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## Collaborative Care for patients with severe personality disorders

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# GENERAL INTRODUCTION

## INTRODUCTION

The Collaborative Care Program in this thesis was developed for patients with severe borderline personality disorder (BPD) or personality disorder not otherwise specified (PD NOS). Several reasons motivated the development of this Collaborative Care Program. Psychotherapy is considered as the preferred treatment according to clinical guidelines. However, research indicates that less than 25% receive psychotherapy as a first-step treatment due to strict indication criteria on the one hand and insufficient capacity of trained psychotherapists on the other hand (Hermens et al, 2011). In addition, non-completion rates of personality disorder treatments vary between 25 and 37% (McMurran et al, 2010; Barnicot et al, 2011). Apart from access and drop out problems, many patients do not benefit sufficiently from psychotherapy. Occasionally it even causes iatrogenic harm, because severe borderline patients are sometimes offered treatment that pushes their limits. The emphasis in psychotherapy on self-reflection, autonomy and motivation underestimates the enormous deficits of many borderline patients (van Luyn, 2007; van Manen et al, 2012). It is for all these patients, who currently do not receive adequate care meeting their specific needs and taking into account their capacities, that we have developed the Collaborative Care Program.

There are three main factors that contribute to the risk of receiving inadequate care, which are mutually dependent. The first factor is related to specific patient characteristics, which explain why they do not easily fit within the current mental health care provisions. For example, in addition to their personality disorder, these patients commonly suffer from chronic suicidal behaviours, frequent comorbidity with predominantly anxiety and depression, and multiple social and interpersonal problems. Moreover, most of them exhibit ambivalence towards their need for care. The second factor is associated with the organization of (community) mental health care. There appears to be a gap between the current supply and organization of mental health care and the specific needs, problems and capacities of a subgroup of patients. Regularly, this subgroup of patients is treated within community mental health care (CMHC) settings, where mental health nurses are responsible for the main part of treatment. However, care delivered by CMHC teams is usually not standardized and generally unstructured (Koekkoek et al, 2009a; Koekkoek et al, 2010a). Accordingly, the third factor is related to characteristics of the professionals working within these CMHC settings, and in particular to characteristics of nurses. Nurses are not always sufficiently equipped to fulfil their professional responsibility regarding the treatment of patients with severe personality disorders. Moreover, the aforementioned patient characteristics, especially the chronic suicidal behaviour and ambivalent help seeking behaviour, are considered as highly stressful for all care providers, but, as research suggests, in particular for nurses (Newton-Howes et al, 2008; Gunderson, 2008; Bodner et

al, 2011;Black et al, 2011;McGrath and Dowling, 2012). Hence, the CCP was developed to meet the needs of a subpopulation of patients with severe BPD or PD NOS, to improve organizational aspects of care, and to support nurses with their difficult and stressful task in caring for patients with severe personality disorders.

In this general introduction we will elucidate the three factors in more detail and substantiate the choice for the developed Collaborative Care Program as a possible answer to the identified shortcomings in the treatment for patients with severe personality disorders. Afterwards we will formulate the research objectives of this thesis and provide an outline of the different chapters included in this thesis.

### **Patient characteristics**

The prevalence of both BPD and PD NOS is approximately 1 to 1.5% in general population studies. In psychiatric patients, however, the estimated prevalence rates for BPD and PD NOS are much higher, i.e. 10-20% and 8-13% respectively (Verheul and Widiger, 2004;Lenzenweger et al, 2007;Paris, 2010;Leichsenring et al, 2011).

A BPD severely affects all aspects of life. The essential feature of BPD is a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early adulthood. The diagnosis of PD NOS will be established when the mental disorder appears to fall within the larger category of personality disorders, but does not meet the criteria of any specific disorder within that category. To get a picture of how patients with BPD could be characterized, a description of the official DSM-IV-TR criteria is given in Table 1 (American Psychiatric Association, 2005). Part of the patients with PD NOS has comparable symptoms and problems as patients with BPD; therefore they were also included in the study.

Over the past decades, the optimism regarding the potential to recover from personality disorders has evolved (Zanarini et al, 2010;Gunderson et al, 2011). This optimism increased due to the availability and efficacy of diverse models of structured psychotherapy, currently the recommended treatment for patients with personality disorders (Verheul and Herbrink, 2007;McMain et al, 2012;Bateman, 2012;Stoffers et al, 2012).

