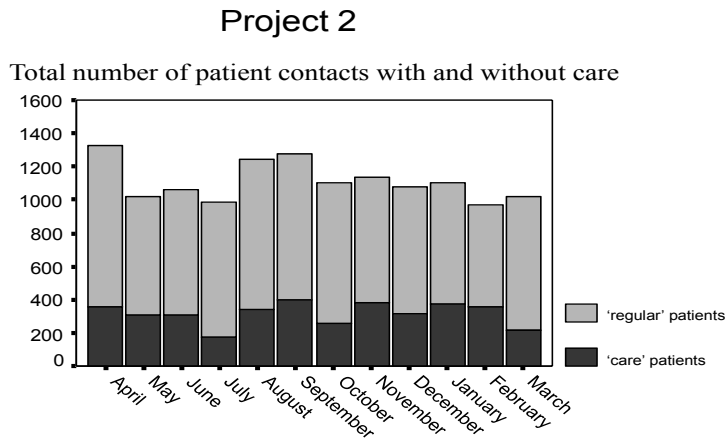
Figures 6.3 and 6.4 show the number of contacts with regular patients and care patients per month and per project in that period of time. Project 1 had the most patients in the months of August, September and November and the fewest in January of the next year. Most care patients came in September and November of 2002 and in February 2003. The fewest number of care patients came in June 2002.

Table 6.4: Project 1: total number of contacts in 12 months



Project 2 had the most patients in the months of April, August and September of 2002 and the fewest in July 2002 and February 2003. The number of care patients reached a peak in September 2002; the fewest number of care patients came in July.

Table 6.5: Project 2: total number of contacts in 12 months



We analyzed the development of the care in the course of time with a linear regression analysis. We chose for month (1 through 12) as the independent variable. The dependent variables were the total number of patients, the total number of patients with and without ad hoc care, respectively. Per month corrections were made for the total number of opening hours and the number of nurses.

Table 6.6: Calculation decrease/increase number of patients in the course of time

Project	Number of patients	Period	
		Regression coefficient	Regression coefficient p-value ($\alpha = 0.05$)
Project 1	Total number of patients	+11.2	0.44
	Total number of patients without ad hoc care	-10.5	0.32
	Total number of patients with ad hoc care	+21.7	0.07
Project 2	Total number of patients	-31.5 (per period)	0.03
	Total number of patients without ad hoc care	-21.8	0.08
	Total number of patients with ad hoc care	-9.8	0.29

As shown above, there is only a significant increase in project 2. The 'experienced' increase/decrease in pressure at the dispensing counter is not underpinned by an actual increase.

Conclusions

The research question related to this innovation was: Can a decrease be observed in the ad hoc care at the dispensing counter in the course of time?

The innovation was aimed at a decrease of such care activities. The teams felt they realized this goal, but we could not confirm it on the basis of the observed numbers.

6.8.4 Incidents of aggression

In both projects the research was carried out in what Bouter, van Dongen & Zielhuis (2005) called a 'dynamic population'. Our research population has been open during the research. For project 1 this meant that the number of patients on methadone maintenance increased during the research. The table below gives an overview of the changes in the number of patients in project 1.

Table 6.7: Number of patients in project 1 in 2002-2003

Methadone collecting days	Patients in February 2002	Patients in August 2002	Patients in March 2003	Increase in number of patients
1 time per week	35	43	50	15
2 times per week	8	10	13	5
3 times per week	24	27	38	14
5 times per week	0	13	24	24
Total number of patients	67	93	125	58

The number of patients who came several times per week increased in this project the course of time. The nature of the addiction problems in this group of patients can be characterized as the severest, which is why they can come and collect their medication every workday.

We can state that from the beginning of the innovation the number of patients gradually increased from 93 to 125, an increase of 32 patient (34 %). The increase was the largest in the group of patients who can be defined as severely care dependent (from 13 to 24: 11) and the slightly lesser severe category (from 27 to 38: 11). In project 2 the number of patients remained stable during the research period, both in nature and number.

In order to map out the scope of the incidents of aggression we used a Poisson distribution (Rothman & Greenland, 1998) that relates to counting incidental cases. The incidents of aggression are determined by the average number per time interval. The number of incidents of aggression was recorded by means of observation of these incidents in all patient contacts in both projects in the second half of 2002 and the first half of 2003. Table 6.7 therefore provides insight into the nature and scope of the incidents of aggression without taking into account the increase in patients in project 1. Another consideration is that only the incidents of aggression have been counted and not the number of patients who caused them (not in all cases the incidents could be directly linked to patients).

The seriousness of the incidents ranges from rude/clumsy behaviour and verbal insults to aggressive threatening behaviour. The centre responds to the latter by imposing sanctions. The tables below show the nature and scope of the incidents for both projects. Project 1 extended its opening hours at an earlier date (1 March 2002) than project 2 (1 July 2002). For the benefit of the research the period of both measurements has been set at 6 months in order to be better able to assess their effects. We have calculated if the differences observed in both periods per project were statistically significant. These calculations are shown in the tables below.

Table 6.8: Nature and scope of incidents of aggression project 1

Year/ Project 1	Number and nature	Total number per 6 months	Average number per month	Number related to nature in relation to the total
2002: up to 6 months after the intervention	Rude and clumsy behaviour: 1 Verbal insults: 8 Physically threatening behaviour: 17	26 incidents in 6 months	4.3	Rude and clumsy behaviour: 3.8 % Verbal insults: 30.7% Physically threatening: 65.3%
2003: 7-13 months after the intervention	Rude and clumsy behaviour: 5 Verbal insults: 3 Physically threatening behaviour: 5	13 incidents in 6 months	2.1	Rude and clumsy behaviour: 38.4% Verbal insults: 23.1% Physically threatening: 34.4%

Table 6.9: Nature and scope of incidents of aggression project 2

Year/ Project 2	Number and nature	Total number per 6 months	Average number per month	Number related to nature in relation to the total
2002: up to 6 months after the intervention	Rude and clumsy behaviour: 1 Verbal insults: 3 Physically threatening behaviour: 4	8 incidents in 6 months	1.3	Rude and clumsy behaviour: 12.5% Verbal insults: 37.5% Physically threatening: 50%
2003: 7-13 months after the intervention	Rude and clumsy behaviour: 3 Verbal insults: 2 Physically threatening behaviour: 1	6 incidents in 6 months	1.0	Rude and clumsy behaviour: 50% Verbal insults: 33.3% Physically threatening: 16.7%

Then we calculated whether the differences observed in both periods per project were statistically significant.

An overview is given in the tables below.

Table 6.10: Increase/decrease incidents of aggression project 1, 2002-2003

Kind of incident	2002	2003	Fisher's exact P-value, 2- tailed (p) $\alpha = 0.05$
Rude and clumsy behaviour	1	5	0.22
Verbal insults	8	3	0.23
Physically threatening behaviour	17	5	0.02
Total number of incidents	26	13	0.05

Table 6.11: Increase/decrease incidents of aggression project 2, 2002-2003

Kind of incident	2002	2003	Fisher's exact P-value, 2- tailed (p) $\alpha = 0.05$
Rude and clumsy behaviour	1	3	0.63
Verbal insults	3	2	1.00
Physically threatening behaviour	4	1	0.38
Total number of incidents	8	6	0.80

The decrease of the number of incidents of aggression in project 1 is only significant in the severest category, the physically threatening incidents. These incidents decreased from 17 to 5. It is particularly relevant that the total number of patients in the project increased in both periods when measurements took place, in particular the category of patients who come to

collect their methadone several times per week because they are in poor health, are (very) poorly integrated, and are unreliable with regard to medication adherence. In project 2 the incidents did not decrease significantly. Although the relationship between the extension of the opening hours and the decrease in number or change in nature of the incidents of aggression cannot be fully proven in this research design, the tables above indicate a trend for both projects, namely a shift from serious to less serious incidents: from physically threatening behaviour to rude and clumsy behaviour. In addition there are some other interfering factors. We have to take into account differences in the number of opening hours, in the number of nurses who worked at the dispensing counter, in the number of patients per opening hour, and in the patients' nature (e.g. quick-tempered or not).

Conclusions

We wondered whether the nature or scope of the incidents of aggression at the dispensing counter had changed thanks to the longer opening hours. This question is hard to answer as few patients showed such behaviour. There were also only few patients with measurements on both points in time. In both projects the research population differed with regard to number and composition. Because of this selection effect it is possible that the differences in nature and scope of the incidents cannot be attributed to the longer opening hours. They may very well be the result of the increase in the nurses' knowledge and the fact that in a number of focus group meetings attention was paid to the nature and scope of these incidents; they were always considered from an interaction perspective, i.e. the contribution of the nurses themselves at the dispensing counter. It made the nurses more aware of their role. Towards the end of the research the incidents relatively more often involved clumsy and rude patient behaviour. In the reflection meetings the nurses discussed the causes of the incidents and reviewed them in the light of their own professional behaviour. They proved to be able to make an analysis of each incident, review possible causes and critically look at their own behaviour, and in this way come up with alternative professional responses and attitudes at the dispensing counter. Their awareness with regard to the causes of incidents and possible solutions increased while the aggressive nature of the incidents gradually decreased. The longer opening hours brought peace and quiet at the dispensing counter.

6.8.5 Job satisfaction and perceived autonomy

The data collection of both outcome measures is described in section 5.7 of chapter 5. The results pertaining to the scope of the job satisfaction and perceived autonomy are described in section 5.12 of chapter 5.

In order to be able to determine the changes, if any, in the job satisfaction and perceived autonomy a multivariate analysis of variance (MANOVA) was made with data collected in various projects at two moments in time. MANOVA can be used to calculate the significance of differences between averages of dependent variables that occur at the same time (Segers & Hagedaars, 1980; Polit & Hungler, 2004).

Job satisfaction

In this study *the moment of measurement* was regarded as the independent variable, the average total score for satisfaction as a dependent variable. Corrections were made for project. Our α was 0.05. Scores were classified according to a Likert-type scale: 1 stands for very dissatisfied, 2 stands for dissatisfied, 3 stands for neutral, 4 stands for satisfied, and 5 stands for very satisfied.

Table 6.12: MANOVA results job satisfaction for the total group of nurses

Total average/ Job satisfaction	First measurement: T ₁	Second measurement: T ₂	P-value ($\alpha = 0.05$)
Job satisfaction: total	3.2	3.4	0.03
Job satisfaction: clarity	3.0	3.2	0.05
Job satisfaction: contacts with patients	3.5	3.8	0.20
Job satisfaction: contacts with colleagues	4.3	4.0	0.30
Job satisfaction: development opportunities	3.6	3.6	0.60
Job satisfaction: quality of care	2.8	3.3	0.04
Job satisfaction: career opportunities	2.8	2.8	0.50
Job satisfaction: department head	2.8	3.3	0.02

The nursing team (nurses of both project 1 and project 2) scored an average of 3.2. for total job satisfaction at the first measurement and a 3.4 at the second. This change is significant, but the score remains neutral: not really dissatisfied and not really satisfied. The changes in satisfaction with the quality of care (from 2.8 to 3.3) and with the department head (from 2.8 to 3.3) show a significant, but small improvement as well.

Autonomy

The moment of measurement was regarded as the independent variable, the average total score for autonomy as a dependent variable. Corrections were made for project. Our α was 0.05.

Table 6.13: MANOVA results autonomy for the total group of nurses

Total average/ Autonomy	First measurement T ₁	Second measurement T ₂	P-value ($\alpha = 0.05$)
Total perceived autonomy ³⁷	2.7	2.7	0.9
Operational autonomy: autonomy in the work	3.1	3.1	1.0
Structural autonomy: autonomy over the work	2.5	2.5	1.0

The perceived autonomy did not change in this population of nurses after implementation of the innovations.

Conclusions

We (and the nurses as well) assumed that the job satisfaction and perceived autonomy of the nurses in both teams would increase in the course of the research. The research questions were: Can a change be observed in the job satisfaction of the nurses working at the MMT clinics in the course of the change research? And: Can a change be observed in the perceived autonomy of the nurses working at the MMT clinics in the course of the change research?

³⁷ Autonomy in this research can be divided into operational autonomy and structural autonomy. Operational autonomy consists of options within the limits of one's own work situation, the choices in one's work. Structural autonomy is understood to mean the options in the gray area between one's own work situation and the environment, the autonomy over one's work.

In the course of the research a small increase in job satisfaction can be observed. The perceived autonomy of both teams is not really high. This is explained by the fact that an outpatient addictions nurse has hardly any autonomy anyway, with the exception of assessing the methadone dose (most centres have this task worked out in detail in [semi] guidelines). With regard to the care and treatment aspects hardly any proper guidelines, if at all, formulated in accordance with the national standards, and if there are, they are often only described in centre-related documents. In all multidisciplinary guidelines for MMT clinics the nursing care has virtually disappeared. This autonomy was carefully developed in this research; the nurses saw that on the basis of education and 'love' for their work they are very well able to increase and build on their own professional autonomy. The recommendation for the future is to document this new care well, so that it can be applied in other projects and be validated and adjusted to the times and other circumstances.

The results must be interpreted with some caution. In the first place there is the matter of instrumentation (van Dijk et al., 1991; De Goede, Boeije & Hox, 2005) i.e. that the pre-measurement and both post-measurements took place under different circumstances; different methods were used. Only both post-measurements can be compared with each other. Furthermore, in relation to both post-measurements we can say that there is 'growth' (van Dijk et al., 1991) also called maturation (De Goede et al., 2005). Both teams, the nurses, changed along the way thanks to the participative action research. They gained more knowledge and changed their daily work, their professional knowledge increased and with it their insight. A third factor was that both post-measurements had to be planned fairly shortly after one another on account of time. This may have resulted in a test effect or Hawthorne effect (van Dijk et al., 1991). The learning effect of the first measurement still plays a part in the next measurement.

6.9 In conclusion

At an earlier stage of the research, mapping out the not recognized/not acknowledged care proved very important for the professional growth of both teams. The nurses could show that they did a lot more than just handing out cups of methadone and collecting urine samples for analysis. The patient care load became clear as did the pressure on the dispensing counter. The research question related to the above-mentioned stage was the following:

Does the implementation of innovations in methadone dispensing lead to changes in the care practice by nurses at MMT clinics?

It was not possible to sufficiently assess innovations for their effect with the chosen naturalistic research method. It involved a naturalistic follow-up study with post-measurements. Beforehand both patient populations could not be compared with each other just like that. Chapter 4 describes how both teams started to take different paths with regard to their active input in the change process. It showed the differences between both teams, which already differed with regard to composition and work experience to begin with. Still the observed difference in willingness to change was an interesting phenomena which required further investigation. The question arose whether this willingness to change could be found again in the effects of a number of innovations.

Innovation: training and education

The first incomplete files were improved as treatment plans were formulated for a small number of selected patients. This made the care easier to monitor and the actual nursing input in the patient reviews increased. Their tasks in this respect were now fully recognized and laid down in the minutes. The actual provision of care gradually improved. On this point a difference between both teams became visible; team 1 gradually retreated and was less able to implement the more patient-related care innovations both in the patient files and in the nursing

input in the patient reviews. In this respect team 1 performed less well than team 2. The nursing input in the meetings of team 2 was structured and supported by the treatment plan.

Innovation: mapping out the ad hoc care

When too many care contacts are dealt with too quickly at the dispensing counter, it is called 'cram care'. A significant decrease in these care activities at the dispensing counter could not be proven for both projects. However, there were significant differences in the nature and scope of these activities, which can be used for future care load calculations. Mapping out the provided care at the dispensing counter, next to methadone dispensing and collecting urine samples, has been the basis of a better registration and financing of the nursing interventions in methadone maintenance treatment. A distinction could be made between care at the counter and care within treatment trajectories.

Innovation: longer opening hours of the dispensing counter

The extension of the opening hours was a probable cause of the improvement in the nature and scope of the incidents of aggression. The nurses benefited from this improvement, as it created more time and space to provide care and reflect on the incidents that still occurred at the dispensing counter. With respect to these innovations the occurring mutual differences were not examined, as these differences, if any, could not be related to the increasingly less active contribution of the team members of project 1.

Innovation: critical reflection

The job satisfaction increased significantly. The perceived autonomy did not change very much. However, these outcome results can be put to good use in follow-up research as a measure for a change process; the post-measurements will have to be carried out at longer intervals in order to give changes time to take root and to be able to reliably measure their effects.

The figure below shows the different results of projects 1 and 2. It states whether the differences can be attributed to the changes in the teams during the participative action research.

Figure 6.7: Differences in results between projects 1 and 2

Differences in results	Project 1	Project 2
Incidents of aggression	No differences between the projects calculated	
Formulation of treatment plan	Little to no effect	Much effect
Planning and input of treatment plan	Little to no effect	Much effect
Mapping out ad hoc care at the dispensing counter	No decrease in care patients at the dispensing counter	No decrease in care patients at the dispensing counter

There is a considerable chance that the differences between both projects would have faded away if project 1 had continued the participative action research. Therefore we can state that the innovations lead to a better quality of the provided care and counselling, provided that these innovations are carried out and evaluated from start to finish, and are combined with an active input of, in this case, nurses, who are working in a practice that is being improved. The small-scale innovations lead to an improvement that can be transferred to other outpatient methadone maintenance clinics. And the method used to accomplish this, namely an active input of the workers themselves, can be warmly recommended.

Appendix 1: Analysis results of the patient review minutes of project 1

Meeting	Nurses	Minutes	Agenda	Prepared and discussed patients
1	1	Yes	No	4 patients discussed, none were prepared and no nursing input.
2	1	Yes	No	4 patients discussed, two of which only very briefly and not prepared. No nursing input.
3	None	Yes	No	4 patients, one of which postponed to 14 November at the written request of the nurse.
4	1	Yes	No	6 patients discussed, two of which were brought forward by the nurses without preparation. One patient postponed to 28 November for nursing input.
5	1	Yes	No	2 patients discussed, unprepared. The only nursing input is postponing a patient to 12 December.
6	1	Yes	No	12 patients discussed, unprepared, five of which very briefly as an announcement. Twice brief additional information by the nurse present. Patient with nurse postponed to 19 December.
7	1	Yes	No	As a result of the nurse's input the patient is postponed to 9 January 2003 for a follow-up.
8	1	Yes	No	7 patients discussed, two of which were unprepared, no nursing input.
9	2	Yes	No	3 patients discussed, one of which was prepared. The nursing input complements that of her colleague.
10	None	No	Yes	6 patients discussed, three of which very briefly as an announcement. No nursing input.
11	1	No	Yes	4 patients discussed, one of which was prepared. Two patients who the nurse would bring forward, are postponed. No nursing input.
12	1	No	Yes	The only patient discussed was prepared in writing by the nurse. This person is not present.

Meeting	Nurses	Minutes	Agenda	Prepared and discussed patients
13	1	Yes	Yes	4 patients discussed, two of which very briefly and the other two were prepared. The nurse present provided additional information. At the end of the meeting ('any other business') the nurse brought forward an item about a patient against whom sanctions had been imposed by TACTUS/IVS.
14	None	Yes	No	4 patients discussed, two of which very briefly, and no nursing input.
15	1	Yes	No	3 patients discussed, one of which was prepared, and no nursing input.
16	1	No	No	1 patient discussed with a prepared input, three patients with brief announcements and no nursing input.
17	None	Yes	No	1 patient discussed with a prepared input, one patient where the discussion only dealt with the details of the treatment plan and not the patient itself. No nursing input.
18	1	Yes	Yes	4 patients discussed, one of which was prepared; nursing input only at the end of the meeting ('any other business').
19	None	Yes	Yes	6 patients discussed, two of which were prepared. No nursing input.
20	1	Yes	Yes	2 patients discussed, one of which with nursing preparation, and an announcement of the nurse for the 'any other business'.

