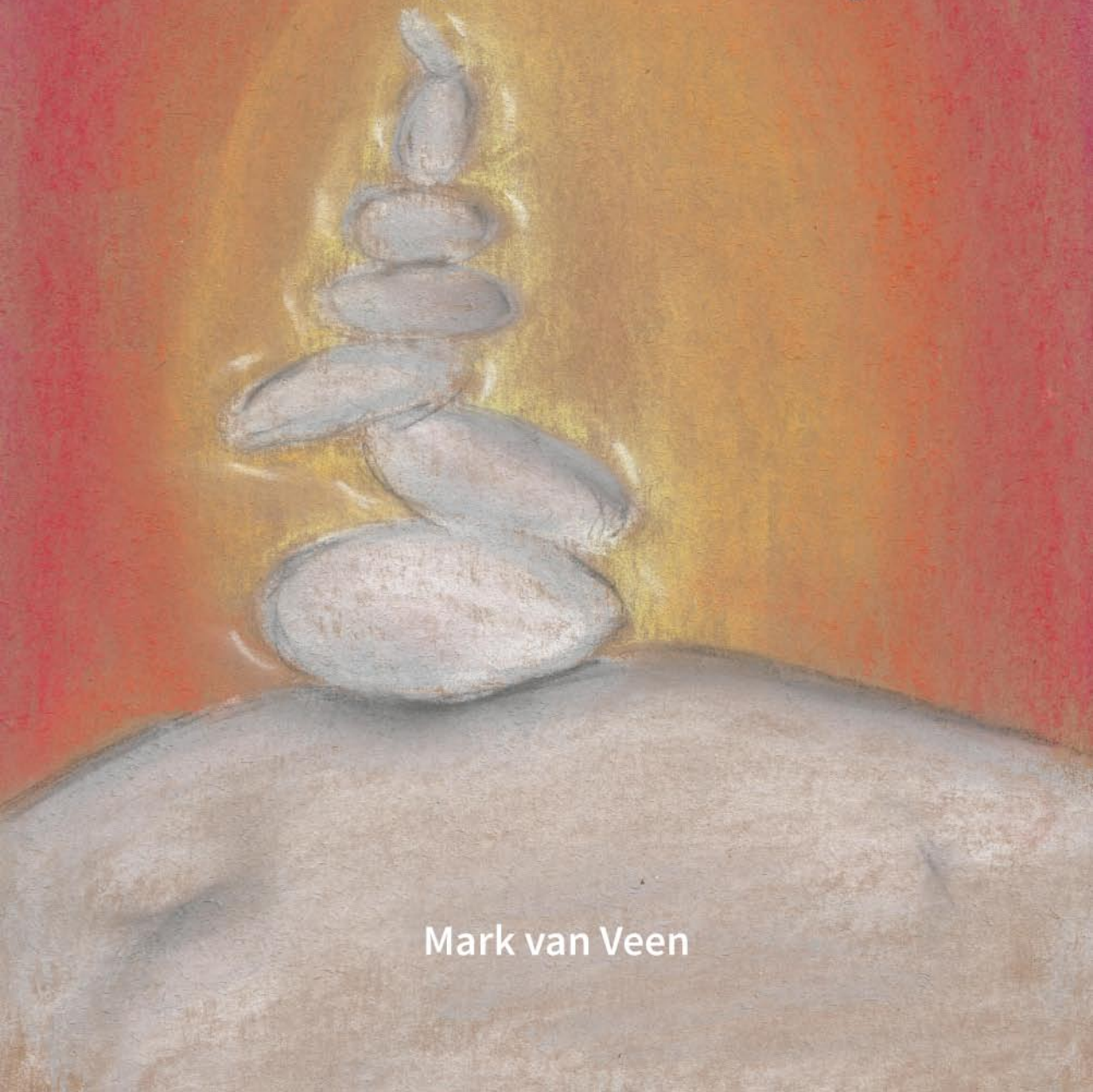
A balancing act

Caring for 'difficult' patients in community mental health nursing



Mark van Veen

Voor
Mijn prachtige zoons
Jasper, Douwe en Onno

"The very relationship with the Other is the relationship with the future"

Emmanuel Levinas

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mental health nursing

Een evenwichtsoefening:

geven om ‘moeilijke’ patiënten in de sociaal psychiatrische
verpleegkunde

Met een samenvatting in het Nederlands

PROEFSCHRIFT

ter verkrijging van de graad van doctor
aan de Universiteit voor Humanistiek te Utrecht
op gezag van de Rector Magnificus prof. dr. Joke van Saane
ingevolge het besluit van het College voor Promoties,
in het openbaar te verdedigen op 13 februari, om 10 uur ’s ochtends

door

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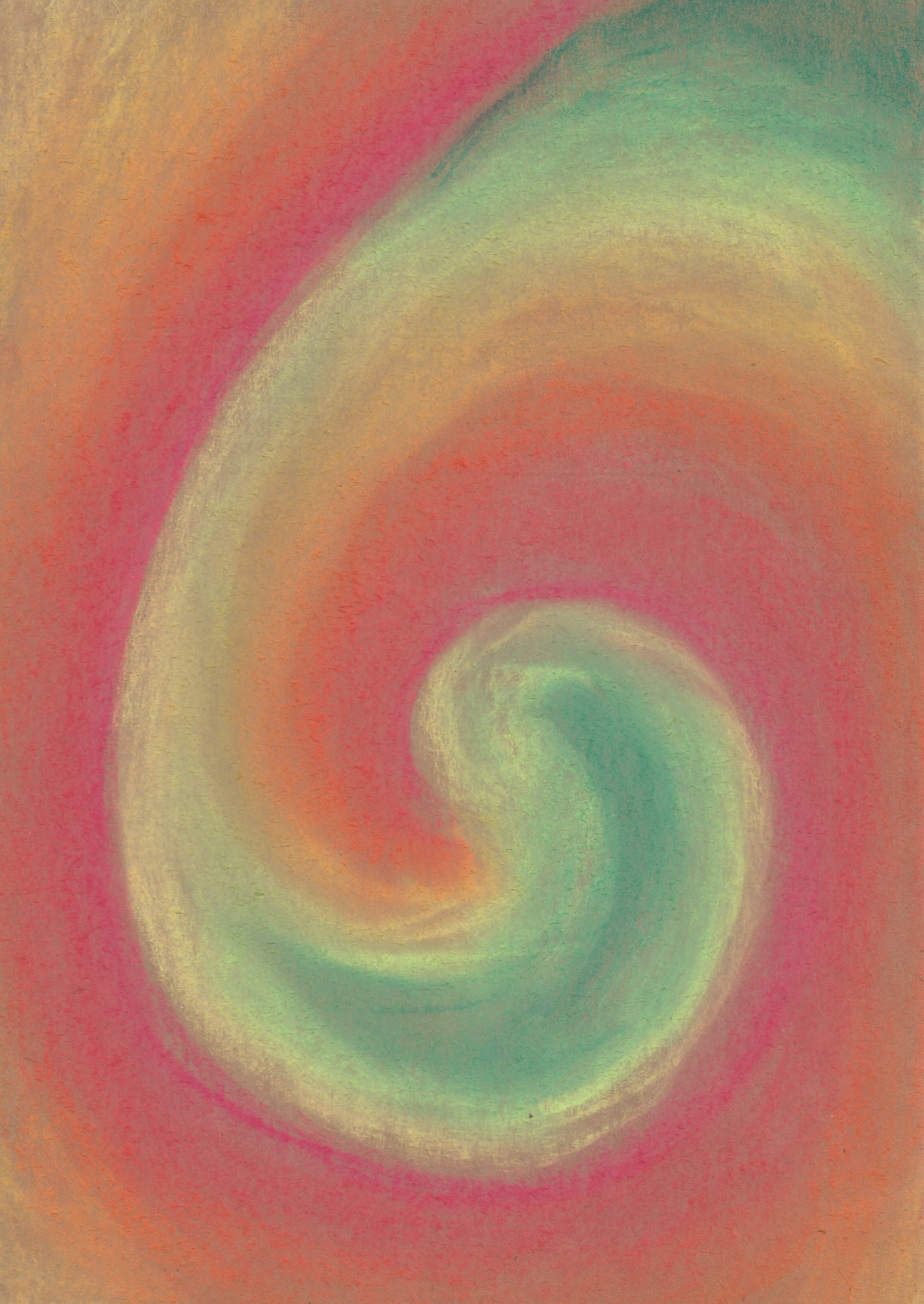

1

General introduction

General introduction

Non-psychotic severe mental illness

In the Netherlands (17,5 million inhabitants), as in several other Western countries, people with severe mental illness (SMI) are mostly treated by long-term community mental health care services. SMI is defined as the presence of [a] one or more mental disorders (including substance abuse and addiction), [b] ongoing poor social and personal functioning due to that mental disorder and [c] need of long-term treatment (>2 years or more)[1]. In 2018, approximately 215,000 people were diagnosed with SMI and approximately 106,000 (49%) of them had a non-psychotic SMI[2]. In 2018, the average healthcare costs for SMI-patients were 4,7 billion Euros, which is an average of 16,000 Euros per SMI-patient, per year. The costs can be up to 60,000 Euros, if a patient is admitted[2]. People may suffer from problems in interpersonal functioning, suicidality, and other things. This puts pressure on mental health services and challenges mental health professionals to deploy and improve their interpersonal treatment skills.

Suicidality

The WHO estimates that over 800,000 people die of suicide each year[3]. In the Netherlands, the current suicide rate is eleven per 100,000 inhabitants. In 2021, 1,859 Dutch inhabitants died by suicide, from 2013 the number of suicides per year has been fairly stable[4]. Suicidal behaviours include attempted suicides (e.g., by taking an overdose of pills), suicidal ideations (considering suicide and thinking about it), but also deliberate self-harm. There are many underlying factors for suicide and suicidal behaviours.

Mental health disorders (e.g., mood disorders, personality disorders and substance abuse) represent important risk factors for suicide[5]. About 40% of suicide attempters have not had any form of mental health services in the year previous to their suicide attempt and 33% has not had any previous psychiatric care at all[6].

Personality disorders in non-psychotic SMI-patients are associated with reduced life expectancy[7] and high health care costs[8]. Especially patients with a borderline personality disorder, who are characterized by impulsivity, emotional and relational instability and suicidal behaviour are known to have a very high time risk for suicide, with a standardized mortality rate up to 45 times higher than in the general population[9,10].

Nursing care in the Netherlands

In the Netherlands, over 375,000 health professionals work in some form of healthcare. Over 210,000 (60%) of them are working as a registered nurse[11]. The vast majority of these nurses is working in general health services, whereas about 11% of them are working in mental health services[12]. Mental health nurses are the largest occupational group in mental health services, 30% of the total group of mental health professionals. There are an estimated 3,000 Community Mental Health nurses (CMH nurses) working in the Netherlands. About 45% of them are members of the professional association of CMH nurses[13].

CMH nurses usually work in outpatient mental health care and offer their treatment within a mental health institute or at patients' homes. There are also CMH nurses working in a General Practice. These nurses mostly offer short-term treatment to patients with mild psychiatric disorders, e.g., panic disorders or anxiety disorders. If problems turn out to be more persistent or longer lasting, patients are usually referred to specialized mental health services. They provide inpatient and outpatient treatment to SMI-patients. Nowadays, however, there also exist more smaller-scale mental health care institutions that offer outpatient treatment to SMI-patients. There are, however, some disadvantages: they do not offer 24-hour care (outside office hours), no inpatient care and no involuntary treatment that non-psychotic SMI-patients sometimes need. As a result, these patients are dependent on the help of other mental health services who offer 24-hour care. CMH nurses who work in specialized mental health services usually work in multidisciplinary teams, including psychiatrists, psychologists, other therapists, social workers, and peer support workers. Psychiatrists and psychologists generally work according to treatment guidelines and according to the standards of their profession.

CMH nurses play a significant role in community mental health care in the Netherlands. They offer specific therapeutic interventions to help patients with their interpersonal or social issues, e.g.: education and monitoring, societal participation (e.g., work education, daily activities), crisis management, home visits, family interventions and case management. They often have specialized knowledge of the regional "social map". An important focus is the involvement of relatives or other agencies (e.g., general practitioners, sheltered care professionals, salvation army workers or police). CMH nursesare an integral part of community mental health

teams. Facilitating groups such as therapeutic groups, psycho education groups o or family groups is also an important task of CMH nurses.

CMH nurses usually spend a lot of time with their patients in mental health care, due to treatment relationships that can last for many years, home visits and involvement in life events and crises. Studies about the impact on clinical outcomes in SMI-patients are, however, scarce. Although the value of CMH nurses is widely recognised, little is known about the effectiveness of their treatment in SMI-patients. One study showed that assertive outreach teams were associated with reducing hospital admissions for people with psychosis[14] but did not specify any particular contributions by CMH nurses. Two systematic reviews were found on the effectiveness of CMH nurses. One is more than 25 years old, included 11 trials and found no indications of effectiveness[15]. The other is more recent and did not find sufficient evidence that CMH nursing reduced the risk of psychiatric admission (based on two studies)[16]. In their seminal overview on community mental health care, Thornicroft, Deb and Henderson (2016) recommend that community mental health care for SMI-patients should focus on the patient's goals and strengths, on emphasizing recovery and on supporting peer support and network[17].

Although SMI has a fairly low prevalence of about 3-4%, the impact of SMI on patients, their relatives and societies is substantial[18]. A recent systematic review by Hartley and colleagues showed that a good therapeutic relationship in mental health care is important for positive patient outcomes, yet methods to develop and maintain this relationship are poor. However, their systematic review is about relationships in general and not about SMI-patients specifically[19]. Also in the care for patients with non-psychotic SMI (e.g. personality disorder and substance abuse disorder or a combination) the effectiveness of interventions by CMH nurses, and the quality of the relationship, have not been described systematically[20].

Suicidality and perceived difficulty

Patients at high risk of suicide are usually assessed by suicide risk assessment tools (e.g., mostly interview strategies or occasionally suicidality assessment scales), as part of the clinical interview. However, there is no golden standard to do so. There is evidence that these tools may not be sufficiently accurate to determine the risk of suicide of patients, or to predict future suicidal behaviour and suicide[21], particularly those who are treated in community mental health services[22]. It is unknown to what

extent suicidality determines whether patients are really perceived as difficult by their CMH nurses, or to what extent suicidality determines whether patients who are perceived as difficult, are admitted to a psychiatric hospital.

Therapeutic alliance

Interaction with SMI-patients is often challenging due to the presence of severe mental disorders and generally poor social functioning. CMH nurses may experience a lack of progress in treatment, which likely results into feelings of failure or emotional overload. CMH nurses are often confronted with patients who are having suicidal thoughts or showing unpredictable suicidal behaviour, which puts the interpersonal relationship under pressure. Patients who frequently get into psychiatric crisis may subsequently ask for psychiatric admission, by which they implicitly indicate that their outpatient treatment is not sufficient or their CMH nurse not capable[23]. This may lead to feelings of incompetence for the CMH nurse, negative prejudices, and even avoidance of direct communication with their patients.

Aforementioned problems are more common in treating non-psychotic SMI-patients, than for example, psychotic SMI-patients, who require a different approach. Often CMH nurses tend to perceive non-psychotic SMI-patients as difficult. As mentioned before, there are no known effective interventions developed for CMH nurses treating non-psychotic SMI-patients. This absence of evidence-based interventions may lead to mutual frustration, high care use or inappropriate care use and therefore high care expenses[24].

Interpersonal Community Psychiatric Treatment

For this group of patients as mentioned above, the current community psychiatric treatment practices are hardly described and effectiveness of care is unknown[25].
Therefore, Interpersonal Community Psychiatric Treatment (ICPT) was developed, providing CMH nurses tools to offer a more structured, goal-setting approach, with special attention for the interpersonal relationship. ICPT uses a general treatment frame including: (a) a clear session structure (mutual agenda setting and session evaluation using an established instrument, the Sessions Rating Scale (SRS)[26], (b) a 3-stage model (in line with the patient's level of cooperation and acceptance of help, comprising of three stages: (b1) optimization of the therapeutic alliance, (b2) clarification of, and agreement on goals and tasks, and (b3): improvement of mental and social functioning), (c) a therapeutic method/style appropriate to

the stage where the patient is in, (d) constant monitoring of the interpersonal contact between patient and professional, and (e) support of mental health care professionals through regular supervision.[27]

The findings of the current series of studies contribute to themes that are relevant in the so called 'Recovery movement' in contemporary psychiatry[28]. A crucial topic in this Recovery approach pertains to the theme of personal recovery (next to symptom recovery and functional recovery). Personal recovery is determined by issues such as identity, participation in mental health care (e.g., peer support work), and meaning in life. In the literature of non-psychotic SMI patients, these recovery themes are hardly addressed.

Ethical issues in nursing practice

As mentioned before, CMH nurses play an important role in suicide assessment and prevention[29,30]. Recent studies emphasize the emotional and ethical challenges in caring for suicidal patients[31]. Evidence-based guidelines in managing patients with chronical suicidality are missed, just as specific training[32]. These trainings should include knowledge, understanding, attitudes and caring for suicidal patients to improve quality of life of these patients[33–35]. A literature review on the ethical challenges of suicide care showed three broad categories of ethical issues: (1) ethical issues arising from discrete decisions and acute care settings, (2) ethical issues arising from therapeutic relationships and chronic care, and (3) organizational factors and their effect on care[32]. Across these categories, the authors distinguish the following everyday issues: involuntary hospitalization, therapeutic relationships between mental health professionals and their patients and issues regarding training to treat suicidal patients[32]. Feelings of inadequacy, being squeezed between ideals and clinical reality, and the feeling of failing to fulfil the patient's needs create moral distress. Moral distress causes bad conscience and feelings of guilt, frustration, anger, sadness, inadequacy, emotional fatigue, emotional numbness and being fragmented. Other mental health professionals feel emotionally flat, cold, and empty, or develop high blood pressure and sleeping problems. Even so, some nurses find that moral distress sharpens their ethical awareness. It is particularly problematic if moral distress results in nurses distancing and disconnecting themselves from the patients and their inner selves[36].

This thesis focuses on the exploration, evaluation and further understanding of novel and methodical ways to enhance long-term CMH treatment for non-psychotic SMI-patients, who are perceived as difficult by their CMH nurses.

Aims and outline of the thesis

In this introductory chapter, there are five issues in mental health practice that form the background of this research. The thesis addresses five general research questions:

1. What is the effectiveness and cost-effectiveness of ICPT on quality of life?
2. How is the therapeutic alliance shaped by ICPT-elements, and how does that alliance affects the self-determination of patients with a severe, long-term, non-psychotic disorder?
3. What are the psychometric properties of the Dutch version of the Nurses' Global Assessment of Suicide Risk (NGASR)?
4. What is the association of being diagnosed with a personality disorder and psychiatric admission in crisis situations?
5. What is the association between suicidality and clinician-perceived difficulty?

These main themes will be studied in the following chapters:

The Randomized Controlled Trial (RCT) (protocol in chapter 2 and intervention in chapter 3) describes the evaluation of the effectiveness and cost effectiveness of Interpersonal Community Psychiatric Treatment (ICPT) for non-psychotic SMI-patients. First, our main hypothesis is that ICPT is more effective in improving patients' quality of life and social networks than Care as Usual (CAU). Second, we hypothesize that ICPT is more effective in preventing or decreasing professionals' perception of patients as 'difficult'. This may result in higher quality of care than CAU. Third, we hypothesize that ICPT is more effective in discharging patients to a lower level of care. Fourth, we hypothesize that ICPT is more cost-effective in reaching clinical goals than CAU.

In chapter 4, employing a qualitative approach, we aim to get insight into how the ICPT-elements influence the therapeutic alliance and how this therapeutic alliance affects the self-determination of non-psychotic SMI-patients.

In a psychometric study (described in chapter 5) of acceptability, reliability, feasibility, and predictive validity over time, we try to establish the psychometric properties of the Dutch version of the NGASR, in estimating the severity of suicide risk assessed by CMH nurses.

In chapter 6, we try to gain insight in the association between the level of suicide risk, a diagnosis of a personality disorder, and the risk of voluntary or involuntary admission by the Psychiatric Emergency Services. We assume that suicidal patients with a personality disorder, have a lower probability of psychiatric hospital admission.

Chapter 7, we try to assess the association between professional perceived difficulty and grading of suicidality. We assumed that a higher grading of suicidality is associated with higher levels of professional perceived difficulty.

The General Discussion in Chapter 8 will present the main conclusions of this dissertation. The recovery approach and ethical issues offer frameworks for further consideration of the clinical and social relevance of the present series of studies.

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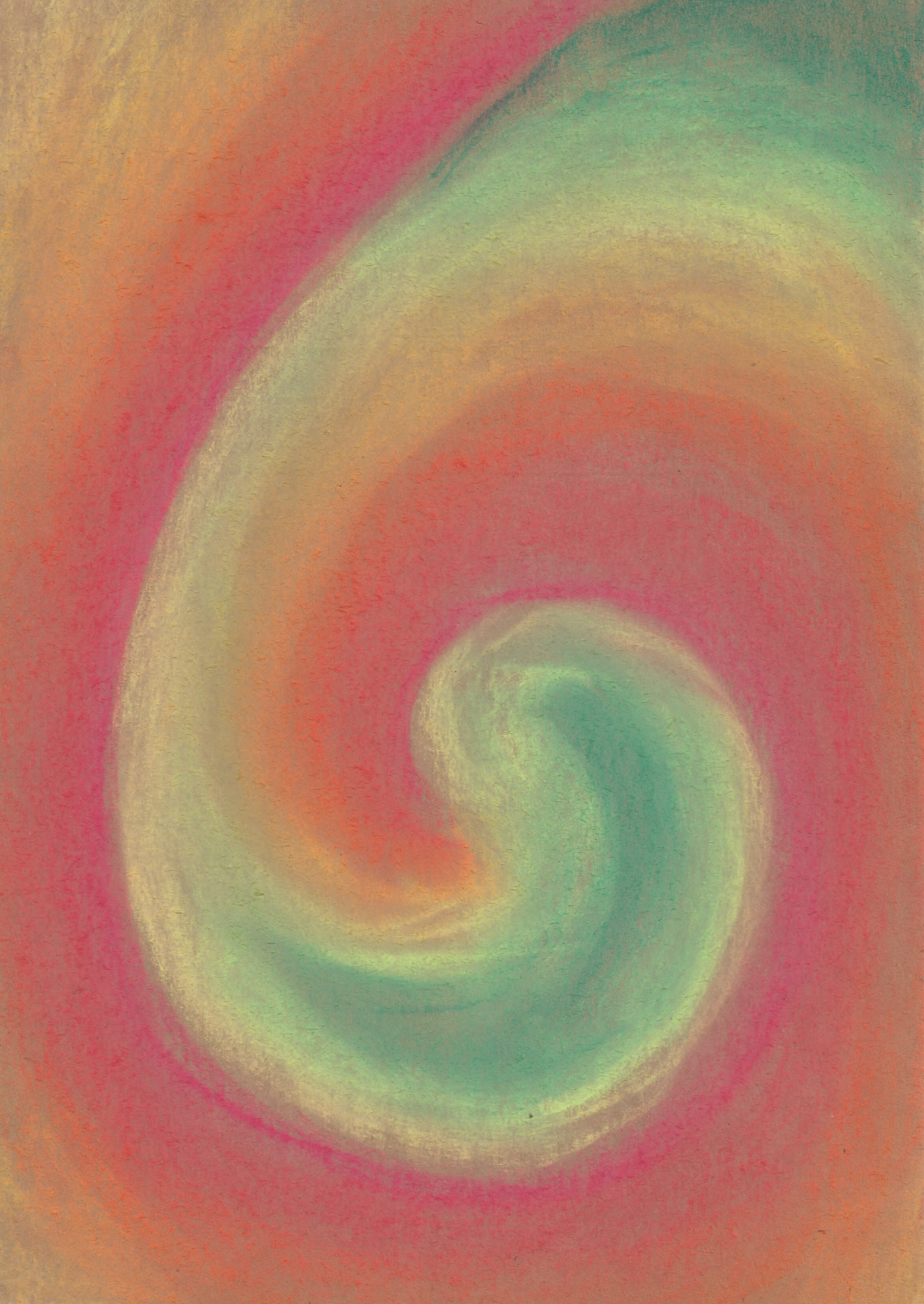

2

Effectiveness of Interpersonal Community Psychiatric Treatment (ICPT) for people with long-term severe non-psychotic Mental disorders: protocol of a multi-centre randomized controlled trial

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(2015)

Abstract

Background: This study aims for health gain and cost reduction in the care for people with long-term non-psychotic psychiatric disorders. Present care for this population has a limited evidence base, is often open ended, little effective, and expensive. Recent epidemiological data shows that 43.5% of the Dutch are affected by mental illness during their life. About 80% of all patients receiving mental health services (MHS) have one or more non-psychotic disorders. Particularly for this group, long-term treatment and care is poorly developed. Care As Usual (CAU) currently is a form of low-structured treatment/care. Interpersonal Community Psychiatric Treatment (ICPT) is a structured treatment for people with long-term, non-psychotic disorders, developed together with patients, professionals, and experts. ICPT uses a number of evidence-based techniques and was positively evaluated in a controlled pilot study.

Methods/Design: Multi-centre cluster-randomized clinical trial: 36 professionals will be randomly allocated to either ICPT or CAU for an intervention period of 12 months, and a follow-up of 6 months. 180 Patients between 18–65 years of age will be included, who have been diagnosed with a non-psychotic psychiatric disorder (depressive, anxiety, personality or substance abuse disorder), have long-term (>2 years) or high care use (>1 outpatient contacts per week or >2 crisis contacts per year or >1 inpatient admission per year), and who receive treatment in a specialized mental health care setting. The primary outcome variable is quality of life; secondary outcomes are costs, recovery, general mental health, therapeutic alliance, professional-perceived difficulty of patient, care needs and social contacts.

Discussion: No RCT, nor cost-effectiveness study, has been conducted on ICPT so far. The empirical base for current CAU is weak, if not absent. This study will fill this void, and generate data needed to improve daily mental health care.
Trial registration: Netherlands Trial Register (NTR): 3988. Registered 13th of May 2013.

Background

In the Netherlands, as in many other developed countries, many people suffer from psychiatric disorders during their life. Recent epidemiological data show that 43.5% of the Dutch are affected by some form of mental illness during their life [1]. Depression (20.1%), anxiety (19.6%), and substance abuse (19.1%) have the highest lifetime prevalence: the first two appear in the Dutch top-4 of diseases with the highest disease burden [2]. Comorbidity with personality disorders, which have a prevalence of 9.1% in western society [3], results in poorer social functioning and limited recovery.