As we have mentioned previously, a substantial group of people does not receive adequate care. In their systematic review, McMurrin et al (2010) found a median of 37% for non-completion of personality disorder treatments. Barnicott et al (2011) found a mean percentage of 25% non-completion in treatments under twelve months duration and 29% in treatments over twelve months.

Table 1: DSM-IV-TR criteria of BPD

The essential feature of BPD is a pervasive pattern of instability of interpersonal relationships, self-image, and affects, and marked impulsivity that begins by early adulthood and is present in a variety of contexts, as indicated by five (or more) of the following criteria:

1. *Frantic efforts to avoid real or imagined abandonment. Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5;*
2. *A pattern of unstable and intense interpersonal relationships characterized by alternating between extremes of idealization and devaluation;*
3. *Identity disturbance: markedly and persistently unstable self-image or sense of self;*
4. *Impulsivity in at least two areas that are potentially self-damaging (e.g., spending, sex, substance abuse, reckless driving, binge eating). Note: Do not include suicidal or self-mutilating behaviour covered in Criterion 5;*
5. *Recurrent suicidal behaviour, gestures, or threats, or self-mutilating behaviour;*
6. *Affective instability due to a marked reactivity of mood (e.g., intense episodic dysphoria, irritability, or anxiety usually lasting a few hours and only rarely more than a few days);*
7. *Chronic feelings of emptiness;*
8. *Inappropriate, intense anger or difficulty controlling anger (e.g., frequent displays of temper, constant anger, recurrent physical fights);*
9. *Transient, stress-related paranoid ideation or severe dissociative symptoms.*

The frequency, content and intensity of psychotherapeutic (group) sessions is not feasible or suitable for all patients due to e.g. limited reflective capacities, insufficient ego-strength to be intensively exposed to own problems and problems of others, motivation problems or a highly instable social context. These patients may not start with psychotherapy, drop out or do not benefit sufficiently (McMurrin et al, 2010; Barnicott et al, 2011; van Manen et al, 2012).

Hence, the patients of our target population do not receive adequate treatment despite several endeavours. Accordingly, they have had multiple therapists and make frequent use of emergency and mental health care services (van Luyn, 2007; Soeteman et al, 2008a). As a result of several (unfinished) treatments with insufficient success, demoralization lurks among patients. Moreover, within CMHC settings the treatment perspective shifts from cure towards care. For some of these patients this reinforces the message that all hope for recovery has been lost, contributing to further demoralization.

Further, among the patients of our target population frequent comorbidity is present, predominantly with depressive and anxiety disorders, but also with alcohol or substance use disorders, and/or somatic disorders (Zanarini et al, 1998). Other problems related to mental health, such as suicidal behaviour and self harm are frequently present (Brown et al, 2002;Paris, 2007). Among patients with borderline personality disorders approximately ten percent die from suicide, most suicides occurring later in the course of illness, generally in patients who have undergone a series of unsuccessful treatments (Paris, 2007). It is suggested that the suicide rate among patients with PD NOS is comparable (Johnson et al, 2005). Patients often present chronic suicidal feelings and conduct multiple suicide attempts (Brown et al, 2002;Paris, 2004). The other way around, in patients with anxiety and depressive disorders those with a comorbid borderline personality disorder are especially at risk for recurrent suicide attempts (Soloff et al, 2000;Hawton et al, 2003;Brodsky et al, 2006). A conclusion could be that there exists borderline related recurrent suicidal behaviour which is a key feature of the subgroup of patients.

In addition, most of these patients are unemployed, and have no stable support system or are dependent on (exhausted) parents or partners. Multiple social problems are common, e.g. difficult relationships or divorces with or without children involved, financial problems and housing problems. As a result quality of life is poor and the risk for suicide increases (Perseus et al, 2005;Cramer et al, 2006;Bateman, 2012).