Appendix 2: Analysis results of the patient review minutes of project 2

Meeting	Nurses	Minutes	Agenda	Prepared and discussed patients
1	2	Yes	Yes	7 patients discussed, 2 unprepared patients brought forward by nurses.
2	2	Yes	Yes	6 patients discussed, 1 prepared patient and 3 unprepared patients brought forward.
3	1	Yes	Yes	6 patients discussed, 1 prepared patient and 1 unprepared patient brought forward by nurses.
4	2	Yes	Yes	6 patients discussed, no prepared patients brought forward, 2 unprepared patients by nurses.
5	2	Yes	Yes	6 patients discussed, 1 prepared patient brought forward by nurses.
6	2	Yes	Yes	6 patients discussed, 2 prepared patients and 2 unprepared patients brought forward by nurses.
7	2	Yes	Yes	9 patients discussed, 3 prepared patients brought forward by nurses.
8	3	Yes	Yes	6 patients discussed, 3 unprepared patients brought forward by nurses.
9	2	No	Yes	12 patients discussed, no nursing input mentioned in the minutes.
10	2	Yes	Yes	13 patients discussed, 1 unprepared and 3 prepared patients brought forward by nurses.
11	2	Yes	Yes	5 patients discussed, 1 prepared and 2 unprepared patients brought forward by nurses.
12	2	Yes	Yes	11 patients discussed, 2 unprepared patients brought forward by nurses.
13	3	Yes	Yes	12 patients discussed, no written input by nurses, however an unprepared input for 3 patients.
14	2	Yes	Yes	6 patients brought forward, 2 prepared by nurses
15	2	Yes	Yes	8 patients brought forward, 2 prepared by nurses

Chapter 7 The local participative action research and national improvement of the methadone maintenance treatment

7.1 Introduction

The local participative action research described in the previous chapters not only aimed to achieve an improvement of the local situation, but also to contribute to the improvement of the outpatient methadone maintenance treatment in the entire country. Coenen (1989, 1996 and 1998) speaks of the 'exemplary generalization': a form of external validity is the extent to which the local research results prove useful to others in similar situations. So therefore the extent to which the findings of the local change research can serve as an example to other methadone maintenance clinics. Has this objective been realized? We had the impression that the situation of the projects we studied was certainly similar to those of other practices. In addition, in the course of the local participative action research it became clear to us that there were no unanimous opinions about methadone maintenance treatment in our country, neither regionally nor nationwide. The relevant question is therefore to which extent our project has led, or has contributed, to those wrongs being recognized, acknowledged and addressed by other nurses working in outpatient addiction care, and whether the improvements in the local project serve as an example to nurses working elsewhere in outpatient addiction care. Could the improvements brought about locally also be incorporated in a national guideline? We therefore formulated the following research question:

Are there signs of improvement of clinical practice in methadone maintenance treatment elsewhere in the Netherlands after and due to the local participative action research?

We divided this question into four sub-questions:

1. *Have others working elsewhere in addiction care recognized the collapse of the local methadone maintenance treatment we observed?*
2. *Have the improvements brought about in our project by nurses working at the 'MMT clinics' been recognized and adopted by other organizations?*
3. *Has the change method that was opted for in both local projects been implemented elsewhere by nurses in other organizations?*
4. *Have the innovations resulted in an improvement of the methadone maintenance treatment, or will they result in an improvement in the near future?*

We will answer these questions in sections 7.2.1-7.2.4.

7.2 Local outcome and acknowledgement

7.2.1 Recognition elsewhere

The collapse of the methadone maintenance treatment we observed at the start of the project (Loth, Schippers, 't Hart & van de Wijngaart, 2003) received much attention and was widely shared. The reaction of the Netherlands Health Care Inspectorate in particular was of importance (IGZ, 2005). It defined the outpatient medical care in methadone maintenance treatment as insufficient, based on: 'no proper clinical, uniform working method in the daily practice, little to no standardization with respect to doses and no proper patient file management'.

The two MMT clinics in the east of the Netherlands were confronted with the same problems that also were encountered elsewhere. There were also centres that made critical comments on our finding. Two centres in the west of the country did not identify with this collapse. They acknowledged it existed in their centres, however not to this extent.

7.2.2 Acknowledgement of local improvements

Can the results of the local improvement process be generalized for the benefit of similar outpatient projects in the addiction care? Is it possible to realize improvement elsewhere with the same innovations? During the local improvement process national initiatives were launched. In 2004 and 2005 consultations about the local progress took place between GGZ Nursing (the professional nursing organization), addiction specialists from the VVGN (the Dutch Association for Addiction Medicine) and the Platform of First-line Physicians in the Addiction Care, chaired by the GGZ Netherlands. These professionals in the addiction care concluded that a national guideline for methadone dispensing should lead to more uniformity in the prescription of medication and the provision of care. In 2004 Tactus -the centre that took the lead in the local change project- and a sister organization applied for a subsidy to formulate such a national guideline. Two other addiction centres pledged their support. The NISPA³⁸ provided scientific supervision. The subsidy was granted by GGZ Netherlands within the framework of ZonMw's 'Scoring Results' program. The Scoring Results Steering Group (consisting of addiction care professors, the board of directors of various addiction centres and GGZ Netherlands) monitored the progress of the project on the basis of progress reports.

Methadone Maintenance Treatment Guideline: RIOB

The guideline is based on three perspectives that are of importance for guideline development from both a national (van Dijk, Schramade, Walburg & De Wildt, 1999; Jansen & Snoek, 2007) and international point of view (Sackett, Strauss, Richardson, Rosenberg & Haynes, 2000): systematic research, clinical expertise and patient preferences. During the development of the guideline the Scoring Results Master Protocol was used (van Dijk et al., 1999; Jansen & Snoek, 2007).

It is a phased plan; the first phase included a desk study and the formulation of a draft guideline. In the second phase the draft guideline was implemented on a small scale, evaluated and revised. First scientific evidence was gathered on the following aspects of methadone maintenance treatment in four desk studies:

- addicts on methadone and psychiatric problems (van Gogh, 2006),
- addicts on methadone and additional use of addictive substances besides methadone and heroin (Knapen, 2006),
- methadone as an opiate replacement: advantages, disadvantages, effect and interaction with other medication (Vossenbergh, 2006),
- buprenorphine as an opiate replacement: advantages, disadvantages, effect and interaction with other medication (Nieuwenhuys, Wittenberg & Boonstra, 2006).

Secondly, already existing methadone maintenance treatment guidelines abroad were studied for classification, specific topics and patient target groups. Particular attention was paid to whether treatment with medication was embedded in a case management trajectory and which role the nurses should assume in this process. See table 7.2 for a comparison.

During the development of the RIOB (national Methadone Maintenance Treatment Guideline) the patient's perspective was taken into account. In the project the patient's perspective is understood to mean: the experiences patients have had with methadone dispensing and the counselling offered, but also their wishes with regard to dispensing times and moments. It therefore entails more than just listing the criticisms patients have; there was a particular

³⁸ NISPA: Nijmegen Institute for Scientist-Practitioners in Addiction is directed by professor Dr. C. de Jong and is part of the Radboud University Nijmegen.

interest in the solutions they proposed. In the guideline both the care worker's perspective and patient's perspective are equally important and accordance between the two was sought. If this was not possible, the perspectives are described next to each other. In the past few years the drug users' perspective and their experiences with professional care have only been sparsely described in the literature (Van der Gouwe & Cornelissen, 2004). For the benefit of the guideline the patient's perspective has been mapped out in various ways by means of focus groups consisting of the patient councils of the centres, desk study, observations, holding an adapted GGZ thermometer (Kertzman, Kok & van Wijngaarden, 2003), topic interviews, and discussion groups with patients about the developed components. Then the formulated chapters were submitted to patient groups for comments and additions (Loth, Oliemeulen & De Jong, 2006)³⁹.

The clinical expertise of nurses working in outpatient addiction care was gradually mapped out by means of monthly focus group meetings. These meetings were chaired by both researchers. Most meetings were taped so as not to lose valuable information. Each meeting was structured with the aid of an agenda. Each time the topics were dealt with in the same way:

- narrowing down a bottleneck
- analysis of the bottleneck in cause and effect
- search for solutions
- determining the best solution for that moment
- evaluation of the innovation
- mapping out which policy decisions would be necessary for the implementation of the improvement; determining which consequences (e.g. funding) such a solution would have.

These meetings expressly looked to integrate the scientific evidence, patient's perspective, care worker's perspective, and the feasibility in clinical practice.

By the end of 2005 the guideline was finished. It consisted of the following chapters:

- Chapter 1: the vision on addiction and care on which professionals must base their work and the best organizational form for methadone maintenance treatment in addiction care.
- Chapter 2: the subdivision of the population on methadone in our country into three groups that differ in the gravity of the addiction and the related problems.
- Chapter 3: how to conduct intakes with thorough data gathering by the nurse and physician, and the design of a medication module and case management module to be filled out for each patient.
- Chapter 4: how to start the methadone maintenance treatment and how to deal with other medication, if any. Extra care and attention is paid to special target groups such as patients with infectious diseases, pregnant women, patients with psychiatric disorders, young people and the elderly.
- Chapter 5: how to set up the organization of methadone maintenance treatment with special attention to the furnishings of dispensing units, the organization of pharmacy dispensing, the quality requirements set to patient-related registration and reporting, the required refresher courses, and the annual costs per patient profile.
- Chapter 6: how the methadone maintenance treatment must be embedded, in particular

³⁹ The practice perspective is discussed in 7.2.3.

the execution of the medication module if the patient goes to prison or is admitted to a general or mental hospital, or receives care from an institute for people who are mentally challenged. The focus lies on the cooperation and acknowledgement of a professional setup of methadone maintenance treatment by the addiction care sector.

Several results of our local project were adopted in the national guideline. They are described in the table below.

Table 7.1: Local results in national guideline

Local results adopted in the RIOB

Local results	Adopted in the RIOB
In our local project we found that care is provided at the dispensing counter and that patients should receive intensive care away from the counter. Our conclusion was that medication dispensing and care cannot be considered separately.	This conclusion was adopted in the national guideline and further worked out (see chapter 3). In the RIOB the care is methodically described and worked out in a treatment plan for each individual patient by means of two modules: the medication module and the case management module. Nurses play an active role in both modules.
An important conclusion of the local project was that in addition to the care at the dispensing counter, nurses can also be deployed as a counsellor away from the counter according to their competency and qualifications ensuing from their professional training and education.	This conclusion was adopted in the national guideline and translated into several positions which are further worked out in chapter 5. In addition to dispensing methadone in the position of dispenser, nursing counsellor positions are described.
We mapped out the extra care provided at the dispensing counter in addition to handing out methadone and carrying out urine analyses, and called it ad hoc care.	The ad hoc care activities were input for the RIOB to improve the care registration. This registration is based on care activities that can be linked to prolonged counselling contacts and care activities carried out at the dispensing counter.
The knowledge deficit among the nurses was one of the causes of the collapse. A training and development policy was developed for the two local projects.	The training and development policy we formulated and implemented, was adopted in the RIOB and gradually extended. Chapter 5 of the RIOB describes this process.
In the local project interviews were held with patients who came to collect their methadone every week and, in principle, were fairly well or well integrated, and showed low drug use; two focus group interviews were held with a group of less well integrated patients.	During the development of the RIOB the patient's perspective was more extensively studied and taken into account in the text: A satisfaction study among all patients of the participating clinics in phase 1, group interviews with client councils and a number of individual interviews with various patients at eight MMT clinics. Furthermore, all RIOB chapters were put before patients. Their comments were incorporated. Or, if the patient's perspective was put next to that of the care workers or if it was a joint opinion, they were incorporated in its entirety (see chapter 3 of the process report, Loth et al., 2007).

A comparison was made with already existing guidelines abroad; main points of attention were in which way these guidelines described both the counselling of patients in addition to the medication and the required conditions for a successful methadone dispensing, and in which way they took the patient's perspective into account. The findings are worked out in the table below. The patient's perspective was taken into account in the development of the RIOB from the very start. In this respect the Dutch guideline clearly differs from other guidelines. Furthermore, the Dutch guideline clearly describes the case management of patients in addition to dispensing medication. The foreign guidelines focus on medication dispensing, and although they state that treatment must be multidisciplinary, they hardly pay any attention to psychosocial counselling. At a national congress in January 2006 the RIOB was presented to all addition centres, the Ministry of Health, Welfare and Sport (VWS) and GGZ Netherlands, the principal/grant provider.

Table 7.2: The RIOB compared to guidelines abroad

Guideline	Case management in addition to medication	Preconditions	Patient's perspective	Notable information
New Zealand: Opioid Substitution Treatment (Ministry of Health, 2003).	Case management is recommended as the proper counselling method; in addition the outpatient care via the general practitioner is mentioned and described.	Clear statements on the composition and required expertise of the team. Clear statements on how to record the medication dispensing and provided care.	Not mentioned.	Hardly any information on buprenorfine. Active role of general practitioner.
Scotland: Drug Misuse and Dependence, Guidelines on Clinical Management (Department of Health, 1999).	Treatment objective is multidisciplinary.	Various preconditions are worked out in the appendices.	Not mentioned.	Clear information on the objective of case history and on the basis of which data. Information on how to monitor the effects of the dispensed medication. Buprenorfine is only advised in cases of moderate heroin addiction. Information on how to prevent a relapse to use.

Guideline	Case management in addition to medication	Preconditions	Patient's perspective	Notable information
Canada: Best Practices; Methadone Maintenance Treatment (Jamieson, Beals & Lalonde, 2002).	Not much attention is paid to this subject.	An extensive chapter discusses the preconditions in detail: composition of multidisciplinary team, amount of staff, competencies, attitudes and professional behaviour, ongoing training of staff, and environment.	Not mentioned.	Much information on various specific target groups, including forensic patients addicted to heroin.
Australia: Review of Methadone Treatment in Australia (Commonwealth Health Department, 1995).	Is hardly mentioned.	Brief information on the required training.	23 heroin and methadone users were asked to comment on the texts.	Much attention is paid to cost-benefit analysis and treatment results.
WHO: Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention (2004).	Is not discussed.	Brief information on the training of staff.	Not mentioned.	Buprenorphine is extensively described in addition to methadone. Cost-benefit analysis.

7.2.3 *Local change method implemented elsewhere*

The local change method consisted of an participative action research in which the nurses themselves played an active role in mapping out the existing bottlenecks and how to deal with them. The active participation of nurses in the improvement of their own nursing practice has not only been important for the development of the RIOB, but also in the follow-up project in which national support for implementing the guideline in the various organizations was offered.

Development of the RIOB

The local outcome were not only recognized by nurses in other MMT clinics but also by addiction specialist physicians, managers, and policy makers in other clinics. The content of these outcome and the framework in which the analysis were put were sufficient convincing. One of the results of the local change research was the diagnostic model. With ten bottlenecks it provided the basis for a number of innovations. This model became the first input in the analysis of the situation of other outpatient methadone maintenance settings (see the RIOB process report: Loth, Oliemeulen & De Jong, 2007, page 43).

The development of the RIOB consisted of two phases, as mentioned earlier. The development phase was carried by two addiction centres, among which the centre of the local project. Project 2 (100 patients, three nurses and one addiction specialist) also continued with the development of the RIOB; it was joined by another MMT clinic that resembled project 1 with regard to size and patient population (150 patients, five nurses and two addiction specialists). And one MMT clinic from the other centre (100 patients, four nurses and one addiction specialist).

The monthly focus group meetings from the local project were continued in both centres during the development of the RIOB; however, additional participants were an addiction specialist, the department head and, if so desired, a policy employee of the centre in order to better establish the essential policies on the basis of the existing possibilities/limits. The results of both groups were exchanged immediately. In this way, all nurses and addiction specialists of the three participating MMT clinics carried out evaluations in the same iterative way (identifying bottlenecks, looking for solutions and testing them) by means of these critical reflection meetings. Most of the input for the RIOB was proposed by the workers themselves. These monthly focus group meetings, which focused on the nursing perspective and the provided care, were filled up with a centre working group consisting of a nurse, an addiction specialist, managers and policy employees. This policy group at centre level decided on changes and the implementation of new policies, and if so desired, expertise from elsewhere in the centre was sought.

In this first development phase a large addiction centre in the west of the country asked if it could join the development of the RIOB. One big-city MMT clinic joined.

In the second phase of the development of the RIOB, the implementation phase, the total procedure (the primary process) within the RIOB was again applied to three new MMT clinics of two new addiction centres, while the other clinics continued with the development: one small-city MMT clinic with 80 patients, two nurses and one part-time physician with the GGD, one big-city MMT clinic with 150 patients and four nurses (this clinic dropped out as the pressure to achieve was too high and could not be realized) one MMT clinic with two nurses and 80 patients, and one clinic with 95 patients and three nurses. The latter two shared one addiction specialist. Both centres immediately started with focus group meetings and centre working groups.

At the end of the local change research one project withdrew. During the first phase of the development of the RIOB the decision was taken to ask a team to withdraw as it frustrated the process rather than contributing to it. In the second phase another team dropped out. Both teams were caught unawares by the changes that had to be initiated. According to van Dijk, Schippers & Visser (2006) the willingness to work with new innovations in the addiction care depends on:

- the knowledge of the innovation disseminated within the centre (obviously this also depends on the extent to which specialist journals report on it and the extent to which professionals keep up with professional literature)
- the explicit decision to implement the innovation in the centre
- ensuring that the innovation can be implemented in the centre
- continuing and maintaining the innovation.

The evaluation research they conducted showed that workers are not able to apply new working methods in their work situation at the drop of a hat. Professionals are often inclined to stick to old working methods and carry out the innovations as 'extra' work. Innovations are therefore considered as making the job responsibilities more arduous and are quickly let go of (van Dijk et al., 2006). The recognized experiences in this respect gained during the development and small-scale implementation of the RIOB were translated into several important preconditions that apply to each centre. If these preconditions were not met the de implementation was doomed to fail; e.g. communication about the guideline within the centre, training and education policy, and the time workers have available for training, and setting up a centre policy group who has power of decision with regard to policies (Loth et al, 2006).

National implementation of the RIOB

In 2007 a new project started, again subsidized by the 'Scoring Results' program. The project supports centres wanting to implement the RIOB. This support consists of a 'learning group' for all project leaders of the various centres. The form of this learning group is based on the local project, i.e. the focus group. An exchange of experiences, coordination of the local implementation plans, and adjustment of the RIOB implementation on account of local and cultural and structural differences that simply exist between centres. The objective is to arrive at an unambiguous implementation of the RIOB. For each centre there is a local implementation plan to be filled in. Furthermore, before implementation each centre has to set up a monthly focus group meeting for nurses.

7.2.4 The RIOB and quality improvement

In 2006 the RIOB was presented to two national organizations: the GGZ Netherlands and the Ministry of Health, Welfare and Sport (VWS). Furthermore, it is of importance to know to which extent the RIOB has been accepted by the centres.

Acceptance in the Dutch addiction care sector

When the guideline was ready, it was submitted to the Scoring Results Steering Group for assessment. This steering group was the grant provider and would now assess the guideline for following the predetermined steps comprised in the Master Protocol. In addition, the steps according to the Agree Instrument (Appraisal of Guidelines Research & Evaluation; published in Dutch by the CBO in 2001) were used in the realization of the guideline and specification of its contents. In 2004 a national guideline that would unambiguously describe the methadone maintenance treatment was considered very welcome by various professional groups in this field (addiction specialists, GGz nurses and first-line physicians working in addiction care). These three professional groups were regularly informed about the developments and various

members of these professional organizations actively contributed to the realization of the contents.

The implementation of the RIOB entails a fundamental change process for almost all addiction centres (Loth et al., 2006). The guideline cannot be implemented with a couple of quick adjustments in an 'MMT clinic' only. At various levels in the organization a change process is necessary in order to realize good, multidisciplinary care. From October 2006 through October 2007 the NISPA and the IVO (the Addiction Research Institute in Rotterdam) offered therefore support with regard to the implementation of the RIOB, commissioned by Scoring Results (GGZ Netherlands and ZonMw's addiction care research program).

The general objective of the 'Implementation Support RIOB' was to arrive at a national implementation of the Methadone Maintenance Treatment guideline by means of central national support and quality assurance (Wits, Loth, Van de Mheen & De Jong, 2007). The aim was to have at least one pilot clinic complete the implementation at each of the participating centres in 2007. Furthermore, by the end of 2007 the participating centres should have acquired the expertise to implement the guideline centre-wide. Finally, several performance indicators would be developed and tested for the benefit of a national RIOB benchmark structure. However, at the end of 2007 the decision was taken to suspend the implementation support as a considerable additional funding of this care by VWS did not materialize.

The centres participating in the implementation trajectory provide a certain insight into the national acceptance of the guideline. In December 2007 and again in April 2008 the minister of Health, Welfare and Sport promised to create extra financial headroom of at least 15 million Euros for better care to drug-addicted patients.

The Netherlands have 13 addiction centres and one GGD that have outpatient methadone dispensing to drug addicts in their services package (14 centres in total, however halfway through the national implementation phase Parnassia Addiction Care and the Brijder Foundation merged; so in total there are 13 centres). In the end, seven of them participated in the implementation trajectory and/or the accreditation.

The six other centres did not want to participate in the implementation of the RIOB for the following reasons (Wits et al., 2007):

- One centre stated it was interested in a second accreditation round and still intended to join the project, but said it had to pay too much attention to the HKZ certification in this phase (acceptance of the RIOB working method).
- Three centres stated they did not want to participate because they were already working with a similar working method for some time (so a general acceptance of the RIOB working method, but no interest in the support project).
- One centre stated it did not support several components of the RIOB (no acceptance of the RIOB working method).
- One centre had already started implementing the RIOB working method and did not feel the need for support (acceptance of the RIOB working method).

One of the six centres that did not want to participate in the RIOB support project declined on account of the RIOB contents/working method.

Acceptance outside the addiction care sector

The RIOB also contains statements on the cooperation with other organizations providing care to drug-addicted patients, such as the regular GGz centres, general hospitals, and institutes for mentally challenged patients, but also penitentiaries (houses of detention) and police stations (DJI, National Agency of Correctional Institutions). The institutes for mentally challenged patients reacted positively.