About 80% of all patients receiving mental health services (MHS) have one or more of the aforementioned non-psychotic disorders [4]. Between 16-18% of these patients do not respond well to short-term treatment (i.e. <15 contacts or <1 year treatment) and end up in long-term care [5,6]. Long-term treatment and care are poorly developed: 50-70% of these patients receive a form of long-term supportive treatment/counselling/ care, which we refer to as care as usual (CAU). CAU currently is a low-structured treatment/care: biweekly contacts with a nurse, social worker or occupational therapist, in which daily issues are discussed [7]. The other 30-50% of the patients receive long-term psychotherapy – of which many are eventually referred to long-term CAU. Thus, often when short-term treatment has proven ineffective, long-term care with a poor focus is the only alternative. Specific treatments for subgroups, e.g., patients with chronic depression, exist [8] but are not widely implemented. As a result, large numbers of people yearly receive a non-descript form of long-term care. The lack of direction in CAU results in: 1) very long-term care (e.g., up to 10 years [9]) and 2) high care use. Several studies show that 10-30% of chronic patients use 50-80% of mental health care's resources [10]. These resources include (intensive) ambulatory care, as well as services such as crisis intervention outside office hours, ambulance transport, and admissions to hospitals, and ER/ casualty-departments. Long-term and intensive care use is highly correlated with the perceived patient 'difficulty' [11,12]. When a patient is labelled 'difficult' quality of care often becomes low [13]. For patients this results in lower quality of life, more symptoms, and even higher care use [14].

For those patients who receive CAU, we developed Interpersonal Community

Psychiatric Treatment (ICPT). Feasibility and preliminary effectiveness of ICPT were evaluated in a controlled pilot-study [9], in which ICPT was more successful than CAU on a number of outcome variables. Patients gained quality of life and social contacts and used fewer health care services. Professionals (e.g., community psychiatric nurses and nurse specialists) valued the therapeutic alliance more positively, and experienced both patients and patient care as less 'difficult'. ICPT is not yet standard care but is being used on a small scale. Given the positive outcomes in a group of patients with complex needs, ICPT seems a promising intervention. Yet data from RCTs on the (cost) effective- ness of ICPT is not available.

Target population

The intervention in this study aims at a broad group of patients in terms of psychiatric diagnosis (non-psychotic disorders in several combinations) and in terms of demo- graphic characteristics (although women, and persons with a lower socio-economic status are overrepresented), but a specific group in terms of care use (long-term and intensive). The severity of the disorder may account for the long duration of care, yet in psychiatric care people may also become accustomed to using services. Some studies highlight such iatrogenic dependency [15], and show very high service use of non-psychotic patients across health and social services [10]. We specifically aim at this group of patients, who have serious mental illnesses, but who may also have become accustomed to long term or high care use. These patients may be perceived as 'difficult' [16] and difficult-to-place, and be passed around by services [11]. They may get lost in the system, since they neither fit in long-term care programs (mostly aimed at patients with psychotic disorders), nor in short-term therapy (mostly aimed at patients with singular non-psychotic disorders, who respond well to medication and/or psychotherapy). In- stead of keeping on 'pampering and dithering' we offer this group a generic program that aims at improving quality of life while decreasing costs.

Research aims and hypotheses

This study aims at comparing the effectiveness and costs of ICPT in the treatment of people with long-term non- psychotic mental illness to CAU.

Based on a previous controlled pilot study of 36 patients [9], our main hypothesis is that ICPT is more effective in improving patients' quality of life and social networks than CAU. Further, we hypothesize that ICPT is more effective in preventing or decreasing professionals' perception of patients as 'difficult', resulting in higher quality of care than CAU and that ICPT is more effective in discharging patients to a lower level of care (i.e., general mental health care instead of specialized mental health care) and more cost-effective in reaching aforementioned clinical goals than CAU.

Methods/Design

Design

Multi-centre cluster-randomized clinical trial: participating professionals will be randomly allocated to either ICPT or CAU for an intervention period of 12 months, and a follow-up of 6 months (total 18 months). Participating patients will receive ICPT or CAU for 12 months. There is a measurement at baseline, an intermediate measurement (6 months after baseline), after the intervention period (12 months after baseline), and a follow- up measurement (6 months after end of intervention, 18 months after baseline).

Randomization

The professionals (clusters) will be randomized the intervention (ICPT) or the control group (CAU) using randomized stratification by an independent statistician. The allocation sequences will be generated with an automated algorithm by a statistician independent from the recruiter of the professionals using a random sequence generation.

Inclusion and exclusion criteria

Patients between 18–65 years of age with a presence of a non-psychotic psychiatric disorder such as depressive, anxiety and/or personality disorder and/or substance abuse and long-term treatment (>2 years) or high care use (>1 outpatient contact per week or >2 crisis contacts per year or >1 inpatient admission per year) in secondary mental health services will be included. Patients with a psychotic, bipolar I or cognitive disorder (e.g., dementia) and a lack of skill in understanding of, or communication in Dutch language are excluded.

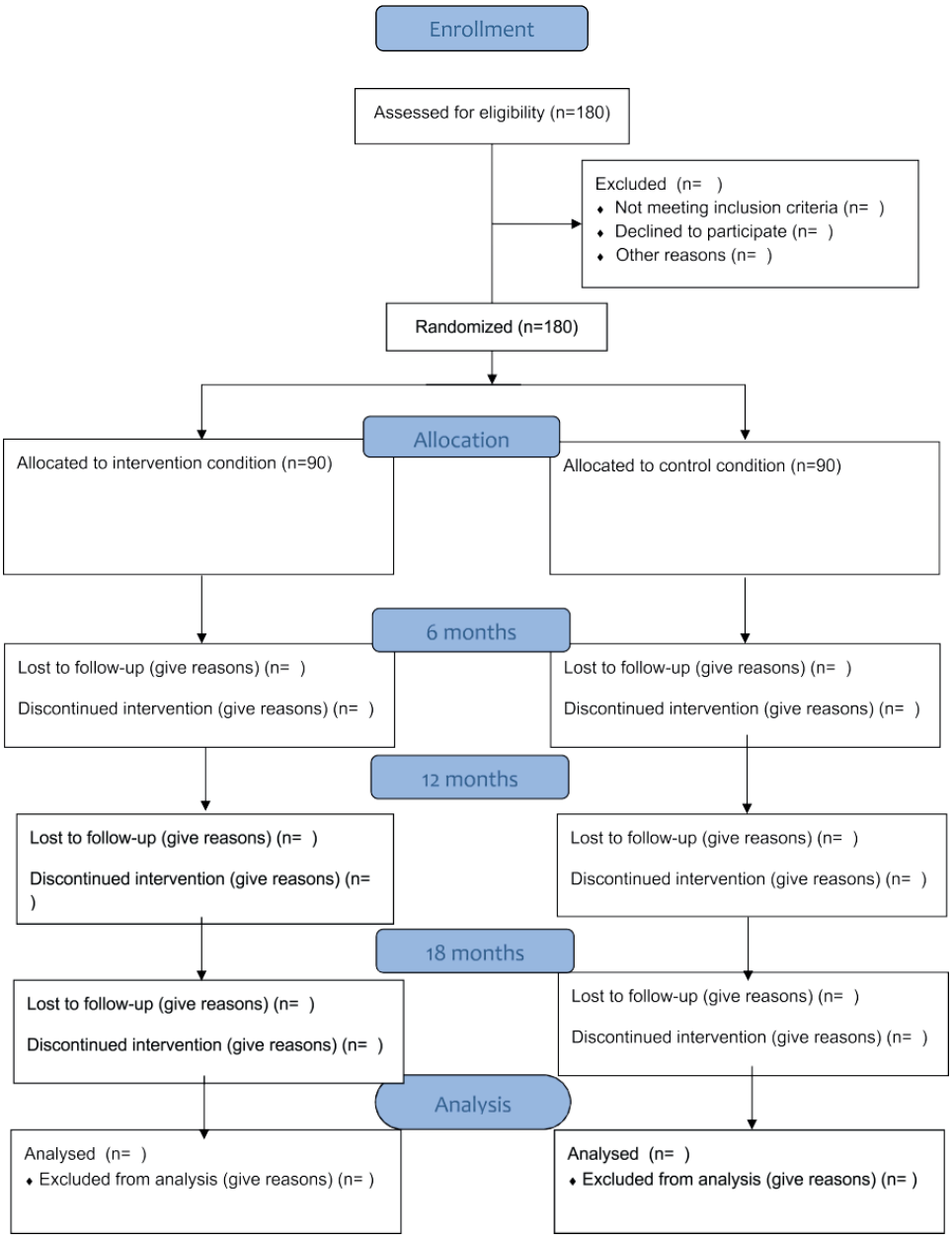

Figure 1: Participation Flow Chart

Professionals who have an individual caseload of > 5 patients with a non-psychotic disorder, who are willing to be randomized to either CAU or the experimental ICPT-condition and have not expressed intention to leave the present service between now and 12 months are included. Refer to Figure 1 Participant flowchart for details.

Sample size calculation

This study's sample size calculation is based on the primary outcome variable, quality of life as measured with the Manchester Short Assessment of Quality of Life (MANSA), for which we found an effect size of 0.3 in our pilot study [17]. In a patient group in which quality o f life is difficult to improve, an effect size of 0.3 signifies clinically meaningful progress. Furthermore we assumed a conservative Intra Cluster Correlation of 0.10 for clustering of patients, based on the scarce literature on the correlation between long-term psychiatric patients within one professional [17]. The correlation between baseline and follow-up measurement, also from our pilot study, was set at 0.5 and 0.8 for cluster and subject level, respectively. With an alpha of 0.05, and a power of 0.80,
36 clusters (professionals) of 5 participants (patients) each are required (total of 36 professionals and 180 patients needed for the analysis).

Ethics

A certified Medical Ethics Review Committee, The Clinical Research Centre Nijmegen (CRCN), in The Netherlands has approved this study, registered under NL44744.091.13. This ethical approval covers all sites of data collection.

Procedure

Three large mental health institutions participate in this study. Within these departments, professionals will be asked to participate in this study, and be randomized to either ICPT or CAU. Once a professional is included in the study, his or her patients meeting the inclusion criteria at patient level, will be informed about the study, and be invited to participate. This invitation letter (to which a brochure about the research is attached), will be signed by the professional, and sent by the department's management. Patients who express their willingness to participate may either contact their professional or the research team directly. The research team will then contact them by telephone or email, make an appointment for a face-to-face contact, and send formal information about

participating in the study by post. In this face-to-face meeting the researcher will explain the study verbally and obtain informed consent if the patient is indeed willing to participate.

Treatment integrity

Treatment integrity in the experimental condition will be monitored and discussed by means of supervision. Since there is no clear treatment guideline for CAU, treatment integrity will not be monitored in the control group. Randomly selected audiotapes of treatment sessions will be evaluated by independent raters (Master-level students familiar with ICPT) masked to treatment condition. They will assess whether the tape is CAU or ICPT, and to which extent ICPT-elements are indeed used. The ICPT-professionals assess the ICPT-form and the attached scoring form after each session [9].

Treatments

ICPT

Apart from various specific methods, the focus of ICPT very much lies on the participation of patients through attention for the interaction between patient, professional and social system. The match between patient and professional is highly important for the future course of the care process [17]. In ICPT, the patient is strongly encouraged to take responsibility for his or her recovery. Likewise, in the ICPT-training the professional is taught not to present him or herself as the all-knowing expert, but rather as a facilitator – yet within a clear frame and structure.

A number of stages were conceptualized in the intervention program, each fitting an important step in the theoretical model, resulting in three stages that fit the patient's level of acceptance of help and cooperation. Apart from these stages (described in detail below), we concluded that an intervention for this patient group program should focus on: (1) a clear generic treatment structure (to prevent uninformed and haphazard low-dosage help), (2) a phased model (which fits the patient's level of acceptance of help), (3) a therapeutic style that fits the phase the patient is in, (4) a routine monitoring of the interpersonal contact between patient and professional, and (5) support for team professionals [18].

I. Generic structure: Based on various evidence-based treatments of specific non-psychotic disorders [19,20], we introduced a fixed structure for each session, taking 45 minutes as the standard duration. The first 5 minutes are used by the professional and the patient to set a mutually agreed on agenda for the session. The next 5 minutes are used to look back from the current to the previous session. In the following 25–30 minutes the themes set on the agenda, are discussed, and summarized. The last 5 minutes are used to look back on the session and to fill out a report form (professional) and a feedback form (patient).

II. Stage model: In the stage model patients may move from the 1st stage (optimization of working alliance), through the 2nd stage (clarification of an agreement on goals and tasks) to the 3rd stage (improvement of psychiatric and social functioning). In order to optimize the patient-professional interaction across all stages, it is crucial for the professional to determine in which stage the treatment contact is located. The stage model helps professionals to structure their treatment, using different methods across different stages.

III. Therapeutic methods per stage: One of the crucial elements of ICPT, in order to prevent ineffective illness behaviour and professional behaviour, is the differentiation of therapeutic styles across treatment stages. This approach is a variation of, but consistent with, the trans-theoretical model of change [21] which differentiates people's readiness to change into various stages. Different methods (e.g., motivational interviewing) are used to prevent the usual mental health treatment 'script'. In this script, the professional is the one who looks for problems in the patient and suggests improvements of his or her behaviour, while the patient is a passive recipient of help. In the second stage of ICPT, motivational interviewing is used to do enable systematic goal setting. After an initial open question to focus the patient on the future, a widely used tool to assess care needs [22] is used, after which specific goals are jointly formulated. This careful process of mutual goal setting seeks to avoid common pitfalls: the patient feeling that treatment goals are forced upon him or her, and the professional feeling that urgent patient needs (e.g., financial problems) have not come under discussion. In the third stage of ICPT, three different goal-oriented methods are used to improve personal and social functioning. Practical case management, motivational interviewing and aspects of cognitive behaviour therapy may be used. This third stage of

ICPT, which may not be reached by all patients, aims to offer practical help after goal setting in stage two has been concluded.

IV. Application of feedback forms: In ICPT, both professional and patient fill out a form about the session they have just had. Both rate items on the Session Rating Scale [23], thereby informing one another on their (dis) content with the working alliance. In addition, professionals score in which stage of the treatment contact this session could be located, as well as which methods were used, if treatment goals were discussed, and a number of other elements, using the ICPT-form and scoring form after each session [9]. Patients, on the other hand, rate their own input in the session's content. By these means, both parties are delegated responsibility for the working alliance and their substantive input in the session.

V. Supervision: Every two weeks, a team-wise supervision takes place in which a treatment situation of two different professionals is jointly analysed. We use a brief version of a supervision protocol that has been developed and evaluated in Dutch long-term mental health care [24].

CAU

Care as usual (CAU) currently is a low-structured treatment/care: biweekly contacts with a nurse, social worker or occupational therapist, in which daily issues are dis- cussed [7]. This CAU lacks an empirical and theoretical base and may foster dependence and repeated crises through its ad-hoc character [25] and lack of clear aims [26]. Without a clear frame, this CAU turns into – politically incorrect – 'pampering and dithering, reinforcing patients' dependency and high care use [27]. The present CAU is offered by non-academically trained professionals (e.g., nurses and social workers) who have always relied on practical, day-to-day interventions in acute circumstances (e.g., locked units or psychosocial crises).

Although these generalizing statements do not apply to all of these professionals, most – if not all – of them feel that they lack a solid theoretical base from which to understand the disorder, its long (er) term character, and possible treatment.

Participating professionals in the experimental condition will receive a 4-day training in ICPT over 4 weeks' time. The ICPT-training has been piloted twice before, and consists of the following elements: (1) theoretical overview (4 hours), (2) generic ICPT-skills, e.g. agenda setting (4 hours), (3) relationship

management skills (8 hours), (3) motivational interviewing and goal setting skills (8 hours), (4) case-management skills and behavioural analysis skills (4 hours) and skills to discharge patients to a lower form of care. It combines lectures, group discussions, one-on-one and group-wise role- playing, homework assignments, and self-study of provided literature. Substantial effort is put in tailoring the training program to the needs and competencies of the participants. Some of the ICPT-methods for patients with non-psychotic disorders are aimed at Master-level professionals (e.g., Cognitive Behavioural Therapy), whereas the participating professionals – the key professionals of patients and also those intended to carry out ICPT – usually have Bachelor-level qualifications. Tailoring will be done by inviting specialists with extensive experience with both the target group of professionals, and the method to be taught. In following group-wise supervision sessions ICPT-skills will be practiced, and cases will be discussed.

Measurements

Demographic variables

At baseline, participants complete questions concerning living situation, marital status, education, income and working situation.

Baseline

Table 1 schematically shows the instruments used in the study. A structured diagnostic interview about the patient's diagnosis is the first step in the baseline assessment. Axis I psychiatric disorders will be assessed by use of the electronic version of the MINI Plus (Mini Neuro- psychiatric Interview) [28]. The MINI Plus is the briefest full psychiatric interview available and takes, dependent on the number of disorders, between 15 and 45 minutes. A 10-item screening instrument will be used to assess whether a full structured diagnostic interview for Axis II psychiatric disorders is required. The Standardised Assessment of Personality – Abbreviated Scale - Self Report (SAPAS-SR) has been found one of the briefest, most sensitive, and specific screening instruments for Axis II disorders [29]. We expect about 50% positive screens in this secondary care sample. A positive screen will be followed by the Structured Interview for DSM-IV (SIDP-IV) [30]. The SIDP-IV is a widely used semi- structured interview with good psychometric properties.

All outcome measures (MANSA; HONOS; IMR; EQ-5D; OQ45; TiC-P; STAR; DDPRQ; CANSAS; SNM) will be assessed at baseline, and at 6 months, 12 months and 18 months. Referral to lower intensive services will be assessed at the 12-month and 18-month measurement.

Primary outcome

Quality of life

Quality of life is measured on participant level with the MANSA [31]. The MANSA (Manchester Short Assessment of Quality of Life) is the single most used quality of life instrument for patients with severe mental illness. It is a 16-item patient-rated instrument with good psychometric properties.

Secondary outcomes

Quality of life

The EQ-5D (EuroQol 5D) [32] is a patient-rated measurement of health-related quality of life, providing a gen- eric measure of health for clinical and economic appraisal. It is applicable to a wide range of health conditions and treatments and provides a single index value for health status that can be used in the clinical and economic evaluation of health care. It is a 5-item patient-rated instrument with good psychometric properties that allows the calculation of QALY's and DALY's.

Table 1: Measuring instruments

Instrument	Measuring moments			
	T0(baseline)	**T1(6 months)**	**T2(12 months)**	**T3(18 months)**
Filled in by researcher				
Demographic questionnaire	X	X	X	X
MINI Plus	X			
SAPAS-SR	X			
SIDP-IV (when SAPAS-SR positive)	X			
CANSAS (Patient)	X	X	X	X
SNM	X	X	X	X
Filled in by patient				
OQ-45.2	X	X	X	X
MANSA	X	X	X	X
IMR (Patient)	X	X	X	X
EQ-5D	X	X	X	X
TiC-P	X	X	X	X
STAR (Patient)	X	X	X	X
Filled in by professional				
DDPRQ	X	X	X	X
HONOS	X	X	X	X
CANSAS (Professional)	X	X	X	X
IMR (professional)	X	X	X	X
STAR (professional)	X	X	X	X

General mental health

The HONOS (Health of the Nation Outcome Scale) is a 12-item professional-rated instrument to assess general mental health in predominantly SMI-patients [33] with good psychometric properties and a mean duration of 10 minutes [34].

Treatment

The OQ-45 (Outcome Questionnaire) a 45-item instrument which assesses treatment outcome, mostly in terms of symptom reduction [35] with very good psychometric properties and a mean duration of 10 minutes [36].

Recovery

The Illness Management and Recovery (IMR) [37] scale was created to measure recovery outcomes produced by the IMR program. However, many other mental health care programs are now designed to impact recovery- oriented outcomes, and the IMR has been identified as a potentially valuable measure of recovery-oriented mental health outcomes in general. Psychometric properties were moderate, and the scale has a mean duration of 10 minutes.

Costs

The Tic-P (Trimbos/iMTA questionnaire for Costs associated with Psychiatric Illness) [38] measures direct costs of medical treatments such as the number of contacts with psychiatric services, the GP and multiple other care providers, psychometric properties are unknown and has a mean duration of 10 minutes.

Referral to lower intensive services/primary care

Through administrative records it will be assessed to which extent patients are referred to lower intensive services, most likely primary care.

Therapeutic relationship

The STAR (Scale To Assess the Therapeutic Relation- ship) [39] is a 12-item instrument that measures the quality of the therapeutic alliance between patients with severe mental illness and professionals. It is administered both by patients (STAR-P) and professionals (STAR-C) and has good psychometric properties.

The DDPRQ (Difficult Doctor Patient Relation Questionnaire) [40] is a 10-item instrument that assesses problems in the relationship between patient and professional and the perceived difficulty with very good psychometric properties.

Care needs

The CANSAS (Camberwell Assessment of Need Short Appraisal Schedule) [22] is the single most used care needs assessment instrument among people with severe mental illness. Both the patient's perception (through an interview by the researcher), and the professional's perception (self-rated) are assessed through a 22-item checklist that measures met, unmet, and total needs for care.

Social network

The Social Network Map (SNM) [41] is a researcher-assessed instrument using both a graphical (map) and textual (grid) instrument to assess the patient-perceived quantity and quality of his or her social network. The map is divided into sectors (household, other family, work/school, formal services, friends, neighbours, and clubs/organizations/church). The psychometric qualities of the instrument, as in all social network instruments, are acceptable.

Statistical analyses

The primary outcome will be analysed using a linear mixed model (multilevel) to account for the nesting of clients within professionals and for the correlation over time of repeated measurements within subjects. The effect of ICPT versus CAU will be adjusted for important client and professional characteristics (e.g., quality of life) by including the latter as fixed effects in the model. Similar mixed models will be used to analyse the continuous secondary outcomes. All analyses will be performed on an intention-to-treat basis.

Health economic evaluation

This study will investigate the potential efficiency of Interpersonal Community Psychiatric Treatment (ICPT) versus current long-term care (CAU) from a societal perspective. The economic evaluation will be based on the general principles of a cost-effectiveness analysis as described by Drummond et al. [42] and will be per- formed along-side the (cluster randomized) clinical trial. Outcome measures for the economic evaluation, considering the 18-months follow-up period, will be costs, quality of life and quality adjusted life years (QALYs). The cost analysis exists of three main parts.

First, on patient level, volumes of care will be measured prospectively using TiC-P (part I), administrative data. Cost items included are number of outpatient contacts, home visits, number, and length of hospitalizations, but also ER/ casualty department-visits, ambulance transportation, and justice department contacts. Productivity losses for patients (sick leave) will be estimated using TiC-P part II. The friction cost-method will be applied following the Dutch guidelines for cost analyses [43]. Also travel time to an outpatient clinic and related costs patients make, will be considered. Second, the cost analysis consists of determining the cost prices for each volume of consumption in order to use these for multi- plying the volumes registered for each participating patient.

The Dutch guidelines for cost analyses will be used [44]. For units of care/ resources where no guideline or standard prices are available real cost prices will be determined. Third, per arm (intervention and control) total costs will be determined using activity-based costing. The effect analysis adheres to the design of a randomized controlled trial and measures at baseline, and follow-ups at 6, 12 and 18 months. To measure the quality of life of patients a validated so-called health- related quality of life (HRQoL) instrument will be used, the EuroQol-5D (EQ-5D) [45].

The incremental cost-effectiveness ratio's (ICERs) 'cost per unit change on the MANSA' and 'cost per QALY gained' will be computed and uncertainty surrounding these ICERs will be determined using the bootstrap or Fieller method. Cost-effectiveness acceptability curves will be derived that are able to evaluate efficiency by using different thresholds (Willingness To Pay) for a unit change on the MANSA and a QALY gained. The impact of uncertainty surrounding deterministic parameters (for example prices) on the ICER will be explored using one- way sensitivity analyses on the range of extremes.

Discussion

No RCT, nor cost-effectiveness study, has been conducted on Interpersonal Community Psychiatric Treatment so far – only one, small pilot study, promising better outcomes than in usual care. The empirical base for current care as usual is small, if not absent. This study will fill this void and generate data that is needed to inform and hopefully improve daily mental health care. In summary, we assume that ICPT is more effective in improving patients' quality of life and social networks, preventing, or decreasing professionals' perception of patients as 'difficult', discharging patients to a lower level of care and being less costly in reaching these clinical goals than CAU. The patient group we focus on, receives long term care, and suffers from various non- psychotic psychiatric diagnoses. The strength of ICPT is its focus on this varied group of patients, for whom current care is unsatisfactory.

The rationale performing a cluster-randomized design is threefold. First: data from this trial will be clustered at multiple levels, due to three participating

institutions, various departments within these institutions, and various professionals (=cluster level) within these departments. Second: contamination of treatment methods is likely when professionals treat patients in both the experimental and control condition. Contamination is less likely in the current design since participating professionals have limited contact on treatments or methods with one another outside official treatment progress meetings – in which there is little time to dis- cuss treatment content. Therefore, randomization at the level of professionals is preferable. Third: refusal to be randomized is likely with this patient group. Many patients find it difficult to switch to another professional since they may have a long-term working alliance with their present professional. Randomization there- fore takes place on the professional level instead of on patient level.

It is expected that this study will yield results that may well be generalized across everyday mental health care. Since our target population consists of patients who are high care users, who are more willing to participate than patients who receive for example assertive outreach [9], we do not expect high selection bias. There are a limited number of inclusion and exclusion criteria in our trial. Unlike in many other trials, patients who are suicidal, aggressive, or self-harming are welcome to participate. Also, comorbidity as well as substance abuse are no exclusion criteria. To encourage participation by professionals, a tailored training- program was developed, based on their day-to-day work with the participants involved. A limitation of this study is the lack of blinding. Participating professionals will know that they conduct ICPT instead of CAU. Patients will also not be blinded.

Abbreviations

CANSAS: Camberwell Assessment of Need Short Appraisal Schedule;
CAU: care as usual;
DALY: Disability-adjusted life years;
DDPRQ: Difficult
Doctor Patient Relation Questionnaire;
EQ-5D: Europol 5D;
HONOS: Health Nation Outcome Scale;

ICER: incremental cost-effectiveness ratio;
ICPT: Interpersonal Community Psychiatric Treatment;
IMR: Illness Management and Recovery;
MANSA: Manchester Short Assessment of Quality of Life;
MHS: Mental Health Services;
MINI Plus: (Mini Neuro-psychiatric Interview);
OQ45: Outcome Questionnaire45;
QUALY: quality adjusted life years;
SAPAS: Standardised Assessment of Personality –Abbreviated Scale, Self Report;
SIDP-IV, Structured Interview for DSM-IV;
SNM: Social Network Map;
STAR: Scale to Assess the Therapeutic Relationship;
Tic-P: Trimbos/iMTA questionnaire for Costs associated with Psychiatric Illness.

Competing interests

The authors declare that they have no competing interests.

Authors' contributions

MvV prepared the study, drafted this paper, and will carry out the study. BK developed and piloted the ICPT-treatment, designed the present study, and obtained funding for it. TvA, LS and NM supervised the project and co-applied for funding. DP and EA designed the cost effectiveness component and drafted this part of the manuscript. ST offered statistical and methodological advice. All authors contributed to the design of the study and read and approved the final manuscript.