Despite their severe suffering, commonly, these patients show ambivalence towards their needs for treatment and some are left without any treatment at all (van Luyn, 2007). Ambivalent care seeking of these patients, shifting between dependency and autonomy and between idealisation and condemnation of professionals, can be explained out of their disorder and the irregular course of the therapeutic process. Moreover, studies reveal that patients and care providers set different priorities during treatment, based on a different perspective of problems and needs of patients that require attention. These at times conflicting priorities can cause miscommunication between patients and care providers and hence adversely affect outcomes of care (Hansen et al, 2004;Lasalvia et al, 2005;Hayward et al, 2006;Junghan et al, 2007;Lasalvia et al, 2008). It is known that the 'treatment gap' between the need for, and delivery of, appropriate mental health care services is still wide, especially among patients with suicidal behaviours (Bijl et al, 2003;Kohn et al, 2004;Wang et al, 2007;Bruffaerts et al, 2011). Part of this suggested gap between need for and delivery of appropriate mental health care services for suicidal persons may be explained by the entrapped mindset and feelings of hopelessness of suicidal persons which may result in fixed ideas that nothing will help (Williams et al, 2005). In this respect the suicidal person demonstrates his

core beliefs that make him suicidal by engaging in prototypical cognitions of being untreatable, being too worthless to be treated, being incapable of profiting from any help, fear of stigma, etc. (Bruffaerts et al, 2011). As (recurrent) suicidal behaviour is a key feature of patients with severe personality disorders, these prototypical cognitions also apply to them.

Overall, it can be concluded that it is a very vulnerable population with chronic complex conditions resulting in a high burden of disease and high economic burden (Soeteman et al, 2008a; Soeteman et al, 2008b).

## **Organization of (Community) Mental Health Care**

The second risk factor for receiving inadequate care concerns organizational aspects. Mental health care is becoming increasingly specialized. Consequently, it has been organized towards illness-oriented treatment programs. For patients with multiple comorbidities, like the patients of our target population, this increased specialization contributes to the risk of receiving inadequate care, because they do not easily fit within illness-oriented treatment programs. Moreover, due to these multiple comorbidities many different care providers are involved: family practitioners and/or somatic specialists for the present somatic problems, and/or addiction health care providers for the treatment of alcohol or substance disorders. Due to functional impairments and social problems, care providers of home care, supervised independent living facilities, social work, or youth care are regularly involved. The involvement of so many different care providers often leads to fragmented communication and discontinuity of care and thus to poor treatment outcomes.

Another organizational aspect concerns the engagement of the various mental health professionals in the treatment of patients with personality disorders. The psychotherapeutic treatment belongs for the main part to the domain of psychiatrists, psychotherapists and clinical psychologists. Within the group sessions of Dialectical Behavioural Therapy (DBT), Mentalization Based Treatment (MBT) or Systems Training for Emotional Predictability and Problem Solving (STEPPS) nurses participate as co-therapists, next to psychiatrists, psychotherapists or clinical psychologists (Woods and Richards, 2003; Black et al, 2004; Osborne and McComish, 2006; Bos et al, 2010; Bales et al, 2012).

As we have stated before, however, the patients of our target population generally are treated within CMHC settings. Within these settings, treatment is provided by (community) mental health care nurses, social workers, psychologists and psychiatrists providing long-term support to patients who have mostly received unfinished and unsuccessful specialized treatments before. In line with the organization structure of these settings, the involvement of the more specialized

professionals (psychiatrists, clinical psychologists, psychotherapists) decreases, thus reducing the possibilities for supporting nurses in their difficult task of treating patients with personality disorders. Moreover, care for patients with severe personality disorders delivered by CMHC teams is usually not standardized and generally unstructured (Koekkoek et al, 2009a; Koekkoek et al, 2010a). Although intensive outpatient models, such as Assertive Community Treatment (ACT) and Function Assertive Community Treatment (F-ACT) have improved the quality of care and treatment outcomes within these settings (Dieterich et al, 2010), the focus of CMHC is predominantly on patients with axis I disorders, such as schizophrenia, other psychotic disorders, bipolar and depressive disorders. The treatment of patients with axis I disorders requires a different therapeutic approach than patients with severe personality disorders. In particular the management of recurrent suicidal behaviour poses problems for the organization and the nurses involved. Mental health care institutes and the professionals involved balancing between resisting the urge to send someone in for admission in case of suicidal threat and the fear of not sending someone in for admission erroneously. Enduring constant suicidal threats, the subsequent risk assessment and associated decisions about (involuntary) admissions weigh heavily upon the responsibility of professionals and nurses in particular (Gunderson, 2008). A fortiori because nurses have little to go by: multidisciplinary treatment guidelines for both personality disorders and suicidal behaviour offer few specific recommendations how to treat these patients. As a result, mental health nurses commonly rely on knowledge from adjacent disciplines, tacit knowledge, common sense and intuition (van Meijel et al, 2004). To entrust vulnerable patients to a setting where care is unstructured and where professionals are insufficiently equipped for their task may also cause iatrogenic harm, because they become unintentionally depending of inadequate care.