Meanwhile DJI has adjusted its old methadone medication policy, first in the form of an internal scheme and recently with a guideline (Ministry of Justice/DJI, 2008). Short-term prisoners who are addicted to heroin retain their methadone medication set up by the addiction care. Only after six months medication reduction, if any, is discussed. All forensic nurses will attend refresher courses in all kinds of areas, including addiction. This teaching module will pay attention to the RIOB. With regard to GGz institutes and general hospitals there is too little information, so no statements can be made about them.

If other 'MMT clinics' would adopt the method and innovations, would it lead to changes in the organization of care and eventually to an improvement of the situation of drug addicts? An interesting question, and obviously also an important goal, which would lead to improvements in the life of drug-addicted patients. The national implementation that started in 2007 when there turned out to be sufficient acceptance, was suspended after a first accreditation round and the first round of implementation support and exchange as extra funding by the Ministry of VWS was required before the extra care could be offered in the form of extra staff. Therefore this question cannot be answered yet. The eventual objectives are to arrive at performance indicators for outpatient methadone maintenance treatment, the set-up of a national benchmark structure, and an evaluation of the RIOB working method including patient-related outcome measures. It is too early for that yet.

7.3 Conclusion

Are there signs of improvement of clinical practice in methadone maintenance treatment elsewhere in the Netherlands after and due to the local participative action research?

The findings of the local change research were recognized and acknowledged by other institutes. Several proposed improvements were adopted in full in a national guideline. This national guideline, the RIOB, is acknowledged in the Dutch addiction care. Its implementation has been started up in nearly 50% of the addiction centres and expectations are their number will increase. The collapse is broken out of.

The long-term effects will have to be made clear at a later stage by means of research.

Fisher, Rehm, Kim & Kirst (2006) critically consider the evaluation of methadone maintenance treatment and make recommendations that are supported by the development and implementation of the RIOB. Methadone maintenance treatment should not be aimed at, nor be evaluated for nuisance reduction only. Important other outcome measures include the stability in the drug-addicted patient's life, the experienced safety, and the extent of craving. However, other often forgotten outcome measures are the quality of life experienced by the patient, the patient's perspective on the treatment, and the counselling offered in addition to medication in relation to the duration of the patient's participation in the treatment (therapy compliance). Particularly the type of counselling such as intensive case management is worth researching among patients that are on the verge of avoiding care. This type of counselling has proven effective in getting addicted patients back into counselling (Nadelmann & McNeely, 1996; NCDP, 1998; Coviello, Zanis, Wesnoski & Alterman, 2006; Zador, 2006). The psychiatric comorbidity (mapped out for the Netherlands by Knapen, van Gogh, Carpentier, Verbrugge & De Jong, 2007) plays an important role in this patient group and methadone in particular is used as self-medication for a certain period of time (often successfully so, Fischer et al., 2006; Knapen et al., 2007). Important other outcome measures are therefore the psychiatric situation of the patient and changes in the use of methadone and other addictive substances.

Chapter 8 General discussion

8.1 Introduction

In this concluding chapter I look back on the chosen strategies and whether they yielded the intended results. In the study, participative action research was used as a tool to achieve improvements. The research hypothesis was that if professionals actively help to improve their own practice, their professional autonomy⁴⁰ increases, resulting in the knowledge about bottlenecks in the daily practice taking root better. This assumption determined the type of research design; 'shaking up' the daily routine was chosen as a means. By means of critical reflection the nurses were to step out of their victim role so that -as assumed by the researcher- they gradually could regain their autonomy and step by step become motivated. The initiated and evaluated innovations had to be embedded in the centre's policies. The research had a second line of approach as well. The researcher wanted to carry out a scientific study from beginning to end and report on it to a scientific forum in the approved manner. With her research she wanted to provide scientific knowledge in order to investigate:

- whether it is possible or useful to identify bottlenecks in outpatient addiction care together with others and effect changes
- so that the experienced bottlenecks can be solved or at least become less serious.

An important scientific question in this respect is whether the knowledge about bottlenecks and innovations resulting from the local project is sufficient and correct, i.e. whether the followed procedure has led to valid knowledge that can stand the test of criticism of the scientific forum.

There were two change objectives; mapping out the causes and effects of the collapse and breaking out of the deteriorated situation. In short, knowledge of how this situation had come about and knowledge of how to improve the medical and nursing care and case management in the 'methadone dispensing' practice.

The research started with two research questions:

Is it possible with the aid of participative action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?

Does the implementation of innovations in methadone dispensing lead to changes in the care practice by nurses working at methadone clinics?

A third research question was added at a later stage:

Are there signs of improvement of clinical practice in methadone maintenance treatment elsewhere in the Netherlands after and due to the local participative action research?

In this chapter I describe which answers were found for the research questions (8.2), then critically reflects on the research methodology (8.3) followed by a personal review (8.4) and concludes with recommendations for further research (8.5).

⁴⁰ Autonomy with regard to a professional attitude was defined as: maintaining a methodical communication with each other as a team, reading and disseminating specialist literature, and an active contribution when discussing patients. Autonomy with respect to the content and organization of one's own work was defined as: giving advice and arguments based on a vision for expanding the opening hours and mapping out the unacknowledged but still provided care activities. Autonomy in interactions with patients was defined as: the nurses' approach and demeanor is focused on fitting in with the patient's perspective.

8.2 Answers to the research questions

Research question 1

Is it possible with the aid of participative action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?

The evaluation of the monthly focus group meetings showed a gradual development of the nurses in the way they viewed their own work. In the beginning still very chaotic, without distance or critical view from the 'victim role', but at the end of the local research with much more distance and a clear distinction between the things they could and could not influence. Because of the fact that the nurses in the participative action research were actively working on their own knowledge and skills both teams grew in these respects.

Gradually they acquired more influence. Playing an active role themselves in analyzing bottlenecks, gathering the information required to this end and then making statements about possible solutions (consensus) and testing them (supported by the entire team) have indeed contributed to the solutions being valid (possibility to disseminate outside the local project), as was shown in the development of the national guideline.

In all steps that were taken the nurses were actively involved as co-researchers of their own practice. Step by step their reflection on their own work became more professional and better substantiated. According to 't Hart (in De Winter & Kroneman, 2003) is this the usefulness -in particular the conceptual usefulness- of a practice-driven and participative study. The users -in this case the nurses of both local projects- have acquired new knowledge by means of the research. They developed knowledge about innovations, and learned to apply the acquired knowledge and evaluate their own improvements. Everything was shaken up and the focus group meetings showed their progress. Next to conceptual usefulness the instrumental usefulness ('t Hart, in De Winter & Kroneman, 2003) came up as well; the discussions led to a different view of the work and a different approach.

Another question is if the nurses contributed more and qualitatively better data to the research on account of their knowledge of the daily routine than would have been the case had they been involved as little as possible. An important starting point in the research was that the employees had a wide experience but that they did not use it sufficiently nor used it to effect changes. According to 't Hart (in De Winter & Kroneman, 2003; Heron & Reason in Reason & Bradbury, 2001) this is an important starting point in emancipatory research. In this framework Benner (1984 and 2001) speaks of 'professional intuition': in the case of this research, knowledge of nursing and in particular of nursing addicted patients. Knowledge that accumulates step by step and has a beginning in a thorough training. After the nurse has started working, this knowledge and these skills increasingly broaden and deepen. The ability to immediately assess situations and know what to do develops through the years. Mapping out this (often hidden) knowledge is in particular of importance to professionals such as nurses, as this knowledge cannot easily be described, e.g. in text books, and is often only transferred in the daily practice through the supervision of 'wise' supervisors. This professional knowledge is supplemented with knowledge about change in the own organization.

The culture and structure of an organization play a role in shaping changes. The researcher wanted to tap this mix of experiences in order to break out of the deteriorated situation using innovations based on thorough and tacit knowledge, in connection with the evidence-based interventions from science. The mix of these sources of knowledge resulted in a thorough bottleneck analysis which was the leitmotiv for the way various problems were dealt with and for the design of various innovations.

The premise with regard to knowledge development was that both job satisfaction and perceived autonomy would improve. This was the case for the job satisfaction, however the autonomy did not improve demonstrably.

Research question 2

Does the implementation of innovations in methadone dispensing lead to changes in the care practice by nurses working at methadone clinics?

The following innovations were developed and tested for their impact:

1. training and development to increase the nursing input in the treatment plans as part of the patient files and the patient reviews;
2. recording the ad hoc care activities at the dispensing counter to determine this unknown and unacknowledged care and turn it into nursing counselling;
3. extension of the opening hours to reduce the incidents of aggression;
4. monthly reflection meetings with the nurses in order to positively influence the autonomy and job satisfaction.

The training courses proved to yield results: in the end, the nurses from one project were able to better formulate their input in both the treatment plans and the transfer of these plans during the patient reviews. Their care and counselling activities were acknowledged.

The care that was provided at the dispensing counter but was not acknowledged and therefore not registered, was recorded for a year. This ad hoc care was mapped out, but did not decrease significantly in the course of time.

However, this innovation yielded a number of established and acknowledged care activities, which were adopted in the Guideline Opiate Maintenance Treatment (RIOB) and embedded in policy. Not in all cases did the extended opening hours lead to an actual decrease in the incidents of aggression (on one location only in the severest category), but in both projects a shift could be observed from serious incidents to less serious incidents.

In both projects, the monthly focus group meetings led to a slight improvement of the job satisfaction but not to a change in the perceived autonomy.

The implementation of innovations in methadone dispensing leads to improvements on a small scale. However, looking critically at the own research the statement must be made that there are obviously better research methods to measure the effect of these innovations (we will come back to that later). The chosen approach has developed and was determined by the search process. However, during the participative action research improvements were realized. They were changes thought up and then implemented by the nurses themselves. In this respect project 1 achieved less than project 2, but still realized innovations that at a later stage became leading for a better care organization.

Research question 3

Are there signs of improvement of clinical practice in methadone maintenance treatment elsewhere in the Netherlands after and due to the local participative action research?

Can the results of the local project be generalized for the benefit of other, similar situations?

During the local practice-driven research methodological steps were taken to make the results transferable to other, similar settings. All steps taken locally were embedded in analyses transcending the local thinking. Findings were tested against the national and international literature, experts were consulted in several stages, consultations took place with various nurses from other centres and from other work stations within the own centre. In various roles, the researcher played an active part in disseminating this knowledge (further described in 8.3.4).

The findings of the local research, in particular the observation that the outpatient methadone maintenance treatment had considerably deteriorated, were recognized and also found by the Health Care Inspectorate (IGZ) elsewhere in the country. Subsequently a local analysis was made of this collapse and innovations were developed and tested locally. Various results of the local project were adopted in the national guideline (RIOB) and the knowledge development process was partially realized in a similar way.

According to Coenen (1996) and Van Dijk & Landsheer (in: 't Hart et al., 2003) this can be called exemplary generalization. The content of the RIOB was a next step to the local project: broader, deeper and suitable for more organizations. The knowledge from the local project has been partially generalized for other MMT clinics and other addiction centres. The fact that nurses of other addiction centres recognized the local results and that these results were recognized in the RIOB is a confirmation of the reliability and validity of the statements in the local project ('t Hart in De Winter & Kroneman, 2003).

The local project has succeeded in setting up conditions (via the RIOB) for improvements; they are properly described in a number of chapters of the national Guideline Opiate Maintenance Treatment. Improvements which proceeded from local participative action research and which were recognized in other MMT clinics by other nurses. But these outcome were also recognized in other projects by physicians and institutional policy makers. With help of the local outcome, the nurses were capable of convincing other health care workers and policy makers in the Dutch outpatient methadone maintenance treatment institutes. These outcome gave convincing power. However, they are only described but not tested. Their effects cannot yet be reliably proven.

It has been proven that a local research has enough significance for a national follow-up project. And that local practice-driven participative action research can give cause to a future nationwide scientific evaluation of methadone maintenance treatment is a great ending.

8.3 Critical reflection on the research methodology

8.3.1 Researching and changing simultaneously

Looking back on the beginning of the research, on both locations within one centre, the observation can be made that the problems experienced at the time and the questions they raised could not be resolved just like that. The causes and effects were unknown at both the national and local levels, as were the possible feasible solutions. This meant that practice-oriented research was not possible, and research at a local level to try to solve only the problems there was not advisable. A practice-driven research with an participative action research design seemed the best solution. Was it indeed the best option?

During the participative action research and later during the development of the national guideline van Strien's regulative cycle (1986) was used; in the various stages of the research well-founded decisions were made each time. But as Boeije in 't Hart et al. (2005) already said, the regulative cycle for practical situations can go together with the empirical cycle and the steps taken in this context. She says: '*At various moments in the regulative cycle there is room for deriving knowledge from fundamental research. In the first place between the diagnostic and planning stages... Furthermore, fundamental research plays a role between intervention and the evaluation stage.*' (page 91). In the research we opted for changes in the daily practice that were scientifically and adequately inventoried and evaluated.

An example:

One of the identified bottlenecks was the limited opening hours of the methadone dispensing counter. Had the bottleneck been considered from the practice and not from practice-driven research, it would probably not have been placed on the agenda as such. The opening hours are determined by the financial sources present, which are very remote from the nurses on the

shop floor. Thanks to the fact that the bottleneck was placed on the agenda via the practice-driven research it became clear that there was probably a direct link between the incidents of aggression at the dispensing counter and the interaction between nurse and patients. Because the nurses started to look into this, they decided to ask permission to extend the opening hours as an experiment. They used their increasing autonomy to persuade the management of its use on the basis of arguments (reduced aggression). As the evaluation of this innovation showed that the degree of aggression became less serious they proved their line of reasoning was correct. The dispensing counter remained open for longer hours than at the start of the research.

With help of the research great solutions were found for the two local projects that were effective in that particular addiction centre. However, it would have been a shame had the project limited itself to this. Then we still would not know how nurses can broaden their professional knowledge and change the daily practice themselves. And we still would not know (or only much later) that it is possible to improve a deteriorated situation. It would not have been possible to apply the results to the rest of the outpatient addiction care which would not only have been a impoverishment of the local results but also for the rest of the addiction care in our country.

If the research had first focused on finding the best evidence for improving the practice in a detached manner, it should have taken place from a baseless analysis of what was wrong in practice. The improvements found would probably have been of good quality good but not geared towards the daily practice, which means that this translation would have to be made afterwards. It is because of the participation of the nurses in the research that the room between research and practice was made as small as possible.

However, simultaneously researching and changing has its drawback. The exact role of change and its effect is difficult to establish. The interaction between actively changing and researching and the direct effect on each other remains diffuse; it is a weak point of this kind of practice-driven research.

Has the followed working method led to valid knowledge that can stand the test of criticism of the scientific forum? The answer to this question cannot be given by the researcher. She has however provided the information on the basis of which the scientific forum can pass judgment.

8.3.2 Participation of the research population

Central in the research was that participants would actively contribute to the research.

Participation of the research population in a research can differ with regard to which end they participate and to which extent ('t Hart, in De Winter & Kroneman, 2003).

In the research in hand -which had an emancipatory angle and aimed to increase the autonomy of the nurses as one of the objectives- this participation was mainly brought about by means of dialogue. Dialogue that led to joint activities and to innovations aimed at improving the daily practice.

How far did this participation go? The nurses have done more than just being involved in the execution of the research; they provided information about the daily bottlenecks, and took part in deciding on the research questions to be formulated, on the order of the problems to be dealt with, on the outcome criteria of the various innovations, and on the measuring instruments to be used. They gathered much data themselves and passed immediate criticism on the analyses. Afterwards they gave many presentations in the country to disseminate the results.

They had no part in the initial analyses -they were carried out by the researcher and a second researcher- nor in the final reports for the scientific forum.

Dialogue was possible on many fronts; there was a large degree of equality. The latter also has a drawback: the more participation, the larger the degree of influence. Influence which is also called 'test leader effect' (Landsheer et al., 2003; Boeije, 2005) and is also described in qualitative research as the adverse effect of too much involvement due to a lack of dissociation resulting in a common distortion. The test subjects start to behave according to the test leader's expectations. They start behaving according to hints. In quantitative research, too, the test leader effect is found, even though the researcher will keep more distance anyhow with regard to the test subjects and their world. Even when the distance is great the effect can be found because test subjects behave differently from when no test leader would be present.

According to Landsheer et al. (2003) a researcher can have a 'polluting' effect. Have there been adverse effects in the research in hand on account of the influencing role of the action researcher? In other words, have the nurses become dependent on the researcher? And if so, has the lack of distance led to distortion? In the beginning in particular the nurses were led by the researcher's active change attitude. They became enthusiastic and project 2 stayed enthusiastic to the very end. When the progress came to a halt in project 1 and the researcher stepped out of her role as an 'equal' and started asking critical questions from a more reflective and distant position, the team slammed on the brakes and withdrew. However, in 2008 both teams were still actively involved in the implementation of the RIOB, with project 1 making the most progress in this respect. So after the researcher had left, the project was not discontinued; quite the reverse.

However, this does not alter the fact that in this type of practice-driven research the influence - desired as it is- is difficult to describe exactly with regard to the scope of the influence and its precise effects on the thinking and actions of the participants, in this case the nurses.

8.3.3 *Cooperative inquiry: four stages*

The researcher states in chapter 3 that this participative action research is based on the four stages of Heron's Cooperative Inquiry (CI) (Heron, 1998). Has the research actually been conducted in these four stages? In chapter 4 the four stages and how the knowledge of both teams developed in each stage are described (please also refer to chapter 5). Also which changes could be observed and which products were developed in which stage. The various stages have been leading for the design and realization of the entire research and have been helpful each time in distinguishing the various steps. Thanks to them even the stagnation and chaos were recognized and included in the research process. Heron's four stages (1998) helped in mapping out the nurse's change and learning processes, but also made it possible to describe the product results.

A drawback of the four consecutive stages in the CI is the vague boundaries between the stages: the researcher himself has to go looking for clearly distinguishable process elements or products that mark these boundaries.

8.3.4 *Role of the researcher*

In practice-driven research the researcher is neither objective nor independent; this applies in particular to participative action research. Empathy is important in order to better understand the perspective of the research population. This means that her characteristics and her opinions and prejudices can lead to dependency and influencing. In order to take into account all related aspects participative action research must be reflexive. According to Boeije (2005) this means that the researcher must be able to explicitly describe both the personal and theoretical perspectives. Pyatt (2003, page 1171) states: '*Reflexivity is a continual evaluation of subjective responses, intersubjective dynamics, and the research process itself. Including the*

examination of the role of the researcher in the construction of meaning and checking the method, the analysis, and the interpretation not only with other researchers but also with the population which was researched'.

In action research, the researcher must want to change as well, must want to be committed to the group that is being researched. In the research in hand the researcher very clearly chose the nurses' side. She immersed herself in their situation, felt a victim as well, heard their complaints and sometimes went along with them in order to explore them properly. But because she was the researcher she also had to remain aware of her position, had to be able to distance herself and analyze and explain; as 'a nurse who knew her business'. In order to avoid 'going native' it helped that there were various levels of taking action. Firstly the micro level: the interactions between nurses and patients, the interactions between the nurses (the direct data sources in the research). Then the meso level: the interactions between the researcher and the management and the translation to the macro level: the research literature, policies in the addiction care and the related developments. '*Reflexive*' memos were used in the research to stimulate critical thinking, to filter information about the researcher herself from them (her assumptions, her decisions, her insights and her criticisms) but also for the benefit of growing insight and development of a theory.

An interesting question in the transfer of the results of the local project to the national development of the guideline is the role of the researcher. Did this happen thanks to her efforts or was it the results themselves that were recognized by other nurses working at other centres and MMT clinics? The role of the researcher was not value-free, so her efforts have definitely influenced the transfer. However, because of the set manner of reflecting (the falsification method) the outcomes were the focus of attention and were discussed, criticized and adjusted to the culture and structure of the various centres.

These meetings focused on the daily work, the related bottlenecks and the desired solutions and not on the state of mind and attitude of an individual researcher. In the follow-up stage of the local research a second researcher and developer with a different professional background supported, criticized and corrected the researcher. Again a 'critical friend' in both the local and national projects. The reflection meetings with this researcher were held as soon as possible after focus group meetings had taken place, and had a set method and design: first putting their own impressions into words, followed by an analysis of the situation in which viewpoints and conclusions of both were compared and differences and common ground would become clear. If no agreement was reached a new round of data collection followed. The strength of all meetings has been the double hermeneutics (Boog, 2007). This double way of communication about the meaning of theoretical concepts in practice took place during data analysis with help of the actors, but also during the meetings with both professors with special interest in knowledge in general and in how to act and plan during the research process. This resulted in research outcome that conducted knowledge enlargement and this was helpful for the nurses in practice because the new knowledge helped them to make practice based and evidence based decisions and to convince others (Boeije, in 't Hart, Boeije & Hox, 2005).

During the process mutual interpretations have continually taken place between the researcher and actors; it has all led to the various roles the researcher has played and the development of a theory that was partially embedded in national and international literature.

8.3.5 *Degree of generalization*

Both local projects were not chosen by means of random sampling; their participation was determined by the degree of problems experienced in one addiction centre. The choice of these both projects can have resulted in a misrepresentation although both projects did not really differ from other addiction centres that provided outpatient methadone maintenance treatment:

a big-city MMT clinic and a small-town clinic with a clear regional function. However, the findings of the local project could not be compared with findings from similar studies, because there were not any. The acknowledgement and recognition only really took off when the IGZ presented its research. (IGZ, 2005).