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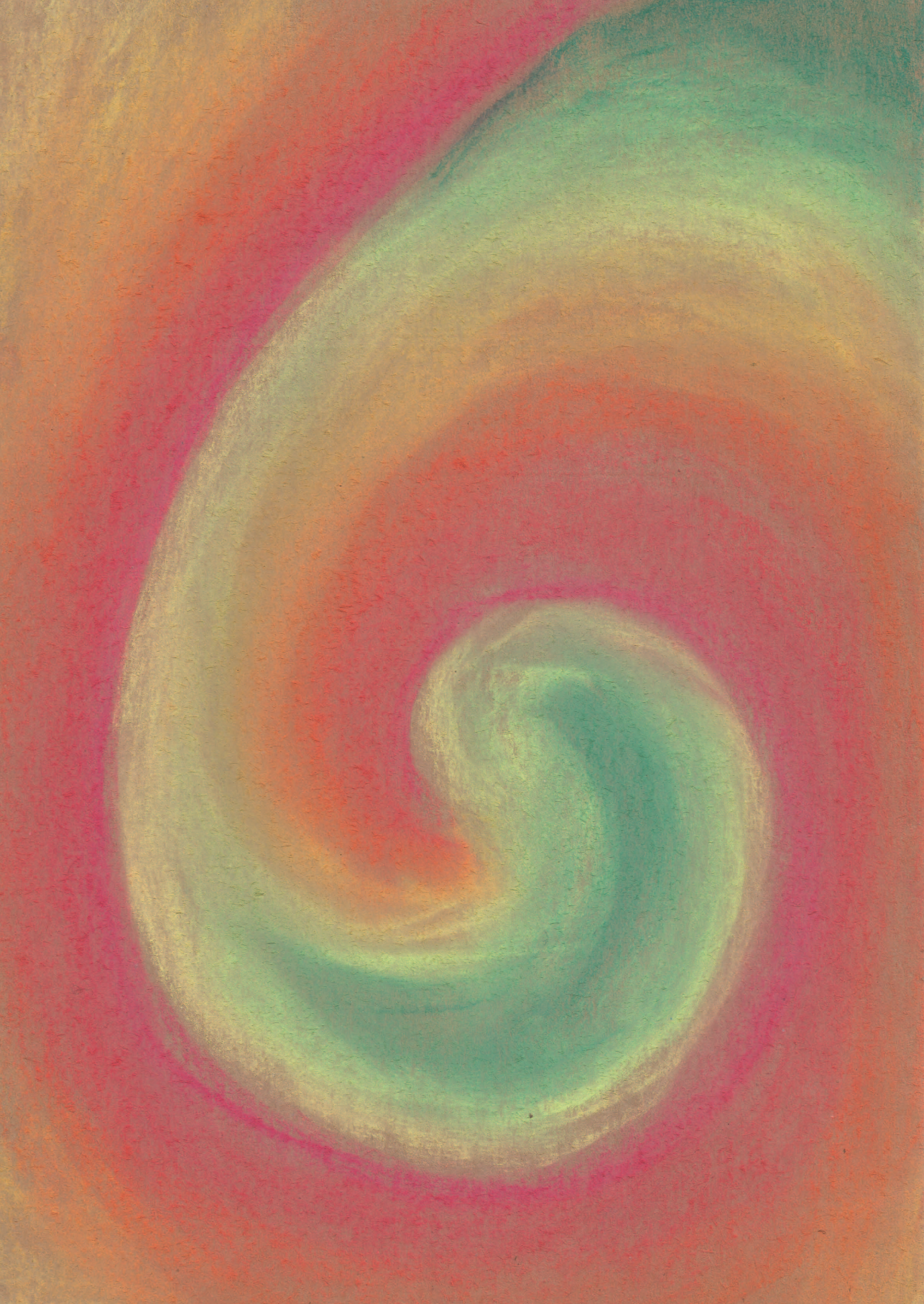

3

Effectiveness and cost-effectiveness of Interpersonal Community Psychiatric Treatment (ICPT) for people with long-term severe non-psychotic disorders: multi-centre randomised controlled trial

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Abstract

Background: Long-term community mental health treatment for non-psychotic disorder patients with severe mental illness (SMI) who are perceived as difficult by clinicians, is poorly developed and lacks a structured, goal centred approach. This study compares (cost-)effectiveness of Interpersonal Community Psychiatric Treatment (ICPT) with Care As Usual (CAU) on quality of life and clinician perceived difficulty in the care for non-psychotic disorder SMI-patients. A multi-centre cluster-randomized clinical trial was conducted in which Community Mental Health Nurses (Clinicians) in three large community mental health services in the Netherlands were randomly allocated to providing either ICPT or CAU to included patients. A total of 56 clinicians were randomized, who treated a total of
93 patients (59 in ICPT-group and 34 in CAU-group).

Methods: Primary outcome measure is patient-perceived quality of life as measured by the Manchester Short Assessment of Quality of Life (MANSA). Secondary outcome measures include clinician-perceived difficulty, general mental health, treatment outcomes, illness management and recovery, therapeutic relationship, care needs and social network. Patients were assessed at baseline, during treatment (6 months), after treatment (12 months) and at 6 months follow-up (18 months). Linear mixed-effects models for repeated measurements were used to compare mean changes in primary and secondary outcomes between intervention and control group of patients over time on an intention to treat basis. Potential efficiency was investigated from a societal perspective. Economic evaluation was based on general principles of a cost-effectiveness analysis. Outcome measures for health economic evaluation, were costs, and Quality Adjusted Life Years (QALYs).

Results: Half of the intended number of patients were recruited. There was no statistically significant treatment effect found in the MANSA (0.17, 95%-CI [–0.058,0.431], p = 0.191). Treatment effects showed significant improvement in the Different Doctor-Patient Relationship Questionnaire-scores and a significant increase in the Illness Management and Recovery–scale Client-version scores). No effects of ICPT on societal and medical costs nor QALYs were found.

Conclusions: This is the first RCT to investigate the (cost)-effectiveness of ICPT. Compared with CAU, ICPT did not improve quality of life, but significantly reduced

clinician-perceived difficulty, and increased subjective illness management and recovery. No effects on costs or QALY's were found.

Trial registration: NTR 3988, registered 13 May 2013.

Keywords: Effectiveness, treatment, Nursing

Background

Caring for patients with severe a mental illness (SMI) in long-term community mental health care has been, and still is, one of the major challenges for mental health systems. These SMI may have a low prevalence, the impact on patients, families and societies is huge (1).
Thornicroft et al. define community mental health care for SMI-patients as promoting mental health by being accessible, focusing on the patient's goals and strengths, working evidence based and recovery-oriented and supporting network and services to get involved in the treatment (2). Community mental health nurses (CMHNs) play an important role in community mental health care. Especially the care for patients with non-psychotic SMI (e.g., personality disorders) is an area in which the effectiveness of their interventions is unknown (3). A good therapeutic relationship is very important for positive patient outcomes, yet methods to develop and maintain this relationship are poor, a recent systematic review showed (4).

There are, however, some interventions that are worth mentioning. First is the Boston Psychiatric Rehabilitation (PR) Approach which showed effectiveness in supporting patients to reach self-formulated rehabilitation goals and enhancing societal participation, yet without effects on quality of life, need for care and functioning (5). Second is Illness Management and Recovery (IMR) that aims to improve illness self-management and achieving clinical and personal recovery. A recent trial showed no significant effect on clinical and personal recovery at the one-year follow-up (6). Third is Structured Clinical Management (SCM), an evidenced based approach that enables generalist mental health clinicians to work effectively with patients with personality disorders. It provides a systematic approach and is based on case management and advocacy support (7).

In the Netherlands, long-term treatment of people with non-psychotic severe mental illness (SMI) is frequently offered in secondary mental health services yet hampered by a lack of methodical underpinning and data on effectiveness (8). Patients with depression, anxiety, and substance abuse disorders, often combined with a personality disorder, may be treated for long periods (years on end), and service use may be substantial (9). Treatment in the Netherlands is mostly provided by non-academic clinicians, mainly community mental health nurses (CMHNs) or social workers, who may perceive these patients as difficult (10). Perceived patient

difficulty is highly correlated with long-term and intensive care use (11,12), as well as iatrogenic dependency (10).

This treatment, or Care As Usual (CAU) lacks an empirical and theoretical base and may increase dependency and repeated crises through its ad-hoc character (13) and absence of clear goals (14). Without a clear frame, this CAU may turn into boundless long-term care, which may lead to high care use and dependency of the patient (15). CAU is poorly described and investigated (9) and many clinicians experience a lack of a solid theoretical base from which to understand the mental disorder and its possible treatment. Interpersonal Community Psychiatric Treatment (ICPT) (16) was developed as an alternative for CAU.

The goal of this multi-centre randomized controlled trial was to compare the effectiveness and cost-effectiveness of ICPT to CAU in the treatment of people with aforementioned long-term severe non-psychotic mental disorders. Our primary hypothesis was that ICPT is more effective in improving patients' quality of life. Secondary hypotheses were that ICPT is 1) more effective in decreasing clinicians' perception of patients as 'difficult', and 2) that ICPT is more effective in discharging patients to a lower level of care (i.e., general mental health care instead of specialised mental health care) and 3) that ICPT is more cost-effective in reaching these goals than CAU. A promising pilot study (9) of 36 patients was done earlier. More detailed information can be found in our study protocol (17), that was published earlier.

Method

Design and patients

A multi-centre cluster randomized controlled trial in three large mental health services, which provided both inpatient and outpatient care, in which clinicians (mostly community mental health nurses) were randomly allocated to providing either ICPT or CAU, for a 12-month intervention period and a 6 months follow-up period.

The inclusion criteria for clinicians were:

a. having an individual caseload of 5 or more patients with a non-psychotic disorder
b. willing to be randomized to either the experimental ICPT-condition or CAU

Each clinician selected 5 patients to collect data from. The inclusion criteria for patients were:

a. having a non-psychotic disorder
b. being aged 18-65 years and being able to understand and communicate in Dutch
c. receiving long-term treatment (2 years or more) or having high care use (1 or more outpatient contact per week or 2 or more crisis contacts per year or 1 or more inpatient admission per year

Exclusion criteria for patients were the presence of a psychotic, bipolar I or cognitive disorder and a lack of skill in understanding of, or communication in Dutch language.

Patients were informed about the study and were invited to participate. An invitation letter with attached information about the research was signed by the clinician and sent by the department's management. Patients who expressed their willingness to participate were either contacted by their clinician or the research team directly.

Trial registration and ethical approval

This study was approved by a certified Medical Ethics Review Committee, The Clinical Research Centre Nijmegen (CRCN), in The Netherlands (Ref:44744.091.13) and the trial is registered (NTR:3988). Registered 13 May 2013, https://www.trialregister.nl/trial/3822

Experimental and control conditions (treatments)

Interpersonal Community Psychiatric Treatment (ICPT)

The treatment under investigation was Interpersonal Community Psychiatric Treatment (ICPT), which aims to help patients to become more actively involved in their treatment process to reach a higher perceived quality of life. ICPT focuses on the interaction between patient, their social system and the patient's responsibility for his or her own recovery. On the team level, ICPT supports clinicians by supervision to maintain treatment integrity.

ICPT is based on the interaction between patient, his social system, and the

clinician. It uses the perspective of learned ineffective illness behaviour (9) by both clinicians and patients. ICPT uses a general treatment frame including: (a) a clear session structure (mutual agenda setting and session evaluation using an established instrument), (b) a 3-stage model (in line with the patient's level of cooperation and acceptance of help, comprising of three stages: (I) optimization of the working alliance, (II) clarification of, and agreement on goals and tasks, and (III): improvement of mental and social functioning), (c) a therapeutic method/style appropriate to the stage where the patient is in, (d) constant monitoring of the interpersonal contact between patient and clinician, and (e) support of clinicians through regular supervision. The ICPT- elements are shown in table 1. Participating clinicians received a 4-day training program in the ICPT-group, over 4-6 weeks' time. The intervention has been described in more detail before (17).

Table 1. ICPT-elements

1	Identifying treatment phase	Identification of stage 1 (alliance), 2 (goal setting), 3 (working)
2	Setting agenda	Joint agenda setting for the session
3	Looking back	Looking back at the previous session to maintain a course
4	Clarifying expectations	Matching mutual expectations of the session
5	Inventory of problems and needs	Inventory of needs according to structured instrument (CANSAS)
6	Setting goals	Goal setting based upon needs
7	Negotiating goals	Negotiating suitability and ranking order of goals
8	Working towards goals	Active working on goals, using structured methods
9	Using SRS-forms	Collection of structured session feedback
10	Using stage-specific methods	Using methods that fit the treatment phase

Treatment integrity in ICPT

Treatment integrity in the ICPT-group was monitored by supervision every three to four weeks (with a total of 15 sessions) and by evaluating randomly selected audiotapes of treatment sessions. This was done by an independent rater (a Master-level student familiar with ICPT) masked to treatment condition, who assessed whether the tape was CAU or ICPT, and to which extent ICPT-elements were used (session structure, the 3-stage model and the therapeutic method or style). Additionally, clinicians scored their use of ICPT-elements in a session using a so-called ICPT-form – a checklist of the number of ICPT-elements used in each face-to face contact. The order of the checklist followed the chronological order of the treatment stages in ICPT. The scoring schedule rated the different elements in such a way that, regardless of the treatment stage, scores varied between 4 and 10, with a higher score indicating a higher degree of treatment integrity (9).

Care As Usual (CAU)

The active control group was Care As Usual (CAU), which was a low-structured treatment/care consisting of biweekly outpatient contacts with a clinician, in which daily issues were discussed (8).

Assessments

All instruments used in the study and their psychometric properties have been described in the study protocol, published earlier (17).
We used two quality of life outcomes. The MANSA was used for our clinical analysis, whereas the EQ-5D was used in the clinical and economic evaluation of health care, for our cost-effectiveness analysis

Baseline

The first step in the baseline assessment was a structured diagnostic interview. Axis I disorders were assessed by use of the Mini Neuropsychiatric Interview (MINI Plus) (18). The Structured Interview for DSM-IV (SIDP-IV) (19) was conducted only when the Standardized Assessment of Personality – Abbreviated Scale – Self Report (SAPAS-SR) (20) was positive.

Primary outcome

The primary outcome was quality of life, measured on patient level with the Manchester Short Assessment of Quality of Life (MANSA) (21). It is the single most used quality of life instrument for patients with severe mental illnesses. Is it's a 16-item patient-rated instrument with good psychometric properties.

Secondary outcomes

Secondary outcomes were a) the Difficult Doctor-Patient Relationship Questionnaire (DDPRQ), an 11-item instrument that assesses problems in the relationship between patient and clinician from the clinician perspective including the perceived difficulty (PD) as a single question about the clinician's perceived difficulty in patient treatment(22), b) the Health of National Outcome Scale (HONOS)(23), that assesses overall mental functioning by the clinician perspective; (c) the Outcome Questionnaire (OQ-45)(24) that broadly assesses treatment outcomes from the patient perspective; (d) the Illness Management and Recovery scale (IMR)(25) that measures the extent of the patient's management of serious mental illnesses from both patient (IMR-Patient) and clinician perspective (IMR-Clinician); (e) the Scale To Assess the Therapeutic Relationship (STAR)(26) that measures the quality of the therapeutic relationship between patients and clinicians, from both patient and clinician perspective; (f)the Camberwell Assessment of Need Short Appraisal Schedule (CANSAS)(27) that assesses care needs from both patient and clinician perspective; (g) the Social Network Map (SNM)(28) that assesses patient-perceived quantity and quality of the patient's social network; (h) referral to lower intensive mental health services; (i) the EuroQol-5D (EQ-5D)(29) that measures health-related quality of life based on the patient perspective, on the basis of which quality-adjusted life-years (QALYs) can be calculated and (j) the Trimbos/iMTA questionnaire for Costs associated with Psychiatric Illness (TiC-P)(30) that measures direct costs of medical treatments based on the patient perspective.

Randomization

Clinicians were randomized to either ICPT or CAU, stratified by unit within mental health service. The allocation sequences were generated with an automated algorithm, using a random sequence generation. This was done by a statistician at the Radboud University Medical Centre in the Netherlands who was not directly

involved in the study. There was no possibility of blinding, since the ICPT-clinicians were trained, and patients knew they were in the ICPT-group. See Figure 1 for the CONSORT-flow diagram.

Sample size calculation

The sample size calculation was based on the primary outcome variable, quality of life as measured with the MANSA. With 36 clinicians and 5 patients per clinician (180 patients in total, 90 in the ICPT group and 90 in the CAU group), our study aimed for 80% power to detect an effect size of 0.3, assuming conservatively an intra-clinician correlation (ICC) of 0.10, a correlation between baseline and follow-up measurement of 0.5 for clinicians and 0.8 for patients.

Procedures

After randomization, participating clinicians (both ICPT and CAU-condition) approached their own patients meeting the inclusion criteria and invited them to participate. When a patient agreed, he or she was contacted, and an appointment was made for a face-to-face contact with a researcher. In this contact, an explanation of the study was provided, written informed consent was obtained, and the baseline assessment was completed. Follow-up measurements were at 6 (intermediate), 12 (end of treatment period) and 18 months, all by telephone or face-to-face (when requested by the patient).

Statistical analyses

Linear mixed-effects models for repeated measurements were used to compare mean changes in primary and secondary outcomes between the intervention and control group over time. The estimates in this multilevel analysis do not have to correspond to the observed results, because they are corrected for correlation of measurements over time and for correlation of patients within a clinician. Since after randomization a significant difference in level of education of patients was observed between experimental and control group, and the intervention implicitly

depends on ability to self-reflect, education (low vs non-low) was corrected for in the analyses. Differences in ethnicity, marital status, and working status were not considered to be of such magnitude to confound the outcomes. Effect sizes were calculated as the estimated difference between groups at 12 months divided by the (pooled) standard deviation at baseline. The level for a statistically significant p-value was set at $p < 0.05$, but all p-values <0.1 are reported. Intra-clinician and intra-patient ICC describing the correlation of patients within a clinician and the correlation of measurements within a patient, respectively, were estimated as $ICC_{professional} = \frac{\sigma^2_{professional}}{\sigma^2_{professional}+\sigma^2_{client}}$ and $ICC_{client} = \frac{\sigma^2_{professional}+\sigma^2_{client}}{\sigma^2_{professional}+\sigma^2_{client}+\sigma^2_{error}}$, where

$\sigma^2_{professional}$ is the variance of the random intercept at clinician level,
σ^2_{client} is the variance of the random intercept at patient level, and
σ^2_{error} is the variance of the residuals (31). Missing values were handled under the missing-at-random assumption in the linear mixed model analyses. We specifically did not perform a post-hoc analysis based on the observed effect and observed variances because it does not address the problem of a possible type II-error (32).

Outcome measures for the economic evaluation, considering the 18-months period of evaluation, were costs, quality of life and quality adjusted life years (QALYs). On patient level, volumes of care were measured prospectively using TiC-P part I, administrative data. Cost items included were number of outpatient contacts, home visits, number, and length of hospitalisations, but also ER/casualty department-visits. Productivity losses for patients (sick leave) were estimated using TiC-P part II. To measure the health-related generic quality of life of patients the EQ-5D was used.

For QALYs, regression models with cluster robust standard errors were used to the determine treatment effects.

The cost variable was analysed by a generalised linear model with a log link function and gamma distribution. Here also cluster robust standard errors were applied. All models included the same set of covariates: sex, centre, education, and age at baseline. The cost and QALY variables were presented with estimated marginal means. The level for a statistically significant p-value was set at $p < 0.05$. A Net Monetary Benefit (NMB) approach was used for the economic evaluation. The NMB depicts the difference in effects between the ICPT and the CAU-group multiplied with the Willingness to Pay (WTP) for a QALY minus the difference in costs between these treatment groups. When the NMB is larger than zero, the intervention is

cost-effective. These NMB regression results can also be used to obtain a cost-effectiveness acceptability curve (CEAC) by plotting 1 minus p divided by 2 against a range of WTPs where p is the p-value from the coefficient on the treatment dummy variable (the divisor of two is employed because the acceptability curve is equivalent to a one-sided test).

Results

Figure 1 (flowchart) shows that of 80 clinicians informed, 56 clinicians were recruited and randomized from August 2014 to August 2016. Two clinicians dropped out, one just before the start of the training and one immediately after the training. Recruited clinicians were predominantly women, working for at least five years within their mental health service. Clinicians were equally distributed across clusters. Then, 150 patients were informed, of whom 113 were initially interested to participate. Of those interested, 20 refused to participate: 8 because they were in the CAU-condition (but desired to participate in the ICPT-condition), 12 patients because they were in the ICPT-condition (but were unwilling to receive a new treatment or to assess questionnaires). In the end, only half of the planned number of patients were recruited.

Of the 93 patients, 30 were lost to follow-up and 3 discontinued the intervention. Reasons for loss to follow-up were physical illness or having quit treatment. Reasons for discontinued intervention were lack of motivation for participation in the study or for further treatment. Two clinicians dropped-out due to change of work setting during treatment period. Table 2 shows baseline characteristics of the two groups, table 3 shows the change from baseline to the end of the study, per 6 months.

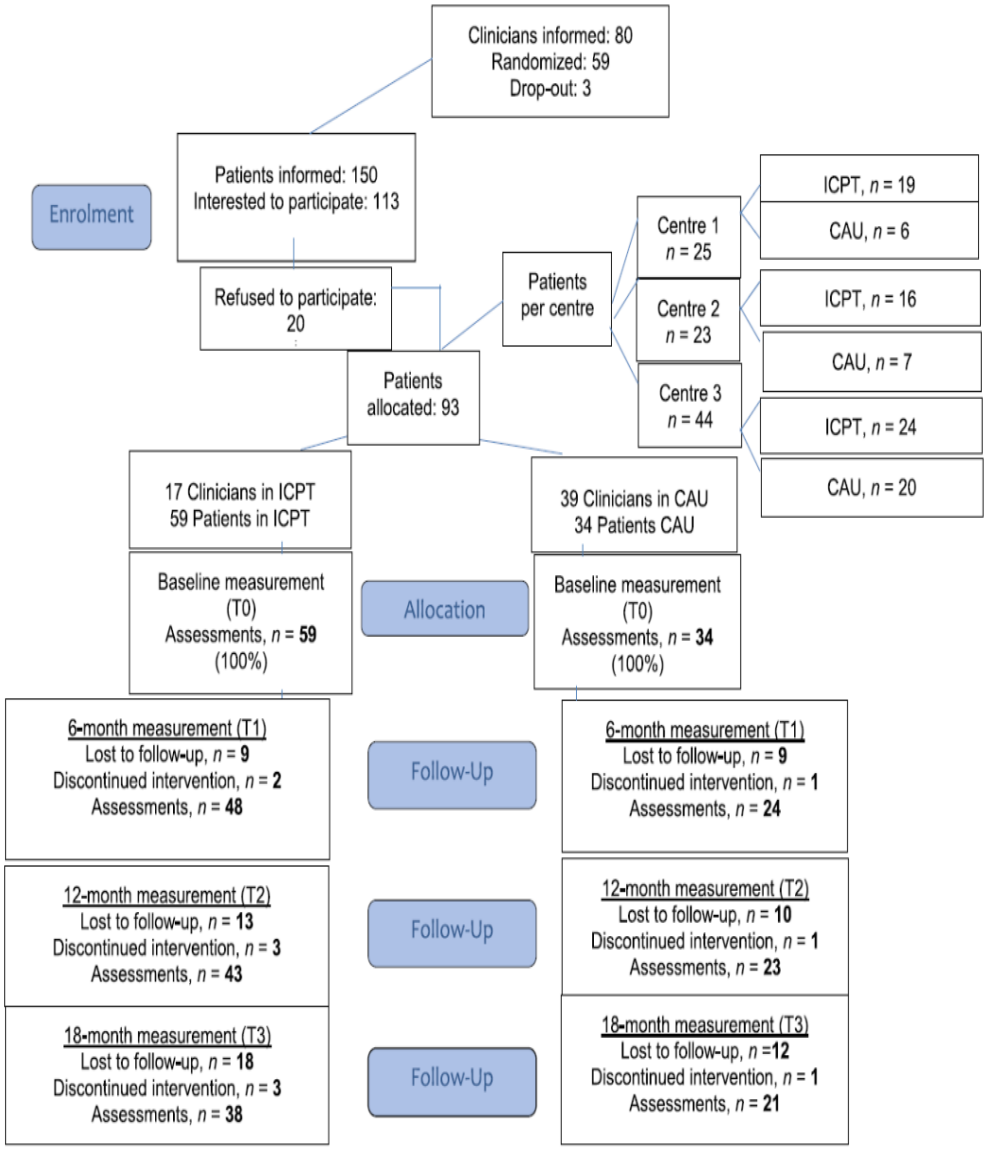

Figure 1: Consort diagram

Table 2. Patient and socio-demographic characteristics at baseline of the ICPT-patients

Socio-demographic characteristics	**ICPT (N=59)**	**CAU (N=34)**	***p***
Age: mean (SD)	37(17.5)	41(12.7)	0.17
Sex: %,(*n)*			0.41
Female	72.9(43)	64.7(22)	
Male	27.1(16)	35.3(12)	
Ethnicity: %,(*n)*			0.22
Dutch	92.2(47)	73.5(25)	
Other	7.8(4)	26.5(9)	
Marital status: %,(*n)*			0.73
Married	20.3(12)	14.7(5)	
Unmarried	66.1(39)	58.8(20)	
Unknown	13.6(8)	26.5(9)	
Working status: %,(*n)*			0.58
Employed	16.9(10)	11.8(4)	
(temporarily) disabled	27.1(16)	38.2(12)	
Volunteer	11.9(7)	14.7(5)	
Looking for job	10.2(6)	5.9(2)	
Other	33.9(20)	29.4(10)	
Education: %,(*n)*			0.01
Primary education	3.4(2)	11.7(4)	
Secondary education	54.2(32)	44.1(15)	
Tertiary education	25.4(15)	35.3(12)	
Unknown/other	10(17.0)	8.8(3)	
Income: %,(*n)*			0.55
Salary	11.9(7)	11.8(4)	
Social benefit	47.5(28)	58.8(20)	
Student grant	8.5(5)	-	
Other	32.1(19)	29.4(10)	
Clinical characteristics MINI Plus			
Axis I: %,(*n)*			
Depressive disorder	20.7(12)	12.5(4)	0.33
Anxiety disorder	20.3(12)	8.8(3)	0.15
Alcohol abuse	10.2(6)	8.8(3)	0.84
Substance abuse	22(13)	20.6(7)	0.95
No or other diagnoses	26.8(16)	49.3(17)	-
Clinical characteristics SIDP-IV			
Axis II: %,(*n)*			
Cluster A			
Paranoid, schizoid, schizotypal PD	-	-	-
Cluster B			
Borderline PD	15.3(9)	14.7(5)	0.69
Cluster C			
Avoidant PD	11.9(7)	11.9(4)	0.69
Dependant PD	8.5(5)	8.8(3)	0.69
Obsessive-compulsive PD	6.8(4)	5.9(2)	0.93
No or other diagnoses	57.5(34)	58.7(20)	-

Primary outcomes

The change from baseline in quality of life as measured by the MANSA (primary outcome) was 0.007 (95%-CI from 0.023 to 0.142, *p*=0.082). In the CAU-group it was 0.511 (95%-CI from -0.050 to 0.101, *p*=0.025).