## **Characteristics of nurses**

### *General features of nurses within mental health care*

According to several studies, the treatment of patients with personality disorders is highly stressful for nurses in particular. To support nurses in this difficult and stressful task, they should be well equipped to fulfil their professional responsibility. There are, however, several system flaws why they are not always well equipped.

The aforementioned increased specialization of mental health care leads to a need for professionals equipped with specific expertise. However, education programs for (mental health care) nurses are generic in the Netherlands. This means that nurses are trained for the whole range of health care, including somatic, mental health and geriatric care. Mental health care differentiations within these educa-



tion programs exist, but the provision of specific expertise and the training of specific skills regarding psychiatric disorders is limited. Next to the regular education programs and in collaboration with mental health care institutes, dual education programs are offered in which more attention can be paid to specific expertise and skills needed within mental health care.

Currently, there are two levels of nurses trained in the Netherlands: nurses with an intermediate vocational education level and nurses with a bachelor degree. In clinical practice, however, both perform mostly the same tasks and have the same responsibilities. Due to cost reductions and a lack of distinction between the two levels of nursing a shift towards lower educated nurses can be detected. Post-graduate education programs for community mental health nursing exist but are no longer subsidized by the Dutch government. With a mean age of over 45 years this profession is at risk to become marginalized, as a result of which a lot of specific expertise and experience is lost (Koekkoek et al, 2009b).

Recently, new professional profiles of nurses were presented (Lambregts and Grotendorst, 2012). Within the nursing domain two levels are to be distinguished: nurses with a bachelor degree and clinical nurse specialists with a professional master degree, established in the Dutch Individual Health Care Professions act (<https://www.bigregister.nl>). A restructuring of nursing professions and the division of tasks and responsibilities between these professions was necessary in response to changes in the organization of health care, upcoming ageing, the associated complexity of care, and the expected shortage of nursing staff (Lambregts and Grotendorst, 2012).

Mental health care expenses are increasing rapidly in the Netherlands and without intervention mental health care will be overpriced. Therefore, the national government initiates cost reductions by cutting down insurance packages, relocating financial resources and re-arranging tasks of the nursing discipline in particular. The division of tasks and responsibilities between professions and the introduction of the clinical nurse specialist in mental health care fits into this trend of re-arranging tasks. As we will see, these developments have their consequences for the possibilities to apply complex composite interventions, such as our Collaborative Care Program.

#### *Nurses and the treatment of patients with severe personality disorders*

The subgroup of patients which is treated within CMHC settings poses many challenges for the nursing profession. Nurses have little to go by in relation to this patient population, because evidence based interventions for the treatment of this specific patient population are scarce and support of other (more specialized) professionals is limited. Moreover, research indicates that with respect to self harm, being strongly associated with personality disorders, only 5% of the

participating Dutch nurses had had training in necessary skills for the treatment of self harm (Kool et al, 2011); based on yet unpublished data from the PITSTOP study, 12.5% of the nurses had had training in the treatment of suicidal behaviour (de Beurs et al, 2013). Moreover, negative attitudes towards patients with BPD among nurses are still frequently present (Bodner et al, 2011;Black et al, 2011), while research indicates that these negative attitudes can be altered positively after supervision or adequate training, e.g. in the skills used in DBT, MBT or STEPPS, and treatment outcomes can be improved (Bland and Rossen, 2005; Hazelton et al, 2006;Bland et al, 2007;Bhebhe and Fuller, 2009;Shanks et al, 2011).

The relatively solitary exercise of nurses within CMHC settings, combined with occasionally insufficient understanding of the complexity of BPD, contributes to the risk of demoralization and thus to reduced effectiveness of delivered care.

Moreover, the aforementioned ambivalent care seeking of patients with severe personality disorders is difficult for nurses to accept and to cope with, and it often leads to ineffective professional behaviour (Koekkoek et al, 2010b). Strong emotional responses towards the patient arise frequently, particularly when the disruptive and destructive behaviour of the patient is unpredictable and difficult to understand (Koekkoek et al, 2011). While balancing between autonomy and safety of the patient, nurses easily feel forced and responsible to protect the patient (Hendin et al, 2006;Jobes, 2006;Goldblatt and Waltsberger, 2009). They place a strong emphasis on preventing suicide and other forms of destructive behaviour, at the expense of trying to understand the underlying distress and dynamics of these behaviours, and to refocus the patient on resolving their life problems. At the same time, nurses may underestimate the needs and disabilities of their patients and perceive them as able but unwilling to change (Koekkoek et al, 2010b). To keep the balance between playing a waiting game on the one hand, and being overly supportive and protective on the other hand is considered to be difficult with regard to these patients (van Luyn, 2007).