If the research had taken place at other centres in the same period of time, would the results have been comparable? This question has to be answered with a certain degree of caution, as we will never know for sure.

Changing the autonomy of the nursing discipline was the central point of the local research; the research was started and finished from their position. The choice was made to first map out the nursing care and bring about improvements in order to better make known the nursing care in the outpatient methadone maintenance treatment. The logical consequence of this choice however was that the patients' perspectives were considered from this position. Another consequence was that the effects of the changes on the patients were not included. At a later stage too, during the development and small-scale evaluation of the RIOB, this effect has not been mapped out.

8.3.6 *Social relevance*

The media and the nursing practice in our health care institutes do not have a positive image of drug addicts. They feel addicts are often troublesome and unreliable with regard to keeping appointments and therapy compliance in general (Loth, Oliemeulen & De Jong, 2005 and 2006). The care for these addicts is set up and dealt with in order to reduce crime and nuisance (as described in chapter 2).

The researcher did not want to base her work on this point of view as this principle reduces nursing care for this group of patients to dispensing methadone only, or in other words, being a *'tap gal'*. Care that can be characterized as *'cram care'*. The participative action research showed that the situation was deteriorated, which was confirmed by the IGZ in other, comparable situations.

The knowledge the local research yielded about this collapsed situation was recognized and acknowledged elsewhere by the government and professionals in the field. The 'Scoring Results' subsidy scheme made it possible to initiate an improvement project for all outpatient addiction centres in the shape of a national guideline in which a number of the local findings were incorporated.

From a health perspective, chronically addicted people have a chronic psychiatric syndrome that seriously affects their autonomy at a cognitive, emotional and social level (de Jong, 2006). This is why drug-addicted patients come up against almost insurmountable trouble in all areas of life. These people deserve attention that is not only based on the nuisance principle. An important social assignment of nurses is to assess people's health and keep them in good health; this entails more than just handing out cups of methadone. If drug addicted patients get the care they need and deserve, it will enable them to shake off the negative image that surrounds them. Nurses have an important contribution to make in this respect. This is not only established, but also laid down in rules, step-by-step plans, and procedures: the *'professional care'*. This has been an important contribution of the research to the addiction care sector, the nursing profession, and -in the future- the patients themselves.

8.4 **Personal review**

The research project started when the centre's management called the researcher with a request for help. 'Things are not going well here and you know a lot about methadone dispensing'. In retrospect it is easy to say that complying with this request has had a deep impact on the life of a starting action researcher. This was not noticed in the beginning. An iterative

search process has a hidden side as already expressed by the term. It is still unknown what a team, a researcher, will find in the course of the research. Such a search process leads to confusion on a number of occasions. Then the researcher is the one who has to turn chaos into structure. In this way she will always look for clarity. To keep searching for the benefit of teams is not always fun. Policy makers also may have wishes that may be troublesome for the progress of the study. There have been days that words like 'structure' left a bitter taste. In addition, practice-driven research and participative action research in particular are methods in which several stake holders play an important role. They are important persons ranging from shop floor workers to top-level managers.

The researcher has tried her best to set the proper tone at the right time when talking to such different people. Keeping various people happy who were very important to the research was not an easy, but very fascinating task. It went hand in hand with continuously adjusted information to try and reach the same objectives, so that the right policy decisions were taken at the right moments. The researcher continuously asked herself if all options had been considered and nothing important had been left out. One of the responsibilities of an action researcher is to be credible and not going native.

After all, it would then be impossible to distance yourself from the daily problems and solutions. A 'spectre' that was always present during the entire research and reached a high when project 1 withdrew from the research. After all, from her role as a nurse she had understood very well why it would be better for the nurses to stop implementing innovations as they did so reluctantly. On the other hand, this was perceived as an admission of weakness. A big advantage of participative action research however is that all participants have always believed in what we were all doing, even if one of the projects withdrew from the research ahead of time. If now and then an innovation did not succeed or a policy did not come through, both teams and the researcher were able to motivate each other again. The fact that the identified bottlenecks were credible enough to be turned into long-lasting innovations via policy decisions, has kept everyone going. They were rewarded when the results of the local research became input for the national guideline. The nurses of project 2 participated in the first stage of this development and in this way continued the local project. An important battle has been won.

8.5 Recommendations for further research

The realization of the national Guideline Opiate Maintenance Treatment (RIOB) has been a positive development for the outpatient addiction care. This guideline will be implemented in various addiction centres in the near future. Each centre will follow its own course depending on the actual implementation stage. Prior to the implementation an overview of the state of affairs must be made with regard to the RIOB working method: a good moment to review whether the bottlenecks identified in the local research and recognized by the IGZ (2005) are found in the centre. Then it is of importance to formulate performance indicators for the methadone maintenance treatment at a national level with the aid of a national process evaluation of the implementation. This is necessary to be able to carry out an effect research on patient-related outcome measures in the next step, such as stabilization of health, stabilization of drug use, safety and quality of life (in particular a meaningful life). Then the question can be answered if in fact methadone maintenance treatment in the Netherlands works. A critical question posed by many people, such as Fisher, Rehm, Kim & Kirst (2005). For a short time now medical heroin has been dispensed to drug-addicted patients who tried everything and often have gone through a series of failed treatments (van the Brink, Hendriks, Blanken, Koeter, Van Zwieten & van Ree, 2003). The Dutch government has provided considerable funds to realize this type of treatment. It led to discussions at a high political level as this kind of treatment makes manifest the various political viewpoints. In a short

period of time beautiful and well-furnished units were built in several cities, nurses were appointed to dispense the heroin under supervision and via various researchers data are gathered everywhere for a scientific evaluation to show that this kind of treatment is working. All this in addition to the deteriorated methadone maintenance treatment which was established for the same target group and which has not yet been properly evaluated for its effect up to now. Two kinds of treatment for the same target group with the same group of professionals that rather differ with respect to the investment made. Both kinds of medication (methadone or heroin) are described side by side in chapter 4 of the RIOB as two kinds of medicinal treatment. Isn't that strange? Two treatments that are the same with respect to the care organization, where the same professionals provide the care in the same way. However, heroin dispensing as described in 'About Permanent Care' (CCBH; Central Committee on the Treatment of Heroin Addicts, 2003, in Dutch) only summarily describes the nursing care under the term 'medical'. Nurses (according to the CCBH these professionals dispense heroin and supervise its use) and specialized nurses (according to the CCBH they also provide psychosocial counselling) can do much more and their contribution to the treatment is much larger than described on paper. Furthermore, what is lacking in this kind of treatment is the patient's perspective. How do addicts experience this treatment, how do they see themselves, what is their perspective on improvement, and what are their wishes with regard to the care organization? And in which way are these components of their perspective incorporated in the current treatment?

In outpatient methadone maintenance treatment in Europe 50% of the staff consists of nurses and 22% of physicians. Nurses have a number of tasks (Loth, Rutten, Huson & Linde, 1999; Lilly, Rhodes & Stimson, 2000; Clancy, 2002) such as dispensing methadone and other medication, monitoring for chronic and acute health problems, counselling patients individually or in groups, recording the carried out care activities (administration), and keeping patient files up to date. The nursing professionals themselves must initiate and develop their share of nursing science research in the Dutch addiction care. The nursing counselling deserves to be better evaluated for its patient care. For example, the immediate interventions at the dispensing counter where the medical situation of the patients is observed and monitored. Or assessing the nutritional state and the related nursing interventions, and the brief motivating conversation techniques at the dispensing counter and their effect on patients, e.g. with respect to drug use and (therapy) compliance. With regard to longer-term counselling it is of importance to look at the experienced meaningfulness of the daily existence and the effect of interventions in this respect. In the first instance it is important to define 'meaningful live' for chronic addictions by means of scientific research. It is also important to develop both the patient's and care worker's perspectives and have them gear towards each other in the course of the research. This will certainly improve the quality of the care. The focus group method is particularly suitable for the latter topic.

Fortunately, more and more research has been published in the literature abroad in the past few years which describes the nursing interventions and their contribution to the care of addicts. For example, nursing diagnostics in alcohol-addicted seniors (Loukissa, 2007), preventive nursing interventions for alcohol-related problems (Littlejohn & Holloway, 2008), treatment of ADHD and the contribution of the nursing discipline to recognizing addiction problems at an early stage (Sircy & Stojanoski, 2008) and nursing points of attentions in heroin-addicted patients suffering from pain (Wintle, 2008). In short, the nursing discipline and the scientific research into the content of the nursing care for addicts, into the effect of nursing interventions among addicts and into the various perspectives is by no means finished yet. This thesis wanted to contribute to it.

Literature

- Abma, T., & Widdershoven, G. (2002). Methoden en Technieken: responsieve evaluatie en haar betekenis voor de verplegingswetenschap. *Verpleegkunde*, 17(4), 207-218.
- Abma, T.A., & Widdershoven, G.A.M. (2006). *Responsieve methodologie. Interactief onderzoek in de praktijk*. Den Haag: Uitgeverij Lemma.
- Alem van, V.C.M., & Mol, A. (2001). *Aan vervanging toe? Methadonverstrekking in de ambulante verslavingszorg 1995-1999*. IVZ/IVV INFOS, Houten: Stichting Informatievoorziening Zorg.
- Baarda, D.B., & Goede de, M.P.M. (1995). *Basisboek Methoden en Technieken. Praktische Handleiding voor het Opzetten en Uitvoeren van Onderzoek*. Houten: Stenfert Kroese.
- Ball, J.C., & Ross, A. (1991). *The Effectiveness of Methadone Maintenance Treatment*. New York: Springer-Verlag.
- Ball, J.C. (1991). Opening the black box of drug abuse treatment-measurement and evaluation of the treatment domain. *NIDA Res. Monogr.* 105, 468-474.
- Ball, J.C., & Wijngaart van de, G.F. A. (1994). Dutch addicts view of methadone maintenance, an American and a Dutch appraisal. *Addiction*, 89(7), 799-802 and 803-814.
- Bell, J. (2000). Quality Improvement for Methadone Maintenance Treatment. *Substance Use & Misuse*, 35(12-14), 1735-1756.
- Benner, P. (1984). *From Practice to Grounded Theory. Excellence and Power in Clinical Nursing Practice*. London: Addison-Wesley Publishing Company.
- Benner, P. (2001). *Van beginner naar expert. Excellentie en invloed in de verpleegkundige praktijk*. Maarssen: Elsevier Gezondheidszorg.
- Blaney, T., & Craig, R. (1999). Methadone Maintenance. Does Dose Determine Differences in Outcome? *Journal of Substance Abuse Treatment*, 16(3), 221-228.
- Boeije, H. (2005). *Analyseren in kwalitatief onderzoek: denken en doen*. Amsterdam: Boom Onderwijs.
- Boeije, H. (2005). *Kwalitatief onderzoek*. In H.'t Hart, H. Boeije, & J. Hox (Red.). *Onderzoeksmethoden*. (pp. 253-289). Amsterdam: Boom Onderwijs.
- Boog, B. (1996). Exemplarian Action Research: The Third Paradigm. In B. Boog, H. Coenen, L. Keune, & R. Lammerts (Eds.). *Theory and Practice of Action Research with special reference to the Netherlands*. (pp. 103-117). Tilburg: Tilburg University Press.
- Boog, B. (1998). The dialectic of adequacy and empowerment: the learning process of action researchers. In B. Boog, H. Coenen, L. Keune, & R. Lammerts (Eds.). *The Complexity of Relationships in Action Research*. (pp. 51-63). Tilburg: Tilburg University Press.
- Boog, B., Meer van der, D., & Polstra, L. (2000). Handelingsonderzoek: hoe doe je dat? In F. Wester, A. Smaling, L. Mulder (Red.). *Praktijkgericht kwalitatief onderzoek*. (pp. 139-154). Bussum: Coutinho.

- Boog, B. (2001). Handelingsonderzoek is ook kwalitatief onderzoek. *KWALON, Tijdschrift voor Kwalitatief Onderzoek*, 6(3), 10-14.
- Boog, B. (2002). In antwoord op Wester. *KWALON, Tijdschrift voor Kwalitatief Onderzoek in Nederland*, 7(1), 32.
- Boog, B. (2007). Handelingsonderzoek of Action Research. *KWALON, Tijdschrift voor Kwalitatief Onderzoek*. 12(1), 13-20.
- Boomen van den, T. (1993). Methadon: slikken of stikken. *Mainline*, Juli, 12-13.
- Boumans, N. (1990). *Het werk van verpleegkundigen in algemene ziekenhuizen. Een onderzoek naar werkaspecten en hun invloed op verpleegkundigen*. Maastricht: Proefschrift Universiteit Limburg.
- Bouter, L.M., Dongen van, M.C.J.M., & Zielhuis, G.A. (2005). *Epidemiologisch onderzoek, opzet en interpretatie*. Houten: Bohn Stafleu van Loghum.
- Brayfield, A., & Rothe, M. (1985). An index of jobsatisfaction. *J. Appl. Psychol.*, 35(3), 307-311.
- Breemen-Schrikker van, R., & Eeland, K. (1999). Kwaliteit vanuit patiëntenperspectief. *MGV/Maandblad Geestelijke volksgezondheid*, 54(7/8), 782-787.
- Brink van de, W., Hendriks, V., Blanken, P., Koeter, M.W.J., Zwieter van, B.J., & Ree van, J.M. (2003). Medical prescription of heroin to treatment resistant heroin addicts: two randomised controlled trials. *BMJ*, 327, 310-316.
- Brussel van, G.H.A. (2003). De versterking van het medische aspect van de verslavingszorg. *Ned. Tijdschr. Geneeskd.*, 147(34), 1628-30.
- Buisman, W.R. (1983). De ontwikkeling van de methadonverstrekking in Nederland. *Tijdschrift voor Alcohol, Drugs en andere Psychotrope Stoffen*, 9(1), 24-29.
- Burns, C.M., & Smith, L.L. (1991). Evaluating Spiritual Well-being Among Drug- and Alcohol Dependent Patients: A Pilot Study Examining the Effects of Supportive/Educative Nursing Interventions. *Addictions Nursing Network*, 3(3), 89-94.
- Byrne, C. (1999). Facilitating Empowerment Groups: Dismantling Professional Boundaries. *Issues in Mental Health Nursing*, 19, 55-71.
- Caris-Verhallen, W.M.C.M., Kerkstra, A., Heijden van der, P.G.M., & Bensing, J.M. (1998). Nurse-elderly patient communication in home care and institutional care: an explorative study. *International Journal of Nursing Studies*, 35, 95-108.
- Caris-Verhallen, W.M.C.M., Kerkstra, A., & Bensing, J.M. (1999). Non-verbal behaviour in nurse-elderly patient communication, *Journal of Advanced Nursing*, 29(4), 808-818.
- CBO (2001). *AGREE. Instrument voor beoordeling van richtlijnen*. London/Utrecht: Centre for Quality of Care Research en CBO Kwaliteitsinstituut voor de gezondheidszorg: www.cbo.nl.
- CCBH (2003). *Over Blijvende Zorg. Een voorstel voor de invoering van een duurzame, kwalitatief verantwoorde, medische behandeling met heroïne*. Utrecht: CCBH.
- Chenitz, C.W., & Krumenaker, C. (1987). The Nurse in a Methadone Maintenance Clinic. *Journal of Psychosocial Nursing*, 25(11), 13-17.

- Chenitz, C.W. (1989). Managing Vulnerability, Nursing Treatment for Heroin Addicts. *Image; Journal of Nursing Scholarship*, 21(4), 210-214.
- Clancy, C., Oyefeso, A., & Ghodse, A.H. (2002). Mapping the role of nurses in Methadone Substitution Therapy (MST). programmes across Europe: core competencies. *The Drug and Alcohol Professional*, 2(4), 19-25.
- Coenen, H. (1989). *Handelingsonderzoek als exemplarisch leren*. Utrecht: Jan van Arkel.
- Coenen, H. (1996). The Model of exemplarian action research. In B. Boog, H. Coenen, L. Keune, & R. Lammerts (Eds.). *Theory and Practice of Action Research, with special reference to the Netherlands*. (pp. 13-19). Tilburg: Tilburg University Press.
- Coenen, H. (1998). On the foundations of a relationship based on equality between researcher and the researched party in Exemplarian Action Research. In: B. Boog, H. Coenen, L. Keune, & R. Lammerts (Eds.). *The Complexity of Relationships in Action Research*. (17-36). Tilburg: Tilburg University Press.
- Commonwealth Department of Human Services and Health (1995). *Review of Methadone Treatment in Australia*. Sidney.
- Cox, K., & Tilchen, A. (2003). *Doen en weten dichter bij elkaar brengen voor evidence-based practice*. *Verpleegkunde*, 18(4), 232-241.
- Coviello, D.M., Zanis, D.A., Wesnoski, S.A., & Alterman, A.I. (2006). The effectiveness of outreach case management in re-enrolling discharged methadone patients. *Drug and Alcohol Dependence*, 85, 56-65.
- Curtis, J., & Harrison, L. (2001). Beneath the surface: collaboration in alcohol and other drug treatment. An analysis using Foucault's three modes of objectification. *Journal of Advanced Nursing*, 34(6), 737-744.
- Denzin, N.K., & Lincoln Y.S. (1994). *Handbook of Qualitative Research*. California: Sage Publications.
- Department of Health/Scottish Office Department of Health/Welsh Office Department of Health/Social Services Northern Ireland (1999). *Drug Misuse and Dependence, Guidelines on Clinical Management*, London/Edinburg.
- Dole, V.P., & Nyswander, M.E. (1965). A Medical Treatment for Diacetylmorphine (Heroin) Addiction, A Clinical Trial with Methadone Hydrochloride. *JAMA*, 193(8), 646-650.
- Driessen, F. (1990). *Methadonverstrekking in Nederland*. Rijswijk: Bureau Driessen.
- Driessen, F. (1992). *Methadoncliënten in Nederland*. Rijswijk: Bureau Driessen.
- Driessen, F.M.H.M., & Wal, H.J. van der (1993). Methadonverstrekking in Nederland. *T. Alc. Drugs*, 19(3), 133-144.
- Driessen, F. (1999). *De ontwikkeling van de situatie van methadoncliënten gedurende 2 jaren*. Utrecht: Bureau Driessen.
- Driessen, F.M.H.M., Lelij, B. van der, & Smeets, H.M. (2002). *Effecten van hoge doses methadon: Eerste resultaten*. Utrecht: Bureau Driessen.
- Drouven, L.E., & Lange de, H.B.I. (1999). *Tweede Concept Rapportage Bekostigings-systeem Ambulante Verslavingszorg, fase 1*. Enschede: Hoeksma, Homans & Menting.

- Dijk, A.A. van, Schramade, M.H., Walburg, J.A., & Wildt, W.A.J.M. de (1999). *Masterprotocol Resultaten Scoren. Ontwikkelcentrum Kwaliteit en Innovatie*. Utrecht: GGZ Nederland.
- Dijk, A.A. van, Schippers, G.M., & Visser, G. (2006). *Is invoering ook uitvoering? Evaluatie van implementatie van twee nieuwe methodieken in de verslavingszorg*. Amsterdam: The Amsterdam Institute for Addiction Research.
- Dijk, J. van, Goede, M. de, Hart, H. 't, & Teunissen J. (1995). *Onderzoeken en veranderen. Methoden van praktijk-onderzoek*. Houten: Stenfert Kroese.
- Dijkum, C. van, Dobben-de Bruijn, J. van, & Kats, E. (1981). *Actieonderzoek. Een discussie- en werkboek*. Meppel: Boom.
- Dy, A., Howard, P., & Kleber, H. (1975). The nurse in the methadone maintenance program: expansions and transitions in role. *JPN and Mental Health Services*, 3, 17-20.
- Eland-Goossens, A., Goor, I. van der, & Garretsen, H. (1997). Meningen van heroïnegebruikers over methadonverstrekking in Den Haag. *T. Alc. Drugs*, 22(3), 142-153.
- Eyk, H. van, & Baum, F. (2003). Evaluating Health Systems Change. Using Focus Groups and Developing Discussion Paper to Compile the 'Voices From the Field'. *Qualitative Health Research*, 13(2), 281-286.
- Fals-Borda, O., & Rahman, M.A. (1991). *Action and Knowledge: Breaking the Monopoly with Participative Action Research*. New York: Intermediate Technology/Apex.
- Farrell, M., Verster, A., Davoli, M., Nilson, M., & Merino, P.P. (2000). *Reviewing current practice in drug-substitution treatment in the European Union*. European Monitoring Centre for Drugs and Drug Addiction (EMCDDA). Insights, 3.
- Fine, M. (1992). Passions, politics and power: feminist research possibilities. In M. Fine (Ed.). *Disruptive Voices* (pp. 54-63). Ann Arbor: University of Michigan Press.
- Fisher, B., Rehm, J., Kim, G., & Kirst, M. (2005). *Eyes Wide Shut?, A Conceptual and Empirical Critique of Methadone Maintenance Treatment*. European Addiction Research/Eur Addict Res, 11, 1-14.
- Foucault, M. (1997). *Discipline, Toezicht en Straf, de geboorte van de gevangenis*. Groningen: Historische Uitgeverij.
- Fraser, J. (1997). Methadone Clinic Culture: The Everyday Realities of Female Methadone Clients. *Qualitative Health Research*, 7(1), 121-139.
- Freire, P. (1972). *Pedagogiek van de onderdrukten*, Baarn: Coutinho.
- Freire, P. (1970). *Cultural action for freedom*. Cambridge MA: Centre for Study of Development and Social Change.
- Gezondheidsraad (2002). *Medicamenteuze interventies bij drugverslaving*. Den Haag: Gezondheidsraad (publicatie nr. 2002/10).
- Gibbon, M. (2002). Doing a Doctorate Using a Participatory Action Research Framework in the Context of Community Health. *Qualitative Health Research*, 12(4), 546-558.
- Giddens, A. (1984). *The Construction of Society*. Cambridge: Polity Press.
- Giddens, A. (2001). *Sociology, Introductory Readings*. Cambridge: Polity Press.