Table 3. Outcomes per measurement and estimated change from baseline

Type of outcome	Instrument		ICPT (N=59)			CAU (N=34)		
Quality of life	*Patient-rated*	Mean(SD)	*Change from baseline per 6 months estimate,* ([95%-CI])	*p-value*		Mean(SD)	*Change from baseline per 6 months estimate,* ([95%-CI])	*p-value*
	MANSA		0.082, ([0.023,0.142])	0.007	MANSA		0.025, ([-0.050,0.101])	0.511
	Baseline	4.1(0.8)			Baseline	4.8(0.8)		
	6 months	3.9(0.7)			6 months	4.6(1.1)		
	12 months	4.4(0.8)			12 months	4.6(0.8)		
	18 months	4.2(0.7)			18 months	4.8(0.8)		
Clinician-perceived patient difficulty	*Clinician-rated*				*Clinician-rated*			
	DDPRQ		-0.473, ([-0.879,-0.050])	0.029	DDPRQ		-1.297, ([-1.881,-0.713])	<0.001
	Baseline	23.8(4.8)			Baseline	22.9(4.7)		
	6 months	24.2(3.9)			6 months	20.6(4.9)		
	12 months	21.7(4.5)			12 months	21.7(4.6)		
	18 months	22.3(3.7)			18 months	19.2(5.4)		
	PD		-0.21, ([-0.361,-0.074])	0.003	PD		-0.311, ([-0.507,-0.114])	0.002
	Baseline	3.3(1.3)			Baseline	3.0(1.7)		
	6 months	3.2(1.6)			6 months	1.8(1.1)		
	12 months	2.4(1.3)			12 months	2.3(1.6)		
	18 months	2.7(1.3)			18 months	2.3(1.2)		
General Mental Health	*Patient-rated*				*Patient-rated*			
	HONOS		-1.056, ([-1.480,-0.632])	<0.001	HONOS		-1.180, ([-1.763,-0.597])	<0.001
	Baseline	12.1(4.6)			Baseline	10.5(5.4)		
	6 months	9.7(3.9)			6 months	8.9(4.8)		
	12 months	8.1(4.6)			12 months	7.8(4.5)		
	18 months	9.1(4.9)			18 months	8.4(4.4)		
Treatment	*Patient-rated*				*Patient-rated*			
	OQ45		-0.049, ([-0.084,-0.015])	0.005	OQ45		-0.042, ([-0.086,0.002])	0.065
	Baseline	81.7(23.7)			Baseline	65.1(27.5)		
	6 months	83.2(22.5)			6 months	65.0(31.3)		

	12 months	75.4(24.8)			12 months	64.1(22.2)		
	18 months	72.7(24.5)			18 months	59.7(26.8)		
Illness management and Recovery	*Patient-rated*				*Patient-rated*			
	IMR-Patient		0.037, ([0.002,0.073])	0.036	IMR-Patient		-0.023, ([-0.073,0.027])	0.369
	Baseline	3.2(0.4)			Baseline	3.3(0.4)		
	6 months	3.3(0.4)			6 months	3.3(0.4)		
	12 months	3.4(0,4)			12 months	3.4(0.4)		
	18 months	3.3(0.4)			18 months	3.3(0.3)		
	Clinician-rated				*Clinician-rated*			
	IMR-Clinician		0.130, ([0.078,0.182])	<0.001	IMR-Clinician		0.124, ([0.051,0.197])	0.001
	Baseline	3.1(0.3)			Baseline	3.3(0.4)		
	6 months	3.3(0.7)			6 months	3.2(0.6)		
	12 months	3.5(0.3)			12 months	3.5(0.4)		
	18 months	3.4(0.5)			18 months	3.5(0.4)		
Therapeutic relationship	*Patient-rated*				*Patient-rated*			
	STAR-Patient		0.121, ([-0.458,0.701])	0.681	STAR-Patient		-0.499, ([-1.223,0.225])	0.176
	Baseline	37.5(6.2)			Baseline			
	6 months	37.2(5.9)			6 months	38.9(6.3)		
	12 months	38.7(5.6)			12 months	38.4(5.5)		
	18 months	38.2(5.1)			18 months	36.3(10.4)		
						38.2(7.0)		
	Clinician-rated				*Clinician-rated*			
	STAR-Clinician		0.094, ([-0.369,0.557])	0.689	STAR-Clinician		0.137, ([-0.049,0.684])	0.620
	Baseline	37.5(6.2)			Baseline	39.0(3.9)		
	6 months	37.2(5.9)			6 months	39.7(3.2)		
	12 months	38.7(5.6)			12 months	39.7(4.3)		
	18 months	38.2(5.1)			18 months	41.3(3.9)		
Care Needs	*Patient-rated*							

	CANSAS-Patient, unmet needs		-0.260, ([-0.413,-0.108])	<0.001	CANSAS-Patient, unmet needs		-0.424, ([-0.615,-0.233])	<0.001
	Baseline	2.3(2.6)			Baseline	1.4(1.7)		
	6 months	1.8(2.2)			6 months	0.5(1.0)		
	12 months	1.4(1.9)			12 months	0.4(0.8)		
	18 months	1.4(2.0)			18 months	0.4(1.1)		
	Clinician-rated				*Clinician-rated*			
	CANSAS-Clinician unmet needs		-0.604, ([-0.785,-0.422])	<0.001	CANSAS-Clinician unmet needs		-0.768, ([-0.981,-0.555])	<0.001
	Baseline	2.5(2.8)			Baseline	2.4(2.3)		
	6 months	1.3(2.0)			6 months	0.5(1.2)		
	12 months	0.7(1.4)			12 months	0.4(1.1)		
	18 months	0.6(1.4)			18 months	0.2(0.7)		
Social Network	*Patient-rated*				*Patient-rated*			
	SNM, quality of social network		0.024, ([-0.007,0.045])	0.128	SNM, quality of social network		0.031, ([-0.011,0.074])	0.145
	Baseline	0.6(0.5)			Baseline	0.6(0.4)		
	6 months	0.7(0.4)			6 months	0.8(0.4)		
	12 months	0.8(0.5)			12 months	0.6(0.5)		
	18 months	0.7(0.4)			18 months	0.7(0.4)		
	SNM, quantity of social network		-0.085, ([-0.156,-0.013])	0.020	SNM, quantity of social network		0.002, ([-0.087,0.092])	0.960
	Baseline	-0.3(1.1)			Baseline	-0.4(0.9)		
	6 months	-0.6(0.9)			6 months	-0.4(1.3)		
	12 months	-0.7(0.8)			12 months	-0.6(0.7)		
	18 months	-0.4(0.8)			18 months	-0.4(0.9)		

Table 4 shows treatment effects of ICPT as compared to CAU, effect sizes and ICC's over the full 18-month treatment period. There was no statistically significant treatment effect (p=0.191) on the primary outcome variable, meaning that ICPT was not more effective than CAU in improving quality of life.

Table 4: Estimated effects of ICPT as compared to CAU

Type of outcome	Instrument	Treatment effect* at 18 months [95%-CI] (p-value)	Cohen's D at 18 months	ICC patient	ICC professional
Quality of Life	MANSA	0.17, [-0.058,0.431] (0.191)	0.21	0.08	0.02
Clinician-perceived patient difficulty	DDPRQ	2.47, [0.556,4.387] **(0.012)**	0.51	0.06	1.00
Clinician-perceived patient difficulty	PD	0.28, [-0.362,0.922] (0.390)	0.22	0.07	1.00
General Mental Health	HONOS	0.37, [-1.520,2.267] (0.696)	0.08	0.51	1.00
Treatment	OQ-45	-0.02, [-0.172,0.125] (0.752)	0.00	0.20	0.00
Illness management and Recovery	IMR-Patient	0.18, [0.015,0.349] **(0.033)**	0.45	0.29	0.00
Illness management and Recovery	IMR-Clinician	0.02, [-0.223,0.260] (0.881)	0.06	0.05	0.65
Therapeutic relationship	STAR-Patient	1.86, [-0.513,3.427] (0.124)	0.24	0.23	0.00
Therapeutic relationship	STAR-Clinician	-0.13, [-1.865,1.606] (0.880)	0.02	0.05	0.15
Care needs	CANSAS-Patient	0.49, [-0.152,1.134] 0.133	0.19	0.25	0.37
Care needs	CANSAS-Clinician	0.49, [-0.128,1.114] 0.120	0.18	0.15	0.12
Social Network	SNM-quality	-0.02, [-0.169,0.126] 0.773	0.04	0.27	0.17
Social Network	SNM-quantity	-0.26, [-0.548,0.024] 0.072	0.24	0.09	0.00

Table 5 shows the estimated health economic effects in both groups and estimated effects in the ICPT-group.

Type of outcome	Instrument	ICPT (N=59)	CAU (N=34)	Estimated effect over time	Treatment effect
	Patient rated	Mean (95%-CI)#	Mean (95%-CI)#	[95%-CI]	*p*
QALYs NL	EQ-5D	1.09(0.991,1.194)	1.07(0.942,1.199)	0.02 [-0.194,0.238]	0.84
Medical costs (€)	TiC-P	1927(1374,2479)	1513(834,2193)	1.27 [0.747,2.170]*	0.38
Total costs (€)	TiC-P	2129(1525,2734)	1978(1298,2890)	1.27 [0.748,2.153]*	0.38

#estimated marginal mean

*to be interpreted as a ratio of cost (coefficient of the treatment dummy). Here the intervention costs are, after considering cluster effect and covariates 27% higher than the control condition

Secondary outcomes

A significant treatment effect was found in the DDPRQ (2.47, 95%-CI [0.556,4.387], *p*=0.012), meaning that clinicians perceived patients as less difficult in the ICPT condition as compared to CAU. A significant treatment effect also was found in the IMR-Patient Scale (0.18, 95%-CI [0.015,0.349], *p*=0.033. Other hypotheses about ICPT included improvement of the social network of patients, more discharges to a lower level of care and better cost-effectiveness, yet all other outcomes did not show statistically significant effects of ICPT.

Cost effectiveness

Neither costs (whether societal and medical costs), nor QALYs showed statistically significant treatment effects (table 5). The ICPT-group had an estimated marginal mean cost of €2129 per patient. Looking at the point estimates, taking into account clustering and covariates, cost for ICPT were 27% higher (1.27, 95%-CI [0.75,2.17, *p*=0.38]) than CAU. On the other hand, ICPT offered a higher mean incremental gain of 0.022 (EQ-5D; 95%-CI [–0.194, 0.238]), *p*=0.83) quality-adjusted life-years (QALYs) over 18 months. The cost-effectiveness acceptability curve (CEAC) (figure 2) showed that the cost-effectiveness improved if society is willing to pay more for a QALY. At about €70.000 the probability that ICPT was cost-effective, became 80%. This €70.000 is acceptable considering the threshold of €80.000 the Dutch Health Care Institute (Zorginstituut) uses to advise the minister on benefit package decisions. In fact, the more society is willing to pay for a QALY gained the higher the probability ICPT is a cost-effective approach compared to CAU.

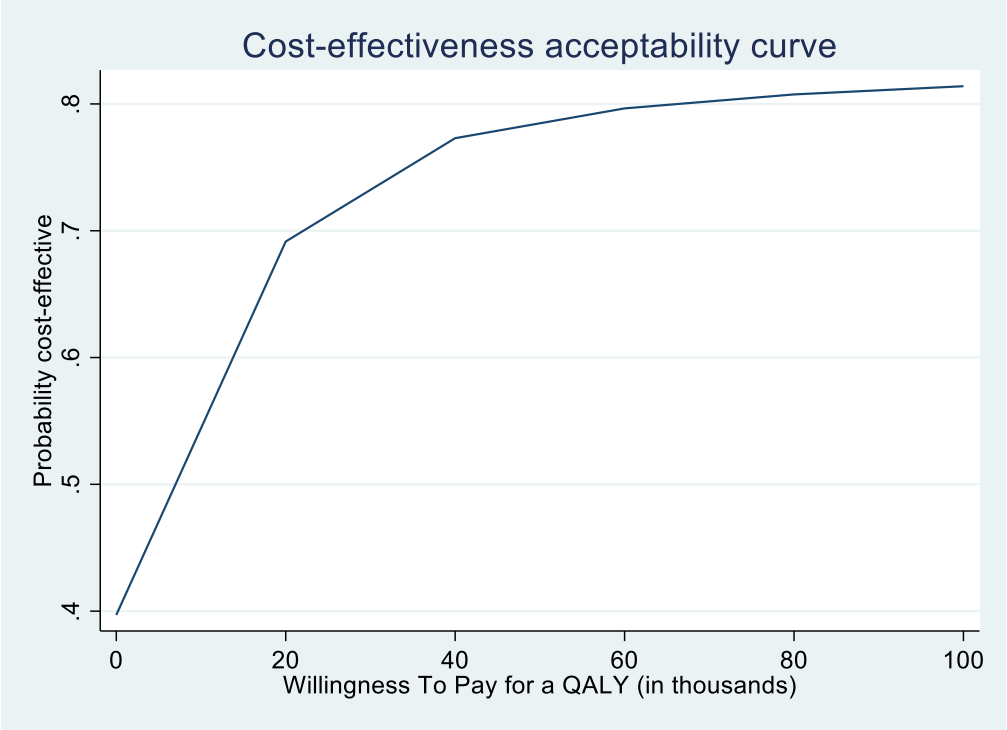

Figure 2 Cost-effectiveness acceptability curve

Completers and dropouts

There were 38 ICPT-patients (out of 59) and 21 CAU-patients (out of 34) that completed the treatment. Significant treatment effects for completers, compared to all patients, were found in the DDPRQ and IMR-patient and in the CANSAS-patient version and CANSAS-clinician and the STAR-patient version (See appendix I for details). Besides patients who were lost to follow-up or discontinued the intervention, a number of ICPT-clinicians was lost due to the cluster design of the RCT. Two clinicians quit their jobs early in the study and one clinician stopped just before the intervention started (but had received the 4-day training program), which resulted in a loss of 15 patients and an actual loss of 4 patients.

Treatment integrity

Only six audiotapes could be analysed and transcribed, due to a low number of recordings made by clinicians. From the analysis of the audiotapes, we found that

clinicians partially worked according to the ICPT-treatment model, yet we were unable to validly assess treatment integrity in this way.

ICPT-forms [37] were assessed by the ICPT-clinicians after each ICPT-sessions. We could analyse ICPT-forms of ten participating ICPT-clinicians, for a total of 22 patients. The total number of completed ICPT-forms was 162 and average number of completed ICPT-forms per clinician was 7.34 (SD=6.01). ICPT-scoring forms were assessed in 74% of the sessions. The number of ICPT elements used during ICPT showed a range of scores between 1 and 11, with a mean of 5.8 (SD 2.3). Mutual agenda setting was done in 66% of the sessions, whereas session evaluation was done in 55.6%. On all forms the identification of stage was scored. Most of the sessions were in the *improvement of mental and social functioning* stage (stage III, 90.7%). The use of a specific therapeutic method was scored in 56.2% of the sessions, with motivational interviewing (21.6%) and behavioural analyses (12.3%) as the most used therapeutic methods.

Discussion

We conducted a cluster RCT on Interpersonal Community Psychiatric Treatment (ICPT) versus Care As Usual (CAU). This study did not find statistically significant treatment effect in the primary outcome variable, quality of life as assessed by the MANSA. Significant beneficial treatment effects were found in clinician-perceived patient difficulty, and patient-perceived illness management and recovery. No effects of ICPT on societal and medical costs or QALYs were found.

Primary outcome measure

Quality of life has become an important outcome in health care as an indicator of treatment effectiveness and recovery[38,39]. We aimed for an effect size of 0.3. Although the confidence interval (from -0.058 to 0.431) did not exclude an effect size of 0.3, the point estimate suggests that the effect size is less than 0.3 but it is indecisive whether the effect is > 0. In line with this, we could not show that ICPT was statistically significantly better than CAU, although MANSA-scores increased numerically more in the ICPT-group than in the CAU-group.

Secondary outcome measures

As in the pilot study[37], the professional-perceived therapeutic relationship increased in the ICPT condition compared to CAU. The clear structure, goal setting and working alliance may have contributed to that. Patient-rated illness management recovery increased in the ICPT-group. This is encouraging, even though ICPT had a different focus: not so much on managing one's illness, but on increasing one's positive interactions and daily activities[40].

The potential societal gains of ICPT were not substantial. ICPT provided no statistically significant efficiency gain since differences in both cost and QALY turned out to be insignificant. Whereas ICPT appeared somewhat (although not significantly) more expensive than CAU, due to higher medical costs, it was also somewhat more effective (yet neither significantly). Ultimately it was about a trade-off as can be inferred from the cost-effectiveness acceptability curve (CEAC). The Dutch Healthcare Institute uses a threshold of €80.000 per QALY gained. Taking uncertainty surrounding cost-effectiveness into account for ICPT it is slightly above 80% probable that it will be cost-effective.

Treatment integrity

One of the ways in which we measured treatment integrity was by using standardized forms. Compared to the pilot study, in which these forms were also used[37], the mean score of ICPT-elements used here was overall lower than in the pilot study meaning that ICPT was more adequately applied in the pilot study[37]. A lack of a sufficient audio tapes made it impossible to rate recorded sessions and assess treatment integrity through this method. To monitor and enhance treatment integrity, constant supervision during ICPT-treatment is important and should be applied systematically and on a regular basis to enhance treatment integrity[41]. Attendance of supervision sessions was sometimes low and keeping CHMNs motivate to remain focussed on the interpersonal element of ICPT was challenging. We may, therefore, hypothesize that the overall implementation was not optimal, given the limited supply of required ICPT-forms and audiotapes by clinicians.

Treatment integrity, dropouts (on patient and clinician level) and inclusion numbers of this multi-centre cluster randomized RCT, showed how challenging it was to conduct this study. Finding three mental health services that wanted to participate was not easy at a time when mental health institutions were under public and political pressure to perform and CMNH's had many patients in their caseloads

and on waiting lists. As a result, we have strong indications that ICPT was not fully embraced within the organizations, teams, and individual clinicians, despite their willingness to participate.

Comparisons with other studies

Overall, there seems to be a lack of comparable studies, regarding effective interventions for non-psychotic SMI-patients in community mental health nursing. A recent study suggests that therapeutic alliance in mental health nursing is very important, but found that the evidence based methods to achieve that alliance are poor[19]. In the Netherlands, Structural Clinical Management (SCM) is used in outpatient treatment for personality disorders. SCM has been found be equally effective as other treatments such as Dialectical Behavioural Therapy (DBT) and Mentalisation Based Treatment (MBT)[42]. It may be used by general mental health clinicians, and like ICPT it works with a structured framework, yet has only been tested in a small population (i.e., borderline personality disorder), whereas ICPT serves a broader population. The aforementioned Boston Psychiatric Rehabilitation (PR) seems promising in terms of rehabilitation and participation and both PR and ICPT share the mutual agreed upon goal setting. PR though, has no specific focus on patient-perceived difficulty. Illness and Management Recovery (IMR) focusses on illness management whereas ICPT places more emphasis on the interpersonal relationship.

Strengths and limitations

The present study has some limitations. The required number of patients as defined in the sample size analysis (180 patients) was not reached, despite substantial efforts and instructions to support clinicians in recruiting suitable patients. There were difficulties in the implementation phase, e.g., recruiting clinicians and keeping them motivated to participate in this study.

Especially in the control group it turned out to be challenging to have patients recruited by clinicians, resulting in a low number of patients compared to the ICPT-group. We do not know whether selection bias occurred in the ICPT-group or CAU-group, respectively, but we know that patients did not want to participate due to lack of desire in a new treatment of unwillingness to fill out questionnaires over

time. There is a loss of statistical power through missing follow-up data resulting from the 18-month follow-up. It must be noted that the completers-analysis is vulnerable to selection bias. Another limitation is the fact that we did not assess self-reported costs (e.g., transportation costs), regarding the cost effectiveness. The limitations of the present study are, however, balanced by a number of strengths. We performed a cluster randomized controlled trial, aiming to reduce the potential for contamination between treatment groups and we did include the number of clusters aimed for (36) and even exceeded that by twenty (56). Since the number of clusters is the driving factor for power, the loss of power due to not reaching the number of patients was substantially reduced. Finally, for the understanding of the effects of ICPT in a pragmatic, real-world setting and generalisability of the findings, the research was carried out in real-life practice with a heterogeneous group of patients.

Conclusions

No significant treatment effect was found in the primary outcome: quality of life. Treatment effects were found on clinician perceived patient difficulty and on patient-perceived illness management and recovery, however, these were not corrected for multiple testing and should therefore be regarded as promising, not confirmative. Compared to CAU, ICPT was not cost-effective from a societal or medical perspective. Given the effects on clinician perceived patient difficulty, we recommend further developing and investigating ICPT as one of the interventions to work more successfully with patients with long term non-psychotic mental disorders.

Abbreviations
CANSAS: Camberwell Assessment of Need Short Appraisal Schedule
CAU: Care As Usual
CEAC: cost-effectiveness acceptability curve
CLINICIAN: Community Mental Health Nurse
DDPRQ: Difficult Doctor Patient Relation Questionnaire
EQ-5D: EuroQol-5D
HONOS: Health Nation Outcome Scale

ICPT: Interpersonal Community Psychiatric Treatment
IMR: Illness Management and Recovery
MANSA: Manchester Short Assessment of Quality of Life
MHS: Mental Health Services
MINI Plus: (Mini Neuro-psychiatric Interview)
OQ45: Outcome Questionnaire45
SAPAS: Standardised Assessment of Personality –Abbreviated Scale, Self-Report -SIDP-IV, Structured Interview for DSM-IV
SMI: Severe Mental Illness
SNM: Social Network Map
STAR: Scale to Assess the Therapeutic Relationship
Tic-P: Trimbos/iMTA questionnaire for Costs associated with Psychiatric Illness

Declarations

Ethical approval and consent to participate
The study was approved by the local research ethics committees at Altrecht Mental Health Care, Met GGZ Mental Health Care and Pro Persona Mental Health Care. Written informed consent was obtained from all patients. Patients were provided with written and verbal information about the study.

Consent for publication
Not applicable

Availability of data and materials
The datasets generated during and analysed during the current study are not publicly available, and we do not wish to share our data. But they are available from the corresponding author on reasonable request.

Competing interests
The authors declare that they have no competing interests.

Author's contributions
Conception and design of the study: BK and MvV, acquisition of data: MVV. Analyses and/or interpretation of data: MvV, BK, ST and EA. Drafting the manuscript: all

authors. Revising the manuscript critically for important intellectual content: MvV, BK and CLM,
All authors read and approved the final manuscript.

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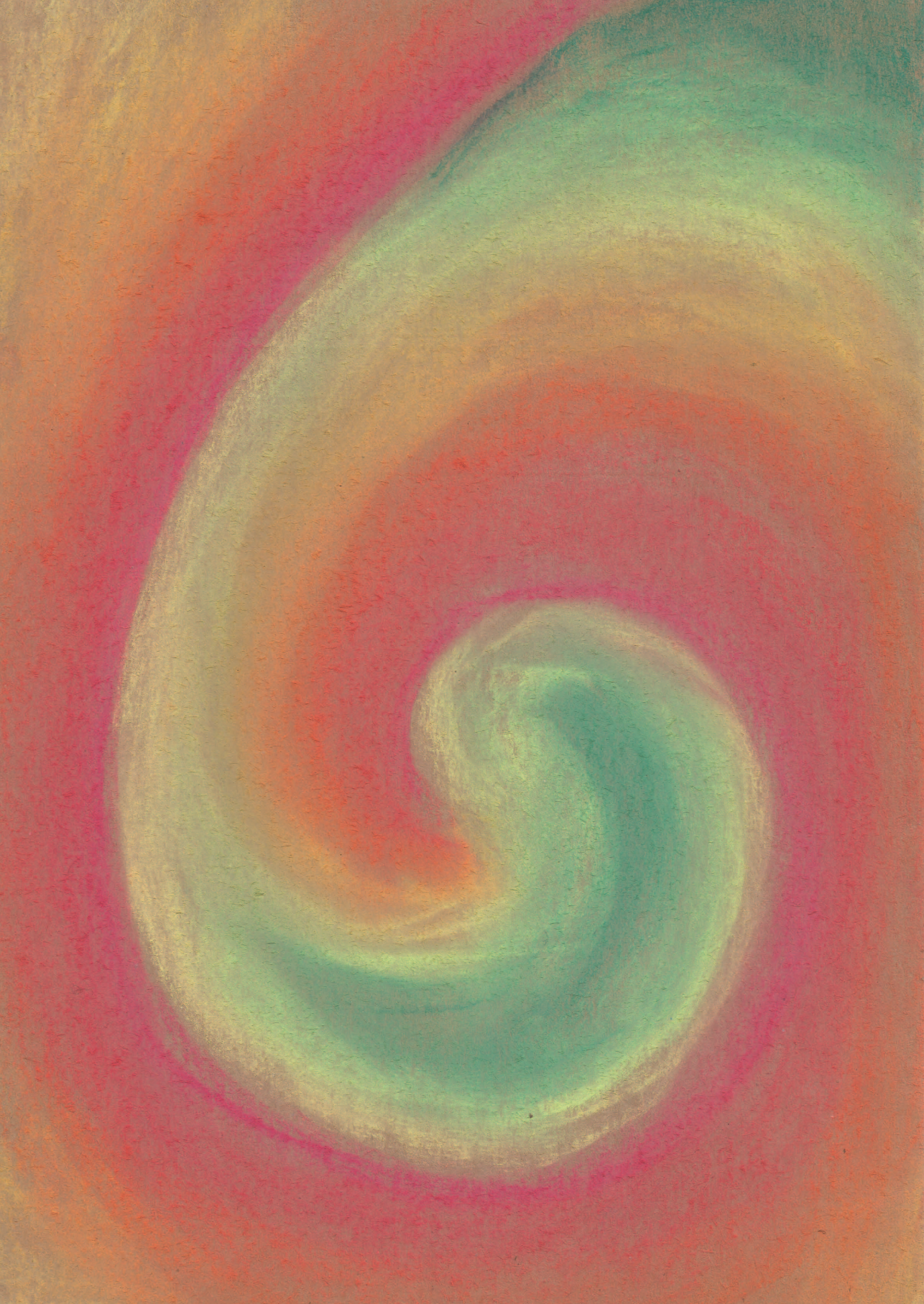

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A qualitative study of the therapeutic alliance between patients and community mental health nurse during Interpersonal Community Psychiatric Treatment

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Abstract

In the Netherlands, long-term community psychiatric treatment for patients with a severe mental illness (SMI) is poorly developed and lacks a structured, goal centred approach. Often this form of treatment is provided by community mental health nurses (CMHN's).