In summary, the current treatment for patients with severe personality disorders within CMHC settings is not standardized and generally unstructured with negative consequences for treatment outcomes (Koekkoek et al, 2009a;Koekkoek et al, 2009b). As a result, nurses fail to acknowledge this vulnerable patient population or occasionally even cause iatrogenic harm. Nurses, who have responsibility for these patients, are occasionally insufficiently equipped due to the absence of adequate treatment models and necessary knowledge and skills. There is an urgent need to professionalize the nursing profession and improve the quality of care for these patients.

## Collaborative Care as a possible answer

As a result the quality of care for patients with severe personality disorders is below optimal standards and is demanding upon nurses and professionals of other disciplines. This limited quality of care is also applicable to other patient populations with chronic complex conditions in both mental health and somatic care (McGlynn et al, 2003;Torpey and Klein, 2008). However, providing adequate care for patients with severe personality disorders is especially urgent due to the high burden of disease, high health care risks, including suicide, high health care consumption and consequently, high costs (Soeteman et al, 2008a;Soeteman et al, 2008b).

Patients with chronic complex conditions are regularly confronted with fragmented communication between health care providers involved, discontinuity of delivered care, the absence of planned and structured interventions, and insufficient patient involvement in the treatment process (von Korff, 1997;Wagner et al, 2001;Bodenheimer et al, 2002). As a possible response to these shortcomings, for patients with severe mental illnesses, mainly psychotic disorders, several intensive outpatient approaches have been introduced with positive results, such as the aforementioned (Function) Assertive Community Treatment ((F)ACT) (Coldwell and Bender, 2007;Drukker et al, 2011). Recently, regarding the treatment of patients with chronic complex personality disorders, initiatives to integrate ACT with dialectical behavioural therapy or mentalization based treatment are undertaken, but evidence for effectiveness is scarce (Horvitz-Lennon et al, 2009;Knapen, 2013). Moreover, questions were raised about the appropriateness of this integration (Horvitz-Lennon et al, 2009). For non-psychotic chronic patients with multiple and complex problems, thereby being perceived as 'difficult' by professionals, few interventions are available yet (Koekkoek et al, 2010a). Koekkoek et al (2012) developed and tested their Interpersonal Community Psychiatric Treatment (ICPT) in a small-scale pilot study, with positive results.

Another promising response to the shortcomings in the treatment of patients with chronic complex conditions is the development of Collaborative Care models to improve and integrate care (von Korff, 1997;Wagner et al, 2001;Bodenheimer et al, 2002). Collaborative Care models aim to fortify primary care in order to treat these patients as long as possible in the least intensive and least expensive health care services. The underlying aims of these models are to increase collaboration between patient, family members/other informal caregivers and professionals; the promotion of shared decision making; and enhancement of self management skills of patients with chronic conditions. Collaborative Care models consist of six core elements: self-management support, decision support, practice redesign, clinical information systems, health care organization and community

linkages (see Table 2) (von Korff, 1997; Bodenheimer et al, 2002; Woltmann et al, 2012). The strength of these models is that they include organizational aspects to optimize coordination and continuity of care, in combination with effective interventions to optimize treatment. Another appealing aspect of Collaborative Care models from a nursing perspective is that nurses have a prominent position in these models as they often function as collaborative care managers, being responsible for both an optimal organization of treatment and a proper implementation. This provides opportunities for nurses to contribute to a higher quality of care (Katon et al, 2001).

These opportunities to contribute to a higher quality of care are supported by the description of core tasks in the new professional profiles of nurses in the Netherlands, for both registered nurses (at bachelor level) and clinical nurse specialists (Lambregts and Grotendorst, 2012). The underlying principles of Collaborative Care, namely shared decision making and self management, coincide with the leading themes in these new professional profiles (Lambregts and Grotendorst, 2012, p.9): “Nurses are all round care professionals focussing at the promotion of self management of persons, their informal carers and social network partners with the aim of maintaining or improving daily functioning in relation to health, illness and quality of life. (.....) Nurses provide care based on an ongoing cyclical process of clinical reasoning, including risk assessment, early recognition, problem recognition, evidence based interventions, monitoring and evaluation.” The tasks mentioned in these nursing profiles bear close resemblance with the core elements of CC, indicating that nurses should be competent to effectively carry out Collaborative Care interventions.