- Goede, M. de, Boeije, H., & Hox, J. (2005). Het experiment. In H. 't Hart, H. Boeije, & J. Hox (Red.). *Onderzoeksmethoden*. (pp. 177-188). Amsterdam: Boom Onderwijs.
- Goffman, E. (1975). *Totale Instituties*. Rotterdam: Universitaire Pers.
- Gogh, M. van (2006). Een systematisch overzicht van de co-morbiditeit tussen psychiatrische as I stoornissen en een onderhoudsbehandeling methadon bij patiënten binnen een ambulante setting. In C.A. Loth, E.A.P. Oliemeulen, & C.A.J. de Jong, (Red.). *Richtlijn Opiaat-onderhoudsbehandeling*. (pp. 209-230). Amersfoort: Resultaten Scoren/GGZ Nederland.
- Gouwe, D van der, & Cornelissen, H. (2004). *Druggebruikers over methadon*. Utrecht: Resultaten Scoren/GGZ Nederland, Utrecht.
- Grundy, S. (1982). Three Modes of Action Research. *Curriculum Perspectives*, 2(3), 23-34.
- Guba, E., & Lincoln, Y.S., (1985). *Naturalistic Inquiry*. Beverly Hill: Sage.
- Haar, R. ter, & Hoekstra M. (2002). Versterking medische zorg in de verslavingszorg. Utrecht: VVGN/GGZ Nederland.
- Haaster, H.P.M. (2001). *Clïëntenparticipatie*. Bussum: Uitgeverij Coutinho.
- Habermas, J. (2001). *The Liberating Power of Symbols, Philosophical Essays*. Cambridge: Polity Press.
- Habermas, J. (2001). *On the Pragmatics of Social Interaction, preliminary studies in the theory of communicative action*. Cambridge/Massachusetts: The MIT Press.
- Hackman, J.R., & Oldham, G.R. (1975). Development of the Job Diagnostic Survey. *J. Appl. Psychol.*, 60, 159-170.
- Hackman, J.R., & Oldham, G.R. (1976). Motivation through the design of work: test of a theory. *Org. Beh. And Hum. Perf.*, 16, 250-279.
- Happal, B., & Taylor, C. (1999). 'We May Be Different But We Are Still Nurses'. An Exploratory Study Of Drug And Alcohol Nurses In Australia. *Issues in Mental Health Nursing*, 20(1), 19-32.
- Hart E., & Bond M. (1995). Developing action research in nursing. *Nurse Researcher*, 2(3), 4-14.
- Hart E., & Bond M. (1996a). Making sense of action research through the use of a typology. *Journal of Advanced Nursing*, 23, 152-159.
- Hart E (1996). Action research as a professional strategy: issues and dilemmas. *Journal of Advanced Nursing*, 25, 454-461.
- Hart E., & Bond M. (1999). *Action Research for Health and Social Care: a guide to practice*. Buckingham/Philadelphia: Open University Press.
- Hart, H. 't (2003). Resultaten van peerresearch als bruikbare weergave van de werkelijkheid. In M. Winter de, & M. Kroneman (Red.). *Participatief jeugdonderzoek. Sociaal-wetenschappelijk onderzoek samen met kinderen en jongeren naar beleid voor de jeugd*. (pp.185-196). Assen: Van Gorcum.
- Hendriks, V., Brink, W. van den, Blanken, P., & Ree, J. van (2000). Heroïne op medisch voorschrift. Achtergrond en opzet van het Nederlandse onderzoek naar de effectiviteit van

- behandeling met heroïne bij chronische, therapieresistente methadonpatiënten. In *Handboek Verslaving*, B4 220 (pp. 1-22). Houten: Bohn Stafleu Van Loghum.
- Hendriks, V.M., Brink, W. van den, Blanken, P., Koeter, M., Zwieten, B.J. van, & Ree, J.M. van (2003). Medical prescription of heroin to treatment resistant heroin addicts: two randomized controlled trials. *British Medical Journal*, 327, 310-312.
- Heron, J. (1998). *Co-Operative Inquiry. Research into the Human Condition*. London: Sage Publications.
- Heron, J., & Reason, P. (2001). The Practice of Co-operative Inquiry: Research with rather than on People. In P. Reason, & H. Bradbury (Eds.). *Handbook of Action Research. Participative Inquiry & Practice*. (pp.179-188). London: Sage.
- Hinshaw, A.S., & Atwood, J.R. (1984). *Anticipated turnover among nursing staff*. Tucson: University Medical Centre/Nursing Department.
- Hoogwerf, J.R. (2002). *Innovation and Change in a Rehabilitation Unit for the Elderly through Action Research*. Dissertation Utrecht: Utrecht University.
- Hovens, J.E., Hensel, R.W., & Griffioen, J. (1984). Doelstellingen van methadonprogramma's: een onderzoek in het veld. *T. Alc. Drugs*, 10, 1, 19-27.
- Hubert, M.C. & Noorlander E.A. (1987). Creatief omgaan met methadon in een laagdrempelige organisatie. *T. Alc. Drugs*, 13(4), 114-121.
- Hutjes, J.M., & Buuren, J.A. van (1996). *De gevalsstudie. Strategie van kwalitatief onderzoek*. Meppel: Uitgeverij Boom.
- Inspectie voor de Gezondheidszorg (2005). *Behandeling met methadon: het kan en moet beter*. Den Haag.
- Jamieson, R., Beals, M., Lalonde, C., & Associates/Office of Canada's Drug Strategy Health Canada (2002). *Best Practices Methadone Maintenance Treatment*. Ottawa: Health Canada.
- Jansen, H.A.M., & Snoek, A. (2007). *Masterprotocol Resultaten Scoren. Handleiding voor de ontwikkeling van protocollen en kennisdocumenten voor de verslavingszorg*. Amersfoort: GGZ Nederland.
- Johns, C. (1999). Reflection as Empowerment. *Nursing Inquiry*, 6(4), 241-249.
- Johns, C. (2001). Reflective practice: Revealing the (he)art of caring. *International Journal of Nursing Practice*, 7, 237-245.
- Jong A.J.C. de (2006). Chronisch verslaafd: de therapeut, de patiënt en de ziekte. Inaugurale rede door Prof. dr. C. A.J. de Jong, Radboud Universiteit Nijmegen.
- Jonge, J. de, Janssen, P., & Landeweerd, A. (1994a). Effecten van werkdruk, autonomie en sociale ondersteuning op de werkbeleving van verplegenden en verzorgenden. *Verpleegkunde, Nederlands-Vlaams Wetenschappelijk Tijdschrift voor Verpleegkundigen*, 9(1), 17-27.
- Jonge, J. de, Landeweerd, J.A., & Breukelen, G.J.P. van (1994). De Maastrichtse Autonomielijst: achtergrond, constructie en validering, *Gedrag en Organisatie*, 7(1), 27-41.
- Jongorius, J., Hull, H., & Derks J. (1994). *Hoe scoort de Verslavingszorg? Kwaliteitsbeoordeling door cliënten; een landelijk onderzoek*. Utrecht: NcGv.
- Jongsma, T. (1981). Verwarring rond methadon. *T. Alc. Drugs*, 7(3), 115.

- Kertzman, T., Kok, I., & Wijngaarden, B. van (2003). *De GGZ Thermometer nader onderzocht. De evaluatie van een vragenlijst voor cliëntwaardering in de volwassenenzorg*. Utrecht: Trimbos-instituut.
- Kingry, M.J., Tiedje, L.B., & Friedman, L.L. (1990). Focus Groups: A Research Technique for Nursing. *Nursing Research*, 39(2), 124-125.
- Knapen, L. (2006). Een systematisch overzicht van de co-morbiditeit tussen psychoactieve stoffen en een onderhoudsbehandeling methadon bij patiënten binnen een ambulante setting. In C.A. Loth, E.A.P. Oliemeulen, & C.A.J. Jong de (Red.). *Richtlijn Opiatoonderhoudsbehandeling* (pp. 231-253). Amersfoort: Resultaten Scoren/GGZ Nederland.
- Knapen, L.J.M., Gogh van, M., Carpentier, P., Verbrugge, C.A.G., & Jong C.A.J. de (2007). *Niet bij Methadon alleen. Een klinisch epidemiologisch onderzoek naar psychiatrische comorbiditeit en comorbide verslaving bij opiaatafhankelijke patiënten in een ambulante methadonbehandeling*. Nijmegen: Novadic-Kentron, Reinier van Arkel Groep en het NISPA.
- Koch, T., & Harrington, A. (1998). Reconceptualizing rigour: the case for reflexivity. *Journal of Advanced Nursing*, 4, 882-890.
- Kruijver, I.P.M. (2001). *Communication Between Nurses and Admitted Cancer Patients: the evaluation of a communication training program*. Proefschrift Universiteit Utrecht.
- Kuehn, B.M. (2005). Methadone Treatment Marks 40 Years. *JAMA*, 294(8), 887-889.
- Landeweerd, J.A., Boumans, N.P.G., & Nissen, J.M.J.F. (1996). *De Maastrichtse Arbeidssatisfactie Schaal voor de Gezondheidszorg (MAS-GZ)*. RUL: Divisie Arbeid en Gezondheid, Instituut Health, Faculteit der Gezondheidswetenschappen.
- LADIS (2003). *Methadon in de verslavingszorg in Nederland (1994-2002)*. Houten: SIVZ.
- Landsheer, H., Hart, H. 't, Goede, M. de, & Dijk J. van (2003). *Praktijkgestuurd onderzoek. Methoden van praktijkonderzoek*. Groningen: Wolters Noordhof/Stenfert Kroese.
- Leininger, M.M. (1985). *Qualitative Research Methods in Nursing*. Philadelphia: Saunders Company.
- Leistra, E., Liefhebber, S., Geomini, M., & Hens, H. (1999). *Beroepsprofiel van de verpleegkundige*. Utrecht: Elsevier/De Tijdstroom/LCV&V.
- Lewin, K. (1951). *Field Theory in Social Science*. New York: Harper.
- Liefhebber, J. (1979). Methadonverstrekking in Nederland. Een poging tot inventarisatie. *T. Alc. Drugs*, 5(4), 124-129.
- Lilly, R., Quirk, A., Rhodes, T., & Stimson, T. (1999). Staff and Client Perceptions of Keyworker Roles and the Constraints on Delivering Counselling and Support Services in Methadone Treatment. *Addiction Research*, 7(4), 267-289.
- Lilly, R., Quirk, A., Rhodes, T., & Stimson, T. (2000). Sociality in Methadone Treatment: understanding methadone treatment and service delivery as a social process. *Drugs: education, prevention and policy*, 7(2), 163-178.
- Limbeek van, J., Buster, M.C.A., & Brussel, G.H.A. van, (1995). Epidemiologie van drugsverslaving in Nederland. *Ned Tijdschr Geneesk*, 139(50), 2615-2618.

- Littlejohn, C., & Holloway, A. (2008). Nursing interventions for preventing alcohol-related harm. *Br J Nurs*, 17(1):53-9.
- Loth, C.A., & Huson, D. (1997). Méér dan potjes methadon uitdelen. *TVZ Tijdschrift voor Verpleegkundigen*, 9, 260-261.
- Loth, C.A., & Wijngaart van de, G. (1997). Verpleegkundige zorg op methadonposten, een vergelijkende literatuurstudie tussen Nederland en Amerika, *Verpleegkunde/ Nederlands-Vlaams Wetenschappelijk Tijdschrift voor Verpleegkunde*, 12(3), 150-159.
- Loth, C.A. (1998a). *Uitkomsten van een demografische inventarisatie rondom verpleegkundigen werkzaam in de ambulante methadonverstrekking in Nederland*, Utrecht: Universiteit Utrecht (niet gepubliceerd).
- Loth, C. (1998b). Verpleegkundigen in de ambulante verslavingszorg. *Tijdschrift voor Verpleegkundigen/TVZ*, 108(15), 489-493.
- Loth, C., Rutten, R., Huson-Anbeek, D., & Linde, L. (1999). *Verslaving en de Verpleegkundige Praktijk*. Maarssen: Elsevier Bedrijfsinformatie.
- Loth, C., & Spexgoor, A. (2000). *Focus 2000-2001, TACTUS instelling voor verslavingszorg: van ambulante methadonverstrekking naar een brede ambulante verslavingszorg*. Enschede: TACTUS.
- Loth, C.A. (2002). Het verpleegkundig handelen vanuit een methadonpost. Een verslag van de eerste fase van een actie-onderzoek naar het vergroten van de autonomie van een professie. *KWALON*, 3, 14-17.
- Loth, C.A., Meijer, M., & Jong, A. de (2002). Een goed begin is het halve werk. Verslag van een actieonderzoek naar het verpleegkundig methodisch werken in de GGZ. *Verpleegkunde. Nederlands-Vlaams Wetenschappelijk Tijdschrift voor Verpleegkundigen*, 1, 4-11.
- Loth, C.A., Schippers, G., Hart, H. 't, & Wijngaart, G. van de (2003). Methadonverstrekking in Nederland aan het begin van een nieuwe eeuw: verloedering van een verpleegkundige praktijk. *MGV/Maandblad Geestelijke volksgezondheid*, 12, 1111-1123.
- Loth, C.A., Oliemeulen, E.A.P., & Jong, C. de (Red.) (2005). *Richtlijn Opiaatonderhoudsbehandeling*. Amersfoort: Resultaten Scores/GGZ Nederland.
- Loth, C.A., Oliemeulen, E.A.P., & Jong, C. de (Red.) (2006). *RIOB/Richtlijn Opiaatonderhoudsbehandeling. Eindverslag van de ontwikkeling en evaluatie van een kleinschalige implementatie*. Nijmegen: TACTUS Instelling voor Verslavingszorg, Novadic-Kentron netwerk voor verslavingszorg, NISPA.
- Loth, C., Schippers, G., Hart 't, H. , & Wijngaart G. van de (2007). Enhancing the quality of nursing care in methadone substitute clinics using action research: a process evaluation. *Journal of Advanced Nursing*, 57(4), 422-431.
- Loth, C.A. (2007). Implementatie van de Richtlijn Opiaatonderhoudsbehandeling in de dagelijkse verpleegkundige praktijk in de ambulante verslavingszorg. *Nederlandse Tijdschrift voor Evidence Based Practice*, 3, 4-8.
- Loukissa, D. (2007). Under diagnosis of alcohol misuse in the older adult population. *Br J Nurs*, 16(20):1254-8.

- Luijting, M. (2002). *Kwaliteit Beoordeeld. Een onderzoek naar de tevredenheid van cliënten van de Ambulante Verslavingszorg Provincie Groningen over de kwaliteit van hulpverlening*. Doctoraal-scriptie. Groningen: Vakgroep Sociologie Rijksuniversiteit Groningen.
- Lynn, M.R. (1986). Determination and Quantification of Content Validity. *Nursing Research*, 35 (6), 382-385.
- Maso, I. (1989). *Kwalitatief Onderzoek*. Amsterdam: Boom.
- McCloskey, J.C., & Bulechek, G. (2001). *Verpleegkundige Interventies*. Utrecht: Tijdstroom.
- McLellan, A.T., Lewis, D.C., O'Brien, C.P., & Kleber, H.D. (2000). Drug dependency, a chronic medical illness: implications for treatment, insurance, and outcomes evaluation. *JAMA*, 284(13), 1689-1695.
- Minjon, B. (1994). Methadon, toepassingen in de drugshulpverlening. *Handboek Verslaving*, Houten: Bohn Stafleu Van Loghum.
- Ministerie van Volksgezondheid, Welzijn en Sport, Ministerie van Justitie, & Ministerie van Binnenlandse Zaken (1995). *Drugsnota: Het Nederlandse Drugbeleid; Continuïteit en Verandering (The Drug Policy of the Netherlands; Continuity and Change)*. Zoetermeer.
- Ministerie van Justitie/Dienst Justitiële Inrichtingen (2008). *Conceptrichtlijn Medicamenteuze Zorg aan Gedetineerde Verslaafden*. Utrecht: CBO.
- Ministry of Health New Zealand ((2003). *Opioid Substitution Treatment. New Zealand Practical Guidelines*. Wellington: www.moh.govt.nz.
- Morse J.M., & Field, P.A. (1996). *Nursing Research, the application of qualitative approaches*. New York; Chapman & Hall.
- Mulder, W.G. (1987). Het methadonprogramma van de Amsterdamse GG & GD. *Ned Tijdschr Geneesk*, 131(45), 2037-2040.
- Mutasa, H.C.F. (2001). Risk factors associated with noncompliance with methadone substitute therapy (MST) and relapse among chronic opiate users in an Outer London community. *Journal of Advanced Nursing*, 35(1), 97-107.
- Nadelmann, E.A., & McNeely, J. A (1996). Doing Methadone Right. *Public Interest*, 123, 83-93.
- National Consensus Development Panel (1998). Effective Medical Treatment of Opiate Addiction, *JAMA*, 280(22), 1936-1943.
- Nationale Raad voor de Volksgezondheid (1989). *Advies Functies Hulpverlening aan Verslaafden*. Zoetermeer. (publicatie 14/'89).
- Nationale Raad voor de Volksgezondheid (1992). *Advies Complexe Verslavingsproblematiek*. Zoetermeer. (publicatie 27/'92).
- Nieuwenhuys, M., Wittenberg, S., & Boonstra, M. (2006). Onderhoudsbehandeling met buprenorfine bij opiaatafhankelijke patiënten. In C.A. Loth, E.A.P. Oliemeulen, & C.A.J. Jong de (Red.). *Richtlijn Opiaatonderhoudsbehandeling*. (pp. 174-208). Amersfoort: Resultaten Scoren/GGZ Nederland.
- Nievaard, A.C. (1990). Validiteit en betrouwbaarheid in kwalitatief onderzoek. In I. Maso, & A. Smaling (Red.). *Objectiviteit in kwalitatief onderzoek*. (pp. 75-96). Meppel: Boom.

- Nightingale, F. (1860). *Notes on Nursing. What it is and what it is not*. New York: D. Appleton and Company: digital.library.upenn.edu/women/nightingale/nursing/nursing.html.
- Nightingale, F. (2005). *Over ziekenverpleging. Wat men om de herstelling te bevorderen, te doen en te vermijden heeft*. Rotterdam: Erasmus Publishing.
- Nyamathi, A.M., & Flaskerud, J. A. (1992). Community-Based Inventory of Current Concerns of Impoverished Homeless and Drug-Addicted Minority Women. *Research in Nursing & Health*, 15, 121-129.
- Nyamathi, A., & Schuler, P. (1990). Focusgroup interview: a research technique for informed nursing practice. *Journal of Advanced Nursing*, 15, 1281-1288.
- Oliemeulen, E.A.P. (2007). *Ongehoord. Aansluitingsproblemen bij de behandeling van psychotische patiënten uit verschillende etnische groepen*. Dissertation Utrecht: Utrecht University.
- Opie, A. (1998). Nobody 's asked me for my view: users' empowerment by multidisciplinary health teams. *Qualitative Health Research*, 8(2), 188-206.
- Polit, D.F., & Hungler, B.P. (2004). *Nursing Research, Principles and Methods*. Philadelphia: J.B. Lippincott Company.
- Pool, A. (1995). *Autonomie, Afhankelijkheid en Langdurige Zorgverlening*. Utrecht: Uitgeverij Lemma.
- Pyett, P.M. (2003). Validation of Qualitative Research in the 'Real World'. *Qualitative Health Research*, 13(8), 1170-1179.
- Reason, P. (1994). *Three Approaches to Participative Inquiry*. In N.K. Denzin, & Y.S. Lincoln (Eds.). *Handbook of Qualitative Research*. (pp.324-339). London: Sage Publications.
- Richardson, R. (2000). Formatief evaluatieonderzoek in een veranderende beleidscontext. In F. Wester, A. Smaling, & L. Mulder (Red.). *Praktijkgericht kwalitatief onderzoek*. (pp. 103-118). Bussum: Coutinho.
- Rothman, K.J., & Greenland, S. (1998). *Modern Epidemiology*. Philadelphia: Lippincott-Raven.
- Sackett, D. L., S. E. Strauss, W.S. Richardson, W. Rosenberg, & Haynes, R.B. (2000). *Evidence-Based Medicine: How to practice and teach EBM*. London: Churchill Livingstone.
- Saunders, B., Wilkinson, C., & Philips, M. (1995). The impact of a brief motivational intervention with opiate users attending a methadone programme. *Addiction*, 90, 415-424.
- Segers, J. (1999). *Methoden voor de maatschappij-wetenschappen*. Assen: Van Gorcum.
- Segers, J.H.G., & Hagedaars, J.A.P. (1980). *Sociologische Onderzoeksmethoden, deel 2. Technieken van causale analyse*. Assen: Van Gorcum.
- Sengers, W.J. (1987). Scheiding van Methadonverstrekking en behandeling. *T. Alc. Drugs*, 13 (2), 52-55.
- Sengers, W. (1990). Kenmerken en ontstaansvoorwaarden van gebruik, verslaving en verloedering. *T. Alc. Drugs*, 16, 17-26.
- Schön, D.A (1987). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass Inc. Publishers.