Especially in the group of nonpsychotic patients with SMI, it often leads to care-as-usual with limited proven interventions and an unstructured treatment. Interpersonal Community Psychiatric Treatment (ICPT) was developed to provide this group of patients a focus, a theoretical view, anda methodological structure. A pilot study has been conducted on ICPT. As a result, a randomizedcontrolled trial (RCT) was recently conducted in which this study is part. The pilot study showed improvement on a number of treatment outcomes. However, the working alliance (WA) experienced by the patients, although not significant, was considered to be decreased. The aimof study was to gain insight into how the ICPT-elements shape the WA and the possible self-determination of patients in general.

The main part of this mixed-methods study was a qualitative study with a Grounded Theory approach. For the selection of the participants, quantitative data from the current RCT has been used. Semi structured interviews have been conducted with 13 participants, divided over three mental health institutions throughout the Netherlands. Interviews and analysis were alternated, so that the interview topics were developed by constant comparison.

Eleven participants were female, and 11 participants received social benefit. Six of the participants were above 50 years of age. Four participants suffered either from a depressive or anxiety disorder. Seven participants had a borderline personality disorder. The results are linked to Bordin's theory of the therapeutic alliance, which is agreement on therapeutic tasks, agreement on therapeutic goals, and the quality of the personal bond. The WA could be analysed from three different perspectives: mutually agreed on goals, tasks, and experienced interpersonal relationship. ICPThad limited influence on the mutually agreed on goals and interpersonal relationship but mainlyon the mutually agreed on tasks. In daily practice, ICPT may have a positive influence on the perceived WA. The main factors that affected the perceived WA during ICPT were the tasks that had been mutually agreed on, the use of an agenda, the structure of the sessions, the alliance between theCMHN and the patient, and the patient's own self-determination. There was a limited influence on the mutually agreed on goals and the quality of the personal relationship between the CMHN andthe patient. The

present research revealed valuable information about the significance of the WAin ICPT and the opinions of the respondents about ICPT and information about what might be helpful or unhelpful in their relationship with their CMHN.

Background

Almost half of the Dutch population will, at some time in their lives, have had a mental disorder (1). Mood (20.1%), anxiety (19.6%), and sub- stance-use (19.1%) disorders are the most common ones in the Dutch population. Of more than 600,000 patients who receive outpatient treatment in Dutch mental health services, about 450,000 of them discontinued treatment after 1 year, but the remaining 25% continued receiving treatment for 2 years or longer. In addition to often having a serious mental disorder, this group of patients often also has various kinds of psychosocial problems, such as being in debt, unemployed, or homeless and with limited family support (2). More than half of these patients have a psychotic disorder (often schizophrenia), but nonpsychotic disorders (e.g., a personality, depressive, or anxiety disorder) are also common (3,4). Often these patients have already participated in a treatment program (such as psychotherapy) butare then referred to some other form of long-term care if their treatment was ineffective. A large proportion (50–70%) of these patients receives supportive treatment. Often this form of treatment has not been well described (5,6), but it appears to con- sist of a treatment session once or twice a week, which lasts from 6 to 24 months (4). It is offered mostly by Community Mental Health Nurses (CMHNs). This form of treatment has supportive elements and seems to focus primarily on stabilizing the patient, facilitating the patient's daily routine, and circumventing a relapse. In order to bringa more focused treatment for this group of patients and to provide a theoretical basis and methodological structure forit, Interpersonal Community Psychiatric Treatment (ICPT) was developed (6).

ICPT

The aim of ICPT is to improve patients' quality of life by focusing on the working alliance (WA) and mutual goal setting during the treatment sessions (Koekkoek, 2011). In the Netherlands after they have received training in ICPT, CMHNs use ICPT to treat patients with severe, long-term, nonpsychotic disorders. This treatment has several distinctive features. First, it follows a fixed structure. During the first 5 min, the professional and the patient mutually agree on an agenda for the subsequent session. The next 5 min are used to look back from the current to the previous session. In the next 25 to 30 min, the themes that were set for the session are further discussed and summarized. The last 5 min are used to look back at the current session. Both the CMHN and the patient complete a feedback form (the Session Rating Scale [SRS]) (7).

Second, ICPT comprises three stages. In the first stage, an attempt is made to optimize the WA between the patient and the professional. The emphasis is on clarifying how the CMHN and the patient want to interact with each other. In the second stage, the goals and tasks are clarified, and the patient's care needs and the potential problems that might arise in reaching the agreed-upon goals are discussed. The objective of the third stage is to improve the patient's social and mental functioning by introducing specific interventions. In all stages of ICPT, various intervention strategies are introduced sequentially. They might include (a) relation- ship management and motivational interviewing or (b) solution-focused therapy or case management and cognitive behavioural therapy. Finally, in the last stage of ICPT, the focus is on the patient's interpersonal contacts and his or her relatives and other people who comprise the patient's social network (4).

Results from a pilot study of the effectiveness of ICPT (6) indicated that patients' quality of life was enhanced, and their social network improved. Patients' need to use the care that was offered decreased compared to a control group that received treatment as usual. In addition, the CMHNs found that the WA had improved, and they viewed the participants as less *difficult* to work with. Surprisingly, however, some of the participants viewed the WA as less satisfying than previously. Although this difference was not statistically significant, it is nevertheless important because ICPT aims to improve the WA as perceived by both parties. For a more detailed description of ICPT, we recommend reading the article "Interpersonal Community Psychiatric Treatment for non-psychotic chronic patients and nurses in outpatient mental health care: A controlled pilot study on feasibility and effects" (6).

A fully conclusive definition of the WA does not exist. In 1979, Bordin defined the therapeutic relationship as a WA, consisting of agreement on therapeutic goals, agreement on therapeutic tasks, and the quality of the personal bond between patient and practitioner. This definition is still widely used in psychotherapy, but also in other fields and in a multidisciplinary context (8,9).

The WA is experienced as an important process factor in a treatment contact. Various studies have shown that the WA plays an important role in the success of psychotherapeutic treatment (8). In a review article, McCabe and Priebe (10) demonstrated that the quality of the WA is also a positive predictor in treatment outcomes and adherence to patients with EPA. Patients themselves experience the

relationship with their professional as one ofthe most important conditions for good care, according to a qualitative study by Johansson and Eklund (11).

Apart from the outcome measure described above, ICPT aims to change the interaction between professional and patient, in order to help the latter to become more self-deter- mined, both in the interaction with the professional, as in daily life. Therefore, the various elements of ICPT all aim to accomplish this goal, thus requiring from the professionals a different style which enables the patient to take up a more self-directed role. This process is highly dependent on theWA but is not necessarily applauded by either professionalsor patients, as was found in the pilot study (6). Therefore, we need to look deeper into how the ICPT- elements shape the WA and the possible self-determination of patients in general. We conducted a qualitative study within a randomized controlled trial (RCT) on the effectiveness of ICPT (12). The aim of this study was to identify how the WA is shaped by ICPT-elements, and how it affects the self-determination of patients with a severe, long-term, nonpsychotic disorder who are receiving ICPT.

Methods

Design

The design of the study was qualitative within the context ofan RCT, and it was based on the principles of grounded theory (13). Basing the present study on the principles of grounded theory was found appropriate because we aimed to acquire theoretical insight into the mechanisms involved in ICPT that determine the quality ofthe WA and the way in which it subsequently affects treatment outcome.

Main data collection

Participants

Respondents for this qualitative study were participants inthe experimental group of the RCT in which the effects of ICPT were quantitatively assessed. These were

participants who were receiving outpatient treatment in one of three mental health institutions in the Netherlands. Each of themmet the following inclusion and exclusion criteria (12): they were between 18 and 65 years old and were suffering

from a severe, nonpsychotic mental disorder, had received treatment continuously for more than two years, and their utilization of treatment was high (having had at least one session every two weeks and at least two crisis interventions each year or one admission each year to a specialist mental- health institution).

Potential participants with a psychotic, bipolar I, or cognitive disorder, those with an IQ lower than 80, and those with an insufficient understanding of the Dutch language or problems communicating in Dutch were excluded. Participants had to be in at least the second stage of ICPT or had completed it, when relevant information about the WA and treatment outcome was collected. The interviews, therefore, were conducted one year or more after ICPT had started. In the first stage, a subset of participants was identified who had indicated on the informed consent form that they had signed that they could be approached for additional research, in addition to their participation in the RCT.

Recruitment

A sample of 13 participants was selected from the experimental group (ICPT group). The characteristics of these participants can be found in Table 1. First, the population was selected on the basis of the "informed consent" forms on which patients had indicated that they could be approached for follow-up research. We also aimed for an equal distribution of men and women. In addition, it was desirable for the participants to be in the working phase of ICPT (third phase), because at the end of the treatment it is expected to provide the most relevant information about how the ICPT- elements shape the WA and the possible self-determination of patients in general. The interviews were therefore conducted after the participants had participated in ICPT for about a year. The first five participants were selected from that sample because (based on the initial analyses) they indicated that they were particularly satisfied with their WA. In the next stage, an attempt was made to recruit participants who had relatively low WA scores, as measured by a scale to assess the therapeutic relationship (STAR) (14), but this attempt was unsuccessful because, for example, these patients were no longer willing to participate in the follow- up research. In the final stage, male respondents were recruited on the basis of interim analysis, which indicated that males were far underrepresented in the sample, yet they could potentially provide important information for theory building.

A total of 19 participants were approached, 13 of whom agreed to participate. Six of the nine either had no desire to participate, or they could not be reached.

Table 1. Characteristics pf the participants

Socio-demographic characteristics	*N*
Number of respondents	13
Gender	
Male	2
Female	11
Age	
20–30 years	5
31–40 years	1
41–50 years	0
51–60 years	6
60+	1
Ethnicity	
Dutch	12
German	1
Marital status	
Married	7
Unmarried	6
Working status	
Employed	5
Incapacitated	6
Other	2
Education	
Primary	1
Secondary	7
Tertiary	5
Income	
Salary	2
Social benefit	11
Treatment characteristics	
Frequency of contact	
Weekly	2
Once in 2–3 weeks	7
Once in 4–6 weeks	8
Mental health institution	
A, Large, in the middle of the Netherlands	3
B, Large, in the east of the Netherlands	6
C, Medium, in the south of the Netherlands	4
Treatment period prior to ICPT with the same care	
(s.d. 0.5–11 years) 0–1 years	2
1–3 years	2
More than 3 years	6
Unknown	3
Clinical characteristics	
Axis I according to DSM-IV	
Depressive disorder	4
Anxiety disorder	4
Alcohol abuse	1
Substance abuse	1
None	3
Axis II according to DSM-IV	
Borderline personality disorder	7
Obsessive compulsive disorder	2
Avoidant personality disorder	2
Dependent personality disorder	2

Instrument

The STAR is an instrument for quantitatively measuring WA, which was developed for people with a severe, long-term mental disorder. The scale has 12 items that measure three distinctive factors: *positive alliance* (six items), *positive clinician input* (three items), and *non supportive clinician input/emotional difficulties* (three items). Each item is answered on a 5-point Likert scale that ranges from *1* (*never*) to *5* (*always*).

An example of an item on the STAR is: *My clinician speaks with me about my personal goals and thoughts about treatment*. Overall, higher scores indicate a WA that the patient experienced positively. Table 2 shows the mean STAR total scores at the beginning and end of the qualitative study (a duration of 1 year). The STAR scores of the participants in the qualitative study increased across the duration of the RCT.

Table 2. STAR scores of participants in the qualitative study

Sample qualitative study	Baseline	After 1 year
	$N = 13$	$N = 12$
STAR total score (mean; s.d.)	36.7 (6.6)	37.1 (5.3)

Interview procedure

Data were collected via semi structured individual interviews. This procedure was selected to ensure that various topics could be addressed during each interview, but also to ensure that there was sufficient time for patients to discuss their individual perspectives (15). A list of topics was compiled, which were based on (a) the components and the outcome of ICPT, and (b) the qualitative findings from an earlier pilot study (6) and (c) theitems in the STAR. The interviews were recorded digitallyand were then transcribed anonymously. The interviews were conducted either in participants' homes or in one of the mental health institutions.

Data analysis

The analysis of the data was based on the principles of grounded theory (16). It was performed between February 2017 and January 2018 using the Atlas Ti7 analysis program. The interviews and the analysis of them alternated, andthe content of the subsequent interviews was guided by reflection on the interim

results. The interim analyses, in fact, resulted in adjustments to the list of topics to be discussed because we aimed to contribute to ongoing theory building during the course of the study.

Data collection and data analysis occurred as an iterative process. In the first stage, five interviews were conductedand then were coded openly. The open coding was carriedout in consultation with co-researchers; doing so enabled us to arrive at a consensus on the code tree. After these firstfive interviews had been coded, axial coding was initiated.In this stage of the analysis, codes that were related to one another were merged into categories (axes). Using the memo function in Atlas Ti7 allowed us to record the choices that had been made in allocating the codes and forming the categories. The first version of the axial coding, which was conducted after two additional (total of seven) interviews, was discussed with the co-researchers who then provided feedback. Fourteen categories initially emerged from using this procedure; however, after further analyses and new insights had been reached, the number of categories was reduced to nine. In this stage of the axial coding in which we used theoretical memos, the cohesion among the categories was assessed in order to arrive at an initial theory.

After the second round of interviews, we created an adapted list of topics, which was based on our initial theoretical insights. Both open and axial coding were again usedin the follow-up interviews. In the analyses, exceptions (i.e., negative case) to the theory that had been developed were also identified, and we determined whether these could also be explained by the theory. After three more (total of 10) interviews had been conducted and analysed, we again dis- cussed with co-researchers the categories that had emergedand the relationships among them, and the boundaries of the grounded theory were specified.
Because there was still some uncertainty about the degree of data saturation, three additional (resulting in a total of 13) interviews were then conducted. Nevertheless, a new perspective did not emerge, and the original theoretical insights were confirmed. An easy-to-understand summary was then written and given to eight respondents who agreedfor assessment. Their responses, in turn, supported the theory that had emerged.

During the different stages of the research, co-researchers were debriefed, and the results were used in the analysis, which two of our co-researchers (MvV and BK)

conducted.A diary was maintained in order for us to be able to reflecton how the research was being conducted. This was aimedin particular at improving the interviewing techniques andfor adequately analysing the data. Finally, the quality aspects of the consolidated criteria for reporting qualitative research (COREQ) (17) were used in implementing and reporting the research.

Ethical considerations

The Human Research Committee of Pro Persona Mental Health Services, Nijmegen approved the entire research project on ICPT; the project is registered under NL44744.091.13. In addition, the science committee at eachof the participating institutions approved the research project. This approval also applies to the part of the study presented in this article, for which participants were asked whether they could be approached for additional research.Only respondents who answered positively were approached for the interviews. Each participant signed an informed consent for this qualitative study, in addition to the informedconsent for the RCT.

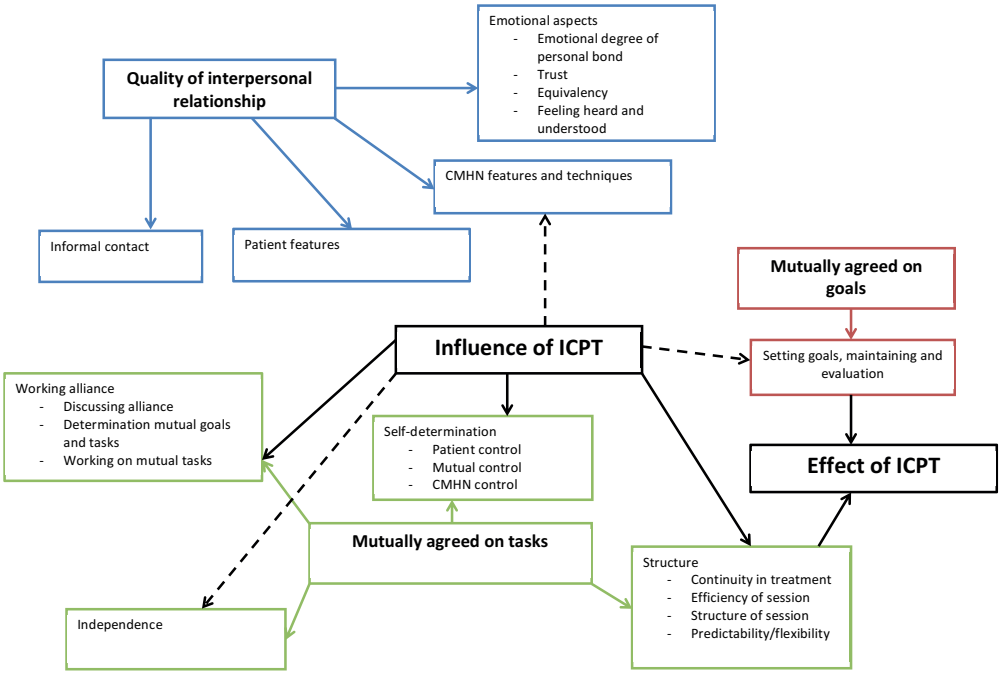

Figure 1. Components of WA and their link to ICPT

Results

The results of the study are summarized in Figure 1. It shows that three important components of the WA emerged from the interviews: (a) tasks that were mutually agreed on, (b) goals that were mutually agreed on, and (c) the experience that the participants had in interpersonal relationships with their CMHNs. Based on the research questions that were raised at the start of the study, an analysis was made of the factors that influenced the WA during ICPT and how WA, in turn, affected treatment outcome.

In the figure, the broken lines indicate which factors were influential in ICPT. ICPT appears in particular to have influenced the tasks that were mutually agreed on, but it had less of an influence on the goals that were mutually agreed on. From the perspective of the participants, the quality of the interpersonal relationship had only a limited influence on the effectiveness of the ICPT. In the next section, we discuss the individual components in greater detail.

Goals that were mutually agreed on

From the very start of the treatment, ICPT aims to help patients to achieve goals that the patient and CMHN formulated together. However, the central role of goal setting in ICPT was not consistently highlighted in the interviews. Some of the participants did explicitly link goal setting to ICPT, whereas others stated that the focus was already on goal setting and attainment before ICPT was introduced; therefore, they did not notice any change.

In addition, other participants could not, or could only to a limited extent, concretely specify the goals they were working on. This does not, of course, mean that there was no focus at all on goals, because all of the CMHNs followed the agenda inwhich the topics that were to be discussed had already been fixed. Nevertheless, it would appear that what was being discussed in these patients' sessions had not been formulated specifically as goals, or these participants did not remember them as such. Here are some specific examples:

"Furthermore, I don't think we are really working on goals. If I say I want to talk about … then it is written down. Is that agoal to talk about that specifically"?

The participants who did link the goals to ICPT indicated that they liked the goal orientation. The goals did not gradually fade away, and they, therefore, could be achieved faster.

"Yes, you came in and she had the papers. And she had written it all down, the goals and so on. And well, then we went to check again and there was always something about it. Oh yes! We would now be talking about this, oh yes! And it was then easier to respond to what you did, to what you had discussed the week before. So, you are not looking at each other for half an hour, like what will I talk about?"

"The goals have made it more concrete. There are more in the spotlight, and you repeat them every time."

However, it was also perceived as incriminating that the same subjects were always on the agenda. For example, one participant said:

"I don't always know what to tell about it, coming back to that one goal every time, while sometimes I just want to talk about other things."

In conclusion, ICPT seems to have had a limited influence on mutually agreed-on goals that were discussed in the sessions.

Mutually agreed-on tasks

With regard to tasks that were mutually agreed on, four central themes emerged in the interviews: the structure of the sessions, collaboration between the patient and CMHN, self-determination, and the patient's independence.

Structure of the sessions

In ICPT, an agenda is set in every session, with the aim of giving the sessions a certain degree of structure. Prior to the introduction of ICPT, there was less structure in the treatment sessions. The sessions were either less well-structured or—in the eyes of the participants—they were a little chaotic: "*They were like a meandering river*." Providing the sessions with structure enabled the participants to focus more on specific topics, and it provided continuity in the treatment, which resulted in a more well-defined intervention. The continuity was created by reiterating the goals and

the tasks, which allowed them to be evaluated and then negotiated, while allthe while referring back to previous sessions for comparison.

"Yes, it seems somehow that we are going into it in more detail, even though I don't feel like it at all. But to go into more detailon certain points and discuss them, and to insist on them, I notice that it works."

Efficiency in the sessions was reflected in the explicit time monitoring, which was based on the agenda. In most cases, this allowed all of the topics on the agenda to be discussed during the session. The focus on goal orientation in the sessions could be increased if important topics were placed on the agenda that needed to be discussed more thoroughly. However, the focus on time monitoring also meant that sometimes the patients felt under time pressure. Some of them felt that the agenda contained too many items, or that there was not enough time to discuss everything. However, this had been experienced even before the fixed structure of the sessions was introduced along with ICPT.

"I thought it was nice, with that agenda. It seems a bit morestructured. Then you will also lose your way less quickly. Thenwe now have to discuss this topic and that you keep an eye on time, and that everything is covered in any case."

The structure of the sessions allowed the sessions to be predictable, and this provided a certain peace of mind because the participants knew that topics that were most relevant for them could be mutually agreed on. In fact, most participants had the opportunity to add items to the agenda that were within the structure of the sessions that had been agreed on and which were important topics for them to discuss.

"On one hand, I thought it was nice, yes, making an agenda. And most of the time I still had one point, and then I justwrote that point down."

One participant, however, showed less enthusiasm aboutthe structure of the sessions:

"It is actually better if you just put down that thing [the agenda] and you grab two topics that you start with, for example. Because now it became a bit obligatory

standard session with work and school, and I don't think it's ideal. You have to think in advance what you want to discuss. And my CMHN and I never thought of what we wanted to talk about before. It was just: "How are you? Do you want a cup of tea? And tell me, what have you been through?"

The different CMHNs dealt with the structure of the sessions in various ways, which according to the participants were determined mainly by the particular agenda that had been mutually agreed on. In certain cases, there was an explicit link to the goals. The participants were usually asked to think about the agenda and to suggest specific topics for it before the session started. In other cases, the agenda was mutually set at the start of each session. Some respondents, however, found it difficult to suggest their own topics for the agenda. In such cases, the CMHN would provide support and structure by asking questions about the topics or the goals at the start of the session.

Collaboration

The results with regard to cooperation can be divided into the following three subcategories: discussion of collaboration between the CMHN and the participant, mutually agreed on goals and tasks, and mutually working on tasks.

Using the SRS at the end of each session, both the CMHN and the participant were now supposed to evaluate the session. This was a change that the participants mentioned in particular. Some of the participants indicated that the CMHN and the participant were completing the scale together and also that the CMHN initiated a discussion of the session. Other participants mentioned, however, that the CMHN and the participant completed the evaluation independently, and that it, therefore, was not a topic that was discussed in the sessions. If, however, it was a topic that was discussed, disagreements could be discussed, and the evaluation turned out to contribute to the idea of having had a constructive session.

"Well, I don't know at the end. But in the beginning, the first few times I was aware of the fact that I had had a good session and I felt understood and, which is actually good, then you go away with a good feeling."

Some of the participants felt that it was not constructive to fill out the SRS after every session, because they felt that they had always filled it out the same.

For them, completing the SRS had been beneficial, especially when ICPT started. However, having to fill it out every time was a time investment that could have been better spent on other things. Participants also mentioned the risk of social desirability. They felt that they did not dare to be completely honest about their experiences.

Self-determination

There were two kinds of self-determination: self-determination that the participant experienced and self-determination that the CMHN and the participant experienced mutually. In particular, the participants experienced self-determination as having increased during the course of ICPT. In their view, the increase occurred because they were now able to mutually agree with the CMHN on the topics and goals for the sessions and to have their own input when the agenda was being set. Mutual self-determination was particularly apparent when the CMHNs offered their own help when the topics for discussion were being decided on.

"Yes, she has sometimes indicated things, will we talk about this or that. But most of the time I indicated what I wanted to talk about. It sometimes happened that we started the sessions, that she indicated the direction of the sessions."

The CMHNs' own self-determination was mainly expressed in their directive approach. Participants valued this approach; it provided them with insight, and it was sometimes necessary in order to maintain the direction that the sessions were intended to take. Respondents did not identify any concrete changes in CMHNs' self-determination during the ICPT.

Independence

In the interviews, the participants indicated that ICPT had only a limited influence on their daily life. This was specific- ally mentioned during the last seven interviews. It had been hypothesized, however, that the participants would be more active and more independent when the sessions included interventions that had been mutually agreed on (such as motivational interviewing or cognitive behavioural therapy).

In conclusion, the participants came to experience more continuity and greater efficiency of the sessions and predict- ability was enhanced through the inclusion

of mutually agreed on, predetermined topics. The participants came toexperience more personal self-determination by being able to determine which topics would be discussed in the ICPT sessions.

The interpersonal relationship between the CMHNand the patient
Nearly every respondent mentioned the *good feeling* that they experienced in the interpersonal relationship they hadwith their current or some other CMHN. They also referredto this as the basic component of the contact. If, on the other hand, they did not have this good feeling about the relationship, they could not express themselves or actively participate; instead, they had a feeling of resistance. Most respondents indicated that the relationship they had had with their CMHN when ICPT started had not changed. The following quotation describes the relationship that one participant had with her CMHN.

"It's just, the session was structured, and she knows that I just like it. It is not that I suddenly find it (session during ICPT) more difficult with her or …. It is just as well [the CMHN]who does what she has to do."

Other participants, however, found that ICPT had a meaningful impact on the relationship between the CMHN and the patient. Specifically, it provided more clarity in the contact, and it increased the positive experiences through the use of an agenda and an increase in focusing, resulting from more structured goal setting and discussing topics that had been predetermined. The participants also felt that they had greater confidence in their CMHN.

"[The structure] certainly has an effect on the relationship. Because I think that makes a difference, that makes me more positive."

One of the aforementioned respondents initially did not have "*a positive feeling*" about her relationship with her CMHN. She did, however, have a sense of basic confidence that her CMHN was doing everything possible to reach her goals. Nevertheless, the structure of the sessions and the tasks that had been mutually agreed on were important, andin the end the relationship was growing, particularly because of the focus on the goals. This had a positive effect on the therapeutic relationship.

"Clarity just gives you a good feeling. The feeling that you achieve something. It is very important for me to take steps forward. I want to get out of this shit … but I need help for that."