Over the past two decades, Collaborative Care was extended to primary and specialized Mental Health Care and to date, Collaborative Care programs have proven to be (cost-) effective for a variety of mental disorders in various settings, e.g. depressive, anxiety and bipolar disorders (Thota et al, 2012; Woltmann et al, 2012). In the Netherlands several studies concerning Collaborative Care in primary care showed positive results (Ijff et al, 2007; van Orden et al, 2009; van der Feltz-Cornelis, 2009; Huijbregts et al, 2012; Vlasveld et al, 2012).

Table 1: Core elements of Collaborative Care models.

Element	
<i>Self-management support</i>	<ul style="list-style-type: none"> <li>• <i>Use of effective self-management support strategies that include assessment, goal setting, action planning, problem solving, evaluation of collaboration and follow-up</i></li> <li>• <i>Organise resources to provide support</i></li> </ul>
<i>Decision support</i>	<ul style="list-style-type: none"> <li>• <i>Embed evidence-based guidelines into daily clinical practice</i></li> <li>• <i>Integrate specialist expertise and primary care</i></li> <li>• <i>Use proven provider education methods</i></li> <li>• <i>Share guidelines and information with patients</i></li> </ul>
<i>Practice redesign</i>	<ul style="list-style-type: none"> <li>• <i>Define roles and distribute tasks among team members</i></li> <li>• <i>Involve informal carers</i></li> <li>• <i>Use planned interactions to support evidence-based care</i></li> <li>• <i>Provide clinical case management services for high risk patients</i></li> <li>• <i>Ensure regular follow-up</i></li> </ul>
<i>Clinical information systems</i>	<ul style="list-style-type: none"> <li>• <i>Provide reminders for providers and patients</i></li> <li>• <i>Facilitate individual patient care planning</i></li> <li>• <i>Track patient outcomes</i></li> <li>• <i>Share information with providers and patients</i></li> <li>• <i>Monitor performance of team and system</i></li> </ul>
<i>Health care organization</i>	<ul style="list-style-type: none"> <li>• <i>Visibly support improvement at all levels, starting with senior leaders</i></li> <li>• <i>Promote effective improvement strategies aimed at comprehensive system change</i></li> <li>• <i>Provide incentives based on quality of care</i></li> <li>• <i>Develop agreements for care coordination</i></li> </ul>
<i>Community linkages</i>	<ul style="list-style-type: none"> <li>• <i>Encourage patients to participate in effective programs</i></li> <li>• <i>Form partnerships with community organizations to support or develop programs</i></li> <li>• <i>Advocate for policies to improve care</i></li> </ul>

## Aims of this thesis

We have noted a lack of evidence based treatment models available for patients with severe personality disorders, in particular for patients who are currently treated in community mental health centres. We hypothesize that a Collaborative Care Program with its principles of shared decision making, establishing collaborative relationships with all partners involved, and enhancing self management and problem solving skills, would be beneficial to this subgroup of patients. This hypothesis is supported by the following arguments: 1) the combination of organizational aspects to optimize coordination and continuity of care on the one hand, and the execution of evidence based interventions on the other hand does justice to the chronic complex conditions of our target population; 2) potential miscommunication and stagnating treatment processes due to conflicting priorities may be resolved by structured needs assessment and shared decision making followed by patient-centred treatment; 3) ambivalent care seeking may be resolved by establishing clear collaboration agreements and adequate coordination of care with all partners involved; 4) coping with multiple social and interpersonal problems requires the promotion of self management and problem solving skills as well as an adequate organization and coordination of care with stake holders; 5) demoralization and adverse outcomes of treatment may be resolved by a realistic perspective on hope and recovery, increased goal orientation and close monitoring of treatment outcomes. Moreover, we expect that the Collaborative Care Program might provide a necessary structure to nurses in the treatment of these patients.