- Schön, D.A. (1991). *The Reflective Practitioner: How Professionals Think in Action*. Aldershot: Ashgate Arena.
- Schreuder, R.F., & Broex V.M.F. (1998). *Verkenning drugsbeleid in Nederland: feiten, opinies en scenario's*. Zoetermeer: STG.
- Schrijvers, C.T.M., Abbenhuis, G.M., & Goor L.A.M. van de (1997). *De prevalentie van complexe verslavingsproblematiek: resultaten van een onderzoek bij druggebruikers*. Rotterdam: IVO.
- Shaw, I.F. (1999). *Qualitative Evaluation*. London: Sage Publications.
- Siegel, S., & Castellan, N.J. (1988). *Nonparametric Statistics for the Behavioural Sciences*. New York: McGraw-Hill International Editions.
- Sircy, R.A., & Stojanoski, A. (2008). ADHD treatment and the risk of substance abuse. *Nurse Pract*, 33(4):33-6.
- Smaling, A. (1990). Objectiviteit en rolneming. In I. Maso, & A. Smaling (Red.). *Objectiviteit in kwalitatief onderzoek*. (pp. 30-49). Meppel: Boom.
- Smaling, A. (1996). De methodologische kwaliteit van kwalitatief onderzoek. Mogelijke maatregelen. *Verpleegkunde*, 4, 240-254.
- Smaling, A. (1998). Dialogical partnership-The relationship between the researcher and the researched in action research. In B. Boog, H. Coenen, L. Keune, & R. Lammerts (Eds.). *The Complexity of Relationships in Action Research*. (pp. 1-16). Tilburg: Tilburg University Press.
- Stichting HKZ (2003). *HKZ: Harmonisatiemodel*. Utrecht: HKZ
- Strauss, A. L. (1987). *Qualitative Analysis for Social Scientist*. Cambridge: Cambridge University Press.
- Strien van, P.J. (1986). *Praktijk als wetenschap. Methodologie van sociaal-wetenschappelijk handelen*. Assen: Van Gorcum.
- Strussgen, R.A.J. (1997). *Kwaliteit van verpleging/verzorging vanuit gebruikersperspectief*. Utrecht: Landelijk Centrum Verpleging & Verzorging/Nederlandse Patiënten & Consumenten Federatie.
- Swanborn, P.G. (1999). *Methoden van sociaal-wetenschappelijk onderzoek*. Amsterdam: Boom.
- Swanborn, P.G. (1999a). *Evalueren*. Amsterdam: Boom.
- Taylor, B. (2001). Identifying and transforming dysfunctional nurse-nurse relationships through reflective practice and action research. *International Journal of Nursing Practice*, 7, 406-413.
- Titchen, A. (2000). *Professional craft knowledge in patient-centred nursing and the facilitation of its development* (Dphil thesis). Oxford: University of Oxford.
- Titchen, A. (2003a). Critical companionship: part 1. *Nursing Standard*, 18(9), 33-40.
- Titchen A. (2003b). Critical companionship: part 2. *Nursing Standard*, 18(10), 33-38.
- Titchen, A. (2003c). Facilitating practitioners research through critical companionship. *NT Research*, 8(2), 115-131.

- Titchen, A., & McDinley, M. (2003). Facilitating practitioner research through critical companionship. *NT Research*, 8(2), 115-131.
- Verbraeck, H. (1984). *Junkies, een etnografie over oude heroïnegebruikers in Utrecht*. Utrecht: St. Werkgroep gezondheidszorg.
- Verbraeck, H., & Wijngaart, G. van de (1989). 'Nu ik alleen methadon haal voel ik mij helemaal geen junk meer'. Ervaringen van cliënten met methadonverstrekking. *Tijdschrift voor Alcohol, Drugs en andere Psychotrope Stoffen*, 15(4), 146-155.
- Vos de, J.W., Geerlings, P., Wilgenburg van H., & Leeuwin, R. (1993). Methadon-onderhoudsbehandeling; farmacotherapeutische aspecten. *T.Alc.Drugs*, 19(1), 16-22.
- Vossenbergh, P. (2006). Onderhoudsbehandeling met methadon bij opiaatafhankelijke patiënten. In C.A. Loth, E.A.P. Oliemeulen, & C.A.J. Jong de (Red.). *Richtlijn Opiaat-onderhoudsbehandeling*. (pp. 146-173). Amersfoort: Resultaten Scoren/GGZ Nederland.
- Waal, H., & Haga, E. (2003). *Methadone Treatment of Heroin Addiction, Evidence at the Crossroads*. Oslo: Cappelen Akademisk Forlag.
- Walburg, J.A., Czyzewski, E.C.J.E., Ruth, L.E.F. van, Kuijff, B.F.M., Rutten, R., & Stollenga, M. (1998). *Resultaten Scoren: kwaliteit en innovatie in de verslavingszorg*. Utrecht: GGZ Nederland.
- Wester, F. (1990). Betrokkenheid en objectiviteit in kwalitatief onderzoek. In Maso, I., Smaling, A. *Objectiviteit in kwalitatief onderzoek*. (pp. 97-116). Meppel: Boom.
- Wester, F. (1995). *Strategieën voor kwalitatief onderzoek*. Muiden: Coutinho.
- Wester, F., Smaling, A., & Mulder L (2000). *Praktijkgericht kwalitatief onderzoek*. Bussum: Coutinho.
- Wits, E., Loth, C., Mheen, D. van de, & Jong, C. de (2007). *Ondersteuning landelijke implementatie Richtlijn Opiaatonderhoudsbehandeling. Eindrapport*. Amersfoort: Resultaten Scoren/GGZ Nederland.
- Windt W. van der, Calsbeek, H., Talma, H., & Hingstman, L. (2001). *Feiten over verpleegkundige en verzorgende beroepen in Nederland*. Maarssen: Elsevier Gezondheidszorg en LCVV.
- Windt W. van der, Calsbeek, H., Talma, H., & Hingstman, L. (2002). *Feiten over verpleegkundige en verzorgende beroepen in Nederland*. Maarssen: Elsevier Gezondheidszorg en LCVV.
- Windt W. van der, Calsbeek, H., Talma, H., & Hingstman, L. (2003). *Feiten over verpleegkundige en verzorgende beroepen in Nederland*. Maarssen: Elsevier Gezondheidszorg en LCVV.
- Wintle, D. (2008). Pain management for the opioid-dependent patient. *Br J Nurs*, 17(1):47-51.
- World Health Organization (2004). *Substitution maintenance therapy in the management of opioid dependence and HIV/AIDS prevention*. Geneva: WHO.
- Wijngaart, G. van de (1989). Methadon: geschiedenis en toepassing van een drug. *MGv*, 2, 125-140.
- Wijngaart, G. van de (1991). *Competing Perspectives on Drug Use, The Dutch Experience*. Amsterdam: Swets en Zeitlinger.
- Zador, D. (2006). Methadone maintenance: making it better. *Addiction*, 102, 350-351.

Summary

In the Netherlands methadone has been dispensed to heroin addicts for over 30 years now. In the course of the years, methadone dispensing was given the dual objective of providing help and reducing nuisance: the schism in the dispensing practice.

The majority of the patients have multiple, strongly interwoven problems in various areas of life and as a result find themselves in social isolation. In addition to their addiction many have to contend with anxiety disorders, depression, amnesia, uncontrolled aggression, psychoses or other personality disorders.

Over the years nurses in the outpatient addiction care in the Netherlands let slip their professional responsibility for quality care in outpatient addiction care from a kind of victim role. There was a huge difference between the day-to-day practice and what nurses learned during their training. In order to improve the daily practice the management of one of the addiction centers decided to have a practice-driven research carried out. Chapter 1 describes these issues and the related research questions:

1. *Is it possible with the use of action research to increase the professional knowledge of nurses working at methadone clinics by means of critical reflection on their own actions and arrive at self-developed innovations in the care practice?*
2. *Does the implementation of innovations in methadone dispensing lead to changes in the care practice by nurses at methadone clinics?*
3. *Can an improvement be observed in the clinical methadone maintenance practice elsewhere in the Netherlands after and as a result of the local action research?*

Chapter 2 describes the collapse of methadone dispensing in the Netherlands at the end of the last century. It was caused by the abovementioned dual objective and the way in which the financing of methadone dispensing was regulated. As shown by the calculation method, most nursing activities were not recognized and therefore not acknowledged. Nursing care was considered to only consist of dispensing methadone and collecting urine samples. Although inspection reports pointed out that prescribing and dispensing methadone is a medical task, the related nursing care was limited to two tasks only. This led to "cram care" at the dispensing counter (care that cannot be properly started, carried out and finished), whereas the health problems of drug addicts were only increasing.

In addition, the way in which the financing was regulated resulted in an extremely poor quality and furnishing of the buildings compared to other health care facilities, in and outside of the addiction care. We conclude that nuisance control should be dropped as an objective and that improving the health of drug addicts should become the main objective of methadone dispensing, so that physicians and nurses can properly practice their professions and the patients' situation can improve.

Chapter 3 describes the methodology used in the research.

Practice-driven research tries to answer questions that arise in daily practice. Answers must be found in that same daily practice to often complex questions that have several perspectives. The research was set up as a participatory action research, at a later stage combined with a cooperative inquiry design.

The intention was to have nurses play an active role in the research, so that they could gradually take on their professional role again by playing a participatory role in both the analysis of the bottlenecks and the search for innovations and solutions. Participatory research

makes high demands on a researcher. He/she needs to have a certain affinity with the practical field, such as knowledge of the culture and structure of the organization where the research is carried out as well as knowledge of, and skills in dealing with the parties concerned. Researchers must consider it a challenge to contribute their own experiences and knowledge and must be willing to enter a learning process themselves too. The required information in this study was obtained from various sources. Results from qualitative research must be explained in the context of everyday life. In the action research this was achieved as follows: a structured analysis in two steps (in the first step the researcher analyzes and categorizes the data, in the second step the results are presented to -in this instance- the nurses; they comment on them and complete them). Both the researcher and the nurses from the two projects wanted to further explore the results in order to gain a broader perspective. The first results were presented, discussed and approved in both projects. For example, several themes were identified typical of the collapse of the nursing practice, such as insufficient insight into the patient's perspectives and insufficient awareness of the nature and scope of the provided care. In addition, we established a number of changes in a quantitative manner. One important condition for an experimental design could not be realized, i.e. randomization. In order to nevertheless be able to establish relationships and effects, we opted for a naturalistic follow-up study. Innovations included training and development (desired effect: improvement of the professional input in patient reviews), mapping out the unknown, ad hoc care (desired effect: becoming aware of these care interventions), extension of the opening hours (desired effect: reduction of aggression), and monthly focus group meetings (desired effect: increase in job satisfaction and perceived autonomy). The research took place at two MMT clinics. In project 1 methadone was dispensed to about 150 heroin users on a daily basis. This clinic was staffed by 5 part-time nurses. In project 2, methadone was dispensed to about 100 heroin users. This clinic was staffed by three part-time nurses.

Chapter 4 describes the process of research and change realized in both MMT clinics. Action research consists of stages as changes in the daily practice are often complex and are analyzed step by step. To this end the four stages of Heron within the cooperative inquiry design were applied:

1. First reflection: formulating a launching statement and the first action plan including innovations and data collection methods.
2. First action: innovations are explored and tested. Data are gathered and analyzed.
3. Experiential immersion: the first innovations are evaluated and, if necessary, amendments are made.
4. Second reflection: the workers' acting space is expanded, and innovations are implemented into daily practice.

Because the changes were gradually realized and kept in step with the increasing knowledge, the degree of responsibility increased as well. Insight in this increase was provided by using Johns' knowledge development model:

1. 'Silence': Workers have little knowledge and few ideas; the voices of more powerful groups are dominant.
2. 'Received voice': workers repeat the ideas and opinions of others, they are not yet capable of expressing their own ideas and opinions.
3. 'Subjective voice': workers are now capable of voicing their own opinions, but these opinions are not clearly thought through, without reflection.
4. 'Procedural voice': critical reflection is possible.

In the first stage the action plan was implemented. The launching theme became: 'Lack of professional autonomy means dissatisfaction and diminishing professional responsibility'. Data were gathered on interaction issues at the counter by means of interviews and participatory observations. A literature study helped the teams to put the outcome into context, leading to a full diagnosis of the problems in both clinics. Knowledge development took place as the nurses, as co-researchers, provided feedback on the data analysis. Both teams worked at formulating and developing statements about care, addiction care, and the organization of this care. The nurses' professional knowledge was still based on assumptions and lacked a theoretical base. For them, there was a huge discrepancy between the ideal situation and the reality with regard to their professionalism. They had no firm opinions of their own.

In the second stage the theme that emerged was: 'Growing professionalism means struggling first and then reaping the first fruits.' Changes in the organization of the daily work were needed to create more space or time for patient care. For example, the opening hours of the clinic were extended. Knowledge development took place as the nurses reflected in the meetings on shifting their focus to a more structured and critical way of thinking. After analyzing the recorded interviews, it became clear that they listened to each other now and frequently entered into debates.

According to Heron, the third stage is crucial as the touchstone and bedrock. The nurses had to cope with two major processes: 'gaining insight and experiencing the positive effects of continuing growth' and the 'step back'. Analysis of the group dynamics revealed that the two teams had grown apart. The first signals of withdrawal in clinic one were a decreasing data collection and increasing absence rates in group meetings. Knowledge development ensued from discussions about all ethical considerations and uncertain policy regulations because of the new interventions; the nurses were often emotional and did not keep enough distance. Uncertainty arose about the newly implemented care strategies because there was insufficient practical experience, but their knowledge grew from theory with no practical experience towards practical experience embedded in applied theory. The nursing team of project 1 withdrew from the research. Although the team was able to cope with the organizational innovations, they did not succeed in developing a more patient-oriented care. It became clear that dysfunctional relationships were one of the causes of the exhaustion stage.

Finally, in stage four the theme for project two became: 'Satisfaction and becoming critical and reflective practitioners'. The team developed knowledge because they discovered that at first they had two separate 'voices' and perceptions about nurse-patient communication. In the reflection meetings the team members succeeded in really listening to each other and after discussion they decided as a team to reflect more frequently on their professional attitude towards drug users.

Only one of the two MMT clinics succeeded in completing the four stages and enhancing its professional autonomy. Johns' four reflection stages were not only helpful in establishing the development of both teams, but for the researcher as well in analyzing different ways of acting in practice. For the nurses they were helpful in recognizing their progression and growing feelings of pride.

Chapter 5 discusses the content developments on the basis of a number of questions:

Which aspects in the care are of importance from the perspective of patients?

Can the patient's perspective be put across to the nursing teams of the MMT clinics so that they can adjust their approach to, and opinion about the patients accordingly?

In the diagnostic stage of the research a number of patients were interviewed with regard to their opinion about the methadone dispensing. Later in the research two focus group interviews were held. In general the patients were dissatisfied with the procedures when collecting their methadone. They felt ashamed to go to the MMT clinic and would like a quick dispensing where they are not confronted with their old lives. Most of them would like to see an extension of the opening hours. The nurses chose not to be present at both interviews because they feared the patients would not feel safe enough and would not fully open up. However, they did not consider an increased patient input as a matter of course. Eventually and in accordance with the patients' wishes a group discussion was planned with both parties to come to the introduction of vacation days for patients.

Is it possible to improve the professional communication among nurses working in outpatient methadone maintenance treatment by planning group meetings at set times? Are nurses working in outpatient methadone maintenance treatment able to make a solid and communicable analysis of their daily care practice and offer feasible solutions?

In total there have been 24 monthly meetings. The researcher drew up the provisional agenda; in the first instance in consultation with the nurses present and later in consultation with the external discussion leader. At the meetings themselves the definite agenda was decided upon. In the first stage of the research, the perspective of reflection in daily practice had been the narrative way of forming an opinion. The second round of reflection meetings was still loosely structured, but having an agenda settled things down. The theoretic model for the research took on more shape in this stage and provided much-needed structure. The third and fourth rounds of meetings had a rigid structure with an agenda; the items on the agenda could not easily be deviated from.

What is the nature and scope of the unacknowledged ad hoc care provided when dispensing methadone at the counter?

Ad hoc care is unexpected and unplanned care that must take place in short moments of contact. To provide more insight into this care the decision was taken to record it by means of registration forms. The activities were subdivided into health education, nursing interventions, psycho-social counseling, and organizational activities. The registration took place over a period of 260 days (12 months). Both projects were opened 5 days per week from Monday through Friday.

The observed differences between both projects are significant and not coincidental. However, the causes of these differences are widely divergent and cannot be attributed with certainty to one or more of them.

Are there any changes in the job satisfaction of nurses working in outpatient methadone maintenance treatment after having been actively involved in changing their own daily practice? Are there any changes in the perceived autonomy in and over the work of nurses working in outpatient methadone maintenance treatment after having been actively involved in changing their own daily practice?

The Maastricht Job Satisfaction Scale for Health Care (MAS-GZ) was used to map out job satisfaction. The Maastricht Autonomy Questionnaire (MAQ) was used to map out the perceived autonomy. The nurses in our study scored 3.2 and 3.4 in the first and second measurements, respectively, which is neutral. The nurses of both projects were the most satisfied with the contacts with colleagues and patients. In the first measurement they were the least satisfied with the clarity, the career opportunities and the department head.

The changes described in chapter 5 were the result of innovations set up and implemented after, and on the basis of, the inventory of bottlenecks made together with nurses. The general question in chapter 6 was: *Does the implementation of innovations in methadone dispensing lead to changes in the provided care by nurses at the MMT clinics?*

Nursing input in the multidisciplinary patient reviews

The minutes of 20 meetings of project 1 were analyzed in the observation period. Nine meetings were not prepared nor showed any input by the nursing discipline. Nine other meetings were prepared (three of which by a nurse), but showed no active input. Only two meetings showed both a written and actual input by the nurse. The minutes of the patient reviews did not show whether the meetings started on time. Many patients were put on the agenda, only to be moved to the next agenda at the meeting itself because the promised written documentation had not been submitted. Putting items on the agenda did not always mean that the patient was actually discussed. Nine of the 15 meetings of project 2 were prepared by the nurses; they made an actual contribution. Five meetings did not show a prepared input, but did have an active patient-related nursing input. One meeting did show neither a prepared input nor an active input by the nursing team. The minutes did not clearly show whether the meetings started on time and how long they lasted. At each meeting a member of the nursing team (three nurses in total) was present. There was one meeting with only one nurse; at all other meetings at least two nurses were present. Minutes were made of all meetings by the same minutes secretary.

A comparison shows that the nurses of project 2 succeeded in increasing their active professional and patient-related input in the patient reviews, whereas the nurses of project 1 only realized a slight improvement in their active nursing input, which continued to be poorly structured. The preselected patients were hardly discussed in the patient reviews, if at all.

The at random selected patient files of project 1 contained only few notes, if any. If there were any notes, they only dealt with ad hoc problems that required quick solutions. Several notes were not signed by a care worker and had to be considered anonymous. The care patient files contained more notes. However, the nursing team did not succeed in realizing this for all selected patients (for only 6, i.e. 50%, of the 12 patients a plan was formulated).

In project 2 the number of care contacts and the number of conversation notes increased for all selected patients compared with the old situation. After training/intervention project 2 formulated treatment plans for all selected patients (100%), planned treatment meetings and reported on them.

Training nurses in formulating treatment plans and recording them in individual patient files has been a success. However, we must comment that in the course of the research project 1 dropped out. Because of this, the progress of project 2 seems to be especially positive.

Ad hoc care

We found that there was only a significant increase in project 2. The 'experienced' increase/decrease in pressure at the dispensing counter is not underpinned by an actual increase. Nevertheless, both teams felt they had achieved their objective.