The components that seemed most important to the participants were the confidence that they had in the CMHN, the feeling that they were being heard and understood, and experiencing their relationship with their CMHN as being on an equal footing. However, according to the participants, ICPT did not have an effect on these components. Additionally, the participants did not view the personal characteristics of the CMHNs or the techniques in ICPT that the CMHNs used as having changed when ICPT was introduced. They also felt that in ICPT the informal natureof their contact with their CMHN remained important. Finally, the participants greatly appreciated following elements, and they felt that these things strengthened the inter- personal relationship: sessions about everyday topics, the humour, and the socializing.

"Yes, I liked the fact that she didn't just come to hear my problems and then went away again. It was also just … Look, what I have been through and if I wanted to show somethingnice … that is also who I am and that also part of me. I also think that it should be possible. But then the basics must be good. The relationship between the CMHN and the patient must be clear."

In conclusion, according to the comments that the participants made, the quality of the interpersonal relationship between the CMHN and the patient was influenced only toa limited extent by the introduction of ICPT yet the focus on goal setting appeared to strengthen the relationship.

Discussion

The interviews revealed that ICPT had only a limited influence on the participants' predetermined goals and on the interpersonal relationship between the CMHN and the participant. On the other hand, ICPT had a definite influence on the mutually agreed-on tasks, and in particular on the structure of the discussion between the CMHN and the participant that the mutually determined agenda had created. Most of the respondents associated ICPT with mutual goal setting, although some of them did not. However, the progress that the participants experienced during the course of the sessions seemed to be linked to working toward the achievement of goals. According to most of the respondents, ICPT had only a limited effect on the quality of the relationship between the CMHN and the patient, although several of the respondentsdid mention this effect. On the whole, however, whether these factors played a role in the perceived significance of ICPT was not apparent from the interviews. When ICPT was introduced, the respondents did, however, experience greater continuity, efficiency, and predictability in the sessions. Some of the respondents attributed the good alliance between themand their CMHN to the assessment scale (the SRS) that both the CMHN and the patient filled out at the end of each session. Doing so enabled differences in opinions to emerge,which in turn could be discussed and resolved.

According to the respondents, their own self-determination increased during the course of the sessions because they were able to con- tribute their own views to the discussions.

Comparison with pilot study

Participants' opinions about the SRS being completed at the end of each session were divided, both in the pilot studyand in this study. In the pilot study, many of the respondents indicated that they viewed the SRS is an opportunity to improve their relationship with their CMHN, however, notin this study. The reason for this is not entirely clear, but it seems that it can be explained by the fact that many of the respondents completed the SRS independently of their CMHN, and it, therefore, was not always discussed duringthe treatment sessions. When, on the other hand, the patient and the CMHN together completed SRS, the rapport between them generally improved.

In the previous pilot study (6) (mentioned in the Background section), some participants' scoreson the STAR (i.e., how the WA was perceived) decreased during the course of the sessions, but this did not occur in the RCT. *Feeling heard* (e.g., the CMHN *listened*, and the patients felt that they *could tell anything*) was an important determinant of how the patients felt that they experienced the interpersonal relationship.
On the whole, therefore, the same themes seemed to emerge in the current research andin the pilot study.

Comparison with other studies
There have been a limited number of research studies on the WA between CMHNs and people with a severe, long- term, nonpsychotic disorder. In addition, considerably more research has been conducted on psychotherapy generally than on long-term treatment specifically. Comparing the present study with earlier studies is also difficult, because this study was specifically focused on the WA within the context of ICPT. Qualitative research has, however, been conducted on the experiences of patients who were receiving outpatient psychiatric treatment from various disciplines, including nursing (18). These studies have focused on various themes, such as *make con- tact with me*, *get to know me as a person*, and *get to the solution*. ICPT, in particular, is related to these topics in that it works toward helping patients achieve their goals and find solutions to their difficulties in a more structured manner than in other kinds of treatment. What emerges, among other things, from the results of these studies is that the participants wanted their sessions to lead to something. This corresponds to the positive experiences that the patients in our qualitative research described. They indicated in particular that they appreciated the fact that the ICPT sessions were more structured and more focused than in other kinds of treatment. *Getting to know me as a person* and the informal contacts between the CMHNs and the patients appeared to have been very important to the patients and were recur- ring themes in the interviews with them.

Qualitative research has previously been conducted on the WA between CMHNs and patients; on the basis of this research, the STAR questionnaire was developed (14). The concepts expressed by patients about the therapeutic alliance in general concerned trust, respect, openness, and commitment. Specifically, in outpatient treatment patients perceived that their CMHN was helpfulwhen he or she attempted to access other care facilities. They also mentioned reliability, support, open

communication, and their own willingness to accept treatment. These concepts also emerged to a greater or a lesser extent in the current study. The goal-oriented concept that was apparent in earlier research was less significant in the present study, but this might be because of the patients' *willingness to accept treatment*. The themes that were related to *cooperation* and *direction* that emerged in the present study might be related to the patients' *willingness* and might account for their predominantly positive assessment of ICPT.

Theoretical framework

In this study, we found three central themes that almost exactly correspond to the components of the WA that Bordin (19) identified: agreement between therapist and patient on the therapeutic goals and therapeutic tasks, and the quality of the personal bond between the patient and the professional. This view of the WA is still widely adhered to in psychotherapy, in other professions, and in multidisciplinary contexts (20,21). Indeed, the WA is an import- ant factor in various treatment contexts (21). In fact, the quality of the WA appears to be a positive predictor of both therapeutic compliance and the treatment outcome of patients with a severe, long-term psychiatric disorder (10). Patients with a mental illness themselves experience their relationship with their CMHN as one of the most important conditions for good mental health care (11). This view closely matches what we found in the analysis of the current research. From the interviews, it was apparent that the patients anticipated that the WA would become stronger (particularly with regard to the task-oriented goals) during the course of ICPT, is consistent with Bordin's alliance theory. The participants in the current study did, however, vary in their assessment of the WA as they experienced it.

The STAR was based on quantitative research on the specific target group (14) and not on Bordin's alliance theory. It is unclear, therefore, whether the STAR covers the same concepts that are being espousedin Bordin's theory, because the STAR questionnaire has onlya limited number of questions about the agreement of theCMHN and the patient in the tasks that should be accomplished. Based on the statements that the participants made in the interviews, it would be expected that their perceptionof the WA would either remain the same or it would increase, which it did. Perhaps in the STAR study, the importance of goals and interventions was overlooked, and Bordin's theory fits better with the factors that underlie the WA within a specific intervention such as ICPT.

Strengths and limitations

The present research revealed valuable information about the significance of the WA in ICPT and the opinions of the respondents about ICPT. This qualitative research on ICPT provided input about the patients' point of view. It also provided an explanation of the influence of the WA on ICPT. Apart from ICPT, the components that were identified also provided information about what people with a severe, long- term, nonpsychotic disorder experience as helpful or unhelpful in their relationship with their CMHN. Another important feature of the study is that it assessed the views ofa group of patients who have not been widely studied.

The study, however, also has some limitations that should be acknowledged. One of these is the size of the sample; 13 participants are a limited number for a study that is based on grounded theory. Although saturation is a more import- ant consideration, it was assumed that from 15 to 30 interviews should be conducted in this approach (16). The heterogeneity of the group was also limited, particularlyin that only a small number of men were included. It shouldbe noted, however, that the majority (73%) of patients inthe ICPT experimental group were also women. Another limitation of the study is that mainly respondents with relatively high STAR scores were included. This was apparent when the STAR total scores of the entire experimental groupin the RCT were analysed.

It is noteworthy that the majority of the respondents were very enthusiastic about the WA with their CMHN. The question, however, arises as to whether the entire interventiongroup was a representative sample of people with a severe, long-term, psychiatric disorder, or whether there was selectionbias for respondents who were more positive about the treatment they were receiving. This possibility arises when we notethat the STAR scores were generally very positive. Another possibility is that the respondents evaluated their relationship with their CMHN in a socially desirable manner. Regardlessof the reason for the respondents' positive evaluations, wehave only limited insight into ICPT among respondents who have a poorer relationship with their CMHN.

Implications for daily practice and further research

The interviews showed that for at least one category of people with a severe, long-term mental disorder, ICPT is supplementary, mainly because of the task-oriented nature of the WA and, to some extent, the goals that are mutually agreed on.

Most of the respondents seemed to benefit from the structured treatment. It is remarkable, however, that other components of ICPT, such as the fact that the treatment occurs in stages or that the goals were not very clearly expressed, were hardly mentioned. This is perhaps due to the fact that the goal-setting stage had already occurred when the interviews took place. Greater insight could be gained into this possibility by interviewing respondents in different stages of their treatment.

Conclusions

The main factors that affected the perceived WA during ICPT for people with a severe, long-term disorder were (a) the tasks that had been mutually agreed on, (b) the use of an agenda, the structure of the sessions, (d) the alliance between the CMHN and the patient, and (e) the patient's own self-determination. In addition, there was a limited influence on the mutually agreed on goals and the quality of the personal relationship between the CMHN and the patient.

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Disclosure statement
The authors declare that they have no competing interests.

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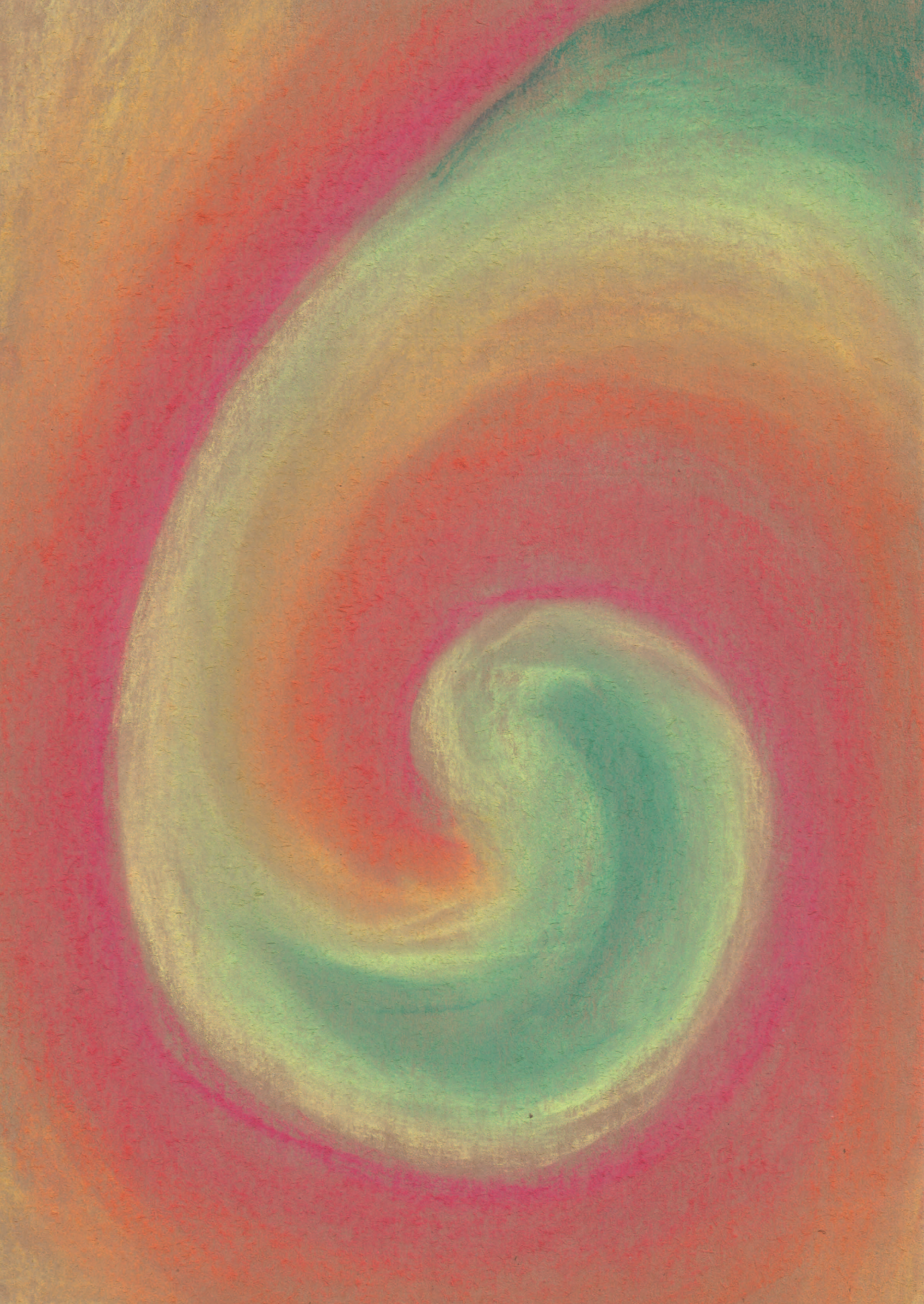

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Structured assessment of suicide risk in a psychiatric emergency service: Psychometric evaluation of the Nurses' Global Assessment of Suicide Risk scale (NGASR)

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Abstract

Background: Risk of suicide is notoriously difficult to assess, and no gold standard is available, in terms of an instrument of first choice. Many different instruments are in use, among which are some that are not properly psychometrically investigated.

Aim: The aim of this study is to establish the psychometric properties of the Dutch version of the Nurses' Global Assessment of Suicide Risk scale (NGASR), and the feasibility of its use in assessing suicide risk. Therefore, our research questions are as follows: what is the reliability, validity, interpretability, and feasibility of the NGASR?

Methods: A psychometric study of acceptability, reliability, and predictive validity among 252 patients making use of a concurrent instrument, the Suicide Intention Scale (SIS), concurrent assessment by a physician and 6-month follow-up.

Results: Factor analysis identified five factors. Cronbach's alpha was .45. Intraclass correlation was .92 (95% confidence interval (CI) = .85–.95). Association between total NGASR and SIS was substantial and significant (B = 0.66, standard error of mean (SE) = 0.19, ß = .66, p = .003). NGASR total score had a significant and moderately strong association with judgement by a physician on 'suicidal thoughts' (odds ratio (OR) = 1.24, p = < .001) or 'suicidal thoughts or plans' (OR = 1.35, p = .001). No significant association of NGASR scores and 6-month follow-up of suicidality was found.

Conclusions: Internal consistency of the NGASR and most of the subscales identified was low. Other indicators of reliability of the NGASR were sufficient, although predictive validity was poor. The NGASR did not outperform other instruments but is easy to use, and may contribute to identification of risk factors, as well as to a more integral assessment of suicide risk.

Introduction

Worldwide, suicide is the 10th common cause of death (1). Absolute and relative numbers of (attempted) suicide differ strongly between nations (2). In the Netherlands, approximately 1,500 people die each year by suicide, while about 94,000 people attempt suicide of whom 14,000 require hospital treatment (3). In 2008, a total of 1,353 people committed suicide in the Netherlands versus 1,753 in 2012, an increase of suicides by 30% (4). Suicide and attempted suicide are more likely in persons who experienced extreme financial loss, persons who may feel excessive guilt, humiliation or shame, or persons who have experienced loss of a close personal relationship (5). If the person cannot cope with the situation and there is no social support, these factors may increase suicide risk (5), but are also strongly related to psychiatric disorders (6). Therefore, psychiatric professionals often are faced with the complex task of assessing the risk for suicide.

Currently, there is no gold standard in suicide assessment, in terms of an instrument of first choice (7). In Dutch mental health care, recent guidelines state that all professionals (including psychiatrists, nurses, psychologists, and psychotherapists) need to be able to explore the suicidal state. They need to be able to assess the psychosocial state the person is in and the main risk factors. Also important are involving family, referring to specialized care and taking of the person's safety (8). Every mental health professional may be confronted with suicidal patients, frequency and severity being dependent on differing patient populations and treatment settings. In many situations, psychiatric emergency services are called upon, both by professionals from within and outside specialty mental health services (9). In the Netherlands, as in other European countries, community psychiatric nurses (CPNs) are often the front- line workers in such psychiatric emergency service, backed by psychiatrists in either a training, attending, or consulting role (10).

Both nurses and doctors find the comprehensive assessment (including structured procedures) of suicidality difficult, in spite of its inclusion in several educational or professional curricula. There are no clear guidelines on which professional should perform such assessments and under which conditions, which reinforces the need of cross-disciplinary instruments that may be used by a variety of professionals (11). This lack of direction may be partly caused by the limited value of structured assessments for suicide risk (12). Most have been poorly tested in prospective

studies, or have limited predictive power in daily practice, and therefore may be underused. Conceptual problems easily arise in assessments of suicide risk, related to the issue whether an instrument should assess risk factors (e.g., depression or loss of loved one) or risk symptoms (e.g., suicidal thoughts, or plans) or both. Psychometrically, a combination of a formative (risk factor) model and a reflective (risk sign) model is complicated.

Commonly used suicide risk assessment tools in clinical settings are, for instance, the Beck Hopelessness Scale (BHS) (13), which was designed to measure negative attitudes about one's future and perceived inability to avert negative life occurrences. The BHS has internal consistency scores ranging from $\alpha = .82$ to $\alpha = .93$ (Cronbach's alpha) among psychiatric samples (Beck & Steer, 1988), and $\alpha = .77$ to $\alpha = .88$ in a non-psychiatric sample (14).
Another is the Beck Scale for Suicide Ideation (SSI) (15), which measures the current and immediate intensity of attitudes, behaviours and plans for suicide-related behaviour with the intent to end life, among psychiatric patients. The SSI has Cronbach's alphas ranging from $\alpha = .84$ to $\alpha = .89$.

Responses to the SSI have been significantly associated with the Beck Depression Inventory and Hamilton Rating Scale for Depression (16). Predictive validity of the SSI for acute suicide showed that patients with a score >2 were seven times more likely to commit suicide. A third is the Modified Scale for Suicide Ideation (17), which was designed to screen at- risk patients in clinical settings in a format that can be used by paraprofessionals and laypeople. Reported internal consistency of SSI-M responses range from $\alpha = .87$ to $\alpha = .94$ (18). The SSI-M shows some support for establishing risk over time; however, there is limited evidence for its predictive validity.

Another developed scale is the Nurses' Global Assessment of Suicide Risk scale (NGASR) that has been widely translated and is used in many countries, however without proper psychometric evaluation (19). We found two studies on the reliability and validity of the NGASR. One using a relatively small sample (n = 106) of psychiatric inpatients that assessed some aspects of reliability and validity. Reliability of the scale was supported with a total intraclass correlation coefficient (ICC) of .890 (range from .722 to 1.000). Other results supported the criterion-related validity of the scale (20). In another study, for the 16 items of the German version of the NGASR scale (n = 12), the observer's agreement for the total scores (ICC = .9) and the risk levels (kappa = 0.7)

were high to very high (21). In both studies, the relatively small sample sizes may be considered a limitation, as well as the insufficient assessment of validity of the NGASR. For this reason, we designed a full psychometric study with sufficient participants in a general mental health care setting.

The aim of this study is to establish the psychometric properties of the Dutch version of the NGASR, and the feasibility of its use in estimating the severity of suicide risk (risk assessment). Therefore, our research questions are as follows: what is the reliability, validity, interpretability, and feasibility of the NGASR?

Methods

Design

In this descriptive study, the NGASR was completed by CPNs, as part of the psychiatric emergency service's routine assessment through a psychiatric interview by both a CPN and a psychiatrist or a psychiatrist in training. In one subsample, patients were also rated with another scale for suicidal intention (the Suicide Intention Scale (SIS) (19) after a suicide attempt. In another subsample, the NGASR was also completed by a psychiatrist or a psychiatrist in training. A third subsample of patients was followed up for 6 months. Demographic and clinical data were collected for all samples.

The NGASR scale

The NGASR was developed by Cutcliffe in 2004 and is an assessment tool developed for nurses, used to identify psychosocial stressors that are reported to be strongly linked with suicide risk. It is based on 15 items, with different items given a different weighting, resulting in a maximum total score of 25. Scores of 5 or less represent a low level of risk, 6–8 represent intermediate risk, 9–11 represent high risk and 12 or more represent very high risk. Each item is supported theoretically and empirically by studies that have shown an association between the item and suicide.
However, the validity and reliability of the scale as a whole have not yet been empirically tested (19).

Instrument translation

The NGASR was translated into Dutch with cooperation of the author of the original instrument, making use of for- ward and back translation by a professional translator.

A multidisciplinary expert committee, consisting of five psychiatrists, one CPN and one academic professor with a nursing background, reviewed the translated version addressing semantic, idiomatic, experiential, and conceptual equivalence. There was debate about a small number of items; however, this debate was not related to the translation of the instrument but rather to its content validity. Resulting from that discussion, some minor changes were made: 'misuse of drugs' was added to Item 4 and 'anhedonia' was added to Item 14.

Setting and participants

This study took place between January and May of 2010 in the central psychiatric emergency service of Utrecht, the fourth largest city in The Netherlands. This service assesses all patients within the city limits that are referred for crisis intervention (by general practitioner (GP), police, health and social care professionals, or self-referral). Included were all patients above age 17, excluded were those with whom an extensive assessment appeared impossible for safety reasons, with whom contact, or communication was problematic (due to severe psychotic states, for instance with agitation or mutism) and those who were unable to understand the Dutch language without use of an interpreter.

Variables and measurements

Demographic and clinical (diagnosis, Global Assessment of Functioning (GAF)-score) characteristics were collected from patient files by the first author.

SIS

Apart from the NGASR, the recommended SIS (22) based on Beck's SSI (15) was completed by both a CPN and a psychiatrist or a psychiatrist in training in a subsample of 20 patients. Within the 3 months of the research, 20 patients ended up in the emergency room of a general hospital, because they had recently attempted to commit suicide. Since the SIS can only be completed after a patient has attempted suicide, the sub- sample is relatively small (20). The SIS was completed by the CPN that was involved during the hospital visit. The SIS consists of nine items, each scored between 0 and 2. A total score of 13 or higher indicates a strong intention for suicide. The SIS has moderately high internal consistency with Cronbach's alphas ranging from $\alpha = .84$ to $\alpha = .89$. Responses to the SSI have been significantly associated with the Beck Depression Inventory and Hamilton Rating Scale for Depression (12).

Psychiatric interview

Psychiatric interviews were carried out with all patients, performed by a psychiatrist or a psychiatrist in training. The psychiatric interview is routinely used to make an initial diagnosis, a working hypothesis, and a crisis treatment plan, while paying specific attention to risk assessment, and assessment of social, cultural, and physical factors that are related to the crisis situation. The first author, blinded for NGASR scores and SIS scores, assessed the patient files for descriptions of suicidality, rating those as either 'no suicidality', 'suicidal thoughts', 'suicidal thoughts and intentions', 'suicidality not reported' and 'suicidality not assessable'.

Follow-up data

In the subgroup of patients who received ongoing outpatient care from the psychiatric emergency service, the patient files were further examined. Reports on suicidal thoughts, intent or attempts up to 6 months after the first assessment were coded by the first author appropriately as 'not recorded', 'absence of suicidality' and 'presence of suicidal thoughts or intent'.

Ethics committee

The study was approved of by the scientific committee of Altrecht Mental Health Care. As the NGASR was filled out by the professional after the routine psychiatric interview with the patient, no further ethical procedures were required.

Statistical analysis

Face validity (the expert opinion about the validity of the separate items) of the NGASR was determined by looking at response rates for each item. Interrater reliability was explored by calculating the ICCs, based on the two-way random effects model (agreement), for all patients who were rated both by CPN and psychiatrist or psychiatrist in training. An ICC of .80 or higher was considered satisfactory. Construct validity (structural validity) and possible multidimensionality of the NGASR were studied by principal component analysis (PCA) with varimax rotation on the 15 items of the scale. Item 15 was omitted because of problematic low variance. Factors were identified for those with an eigenvalue higher than 1. Items with factor loadings $\geqslant 0.40$ were used to define a factor and corresponding subscale. A subscale was constructed when the items within a factor showed an internal consistency (Cronbach's alpha) with a value of at least .60 ('question- able'). Values above .70 were considered 'acceptable'.

To compute sensitivity and specificity, the levels of severity of suicidality according to the NGASR categories have been cross-tabulated with the judgment on suicidality in the psychiatric interview (thoughts and plans) as well as with the follow-up records on suicidality (thoughts or plans), Criterion validity (concurrent validity) was obtained by studying the associations between NGASR sum scores and the relevant NGASR subscale scores, on the one hand, and (1) SIS sum scores and (2) categories of suicidality assessed during the psychiatric interview, on the other hand.

Furthermore, predictive validity was examined by studying the association with record notes on suicidality for those who were followed up in outpatient care for the next 6 months. Associations with the SIS were computed with linear regression analysis, adjusting for effects by age and sex. Associations with the categories of suicidality in the psychiatric interview, and during follow-up, were computed using multinomial regression analyses, computing odds ratios and 95% confidence intervals. All analyses were performed using SPSS 19 for Windows.

Results

Characteristics of the sample

In the study period, 395 patients were seen by the psychiatric emergency service. Of them, 20 were excluded because of one or more of the aforementioned criteria, 123 were not scored because of time limitations, totalling 143 excluded patients. A brief exploration of a random sample of patients not assessed because of time constraints showed no significant differences with the included patients. In total, 252 patients were assessed with the NGASR and psychiatric interview. Of the 252 times the NGASR was filled out, it was fully scored in 214 of cases (item non- response rate 15%). This was by and large due to the fact that NGASR Item 8 ('family history of serious psychiatric problems or suicide') was not scored in 13% of cases, most likely due to the absence of reliable information on family history. Socio-demographic and clinical characteristics of the respondents are shown in Table 1.

Characteristics of the sample are in good agreement with those observed in two measurement episodes in 2009 and 2010 (N = 275), in which records of completely consecutive cases were examined (23), making this sample representative for the psychiatric emergency service. The most frequent reason of referral in the current

Table 1. Socio-demogrphic and clinical charasteristics of the sample.