Accordingly, in order to optimize treatment for this vulnerable patient group and to support nurses in the difficult task to take care of these patients, we developed a Collaborative Care Program (CCP), managed by (community) mental health nurses. Next, this program was to be tested on feasibility and preliminary outcomes by means of a comparative multiple case study. The following research objectives were formulated:

1. To develop a Collaborative Care Program for patients with a severe borderline or NOS personality disorder, adjusted to the specific features, problems and needs of the target population;
2. To describe the processes of application of the CCP for patients with severe borderline or NOS personality disorder in comparison with Care as Usual (CAU);
3. To examine the preliminary results of the CCP in comparison with CAU;
4. To explain which characteristics of the CCP are indicative for the occurrence of positive or negative outcomes compared to CAU;
5. To describe factors which hamper or foster the execution of the CCP;
6. To elucidate possible consequences for the nursing profession regarding the application of a CCP in patients with severe personality disorders.

In addition to this main research project, we performed two epidemiological studies regarding suicidal behaviour, as one of the most urgent and challenging subjects in clinical practice and especially in patients with severe personality disorders. For example, worldwide the lifetime prevalence of suicide attempts is estimated at 4.6% (Kessler et al, 2005;Nock et al, 2008). Each year 94.000 people conduct a suicide attempt in the Netherlands, of which 14.000 need medical treatment from emergency centres (Ten Have et al, 2009). In persons who need medical treatment after a suicide attempt, those with personality disorders are highly represented (Cailhol et al, 2008;Soeteman et al, 2008a).

For these epidemiological studies we used data of the Netherlands Study of Depression and Anxiety (NESDA). The NESDA study was designed as an ongoing longitudinal cohort study, to investigate the long-term course of depression and anxiety disorders (Penninx et al, 2008). Anxiety and depression are generally found to be the most prevalent mental disorders worldwide, with a life time prevalence of approximately 20% (Kessler et al, 2009;de Graaf et al, 2012). Moreover, several studies reveal that the presence of anxiety and depressive disorder increases the risk of suicide attempts and completed suicide (Angst et al, 1999;Sareen et al, 2005;Ten Have et al, 2009). With these two epidemiological studies we aim to contribute to the understanding of borderline characteristics of suicidal behaviour. The clinical relevance of improving our understanding of suicidal behaviour and borderline characteristics by studying patients with depressive and anxiety disorders seems evident, as this represents the best known and most accessible risk group for suicide.

## **Outline of this thesis**

In the following we will briefly introduce each chapter in this thesis:

### **Chapter 1 and 2**

In line with our first research objective, Chapter 1 describes the study protocol of the comparative multiple case study investigating the feasibility and outcomes of the Collaborative Care program for patients with severe personality disorders. Chapter 2 elucidates the content of the CCP in more detail. It clarifies and substantiates the adjustments made to previous CC models in order to make it feasible for our target population.

### **Chapter 3**

Concerning the research objectives 2 to 4, the feasibility and preliminary results of this CCP are presented in chapter 3. The processes of application of the CCP in comparison with Care as Usual (CAU) are described. Subsequently, the preliminary outcomes of the CCP in comparison with CAU are presented. Finally, characteristics of the CCP determining positive or negative outcomes are identified.

### **Chapter 4**

Chapter 4 concerns the research objectives 5 and 6. It elaborates on aspects regarding the application of the CCP. Implications for clinical practice and the nursing profession are discussed. Lastly, it offers recommendations for adapting the CCP to increase effectiveness.

### **Chapter 5 and 6**

These chapters present results of the two epidemiological studies based on the NESDA data regarding patients with depression or anxiety.

#### ***Chapter 5***

As we have seen, conflicting priorities in perceived needs and, subsequently, in treatment goals are common in our target population. While it is known that health care is more likely to be effective if it meets the perceived needs of patients. To investigate possible gaps between perceived needs for care and delivery of mental health care we formulated two research objectives. First, we described the perceived needs of care and health-care utilization of persons with and without suicidal ideation. Second, we examined whether differences in perceived needs and health-care utilization between persons with and without suicidal ideation were associated with the severity of the depression or anxiety.

#### ***Chapter 6***

While the focus of chapter 5 was on suicidal ideation, in chapter 6 our attention narrows to the population of recurrent suicide attempters. In patients with depressive and anxiety disorders the presence of a comorbid borderline personality disorder is associated with an increase of suicidal behaviours. The aim of this study was to examine the role of borderline personality traits on recurrent suicide attempts.

The last chapter summarizes and discusses the main findings of all studies included in this thesis.



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