Incidents of aggression

The seriousness of the incidents ranges from rude/clumsy behavior and verbal insults to aggressive threatening behavior. The center responds to the latter by imposing sanctions. The decrease in the number of incidents of aggression in project 1 is only significant in the severest category, the physically threatening incidents. These incidents decreased from 17 to 5. It is particularly relevant that the total number of patients in the project increased in both

periods when measurements took place, in particular the category of patients who come to collect their methadone several times per week because they are in poor health, are (very) poorly integrated, and are unreliable with regard to medication adherence. In project 2 the incidents did not decrease significantly. Although the relationship between the extension of the opening hours and the decrease in number or change in nature of the incidents of aggression cannot be fully proven in this research design, a trend may be observed, namely a shift from serious to less serious incidents: from physically threatening behavior to rude and clumsy behavior.

Job satisfaction and perceived autonomy

The nursing team (nurses of both project 1 and project 2) scored an average of 3.2 for total job satisfaction at the first measurement and a 3.4 at the second. This change is significant, but the score remains neutral: not really dissatisfied and not really satisfied. The changes in satisfaction with the quality of care (from 2.8 to 3.3) and with the department head (from 2.8 to 3.3) show a significant, but small improvement as well. The perceived autonomy did not change among this population of nurses after implementation of the innovations.

It was not possible to sufficiently assess innovations for their effect with the aid of the chosen naturalistic research method. Beforehand both patient populations could not be compared with each other just like that. There is a considerable chance that the differences between both projects would have faded away if project 1 had continued the action research. Therefore we can state that the innovations lead to a better quality of the provided care and case management, provided that these innovations are carried out and evaluated from start to finish, and are combined with an active input of, in this case, nurses. The small-scale innovations lead to an improvement that can be transferred to other outpatient methadone maintenance clinics.

Chapter 7 deals with the question: *Can an improvement be observed in the clinical methadone maintenance practice elsewhere in the Netherlands as a result of the local action research?*

The local action research not only aimed to achieve an improvement of the local situation, but also to contribute to the improvement of the outpatient methadone maintenance treatment in the entire country. The collapse of the methadone maintenance treatment described by us received much attention and was widely shared. The two local MMT clinics were confronted with the same problems that were encountered elsewhere. Several associations of professionals working in addiction care concluded that a national guideline for methadone dispensing should lead to more uniformity in the prescription of medication and the provision of care. The guideline is based on three perspectives that are of importance for guideline development from both a national and international point of view: systematic research, clinical expertise and patient preferences. During the development of the guideline the Scoring Results Master Protocol was used. This is a phased plan; the first phase included a desk study and the formulation of a draft guideline. In the second phase the draft guideline was implemented on a small scale, evaluated and revised. Several results of the local project were adopted in the national guideline. The Netherlands have 13 addiction centers and one GGD that also offer outpatient methadone dispensing to drug addicts. In the end, seven of them participated in the implementation trajectory and/or accreditation. Of the six other centers that did not want to participate in the RIOB support project, one stated they did not agree with its content/working method. The findings of the local change research were recognized and acknowledged by other centers. The national guideline, the RIOB, is acknowledged in the Dutch addiction care. Its implementation has been started up in nearly 50% of the addiction centers and expectations are their number will increase. The collapse is broken out of.

Chapter 8 looks back on the research. The evaluation of the monthly focus group meetings showed a gradual development of the nurses in the way they viewed their own work. At the beginning still very chaotic, without distance or critical view from the "victim role", but at the end of the local research with much more distance and a clear distinction between the things they could and could not influence. In all steps that were taken the nurses were actively involved as co-researchers of their own practice. Step by step their reflections on their own work became more professional and better substantiated. The culture and structure of an organization play a role in shaping changes. The researcher wanted to tap this mix of experiences in order to break out of the deteriorated situation using innovations based on thorough and tacit knowledge, in connection with the evidence-based interventions from science. The mix of these sources of knowledge resulted in a thorough bottleneck analysis which was the leitmotiv for the way the various problems were dealt with and for the design of various innovations. The implementation of innovations in methadone dispensing leads to improvements on a small scale. However, looking critically at the own research the statement must be made that there are obviously better research methods to measure the effect of these innovations. The findings of the local research, in particular the observation that the outpatient methadone maintenance treatment had considerably deteriorated, were recognized and also observed by the Health Care Inspectorate (IGZ) elsewhere in the country. Subsequently a local analysis was made of this collapse and innovations were developed and tested locally. Various results of the local project were adopted in the national guideline (RIOB) and the knowledge development process was partially realized in a similar way. In addition, the findings were recognized and acknowledged by workers at other MMT clinics. The local project did manage to succeed in setting up conditions for improvements (via the RIOB). Simultaneously researching and changing has its drawback. The exact role of change and its effect is difficult to establish. The interaction between actively changing and researching and the direct effect on each other remains diffuse; it is a weak point of practice-driven research. Central in the research was that participants would actively contribute to the research. They gathered much data themselves and passed immediate criticism on the analyses. Afterwards they gave many presentations in the country to disseminate the results. However, this does not alter the fact that in this type of practice-driven research it is difficult to exactly describe the influence -although desired- with regard to its scope and its precise effects on the thinking and actions of the participating nurses.

Heron's four stages helped in mapping out the nurses' change and learning processes, but also made it possible to describe the product results. A drawback of the four consecutive stages is the vague boundaries between the stages: the action researcher himself has to go looking for clearly distinguishable process elements or products that mark these boundaries. The question is whether the results would have been comparable had the research taken place at other centers as well in the same period of time.

The realization of the national Guideline Opiate Maintenance Treatment (RIOB) has been a positive development for the outpatient addiction care. This guideline will be implemented in various addiction centers in the near future. Each center will follow its own course depending on the actual implementation stage. Prior to the implementation an overview of the state of affairs must be made with regard to the RIOB working method. Subsequently it is of importance to formulate performance indicators for the methadone maintenance treatment at a national level with the aid of a national process evaluation of the implementation. The nursing professionals themselves must initiate and develop their share of nursing science research in the Dutch addiction care. Finally, nursing counseling deserves to be better evaluated for its effect on patient care.

Samenvatting

In Nederland wordt methadon al meer dan 30 jaren aan heroïneverslaafden verstrekt. De methadonverstrekking krijgt in de loop der jaren een dubbele doelstelling; hulpverlening en het verminderen van overlast, het schisma in de praktijk van de verstrekking. Het merendeel van de heroïneverslaafde patiënten heeft meervoudige, sterk verweven problemen op diverse leefgebieden en verkeert hierdoor in een maatschappelijk isolement. Naast verslaving kampt een aanzienlijk deel van hen met angststoornissen, depressies, geheugenverlies, ongecontroleerde agressie, psychosen of een persoonlijkheidsstoornis. In de loop van de jaren lieten verpleegkundigen in de ambulante verslavingszorg vanuit een soort slachtofferrol de professionele verantwoordelijkheid voor de kwaliteit van de door hun gegeven zorg uit hun handen glippen. Het verschil in praktijkvoering tussen de dagelijkse praktijk en dat wat verpleegkundigen leerden tijdens hun opleiding was groot. Om de praktijk te verbeteren besloot de directie van een van de instellingen om een praktijkgestuurd onderzoek uit te (laten) voeren. In hoofdstuk 1 schetsen we deze problematiek en de vragen die we ons bij het onderzoek stelden:

4. *Is het mogelijk om met behulp van actieonderzoek de professionele kennis van verpleegkundigen, werkzaam op methadonposten, te verhogen door kritische reflectie op het eigen handelen en te komen tot zelf ontwikkelde innovaties in de zorgpraktijk?*
5. *Leidt de invoering van innovaties in de methadonverstrekking tot veranderingen in de zorgpraktijk door verpleegkundigen op methadonposten?*
6. *Is er na en naar aanleiding van het lokale actieonderzoek sprake van verbetering van de klinische praktijk in de methadonverstrekking elders in Nederland?*

Hoofdstuk 2 beschrijft de teloorgang van de methadonverstrekking in Nederland aan het eind van de vorige eeuw. Die werd veroorzaakt door de genoemde dubbele doelstelling en de wijze van financiering van de methadonverstrekking. Zoals uit de berekeningsmanier blijkt werden de meeste verpleegkundige werkzaamheden niet herkend en dus niet erkend. De verpleegkundige zorg bestaat daarin uitsluitend uit methadonverstrekken en het afnemen van urinemonsters. Hoewel inspectierapporten erop wezen dat het voorschrijven en uitdelen van methadon een medische taak is, was de verpleegkundige zorg die hierbij hoort tot twee taken beperkt.

Dit heeft geleid tot 'propzorg' aan het uitgifteloket (zorg die niet fatsoenlijk kan worden opgestart, uitgevoerd en afgemaakt). Dat terwijl de gezondheidsproblemen van drugsverslaafden alleen maar toenemen.

Die wijze van financiering heeft er daarnaast toe geleid dat de kwaliteit van de gebouwen en de inrichting daarvan ernstig zijn achtergebleven in vergelijking met andere gezondheidsvoorzieningen in en buiten de verslavingszorg. We concluderen dat overlastbestrijding als doel zou moeten worden losgelaten en verbetering van de gezondheidstoestand van drugsverslaafden de centrale doelstelling moet gaan worden van de methadonverstrekking zodat artsen en verpleegkundigen hun beroep fatsoenlijk kunnen uitoefenen en de toestand van de patiënten kan gaan verbeteren.

In hoofdstuk 3 schetsen we de methodologie die we bij het onderzoek hebben gehanteerd. Praktijkgestuurd onderzoek is onderzoek dat vragen tracht te beantwoorden die zich in de dagelijkse praktijk voordoen en die in die praktijk om een oplossing vragen. In die praktijk moeten antwoorden worden gevonden op vaak complexe vragen die verschillende invalshoeken hebben. Het onderzoek werd opgezet als een participierend actieonderzoek, met

in een later stadium een cooperative inquiry design. De opzet was om de verpleegkundigen een actieve rol te geven in het onderzoek, zodat zij stap voor stap hun professionele rol weer op zich zouden kunnen nemen door een participerende rol te spelen in zowel de analyse van de knelpunten als in de zoektocht naar innovaties en oplossingen. Participerend onderzoek stelt eisen aan de onderzoeker. Deze heeft een zekere affiniteit nodig met het praktijkveld, zoals kennis van de cultuur en structuur van de instelling waar het onderzoek plaats vindt en kennis van en vaardigheid in het omgaan met de betrokkenen. De onderzoeker moet het een uitdaging vinden om eigen ervaringen en kennis in te brengen en moet een eigen leerproces aan willen gaan. De benodigde informatie in dit onderzoek werd verkregen uit diverse bronnen. Resultaten vanuit kwalitatief onderzoek moeten in de context van alledag worden verklaard. In het actieonderzoek werd dit op de volgende manier gedaan: een gestructureerde analyse in twee stappen (in de eerste stap wordt de data door de onderzoeker geanalyseerd en gecategoriseerd, in de tweede stap worden de uitkomsten daarvan voorgelegd aan de in dit geval de verpleegkundigen ter bekritisering en aanvulling). Zowel de onderzoeker als de verpleegkundigen uit de twee projecten wilden de resultaten verder exploreren zodat een breder perspectief ontstond.

De eerste uitkomsten werden gepresenteerd, bediscussieerd en goedgekeurd in beide projecten. Zo werden een aantal thema's aangewezen die typerend waren voor de verloedering van de praktijk. Deze waren; onvoldoende inzicht in de perspectieven van patiënten en onvoldoende bewustzijn van aard en omvang van de gegeven zorg.

Voorts hebben we een aantal veranderingen kwantitatief vastgesteld. Een belangrijke voorwaarde voor een experimenteel design kon niet worden gerealiseerd namelijk randomisatie. Om toch relaties en effecten aan te tonen kozen we voor een naturalistische follow-up studie. Innovaties waren: training en scholing (gewenste effect: verbetering van de professionele inbreng in de patiëntenbesprekingen, onbekende ad-hoc zorg in kaart brengen (gewenste effect: bewust worden van deze zorgactiviteiten), uitbreiding van de openingsuren (gewenste effect: afname van de agressie), maandelijks refererbijeenkomsten (gewenste effect: toename arbeidssatisfactie en ervaren autonomie).

Het onderzoek vond plaats op twee methadonposten. In project 1 kregen ongeveer 150 heroïnegebruikers dagelijks hun methadon, door vijf parttime werkende verpleegkundigen. In project 2 kregen ongeveer 100 heroïnegebruikers hun methadon, drie verpleegkundigen werkten daar parttime.

Hoofdstuk 4 beschrijft het proces van onderzoek en verandering dat zich heeft voorgedaan op beide methadonposten. Actieonderzoek verloopt in fases omdat veranderingen in de dagelijkse praktijk vaak gecompliceerd in elkaar zitten en stap voor stap geanalyseerd worden. In het onderzoek werd daarvoor gebruik gemaakt van de fases van Heron binnen het cooperative inquiry onderzoeksontwerp, waarbij onderscheiden worden

5. eerste reflectie: formulering van een beginselverklaring en het eerste actieplan, inclusief innovaties en dataverzamelmethode,
6. eerste actie: innovaties worden verkend en getest, gegevens worden verzameld en geanalyseerd,
7. leren en ervaren: de eerste innovaties worden geëvalueerd en zonodig aangepast,
8. tweede reflectie: de handelingsruimte van de medewerkers is vergroot en innovaties worden in de dagelijkse praktijk geïmplementeerd.

Doordat de veranderingen stap voor stap tot stand kwamen en gelijk opgingen met een steeds grotere wordende kennis nam ook de mate van verantwoordelijkheid toe. Deze toename werd inzichtelijk gemaakt door het kennisontwikkelingsmodel van Johns te gebruiken:

5. 'stilte': medewerkers hebben weinig kennis en ideeën, de stem van machtiger groepen is dominant,
6. 'ontvangen stem': medewerkers herhalen de ideeën en meningen van anderen; ze zijn nog niet in staat om hun eigen ideeën en meningen te verwoorden,
7. 'subjectieve stem': medewerkers zijn nu in staat hun eigen mening naar voren te brengen, maar deze zijn nog niet weloverwogen en doordacht,
8. 'procedurele stem': kritische reflectie is mogelijk.

In de eerste fase werd het actieplan geïmplementeerd. Als startthema werd gekozen: 'Gebrek aan professionele autonomie betekent ontevredenheid en afkalvende professionele verantwoordelijkheid'. Data werden verzameld over situaties aan de balie door middel van interviews en participerende observaties. De uitkomsten van een literatuurstudie hielp de teams om de resultaten in een context te plaatsen, hetgeen leidde tot een volledige diagnose van de problemen op de beide methadonposten. Kennisontwikkeling vond plaats omdat de verpleegkundigen als medeonderzoekers feedback leverden op de analyse van de data. Beide teams werkten aan het formuleren en ontwikkelen van verklaringen over zorg, zorg voor verslaafden en de organisatie van deze zorg. De professionele kennis van de verpleegkundigen was nog steeds gebaseerd op aannames en had geen theoretische basis. Voor de verpleegkundigen was er een enorme discrepantie tussen de ideale situatie en de werkelijkheid wat betreft hun vakbekwaamheid. Ze hadden geen eigen duidelijke mening.

In de tweede fase kwam als thema bovendien: 'Toenemende vakbekwaamheid betekent eerst zwoegen en dan pas het plukken van de eerste vruchten'. Veranderingen in de organisatie van het dagelijkse werk waren nodig om meer ruimte of tijd voor patiëntenzorg te creëren. Bijvoorbeeld de openingstijden werden verruimd. Kennisontwikkeling vond plaats omdat de verpleegkundigen in bijeenkomsten reflecteerden over het verleggen van hun focus naar een meer gestructureerde en kritische manier van denken. Na analyse van de opgenomen interviews werd het duidelijk dat ze nu naar elkaar luisterden en vaak met elkaar in discussie gingen.

De derde fase is volgens Heron cruciaal als toetssteen en basis. De verpleegkundigen moesten het hoofd bieden aan twee belangrijke processen: 'inzicht krijgen en positieve effecten ervaren van de voortschrijdende groei' en 'de stap terug'. Uit analyse van de groepsdynamica bleek dat de twee teams uit elkaar waren gegroeid. De eerste signalen van het zich terugtrekken van project 1 waren een afnemende dataverzameling en toenemende afwezigheid in de groepsbijeenkomsten. Kennisontwikkeling ontstond uit discussies over alle ethische overwegingen en onzekere beleidsbepalingen vanwege de nieuwe interventies; de verpleegkundigen spraken er met emotie en weinig afstand over. Onzekerheid ontstond over de ingevoerde nieuwe zorgstrategieën omdat er onvoldoende praktische ervaring aanwezig was, maar hun kennis ontwikkelde zich van theorie zonder praktische ervaring naar praktische ervaring ingebed in toegepaste theorie. Het verpleegkundige team van project 1 trok zich terug uit het onderzoek. Het team was in staat om het hoofd te bieden aan de organisatorische innovaties, maar slaagde er niet in om meer patiëntgerichte zorg te ontwikkelen. Het werd duidelijk dat disfunctionele relaties een van de oorzaken van de uitputtingsfase was. In de vierde fase ten slotte werd het thema voor project twee: 'Tevredenheid en kritische, reflectieve beroepsbeoefenaren worden'. Het team ontwikkelde kennis omdat men ontdekte men aanvankelijk twee verschillende 'stemmen' en percepties had over de communicatie tussen verpleegkundige en patiënt. In de reflectiebijeenkomsten slaagden de teamleden erin echt naar elkaar te luisteren en na discussie besloten ze als team om meer te reflecteren over de uitvoering van hun professionele benadering van drugsgebruikers.

Slechts één van de twee methadonposten slaagde erin de vier fases af te ronden en hun professionele autonomie te versterken. De vier reflectiefases van Johns waren niet alleen nuttig om de ontwikkeling van beide teams te bepalen, maar voor de onderzoeker ook om verschillende manieren van praktisch handelen te analyseren en voor de verpleegkundigen om hun vooruitgang en toenemende gevoelens van trots in te zien.

In hoofdstuk 5 beschrijven we de inhoudelijke ontwikkelingen aan de hand van een aantal vragen. *Welke aspecten in de zorg zijn van belang vanuit het perspectief van patiënten? Is het patiëntenperspectief over te brengen op het verpleegkundige team van een methadonpost zodat zij hun bejegening en mening over de patiënt hierop kunnen afstemmen?* In de diagnostische fase van het onderzoek werd een aantal patiënten geïnterviewd over hun mening omtrent de methadonverstrekking. Verderop in het onderzoek werden twee focusgroepinterviews gehouden. De patiënten waren in het algemeen ontevreden over de gang van zaken tijdens de methadonverstrekking. Men schaamt zich om naar de methadonpost te komen en heeft graag een snelle afhaalsituatie waarin hij/zij niet wordt geconfronteerd met het vroegere leven. De meeste van hen wilden graag uitbreiding van de openingsuren. De verpleegkundigen kozen ervoor om niet aanwezig te zijn bij beide interviews omdat men bang was dat de patiënten zich hierdoor niet veilig genoeg zouden voelen en zich daardoor niet volledig zouden durven te uiten. Zij beschouwden echter meer patiënteninbreng niet als vanzelfsprekend. Uiteindelijk werd in lijn met de wensen van patiënten een groepsdiscussie gepland met beide partijen om een vakantieregeling vast te stellen.

Is het mogelijk om de onderlinge professionele communicatie van verpleegkundigen werkzaam in de ambulante methadonverstrekking te verbeteren door op vaste momenten groepsbijeenkomsten te plannen? Zijn verpleegkundigen werkzaam in de ambulante methadonverstrekking, in staat om een gedegen en aan anderen over te dragen analyse te maken van hun dagelijkse zorgpraktijk en vervolgens haalbare oplossingen aan te bieden? In totaal hebben 24 maandelijks bijeenkomsten plaatsgevonden. De onderzoeker, eerst in overleg met de aanwezige verpleegkundige en later in overleg met de externe gespreksleider, stelde de voorlopige agendapunten vast. Op de bijeenkomst zelf werden deze definitief vastgesteld. Het reflecteren in de dagelijkse praktijk heeft in de eerste fase van het onderzoek de verhalende wijze van meningsvorming als invalshoek gehad. De tweede ronde van reflectiebijeenkomsten bezat nog wel een losse structuur maar een agenda bracht rust, het theoretische model voor het onderzoek groeide in deze fase en gaf ook de nodige structuur. De derde en vierde ronde van bijeenkomsten werden gekenmerkt door een strakke structuur door middel van een agenda en de vaste onderwerpen die hier telkens op stonden vermeld en waarvan niet zo makkelijk kon worden afgeweken.

Wat is de aard en omvang van de onbekende, ad-hoc, zorg die tijdens de verstrekking van methadon aan het uitgifteloket wordt verleend?

Ad-hoc zorg is zorg die onverwachts en ongepland is en in korte contactmomenten moet worden uitgevoerd. Om deze zorg inzichtelijk te maken voor het team en voor derden is besloten om de zorg vast te leggen met behulp van een formulier. De werkzaamheden werden onderverdeeld in: GVO activiteiten, verpleegtechnische activiteiten, psychosociale begeleiding en organisatieactiviteiten. De registratie vond plaats over 260 openingsdagen (12 maanden). Beide projecten waren vijf dagen per week geopend van maandag t/m vrijdag. De zo op het oog bestaande verschillen tussen de beide projecten zijn allemaal significant en berusten niet op toeval. De oorzaken die ten grondslag liggen aan deze verschillen zijn echter van uiteenlopende aard en niet met zekerheid aan één of meerdere van hen te relateren.