		Total sample N=252	Referred because of suicidality N = 96	½ Year follow-up N=79
		n (%)	n (%)	n (%)
Gender	Male	137 (54.4)	45 (46.9)	30 (38.0)
	Female	115 (45.6)	51 (53.1)	49 (62.0)
Ethnicity	Dutch	179 (74.0)	77 (81.1)	55 (73.3)
	Non-Western migrants [a]	21 (21.0)	15 (15.7)	22 (27.8)
	Western migrants	10 (4.1)	3 (3.2)	2 (2.6)
Age	<18	11 (4.0)	7 (7.3)	2 (2.5)
	18-39	123 (48.8)	42 (43.8)	39 (49.4)
	40-59	93 (36.9)	41 (42.7)	27 (34.2)
	60+	26 (10.3)	6 (6.3)	11 (13.9)
Referred by	General practitioner	82 (32.5)	39 (40.6)	43 (54.4)
	Police	59 (23.4)	11 (11.5)	5 (6.3)
	Mental Health Care	55 (21.8)	18 (18.8)	15 (19.0)
	General Hospital (ER)	33 (13.1)	25 (26.0)	7 (8.9)
	Own initiative / others	23 (9.1)	3 (3.1)	9 (11.4)
Reason of referral	Suicidality	96 (38.1)	96 (100.0)	36 (45.6)
	Confusion/psychosis	70 (27.7)		16 (20.3)
	Aggression	29 (11.5)		6 (7.6)
	Depression / Anxiety / Other	57 (22.6)		21 (26.6)
First diagnosis Axis I	Psychosis [b]	61 (24.3)	3 (3.1)	14 (17.7)
DSM-IV	Manic episode	19 (7.5)	2 (2.1)	5 (6.3)
	Depression	49 (19.4)	32 (33.3)	23 (29.1)
	Adjustment / relational probl.	36 (14.2)	18 (18.8)	16 (20.3)
	Other	46 (18.3)	16 (16.7)	8 (10.2)
	No / deferred	41 (16.3)	25 (26.0)	13 (16.5)
First diagnosis Axis II	Deferred	148 (58.7)	59 (61.5)	69%
DSM-IV	Personality disorder NOS	31 (12.3)	14 (14.6)	15%
	Other	30 (11.9)	15 (15.6)	5%
Suicidality according to psychiatrists	Absent	116 (46.0)	35 (36.5)	32 (40.5) [c]
	Thoughts	62 (24.6)	42 (43.8)	11 (13.9)
	Thoughts and plans	20 (7.9)	14 (14.6)	2 (2.5)
	No report on suicidality	39 (15.5)	2 (2.1)	33 (41.8)
	Examination not feasible	15 (6.0)	3 (3.1)	1 (1.3)

[a] Moroccan N=21 (8.7%), Turkish N=11 (4.5%); in Measurement Episode Crisis Service Utrecht 2009/2010 the percentage of Moroccan patient was 8.4%, of the Turkish patients 1.8%.
[b] Psychosis: schizophrenia, psychosis NOS, schizoaffective disorder, delusional disorder
[c] Suicidality in files during follow-up period (ambulant trajectory)

Table 2. The Nurses' Global Assessment of Suicide Risk scale (NGASR); original version and translated version in Dutch and results of pricipal component analysis and varimax rotation on items of NGASR (value printed in bold show factor loadings > .40.

				sample	(suicidality)					
			(N=252)	(N=252)	(N=96)	1	2	3	4	5
1	Presence/influence of hopelessness	*Gevoelens van hopeloosheid*	100	56.0	74.0	**.67**	-.23	.07	.24	-.09
2	Recent stressful life event, for example, job loss, financial worries, pending court action	*Recente stressvolle gebeurtenissen*	99.2	45.6	53.7	.06	-.21	.05	**.69**	.04
3	Evidence of persecutory voices/beliefs	*Imperatieve hallucinaties of achtervolgingswanen*	99.6	25.1	6.2	.01	**.73**	-.12	-.21	-.01
4	Evidence of depression/loss of interest or loss of pleasure	*Depressie, interesseverlies of anhedonie* [c]	99.6	51.4	69.8	**.80**	-.12	-.01	.05	-.03
5	Evidence of withdrawal	*Sterke aanwijzingen voor het zichzelf terugtrekken*	100	34.1	39.6	**.72**	.32	-.03	-.01	.03
6	Warning of suicidal intent	*Suïcidale uitingen*	100	48.4	85.4	**.51**	-.48	.38	.05	-.04
7	Evidence of a plan to commit suicide	*Aantoonbaar suïcideplan*	100	7.9	15.6	.28	-.26	**.42**	-.27	.09
8	Family history of serious psychiatric problems or suicide	*Ernstige psychiatrische problemen in de familieanamnese of suïcide in de familie*	86.9	19.2	17.9	-.03	.11	-.07	.21	**.67**
9	Recent bereavement or relationship breakdown	*Recent sterfgeval in de omgeving of een recent verbroken relatie*	99.6	13.5	20.8	.09	-.11	-.05	**.70**	-.04
10	History of psychosis	*Bekend met recente of eerdere psychoses*	98.8	35.3	12.5	-.13	**.74**	.06	-.16	-.02
11	Widow/widower	*Weduwe/weduwnaar*	100	2.8	2.1	-.05	-.13	-.03	-.25	.76
12	Prior suicide attempt	*Eerdere suïcidepogingen*	99.2	27.6	44.2	.05	-.12	**.72**	-.07	-.09
13	History of socio-economic deprivation	*Sociaaleconomische deprivatie*	100	41.2	41.5	.20	**.41**	**.47**	.31	.27
14	History of alcohol and/or alcohol misuse	*Bekend met overmatig alcoholgebruik of misbruik van middelen* [d]	100	36.5	33.3	-.39	.19	**.60**	.17	-.18
15	Presence of terminal illness	*Terminaal ziek*		0.4	0.0					
	Variance explained [%]					19.0	11.2	10.2	9.0	8.0
	Eigenvalue					2.7	1.6	1.4	1.3	1.1

[a] The no /yes format yield score 0 or 1, except when the items 1, 4, 7 or 12 are involved, when the assigned scores are 0 or 3; all available data used.

[b] For the Principal Component Analyses, all scores were used in the 0 / 1 format (only data used with complete scores on all items); item 15 was excluded.

[c] slight addition in Dutch version to original NGASR: 'loss of interest or anhedonia'

[d] slight addition in Dutch version to original NGASR: 'substance abuse'.

study was suicidality with 38.1% (38% in measurement episodes 2009/2010), followed by psychosis/confused behaviour in 27.7% (27% in measurement episodes 2009/2010). The ethnic composition of the sample closely resembled that of the measurement episodes 2009/2010 sample: the percentage of ethnic Dutch patients was 74.0% (72% in measurement episodes 2009/2010).

Response rates on the NGASR items

As shown in Table 2, most NGASR items received high response rates. Low scores were present on Item 15 ('Terminal illness'). Three other items also yielded rather low rates, Item 7 ('Evidence of a plan to commit suicide'), Item 9 ('Recent bereavement or relationship breakdown') and Item 11 ('Widow/widower'). In the subgroup of patients who were referred because of suicidality, the response pattern differed, with lower scores for items on psychosis, and higher scores for items on hopelessness, depressed mood and suicidal thoughts or plans or prior suicidal behaviour. Due to the scoring type of these items ('0' or '1'), there is no true floor effect but rather a low incidence of these factors.

Reliability (internal consistency)

Cronbach's alpha of the total NGASR was .45. For the subscales, the following Cronbach's alpha values were found: Subscale 1 'suicidal mood' (Items 1, 4, 5, 6; *N* = 251) = .68; Subscale 2 'severe mental illness' (Items 3,10, 13; *N* = 246) = .42; Subscale 3 'proneness to suicidal behaviour' (Items 7, 12, 13, 14; *N* = 214) = .30 and Subscale 4 'recent stress' (Items 2, 9; *N* = 249) = .37 As the internal consistency of Subscale 1 'suicidal mood' was at least 'questionable' and close to 'acceptable', it was further used for the exploration of concurrent and predictive validity.

Reliability (inter-rater reliability)

The intraclass correlation (ICC) between the NGASR scored by CPNs and the NGASR scored by psychiatrist or psychiatrist in training is shown in Table 3.

Construct validity

The PCA showed five factors with an eigenvalue above 1, with an explained variance of 57.3%. Varimax rotation revealed a number of high loadings on each factor, with one item (13: socio-economic deprivation) appearing in two factors. Table 2 (right columns) shows the factor loadings, derived from the rotated component matrix. Factor 1 represents the most pronounced factor ('suicidal mood, 19.0%'), consisting of four

items (hopelessness, depression, withdrawal, suicidal intent). Factor 2 ('severe mental illness', 11.2%) includes the two items on psychosis and the item on socio-economic deprivation. Factor 3 ('proneness to suicidal behaviour', 10.2%) consists of four items (previous attempts, current suicide plan, socio-economic deprivation, and sub- stance abuse). Factor 4 ('recent psychosocial stress', 9.0%) holds two items on recent social and interpersonal stress, and Factor 5 includes only one item, on family history of serious psychiatric problems or suicide ('family history', 8.0%).

Criterion validity (concurrent validity and predictive validity)

The association between total NGASR score and SIS was highly significant and moderately strong (*B* = 0.66, SE = 0.19, ß = .66, *p* = .003). Somewhat better associations were found for Subscale 1 'suicidal mood' (*B* = 0.89, SE = 0.24, ß = .66, *p* = .002). Subscale 2 'severe mental ill- ness' and Subscale 4 'recent psychosocial stress' did not show strong nor significant associations with SIS (respectively *B* = 0.64, SE = 1.10, ß = .13, *p* = .569 and *B* = 0.05, SE = 0.72, ß = .02, *p* = .944), and neither did Subscale 3 'proneness to suicidal behaviour', although this may have been due to the small number of subjects (*B* = 0.66, SE = 0.43, ß = .34, *p* = .142). As shown in Table 4, the NGASR total score had a highly significant association with the judgement by the psychiatrist or psychiatrist in training on 'suicidal thoughts' or 'suicidal thoughts or plans'. The associations with Subscale 1 'suicidal mood' were some- what more prominent. Although not significant, the associations with Subscale 2 'severe mental illnesses were in the opposite direction. Subscale 3 'proneness to suicidal behaviour' was significantly associated with the clinical judgment about suicidal thoughts and plans. No significant associations turned up for Subscale 4 'recent psychosocial stress'.

Associations of NGASR scores and subscale scores with the categories derived from the record notes on suicidality during the half-year follow-up are shown in Table 5. The associations were clinically relevant but did not reach significance, although the association of Subscale 1 scores ('suicidal mood') and report of suicidal thoughts or plans in the follow-up period reached the level of a statistical trend.

Interpretability

Interpretability was also examined by calculating sensitivity and specificity. Although the sensitivity of the lowest level of the NGASR categories amounted to 100% for the judgment in the psychiatric interview, this was at the expense of a very low

Table 3. Intraclass correlation(ICC) between the NGASR scored by CPN and the NGASR scored by psychiatrist or psychiatrist in training.

Correlation scores between CPN and psychiatrist of psychiatrist in training					
	ICC	F	df	P	(95% CI)
NGASR-score (0-18)	.92	23.0	43	<.001	(.85-.95)
Subscale 1 (0-8) [a]	.80	9.1	53	<.001	(.68-.88)
Subscale 2 (0-3) [b]	.91	21.2	51	<.001	(.85-.95)
Subscale 3 (0-8) [c]	.96	49.0	49	<.001	(.93-.98)
Subscale 4 (0-4) [d]	.87	14.1	51	<.001	(.78-.92)

[a] NGASR Subscale 1 'suicidal mood' (items 1,4,5,6)
[b] NGASR Subscale 2 'severe mental illness' (items 3, 10, 13)
[c] NGASR Subscale 3 'proneness to suicidal behaviour' (items 7,12,13,14)
[d] NGASR Subscale 4 'recent psychosocial stress' (items 2, 9)

Table 4. Associations (multinomial regression) with concurrent categories of reports on suidality in the psychiatric interview for (I) Nurses' Global Assessment of Suicide Risk scale (NGASR) scores and (2) NGASR subscale scores (in separate models); adjusted for effects by age and sex (value printed in bold show P <0.05).

	Suicidal thoughts [a]			Suicidal thoughts and plans [a]			No report on suicidality [a]			Examination not feasible [a]		
	Wald	P	OR (95% CI)	Wald	P	OR (95% CI)	Wald	P	OR (95% CI)	Wald	P	OR (95% CI)
NGASR-score (0-18)	**18.4**	**<.001**	**1.24 (1.12-1.37)**	**12.0**	**.001**	**1.35 (1.14-1.59)**	1.6	.211	0.93 (0.84-1.04)	1.0	.312	0.92 (0.79-1.08)
Subscale 1 (0-8) [b]	**26.3**	**<.001**	**1.40 (1.23-1.59)**	**14.2**	**<.001**	**1.55 (1.23-1.94)**	1.3	.247	0.92 (0.81-1.06)	0.4	.538	0.94 (0.77-1.14)
Subscale 2 (0-3) [c]	3.1	.077 +	0.73 (0.52-1.03)	0.2	.650	0.89 (.0.53-1.48)	0.4	.527	0.88 (0.60-1.30)	0.1	.770	1.09 (0.61-1.94)
Subscale 3 (0-8) [d]	2.2	.141	1.13 (0.96-1.32)	**11.5**	**.001**	**1.51 (1.19-1.91)**	**4.8**	**.028**	**0.75 (0.57-0.97)**	0.6	.441	0.88 (0.63-1.22)
Subscale 4 (0-4) [e]	2.7	.100	1.12 (0.96-1.52)	1.8	.183	0.65 (0.34-1.23)	0.1	.712	0.94 (0.69-1.29)	2.3	.127	0.53 (0.23-1.20)

[a] absence of suicidality represents reference category
[b] NGASR Subscale 1 'suicidal mood' (items 1,4,5,6)
[c] NGASR Subscale 2 'severe mental illness' (items 3, 10, 13)
[d] NGASR Subscale 3 'proneness to suicidal behaviour' (items 7,12,13,14)
[e] NGASR Subscale 4 'recent psychosocial stress' (items 2, 9)

Table 5. Assocations (Multinormial regression) with records on suidality in the hlf-year follow-up period of ambulant treatment for NGASR score and NGASR subscale score on hopelessness, depression and suicidal thoughts (in separate models); adjusted for effects by age and sex (*N*=79).

	No report on suicidality[a]			Suicidal thoughts or plans[a]		
	Wald	*p*	OR (95% CI)	Wald	*p*	OR (95% CI)
NGASR score (0–18)	0.2	.665	0.97 (0.84–1.12)	1.8	.175	1.15 (0.94–1.12)
Subscale 1 (0–8)[b]	0.6	.445	0.93 (0.77–1.12)	3.0	.085 +	1.36 (0.96–1.94)
Subscale 2 (0–3)[c]	0.1	.745	0.90 (0.49–1.67)	0.0	.953	1.02 (0.47–2.22)
Subscale 3 (0–8)[d]	0.2	.651	1.08 (0.77–1.51)	1.2	.182	1.26 (0.83–1.91)
Subscale 4 (0–4)[e]	0.1	.788	0.95 (0.68–1.34)	0.3	.562	0.87 (0.55–1.39)

[a]Absence of suicidality represents reference category.
[b]NGASR Subscale 1 'suicidal mood' (Items 1,4,5,6).
[c]NGASR Subscale 2 'severe mental illness' (Items 3, 10, 13).
[d]NGASR Subscale 3 'proneness to suicidal behaviour' (Items 7,12,13,14).
[e]NGASR Subscale 4 'recent psychosocial stress' (Items 2, 9).

Table 6. NGASR classification and report on suicidality in psychiatric interview (left columns) and records on suicidality in falf-year follow-up period (right columns).

NGASR category	Suicidal thoughts and plans (*N* = 214)			Any suicidality in half-year follow-up (*N* = 68)		
	N (%)	Sensitivity	Specificity	*N* (%)	Sensitivity	Specificity
Low (0–5)	0 (0.0)			1 (4.5)		
Intermediate (6–8)	6 (10.9)	1.00	0.38	3 (13.6)	0.90	0.36
High (9–11)	2 (3.8)	0.70	0.62	5 (29.4)	0.60	0.69
Very high (12–18)	6 (19.4)	0.64	0.88	1 (14.3)	0.10	0.90
Total	14 (6.5)			10 (14.7)		
	χ^2 = 16.0, df = 3, *p* = .001			χ^2 = 4.8, df = 3, *p* = .190		

specificity. On the other hand, high specificity was attained when using the 'high risk' category as criterion level, but the sensitivity was limited for the judgment in the psychiatric interview, and very low and underpowered for the follow-up records. Using 'high risk' (scores 9 and higher) as criterion impresses as the best achievable option (Table 6).

Discussion

In this study, we investigated the structured assessment of suicide risk by use of the NGASR in a psychiatric emergency service. It is being used throughout the world, including Europe, North America, and Asia (19). This instrument has, to our knowledge, been partly psychometrically tested twice, in Japan (20) and in Switzerland (21). In this study, we found that the instrument has good face validity, both on item level and instrument level. Reliability in terms of internal consistency of the four subscales was low (ranging from .34 to .68), as well as for the total scale (.39). Reliability in terms of inter-rater scores was good, .92 for the total scale and between .87 and .96 for the four subscales. The NGASR had good content validity, and construct validity was adequate (five interpretable factors were identified).

Concurrent validity was 0.66 when related to another instrument for assessment of suicidal risk, and good when related to psychiatric interview. Predictive validity was limited (p = .175).

Validity and reliability of the NGASR

The NGASR has shown good results on face validity but poor results on internal consistency. The latter outcome is not overly surprising since the instrument constitutes of a number of quite different items, pertaining more to a checklist than to a psychometric construct. The internal consistency of the NGASR and most of the subscales identified was low, not surprisingly since risk-assessment tools have very heterogeneous factors. The instrument per- formed, however, quite well on inter-rater reliability and several forms of validity. Predictive validity of the NGASR, as in any other suicide risk assessment so far, is uncertain. Of course, this is the ultimate test for such an instrument, however complicated to investigate. Compared to some other assessments for suicide risk, for example, the BHS (13), the SSI (15), the SSI-M (17), the Suicide Intent Scale (22) and the Pierce Suicide Intention Scale (24), the NGASR performs low on internal consistency. All instruments perform high on inter-rater reliability. What they have in common is the fact that predictive validity for all of these scales has not been established (11). For future studies, a more elaborate follow-up assessment on suicidality is warranted.

Feasibility

The NGASR was originally developed for use by nurses. Within the described psychiatric emergency service, CPNs are often first to make a suicide assessment, which is why it is important to have an instrument that helps to assess suicide risk, especially for less experienced practitioners. The NGASR should be considered primarily as a checklist, as does appear from the current results, and not as a psychometrically consistent measure, However, both inter-rater validity and concurrent validity were high. Psychometric testing of checklist-type instruments such as the NGASR is complicated in general. These instruments are often used in psychiatric research and practice but do not measure such constructs as for which classic test theory was developed. While new methods such as Computer Adaptive Testing may improve their psychometric evaluation, these types of instruments may specifically benefit from rigorous assessment of predictive validity and usability.

Suggestions for improvement

After modification, the instrument should be validated again. The item on the presence of terminal illness clearly did not pertain to the current crisis population. Therefore, the applicability of the NGASR items may vary with the type of population: for example, in emergency rooms of general hospitals, this item may yield higher levels of recognition. In preliminary analyses, three more items were added to the NGASR: signs of anxiety and panic, psycho- motor agitation and admittance to a psychiatric ward in the past 2 months. These items did not contribute to the internal consistency, nor did they contribute to the robustness of the subscales, or to the concurrent or predictive validity (results available on request).

Application of the NGASR

Because the NGASR is easy in its use, it may be helpful to address many relevant risk factors in the usual interview, and to accomplish a more integral assessment of the suicidal state. Solely relying on scale scores should be discouraged. However, for professionals who enter the field of psychiatric emergency and of assessing suicide risk, the use of the NGASR, SIS or other scales may be instructive. The NGASR may facilitate nurses and other professionals to inform those who make the final, weighted clinical judgement. In future studies, this weighted clinical judgement can possibly be implemented and developed by Computer Adaptive Testing (Gershon, 2005).

Strengths and limitations of the study

This is the first rigorous psychometric evaluation of the NGASR instrument, making use of a reasonably large sample (*n* = 252), using multidisciplinary assessment of inter-rater reliability, and applying a number of relevant assessments of concurrent validity. Another asset is the available follow-up data on about a third of the sample, giving some insight into the predictive validity of the NGASR. However, the sample of the concurrent structured assessment was quite small (*n* = 20), while also the sample of inter-rater assessments could have been larger. Given the number of items in the NGASR, the statistical power to carry out factor analysis is relatively modest. Therefore, one should consider the emerging factor structure, as well as the subscales identified, only as an indication of the underlying structure of the NGASR. Retrospective examination and scoring of patient files by the first author may have been biased, although precautions were taken to prevent this (blinding).

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Conflict of interest

None.

Ethical standards

This study has been approved by the local ethics committee and has been performed in accordance with the ethical standards laid down in the 1964 Declaration of Helsinki and its later amendments.

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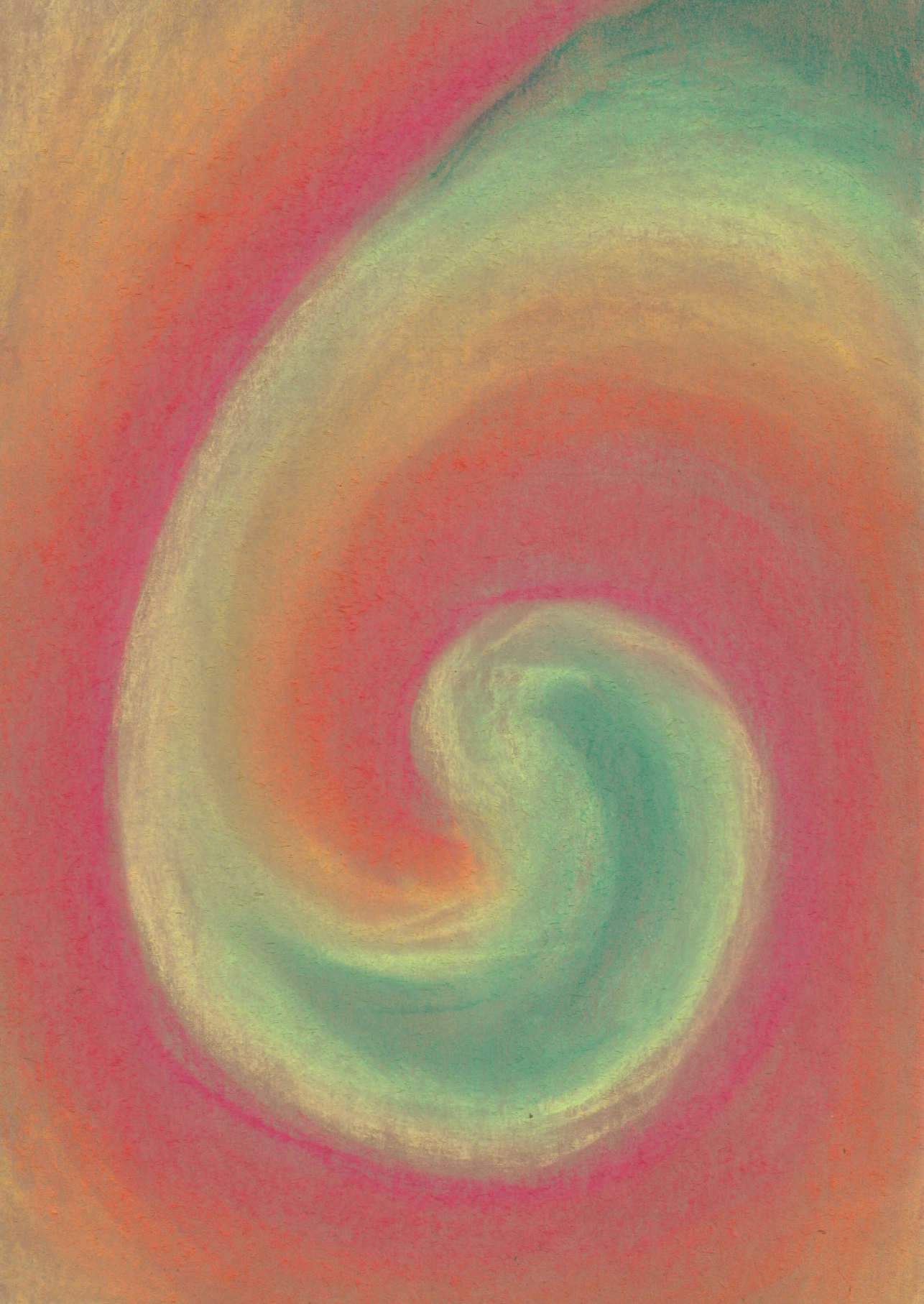

6

Suicide risk, personality disorder and hospital admission after assessment by psychiatric emergency services

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Abstract

Background: The main objectives of the mobile Psychiatric Emergency Services (PES) in the Netherlands are to assess the presence of a mental disorder, to estimate risk to self or others, and to initiate continuity of care, including psychiatric hospital admission. The aim of this study was to assess the associations between the level of suicidality and risk of voluntary or involuntary admission in patients with and without a personality disorder who were presented to mobile PES.

Methods: Observational data were obtained in three areas of the Netherlands from 2007 to 2016. In total, we included 71,707 contacts of patients aged 18 to 65 years. The outcome variable was voluntary or involuntary psychiatric admission. Suicide risk and personality disorder were assessed by PES-clinicians. Multivariable regression analysis was used to explore associations between suicide risk, personality disorder, and voluntary or involuntary admission.

Results: Independently of the level of suicide risk, suicidal patients diagnosed with personality disorder were less likely to be admitted voluntarily than those without such a diagnosis (admission rate .37 versus .46 respectively).
However, when the level of suicide risk was moderate or high, those with a personality disorder who were admitted involuntarily had the same probability of involuntary admission as those without such a disorder.

Conclusions: While the probability of voluntary admission was lower in those diagnosed with a personality disorder, independent of the level of suicidality, the probability of involuntary admission was only lower in those whose risk of suicide was low. Future longitudinal studies should investigate the associations between (involuntary) admission and course of suicidality in personality disorder.

Background

While suicide rates vary considerably between nations and over time, ranging from 3.9 suicides per 100,0000 people in the Eastern Mediterranean to 13.2 in South East Asia, rates of attempted suicide are relatively similar over a wide area [1]. In the Netherlands, injuries caused by suicide attempts led to 93.8 treatments at emergency departments and 56.3 general hospital admissions per 100,000 inhabitants in 2015 [2]. Many people who report suicidal thoughts or attempt suicide are seen by Psychiatric Emergency Services (PES), whose main objectives are to assess the presence of a mental disorder, to estimate risk to self or others, and to initiate an intervention (including psychiatric hospital admission). Following attempted suicide, PES often are called upon by general hospital emergency services. In the Netherlands, more often General Practitioners (GP's), ambulance services and the police ask PES for an assessment. Assessing suicide risk is therefore a core task of PES: in the Netherlands, mostly done by a community psychiatric nurse and a psychiatrist. 30% of a total 150,000–175,000 assessments each year, are related to suicidal behaviour [3]. Some 16% of all patients assessed within office hours are admitted to a psychiatric hospital, and some 28% of those assessed outside office hours. However, regional differences apply (range 5–35%) [4, 5].

Suicide risk, personality disorders and admission

When the perceived risk of suicide is high, PES may initiate psychiatric hospital admission, either with or without the patient's consent. It is a matter of professional debate whether or not suicidal patients should be admitted: some argue that protection should have the greatest priority [6], while others contend that restricting a patient's autonomy may increase the risk of suicide during and after admission [7, 8]. Importantly, admission cannot prevent suicide [9]. Interestingly, two studies found no association between suicide risk and hospital admission in the Netherlands [10, 11], others found that the probability of involuntary admission was increased by suicide risk in Israel [12], the USA [13, 14] and Germany [15].