Is er een verandering te zien in de arbeidstevredenheid van de verpleegkundigen werkzaam in de ambulante methadonverstrekking nadat zij actief betrokken zijn geweest bij veranderingen in hun eigen praktijk? Is er een verandering te zien in de ervaren autonomie in en over het werk van de verpleegkundigen werkzaam in de ambulante methadonverstrekking nadat zij actief betrokken zijn geweest bij veranderingen in hun eigen praktijk?

De Maastrichtse Arbeidssatisfactie Schaal voor de Gezondheidszorg (MAS-GZ) werd gebruikt om de arbeidstevredenheid in kaart te brengen. De Maastrichtse Autonomielijst (MAL) werd gebruikt om de autonomiebeleving in kaart te brengen. De verpleegkundigen uit ons onderzoek scoorden de eerste keer 3,2 en de tweede keer 3,4, dat is beide keren neutraal. Het meest tevreden waren verpleegkundigen bij beide projecten over de contacten met collega's en met patiënten. Het minst tevreden bij de eerste meting is men over de duidelijkheid, de promotiemogelijkheden en het afdelingshoofd.

De in hoofdstuk 5 beschreven veranderingen kwamen voort uit innovaties die zijn opgezet en uitgevoerd na en naar aanleiding van de samen met de verpleegkundigen gemaakte inventarisatie van knelpunten. De algemene vraagstelling in hoofdstuk 6 luidde: *Leidt de invoering van innovaties in de methadonverstrekking tot veranderingen in de geleverde zorg door verpleegkundigen vanuit methadonposten?*

Verpleegkundige inbreng in de multidisciplinaire patiëntenbesprekingen

Van twintig bijeenkomsten in project 1 in de observatieperiode zijn notulen geanalyseerd. Daaronder waren negen bijeenkomsten die geen voorbereiding vanuit de verpleegkundige discipline en geen inbreng van hen hadden. Negen bijeenkomsten hadden wel een voorbereiding (waarvan drie door een verpleegkundige) maar geen actieve inbreng van hen. Slechts twee vergaderingen kenden zowel een schriftelijke als een werkelijke inbreng van de verpleegkundige. Uit de notulen van de patiëntenbesprekingen van project 1 kon niet worden nagegaan of de bespreking op tijd begon. Veel patiënten worden geagendeerd en vervolgens op de vergadering zelf doorgeschoven, omdat de beloofde schriftelijke inbreng niet is aangeleverd. Het op de agenda plaatsen heeft niet steeds tot gevolg dat de patiënt besproken wordt. Van de 15 bijeenkomsten in project 2 waren er negen met een voorbereide en feitelijke inbreng van de verpleegkundigen. Vijf vergaderingen hadden geen voorbereide inbreng maar wel een actieve patiëntgerelateerde verpleegkundige inbreng. En één bijeenkomst had zowel geen voorbereide als geen actieve inbreng vanuit het verpleegkundige team. Het op tijd beginnen en de duur van de bespreking zijn niet goed vast te stellen vanuit de notulen. Bij elke bespreking is een lid van het verpleegkundige team (totaal drie verpleegkundigen) aanwezig geweest. Er is één bespreking geweest met één verpleegkundige, bij alle andere besprekingen waren minstens twee verpleegkundigen aanwezig. Alle besprekingen zijn genotuleerd, er was een vaste notulist.

Uit de vergelijking blijkt dat de verpleegkundigen van project 2 erin zijn geslaagd om hun actieve professionele en patiëntgerelateerde inbreng in de patiëntenbespreking te verhogen. Project 1 daarentegen heeft slechts een kleine verbetering in hun actieve verpleegkundige inbreng tot stand gebracht die te weinig gestructureerd bleef. De van tevoren geselecteerde patiënten kregen nauwelijks tot geen bespreking in de patiëntenvergaderingen.

In project 1 bleken de at random geselecteerde patiëntendossiers weinig tot geen aantekeningen te bevatten. Waren deze er wel dan ging het over het optreden van ad-hoc problemen die een snelle oplossing nodig hadden. Opvallend hierbij was dat verschillende aantekeningen geen naam van een hulpverlener hadden en als anoniem beschouwd moesten worden. Wat verder opvalt is dat de aantallen aantekeningen stegen bij de zorgpatiënten. Het verpleegkundige team slaagde er echter nog niet in om dit bij alle geselecteerde patiënten tot stand te brengen (van de 12 patiënten kregen er zes, 50%, een plan).

In project 2 nam bij alle geselecteerde patiënten, in vergelijking met hun oude situatie, het aantal zorgcontacten en het aantal gespreksaantekeningen toe. Project 2 heeft na de scholing/interventie van alle geselecteerde patiënten (100%) begeleidingsplannen geformuleerd en hierop begeleidingsgesprekken gepland en gerapporteerd. Het trainen van verpleegkundigen in het formuleren van begeleidingsplannen en het vastleggen hiervan in het individuele patiëntendossier is geslaagd. Wel moeten we de kanttekening maken dat in de loop van het onderzoek project 1 uitviel. De vooruitgang van project 2 lijkt hierdoor extra positief uit te vallen.

Ad-hoc zorg

Het bleekt dat er alleen in project 2 sprake was van een significante toename. De 'ervaren' toename/afname van druk aan het loket wordt niet onderbouwd door een werkelijke toename. Beide teams ervoeren desondanks dat zij hun doel hadden bereikt.

Agressie-incidenten

De aard van de incidenten loopt op in ernst van onbeleefd/onhandig gedrag via verbale beledigingen naar agressief bedreigend gedrag dat door de instelling met sancties wordt beantwoord. De afname van aantallen agressie-incidenten in project 1 is alleen significant in de zwaarste categorie, de fysieke en bedreigende incidenten. Deze incidenten namen af van 17 naar 5. Daarbij is extra relevant dat het totaal aantal patiënten in het project in beide periodes waarin werd gemeten toenam, speciaal de categorie patiënten die vaker dan eens per week de methadon kwam ophalen omdat zij een slechte gezondheid hadden en slecht tot zeer slecht zijn geïntegreerd en onbetrouwbaar met hun meegenomen medicatie omgaan. In project 2 namen de incidenten niet significant af. Hoewel de relatie tussen verruiming van de openingsuren en afname van het aantal of verandering van de aard van de agressie-incidenten in deze onderzoeksopzet niet direct te bewijzen is kan er sprake zijn van een trend, namelijk verschuiving van ernstige naar minder ernstige incidenten, van fysiek bedreigend gedrag naar onbeleefd en onhandig gedrag.

Arbeidstevredenheid en ervaren autonomie

Het verpleegkundige team (verpleegkundigen van zowel project 1 als project 2) scoorde op de totale arbeidssatisfactie een gemiddelde van 3,2 bij de eerste metingen en 3,4 bij de tweede. Deze verandering is significant, maar de scoring blijft neutraal. Niet echt ontevreden en niet echt tevreden. Ook de verandering in tevredenheid met de kwaliteit van zorg (van 2,8 naar 3,3) en met het afdelingshoofd (van 2,8 naar 3,3) geeft een significante maar wel kleine verbetering. De autonomiebeleving is bij deze populatie verpleegkundigen niet veranderd nadat innovaties waren ingevoerd.

Met de gekozen naturalistische onderzoeksmethode bleek het onmogelijk om innovaties voldoende op hun effect te onderzoeken. De beide patiëntenpopulaties konden op voorhand niet zo maar met elkaar worden vergeleken. De kans dat de verschillen tussen beide projecten verdwijnen indien project 1 door was gegaan met het actieonderzoek is groot. Daarmee kan worden gesteld dat de innovaties, indien van begin tot het einde uitgevoerd en geëvalueerd met daarbij een actieve inbreng van in dit geval verpleegkundigen, leiden tot een betere kwaliteit van de geboden zorg en begeleiding. De kleinschalige innovaties geven verbetering die overgezet kan worden naar andere ambulante methadonverstrekkingpunten.

Hoofdstuk 7 behandelt de vraag : *Is er na en naar aanleiding van het lokale actieonderzoek sprake van verbetering van de klinische praktijk in de methadonverstrekking elders in Nederland?* Het lokale actieonderzoek had niet alleen verbetering van de plaatselijke situatie

als doel, maar wilde ook een inhoudelijke aanzet geven tot verbetering van de ambulante opiaatonderhoudsbehandeling in het gehele land. De door ons beschreven verloedering van de opiaatonderhoudsbehandeling kreeg veel aandacht en werd breed gedeeld. De twee lokale methadonposten hadden te maken met problemen die ook elders speelden. Een aantal beroepsverenigingen van professionals in de verslavingszorg concludeerde dat een landelijke richtlijn voor de methadonverstrekking tot meer eenheid in voorschrijven van de medicatie en het uitvoeren van de zorg zou moeten zorgen. De richtlijn is ontwikkeld vanuit de drie perspectieven die nationaal en internationaal gezien belangrijk zijn bij richtlijnontwikkeling: systematisch onderzoek, klinische expertise en patiëntenvoorkeuren. Bij het samenstellen van de richtlijn werd gebruik gemaakt van het 'Masterprotocol' van Resultaten Scoren. Dit is een stappenplan met een eerste fase waarin literatuurstudie wordt verricht en een eerste concept richtlijn wordt ontworpen.

Vervolgens een tweede fase waarin de concept richtlijn kleinschalig werd geïmplementeerd, geëvalueerd en bijgesteld. Een aantal lokale uitkomsten zijn overgenomen in de landelijke richtlijn. Nederland telt dertien instellingen voor verslavingszorg en één GGD die ambulante methadonverstrekking in hun voorzieningspakket hebben. Hiervan hebben er uiteindelijk zeven deelgenomen aan het implementatietraject en/of de visitatie. Van de zes instellingen die niet mee wilden doen met het ondersteunende RIOB project deed één instelling dit vanwege de inhoud/werkwijze van de RIOB. De uitkomsten van het lokale veranderonderzoek werden door andere instellingen herkend en erkend. De landelijke richtlijn, RIOB, wordt erkend in de Nederlandse verslavingszorg. De implementatie wordt in bijna 50% van de instellingen voor verslavingszorg opgestart en de verwachting is dat dit aantal zal toenemen. De verloedering werd doorbroken.

Hoofdstuk 8 geeft een afsluitende beschouwing. Uit de evaluatie van de maandelijkse refereerbijeenkomsten bleek dat de verpleegkundigen zich stap voor stap ontwikkelden in de manier waarop zij kijken naar hun eigen werk. In het begin nog heel chaotisch, zonder afstand en kritische blik vanuit de 'slachtofferrol'. Maar aan het einde van het lokale onderzoek met veel meer distantie en met een duidelijk onderscheid tussen wat zij wel konden beïnvloeden en wat niet. In alle stappen die werden gezet waren de verpleegkundigen actief betrokken als co-onderzoeker van hun eigen praktijk.

Stap voor stap werd hun reflectie op het eigen werk professioneler en beter onderbouwd. Door de cultuur en structuur van een instelling worden veranderingen mede vorm gegeven. Deze mix van ervaringen heeft de onderzoeker willen aanboren om zo de verloederde situatie te kunnen doorbreken met innovaties die waren geënt op gedegen en doorleefde kennis, in samenhang met de evidence-based interventies uit de wetenschap. De mix van deze kennisbronnen heeft een gedegen knelpuntenanalyse opgeleverd die leidend is geweest voor de aanpak van diverse problemen en het ontwerpen van diverse innovaties. De invoering van innovaties in de methadonverstrekking leidt op kleine schaal tot verbeteringen. Maar met een kritische blik naar het eigen onderzoek gericht moet wel worden gesteld dat er natuurlijk betere onderzoeksmethoden bestaan om deze innovaties te meten op effect. De uitkomsten van het lokale onderzoek, met name de constatering dat de ambulante methadonverstrekking nogal was verloederd werden herkend en ook via de Inspectie Volksgezondheid elders in het land geconstateerd. Vervolgens werd de lokale analyse gemaakt van deze verloedering en lokaal werden innovaties ontwikkeld en getoetst.

Er zijn diverse uitkomsten van het lokale project overgenomen in de landelijke richtlijn en het proces van kennisontwikkeling is gedeeltelijk op eenzelfde wijze tot stand gekomen. De

uitkomsten werden daarnaast ook door andere werkers in andere methadonposten herkend en erkend. Het lokale project heeft (via de RIOB) wel voorwaarden weten te scheppen voor verbeteringen.

Het tegelijkertijd onderzoeken en veranderen heeft ook een minder sterke kant. De precieze rol van het veranderen en het effect hiervan blijven moeilijk te bepalen. De interactie tussen actief veranderen en onderzoeken en het directe effect van het één op het ander blijft diffuus, dat is een zwakke plek van praktijkgestuurd onderzoek.

In het onderzoek stond centraal dat de deelnemers een actief eigen aandeel zouden leveren in en aan het onderzoek. Zij verzamelden zelf veel data en gaven directe kritiek op de analyses. Nadien gaven zij diverse presentaties in het land om de resultaten te verspreiden. Maar dit alles neemt niet weg dat in deze vorm van praktijkgestuurd onderzoek de beïnvloeding, hoewel deze is gewenst, moeilijk heel precies kan worden beschreven naar haar aard en precieze effecten hiervan op het denken en handelen van de deelnemende verpleegkundigen. De vier fases van Heron hebben geholpen bij het in kaart brengen van het verander- en leerproces van de verpleegkundigen, en maakte het ook mogelijk om productuitkomsten te beschrijven. Een nadeel van de vier opeenvolgende stadia zijn de vage grenzen tussen de ene fase en de andere fase. De actieonderzoeker zelf moet op zoek gaan naar duidelijk van elkaar te onderscheiden proceselementen of producten die deze grenzen markeren. Het is de vraag of indien het onderzoek in die zelfde tijd ook op andere plaatsen had plaatsgevonden de resultaten dan vergelijkbaar zouden zijn geweest.

De totstandkoming van de nationale Richtlijn Opiatonderhoudsbehandeling (RIOB) is een goede zaak geweest voor de ambulante verslavingszorg. Deze richtlijn wordt de komende tijd in de diverse instellingen voor verslavingszorg geïmplementeerd. Iedere instelling zal daarin een eigen route doorlopen afhankelijk van hoever men daar al is met de implementatie van de werkwijze. Voorafgaande aan de implementatie moet een stand van zaken wat betreft de RIOB werkwijze gemaakt worden. Vervolgens is het met behulp van een nationale procesevaluatie van de implementatie van belang prestatie-indicatoren voor de opiaatonderhoudsbehandeling op landelijk niveau te formuleren. Het aandeel van verpleegwetenschappelijk onderzoek in de Nederlandse verslavingszorg moet door de verpleegkundige beroepsgroep zelf worden opgepakt en ontwikkeld. De verpleegkundige begeleiding verdient het om beter te worden geëvalueerd op effect voor de patiëntenzorg.

Dankwoord

Eerlijk is eerlijk, de verpleegkundigen en artsen in de verslavingszorg hebben de tijd mee gehad. Een veranderende visie op verslaving, met daarin een grotere rol voor de verpleegkundige en geneeskundige disciplines gaf meer ruimte voor het onderzoek. Het onderzoek had nooit tot stand kunnen komen als ik niet van zoveel mensen steun en begeleiding had ontvangen.

Zonder de altijd inspirerende begeleiding van Goof van de Wijngaart die mij een aantal jaren op een geheel eigen wijze begeleidde was dit proefschrift nooit tot stand gekomen. In 2004 overleed hij na een jarenlange strijd, die hij ook op geheel eigen wijze streed, tegen de kanker. Ik weet zeker dat hij trots op me is. Als psycholoog had hij nadat hij regelmatig in het ziekenhuis belandde een kritische blik op de gezondheidszorg en de zorg van verpleegkundigen in het bijzonder. Hij vertelde eens: 'De vrouwelijke artsen zijn het ergste en de mannelijke verpleegkundigen, de broeders, het leukste'. En ik betrapte mezelf erop dat ik dacht: 'He gelukkig, het zijn niet de verpleegkundigen die het ergste zijn'.

Allereerst wil ik alle verpleegkundigen, artsen en patiënten bedanken die met te veel zijn om hen allemaal persoonlijk te noemen. Zonder hun inzet had het onderzoek nooit tot stand kunnen komen. In het bijzonder dank aan alle verpleegkundigen van de 'methadonposten' in Almelo en Enschede.

Ook alle medewerkers van Tactus verslavingszorg die vanaf 1999 als eerste instelling actief met me mee hebben willen denken. Ruud Rutten (paranimf) de voorzitter van de Raad van Bestuur heeft me vanaf het allereerste begin gesteund. De steun van een verpleegkundige in een dergelijke functie heeft me altijd het gevoel gegeven dat het onderzoek zou gaan lukken. De samenwerking met Ans Spexgoor die vanuit haar rol als circuitmanager en voorzitter van de instellingsgroep mede aan de wieg heeft gestaan van het actieonderzoek en de implementatie van de richtlijn bij Tactus verslavingszorg dank ik voor de vele gesprekken waarin we een diverse strategieën hebben uitgezet om veranderingen te laten bekliven. Onze beider liefde voor de langdurige zorg aan chronische verslaafde patiënten was telkens het gemeenschappelijke uitgangspunt en dat we wel eens botsten omdat zorginnovatie en managementbeslissingen niet altijd gelijk opgaan was niet erg.

Hillie van de Peppel (paranimf) die vanaf het begin tot het einde van het onderzoek mijn 'kritische vriend' en medeonderzoeker is geweest. Aan jou keukentafel werd de verslavingsverpleegkunde groot dankzij de vele inspirerende en kritische analyses die daar plaats vonden. Ik heb de boom, die nu helaas niet meer is, vanuit het keukenraam in alle seizoenen zien worstelen met het bestaan.

Gerard Schippers wil ik bedanken voor de inzet en inspirerende begeleiding. Direct na het overlijden van Goof schreef hij in een brief dat hij de begeleiding van Goof in stijl zou proberen voort te zetten. Dat is heel goed geslaagd.

Harm 't Hart wil ik danken voor de begeleiding waar ik elke keer weer van genoot. Ook Goof heeft twee keren bij hem aan de tafel gezeten, als 'student' leek het wel. Wij beiden zaten te genieten van een privé college in onderzoeksmethodologie. Dat gevoel is nooit meer over gegaan.

Marloes ter Riet wil ik danken voor de dagen dat we bij elkaar zaten te ploeteren op de analyses van de patiëntendossiers en op de analyses van de beide groepsinterviews met de patiënten en hoewel we twee verschillende disciplines in de verslavingszorg vertegenwoordigden weet ik zeker dat we het in de kern van zaak altijd eens waren met elkaar.

Tineke Buijtendijk dank ik voor het vele typewerk dat ze in alle stadia voor het onderzoek verrichte. Alle interviews werden door haar netjes uitgetypt. Een enorm karwei en dat altijd weer op tijd af was.

Lisette Oliemeulen heeft me tijdens de ontwikkeling van de RIOB wakker gehouden. Onze vele gesprekken in de auto hielden me wakker en wijs. Altijd waren we op weg naar een methadonpost ergens in het land. Gesprekken over verpleegkundigen, antropologen, kwalitatief onderzoek en over hoe we tactisch en methodologisch verantwoord om moesten gaan met ‘pathologische nee-zeggers’.

Cor de Jong dank ik voor de inspirerende begeleiding tijdens de ontwikkeling en implementatie van de richtlijn. Met name de gesprekken over de moeilijkheden die we tegen kwamen tijdens de implementatie en de gesprekken met de overheid om meer financiering te verkrijgen voor de ambulante verslavingszorg hebben geholpen bij het vinden van creatieve oplossingen.

Mijn beide ouders, die zolang hebben moeten wachten op dit proefschrift. Ik heb beiden nogal op de proef gesteld door een hele andere politieke voorkeur te ontwikkelen, door in een woongroep te gaan wonen, door niet te trouwen en toch kinderen te krijgen en door een studie in Engeland te kiezen en hen daarheen te laten komen voor de diplomering. Mijn dank is groot voor zoveel geduld en ouderlijke liefde

En als laatste natuurlijk mijn vriend voor het leven, Hans. Hoeveel van onze etentjes zijn over mijn onderzoek gegaan en hoe vaak eindigden die in onenigheid over wie er nu belangrijk was voor de verslaafde patiënt, de verpleegkundige of de arts? Wat belangrijker was voor de verslavingszorg; kwantitatief of juist kwalitatief onderzoek. Dank voor alle tijd en geduld. Als jij er niet was geweest had zeker het kwantitatieve deel van het onderzoek er niet zo mooi uit gezien als nu. Je geduldige uitleg bij klinisch epidemiologische vraagstukken en je hulp bij de invoer en statistische berekeningen zijn onmisbaar geweest. We hebben elkaar niet voor niets in de verslavingszorg ontmoet.