To date, however, we have found no studies that investigated the interactions between suicidality, admission, and the type of mental disorder. In the absence of empirical evidence, clinical experience suggests that the rate of admission is higher in patients in whom acute suicidality is related to factors such as depression or psychosis than it is in those in whom it is related to having a personality disorder.

While clinicians vary substantially in the ways they perceive suicide risk in patients

with a personality disorder (most often a borderline personality disorder), it is unknown whether voluntary or involuntary admission is effective in reducing the level of suicidality. In some cases the level of suicidality may even increase, especially in patients with regressive behaviours, e.g. resulting in physical aggression towards self and others [16,17,18,19]. As three qualitative studies have shown, the hospitalisation of chronically suicidal patients may become repetitive, and may intensify suicidal behaviour [17, 20, 21]. Since there are no prospective studies, it is difficult to judge when it is justified to admit a suicidal patient with a personality disorder. Some patients with a personality disorder may get into conflict with staff and other patients during admission, particularly in the case of involuntary admission, resulting in a negative chain of events in which suicidal behaviour, aggression and self-harm increase [20,21,22,23].

Aims of the study

The aim of this study is to assess the association between level of suicide risk, a diagnosis of personality disorder, and risk of voluntary or involuntary admission by the PES. We hypothesized that suicidal patients with a personality disorder have a lower probability of admission.

Methods

Study design

In this observational study we used data from an electronic patient file designed specifically for use in PES, i.e., a web-based clinical support system comprising information on sociodemographic variables, psychiatric symptoms, psychiatric diagnoses, and environmental data. We selected data over a ten-year period (2007–2016) of all patients aged between 18 and 65 seen by mental-health services in the two largest cities in the Netherlands (Amsterdam and Rotterdam) and in one midsize city (Apeldoorn) in a more rural area.

Patients were seen by the PES (a psychiatrist together with a nurse, or a medical doctor or resident in psychiatry, supervised by a psychiatrist) on request of others: usually the general practitioner, but sometimes also on request of the police or an emergency department of a general hospital.

Data collection

Sociodemographic variables
We collected data regarding gender, ethnicity (born in the Netherlands vs. born in another country), ethnicity and age.

Clinical factors
Clinical factors, including level of suicide risk, were assessed using the Severity of Psychiatric Illness scale (SPI). The SPI was originally developed as a patient-level decision support tool to assess the need for services [24]. It contains 14 items, including level of suicide risk, substance abuse, and danger to others. While two studies [24, 25] have used the SPI on an item level rather than a total-score level, we focused on four items that were previously found to be associated with risk of admission [25]: level of suicide risk, level of substance abuse, danger to others, and motivation for treatment. Each item was rated on a 4-point scale from 0 to 3, with 0 indicating no risk and 3 indicating a high risk. The SPI is considered reliable(24) The Dutch version of the SPI had an overall inter-rater reliability of kappa 0.76 [25].

Psychiatric diagnoses
Clinicians either based their DSM-IV diagnoses on a clinical interview or adopted the diagnoses from the psychiatric files. These diagnoses were registered in broad categories such as 'psychotic disorder,' 'depressive disorder' or 'personality disorder'. The category 'other' contained diagnoses such as anxiety disorder or PTSD. Clinicians also registered different subtypes of personality disorder. For the analyses, we grouped the subtypes of personality disorders together, as no structured interview for assessment of a personality disorder was performed, and therefore the reliability of assessing subtypes of personality disorders in the context of the PES can be questioned. Clinicians could register more than one diagnosis. When personality disorder was registered as one of the diagnoses, this patient was coded as having a personality disorder, beside possible other (axis I or axis II) diagnoses.

Environmental factors
Family requests for admission were assessed separately on the basis of a dichotomous item asking whether or not the family had requested admission. The level of family involvement was assessed on the basis of one item of the SPI, which was also rated

on a 4-point scale from 0 to 3, with 0 indicating significant family involvement and 3 indicating absence of family involvement.

Outcome measure

Our outcome measure was admission to a psychiatric hospital through the PES, either voluntarily or involuntarily. The four criteria for emergency involuntary admission in the Netherlands are [1] the presence of a mental disorder (this is not specified in Dutch Mental health law, but in practice it is mainly a psychotic, bipolar I, or severe depressive disorder), [2] causing danger to self or others, [3] the lack of an alternative way of averting the danger and [4] unwillingness to be hospitalised.

Statistical analysis

Descriptive statistics were used to summarize the data on socio-demographic characteristics, clinical factors, diagnoses, and admission (Table 1). Logistic regression analysis was performed to assess the impact of personality disorder, on the association between the level of suicidality and the likelihood of admission, while controlling for gender, age, and danger to others (Table 2). Model comparison was based on the Akaike Information Criterion (AIC). To assess the fit of the final models, we calculated the Hosmer-Lemeshow goodness-of-fit statistic and the area under the receiver operating characteristic (ROC) curve [26].

To explore differences in outcomes when alternative strategies were used, we performed sensitivity analyses. Since risk assessments were grouped within clinicians and service organizations, generalized mixed models were fitted to determine the impact of the hierarchical structure of the data. Next, to control for the fact that the absence of suicidality does not automatically mean that the patient will not be admitted, we explored three approaches other than controlling for danger to others. First, we defined alternative suicide-risk categories; secondly, we split the file into ‘no danger to others’ and ‘low to high danger to others;’ and thirdly we restricted suicide risk by excluding patients with no suicide risk and patients with a moderate suicide-risk but a high risk of danger to others. As these approaches produced no relevant differences, we only report models controlling for danger to others. A full account of the sensitivity analyses is available on request from the second author. All statistical analyses were performed using SPSS version 24.0 (SPSS Inc., Chicago, IL).

Results

A grand total of 71,707 patients were assessed between 2007 and 2016, of which nearly 70% had been born in the Netherlands. Nearly 30% of the referrals had been made by GPs; in almost 40% of these cases, suicidality had been the reason for referral. Over half of the assessed patients (54.6%) were suicidal at the time of referral, with at least a moderate or high score on the SPI item. In terms of their diagnoses, over 30% had a psychotic disorder and over 16.2% had a personality disorder, mostly a borderline personality disorder (7.2%), followed by an otherwise unspecified personality disorder (6.4%), and an anti-social personality disorder (1.4%). For all characteristics, see Table 1.

The voluntary admission rate was 17.7% for patients with a low suicide risk, 28.4% for patients with a moderate risk, and 32.9% for patients with a high risk. The involuntary admission rate was 18.8% for patients with a low suicide risk, 16.3% for patients with a moderate risk and 31.9% for patients with a high risk.

Table 2 shows that the probability of voluntary admission to a psychiatric hospital for patients with a specific level of suicide risk was affected by the presence of personality disorder. Overall, patients diagnosed with personality disorder were less likely to be admitted than other patients. For patients in the high-suicide risk group the difference in voluntary admission rate between people diagnosed with personality disorder and other diagnosis is estimated at 0.37 versus 0.46 respectively (see Fig. 1a). The interaction effect suggests that when suicide risk increases, the probability of admission for patients with personality disorder increases more rapidly than for patients with no diagnosis of personality disorder. The interaction effect was more distinct in people who had been admitted involuntarily (for involuntary admissions model fit indices are higher). As we controlled for the risk of danger to others – which is strongly associated with involuntary admission – the coefficient for suicide risk is negligible in the model. When the level of suicide risk is moderate or high, the probability of involuntary admission for patients with a personality disorder is the same as that for patients with other disorders (see Fig. 1b).

The probability of (in)voluntary admission was also affected by other variables. An effect of motivation for treatment (main effect − 2.80, SE = .061; interaction effect − 0.257, SE = .042) indicated that involuntary admission was higher in patients

Table 1. Admission patterns and characteristics in patients assessed by the Psychiatric Emergency Services.

		Total no. of patients assessed *N* = 71,707 (100%)	No admission *N* = 42,572 (59%)	Voluntary admission *N* = 14,346 (20%)	Involuntary admission *N* = 14,789 (21%)
Sociodemographic variables					
Gender	Male	55.1	57.4	19.6	23.0
	Female	44.9	61.7	20.6	17.7
Ethnicity	Dutch	67.3	59.1	21.1	19.8
	Other	8.2	54.9	17.9	27.2
	Unknown	24.5	61.6	17.6	20.8
Age	18–38	49.5	59.9	18.2	21.9
	39–59	44.4	58.8	21.7	19.5
	60–65	6.1	59.5	22.6	17.9
Clinical factors					
Suicide risk	None (0)	35.4	62.0	15.9	22.1
	Low (1)	40.3	63.5	17.7	18.8
	Moderate (2)	16.3	55.3	28.4	16.3
	High (3)	8.0	35.2	32.9	31.9
Substance abuse	None (0)	54.0	62.5	20.1	17.4
	Low (1)	13.2	61.8	18.7	19.5
	Moderate (2)	16.1	56.7	17.9	25.4
	High (3)	16.7	50.1	22.7	27.2
Danger to others	None (0)	54.3	72.1	21.9	5.9
	Low (1)	30.3	56.5	20.7	22.8
	Moderate (2)	8.5	25.9	15.4	58.7
	High (3)	7.0	13.1	7.4	79.4
Motivation for treatment	None (0)	25.4	75.7	22.9	1.3
	Low (1)	31.2	64.4	30.8	4.8
	Moderate (2)	22.2	54.8	17.4	27.8
	High (3)	21.2	37.1	3.5	59.4
Psychiatric diagnoses					
Diagnosis axis I DSM-IV	Depressive disorder	12.6	63.6	28.7	7.7
	Psychotic disorder	32.1	38.8	20.3	40.9
	Other	55.3	68.9	20.0	11.1
Diagnosis axis II DSM IV	Personality disorder[a]	16.2	62.8	23.0	14.2
Environmental factors					
Admission requested by family	Not applicable	58.3	66.3	15.9	17.8
	Yes	28.0	28.3	36.6	35.1
	No	13.7	93.3	3.7	3.1
Family involvement	None (0)	44.1	61.4	21.0	17.6
	Low (1)	21.4	60.2	19.9	19.9
	Moderate (2)	15.7	58.5	20.0	21.6
	High (3)	18.8	54.4	17.8	27.9

[a]11 subtypes of personality disorder (according to DSM-IV) grouped together

Table 2. Probability of voluntary or involuntary admission in patient with suicide risk and peronality disorder.

	Voluntary admission B (SE)	Exp (B)	Involuntary admission B (SE)	Exp (B)
Intercept [a]	−1.395 (.020)		−1.158 (.033)	
Suicide risk	0.398 (.013)	1.49	−0.037 (.018)	0.96
Personality disorder	−0.508 (.049)	0.60	−0.929 (.080)	0.39
Interaction effect	0.142 (.031)	1.15	0.307 (.045)	1.36
AIC [b]	−32.3		−63.3	
AUC	.72		0.80	

[a]Controlling for age (grand-mean centered), gender (effect-coded), and danger to others
[b]AIC in smaller-is-better-form, comparing models with and without interaction effect

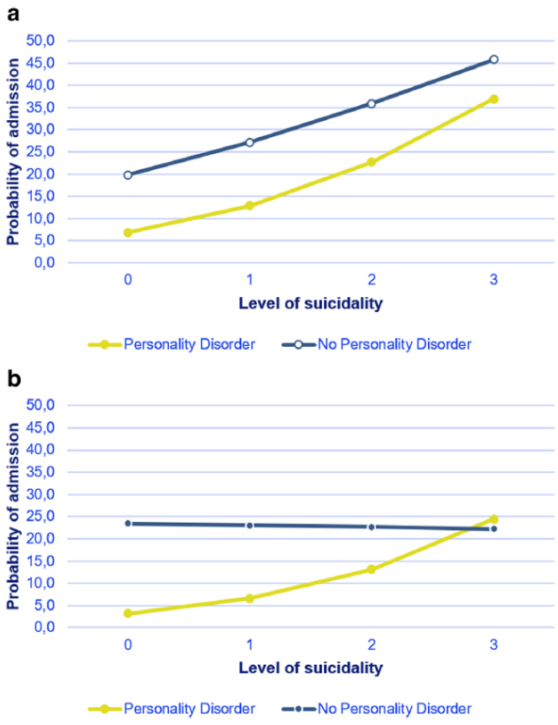

Table 1. a Voluntary admission by suicide risk and personality disorder (or no personality disorder) at fixed values for age gender and danger to others. **b** Involuntary admission by suicide risk and personality disorder (or no personality disorder) at fixed values for age, gender, and danger to others.

with less motivation for treatment. Substance abuse did not change the effect of personality disorder on the association between suicide risk and the probability of admission. Family requests for admission increased the probability of voluntary admission, which rose in line with the level of suicide risk (main effect 1.59, SE = .036; interaction effect 0.105, SE = .026). Family support was also apparent in the assessment for involuntary admission but not in combination with suicide risk. Patients who had strong family involvement were less likely to be admitted to hospital and were even less likely to be admitted when their suicide risk was higher (main effect − 0.114, SE = .032; interaction effect − 0.057, SE = .024). While these factors are important, they did not change the associations between level of suicide risk, personality disorder and (in)voluntary admission.

Discussion

This study shows that suicidal patients diagnosed with a personality disorder are less likely to be voluntarily admitted to a psychiatric hospital by PES, as compared to patients not diagnosed with a personality disorder However, when suicide risk is higher, the personality disorder diagnosis becomes irrelevant in the case of an involuntary admission.
These findings partly confirm the speculation amongst clinicians that admission may be less effective and possibly harmful to people with a personality disorder. Apparently, clinicians working in the PES think that unless suicide risk is very high, suicidal patients with a personality disorder should not be admitted. We speculate that this might be due to fear for a deterioration of the clinical state of patients who have been admitted with a personality disorder.

Strong family support was also associated with a lower chance of both voluntary and involuntary admission, while family pressure on admission was associated with increased chances of (in)voluntary admission. A previous study showed similar results: when significant others requested admission, the probability of admission increased [27]. Family and friends also gave practical support and motivated patients to get better and adhere to their treatment, which decreased the probability of admission. The same study also showed that admission as the last available option is more likely to be unavoidable when family or other close relatives indicate that they can no longer provide help.

Clinical significance and implications

When deciding on admission of a suicidal patient, PES professionals find themselves facing a recurrent dilemma: that admission might be harmful and increase suicidal behaviour – particularly in patients with a personality disorder – but that outpatient follow-up might not be safe enough. Data are lacking about both the effects on suicide risk of inpatient interventions [28]), as well as outpatient interventions such as Intensive Home Treatment (IHT). IHT can be seen as an alternative to admission, offers a multi-disciplinary approach and provides intensive community-based support and appropriate therapeutic interventions to patients and their families [29]. However, little is known about its effectiveness in prevention of suicide and a recent study suggests high suicide rates in IHT-patients [30], although causality remains unknown.

Another alternative to a voluntary admission to a psychiatric hospital may lie in respite houses that focus on a patient's autonomy, empowerment and responsibility [31]. Patients can stay in such houses for a short while, accompanied by volunteers [31]. While this is promising, and may not lead to increased suicidal behaviour in patients with a personality disorder, there is as yet limited evidence of their effectiveness [32].

Strengths and limitations

To our knowledge, this is the first study to describe the relationship between the level of suicide risk, personality disorder and psychiatric hospital admission. It nonetheless has some limitations. First, as personality disorders were diagnosed on the basis not of structured interviews, but on information gathered during the assessment by PES, some diagnoses may have been missing or incorrect. Therefore, we grouped the various types of personality disorder together. Second, the assessment of suicide risk was based on one item of the SPI, and also not on a structured interview. Given the nature and pressure of working in the PES, however, using structured interviews is difficult. Third, as all data were collected in clinical practice, they were vulnerable to errors or missing data in some variables (ethnicity, age).

Conclusions

After controlling for sociodemographic, clinical factors, psychiatric diagnoses, and environmental factors, we intended this study to assess the association between level of suicidality and risk of voluntary or involuntary admission in patients

presenting at the mobile PES with or without a personality disorder. We found that, independently of the level of suicide risk, suicidal patients diagnosed with a personality disorder were less likely to be admitted voluntarily than those without such a diagnosis. In involuntary admitted patients, however, personality disorder affected the probability of admission only in those whose risk of suicide was low Longitudinal studies are needed to better understand the associations between (in) voluntary admission and the course of suicidality in personality disorder patients.

Abbreviations

PES: Psychiatric Emergency Service

SPI: Severity of Psychiatric Illness rating scale

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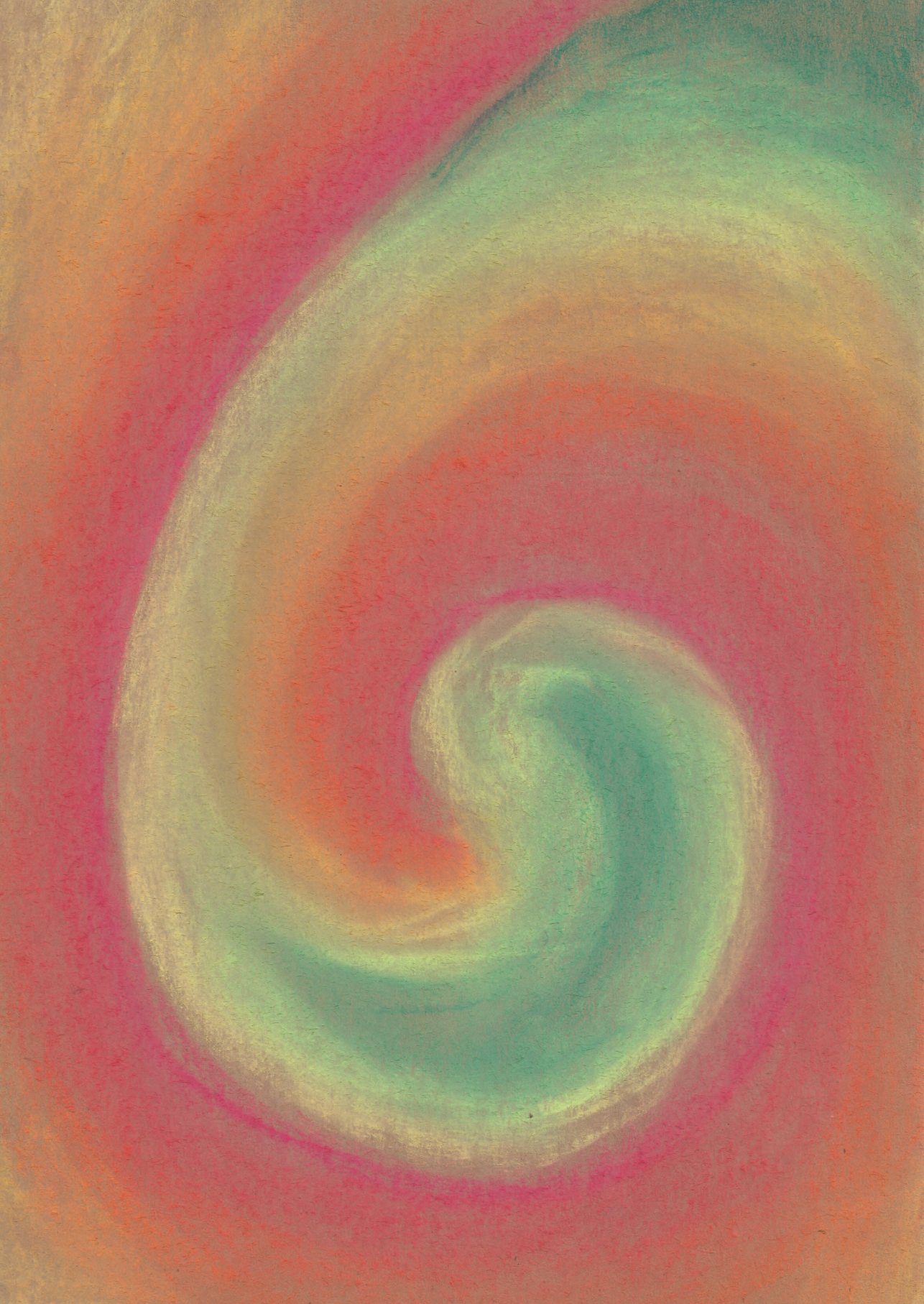

7

Suicidal behaviour and difficulty of the patient, as perceived by Community Mental Health nurses

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Abstract

Background: Mental health professionals who work in community mental health services play an important role in treating patients after attempted suicide or deliberate self-injury. When such behaviours are interpreted negatively, patients may be seen as difficult, and this may lead to ineffective treatment and mutual misunderstanding.

Aim: This study aimed to assess the association between the grading of suicidality and perceived difficulty. We hypothesized that a higher grading of suicidality is associated with an increased perceived difficulty.

Methods: We analysed cross-sectional data of 176 patients who participated in two cohort studies, 92 in the MATCH-cohort study and 84 in the Interpersonal Community Psychiatric Treatment (ICPT)-study. The dependent variable was perceived difficulty, measured by the Different Doctor-Patient Relationship Questionnaire (DDPRQ) and the Difficulty Single-item (DSI), a single item measuring the difficulty of the patient as perceived by the professional. Grading of suicidality was considered as the independent variable. Multiple linear and logistic regression was performed.

Results We found a significant association between perceived difficulty (DDPRQ) and high gradings of suicidality (B: 3.96; SE: 1.44; β: 0.21; *p*=0.006), ascending age (B: 0.09; SE: 0.03; β:0.22; *p*=<0.003), gender (female) (B: 2.33; SE: 0.83; β: 0.20; *p*=0.006) and marital status (being unmarried) (B:1.92; SE: 0.85; β: 0.17; *p*=0.025). A significant association was also found between the DSI and moderate (OR:3.04; 95%-CI 1.355-6.854; *p*=0.007) and high gradings of suicidality (OR: 7.11; 95%-CI 1.8.43-24.435; *p*=0.005).

Conclusions: We observed that perceived difficulty is significantly associated with moderate and high gradings of suicidality, ascending age, gender (female) and marital status (unmarried).

Introduction

Suicide is a major public health issue worldwide, approximately 800,000 people die by suicide everyyear, accounting for 1.5% of all deaths[1]. For each death from suicide, there are 20 suicide attempts (the intention to die by self-injurious behaviour), leading to 16 million attempts. Furthermore, 160 million persons are estimated to have suicidal thoughts, annually worldwide[2].
Mental health professionals working in community mental health services frequently deal with patients who just attempted suicide, show non-suicidal self-injury or have suicidal thoughts [3]. They play an important role in treating these patients[4,5]. Although part of their daily work, mental health professionals often find these patients challenging to manage and causing distress[3,6]. Several factorssuch as cultural, religious and professional backgrounds, or knowledge of and experience with dealing with suicidality, influence the behaviours of these professionals[7]. Mental health professionals may feel incompetent and avoid direct communication with suicidal patients[8].

Furthermore, an eventual suicide of a patient may evoke feelings of guilt, sadness, and incompetence that are sometimes difficult to handle[7]. This is more likely when the patient is of younger age, the professional just has started working, is still in training, has never experienced asuicide before, or when there is little support from colleagues[7,9]. A lack of knowledge and understanding why people show suicidal or self-injurious behaviour, contributes to possible professionals' belief that patients are attention seeking and manipulative[10]. This could turn into a negative attitude and negative prejudices towards these patients[11]. Thus, patients may become seen by mental health professional as 'difficult'. This means that patients have severe mental illnesses, with difficult and ambivalent behaviours, and insufficient adequate treatment[12]. This perceived difficulty results in mutual misunderstanding and ineffective treatment when treatment lacks an empirical and theoretical base and that clear treatment goals are absent[13]. As a result, the quality of care often becomes low, resulting in more symptoms and long-term and intensive care use and dependency[14]. The direct association between perceived difficulty and suicidality has not received clear attention as far as we know, in the literature. The aim of this study is therefore, to assess the association between the grading of suicidality and perceived difficulty. We hypothesized that a higher grading of suicidality is associated with an increased perceived difficulty.

Methods

Setting

To test our hypothesis, we combined two existing samples of patients who participated in studies in secondary mental health services (specialist treatment and support provided by various health professionals for patients who have been referred to them for specific expert care), in which identical instruments and questionnaires were applied.

Sample 1: MATCH-cohort study

The first sample was drawn from a longitudinal study which was designed to examine the determinants and consequences of long-term health services use and complex care situations in people with common mental disorders, described in more detail elsewhere[15]. Originally, 283 patients from three large Dutch mental health services and their professionals were enrolled at baseline. Included were people between the age of 18 and 65, with a common mental disorder (e.g., depression of anxiety disorder) and/or a personality disorder according to DSM-IV (the Dutch version of DSM 5 was not available yet at the time of assessments (2012-2016) for both this study and the study mentioned below (2014-2016)Patients with psychotic, bipolar I, and cognitive disorders as a primary diagnosis and patients who were unable to read and understand Dutch were excluded. Sincethe patients of the second sample (see below) received secondary mental health care, we only used data of 92 MATCH-patients who also received secondary mental health care at baseline for the present analysis. The other patients in this sample received other forms of mental health care, so they were excluded from this sample.

Sample 2: ICPT cluster randomized trial

The second sample came from a multi-centre cluster randomized controlled trial[16] to study the effects of Interpersonal Community Psychiatric Treatment (ICPT) versus Care as Usual (CAU). The inclusion criteria for patients were identical to those of the MATCH cohort study (18-65 years of age, common mental disorder and/or a personality disorder). As with the MATCH-cohort study, patients with psychotic, bipolar I, and cognitive disorders as a primary diagnosis, and patients who were unable to read and understand Dutch were excluded. This study included 93 patients, and we could use data of 84 patients who completed the assessment of the outcome variable at baseline needed for this study.

Measures

All instruments used in the study and their psychometric properties have also been described in the ICPT-study protocol, published earlier[17]the Mini Neuro-psychiatric Interview (MINI Plus), the Difficult Doctor-Patient Relationship Questionnaire (DDPRQ) and a single item measuring the difficulty of the patient as perceived by the professional.

Socio-demographic variables (assessed by researcher)

At baseline, questions concerning age, gender, marital status, ethnicity, working situation, educationand income were assessed.

Diagnoses and grading of suicidality (assessed by researcher)

DSM IV Axis I-disorders were assessed, with the Dutch Mini Neuro- psychiatric Interview (MINI Plus), a structured diagnostic interview, administered at baseline. The MINI Plus is the briefest full psychiatric interview available and takes, dependent on the number of disorders, between 15 and 45 minutes[18]. Overall, validity and reliability are considered good[19]. Part of the MINI Plus are six questions about suicidality, including: Q1"Think that you would be better off dead or wish you were dead?" (one point), Q2"Want to harm yourself or to hurt or to injure yourself?" (two points), Q3"Think about suicide?" (three points), Q4"Plan or intend to hurt yourself in that accident either passively or actively?"(four points), Q5"Take any active steps to prepare to injure yourself or to prepare for a suicide attempt in which you expected or intended to die?"(five points), Q6"Did you ever make a suicide attempt?"(six points) The grading of the suicidality is ranging from low (1 to 5 points in total), to moderate (6 to 9 points in total), to high (>9 points in total).

DSM-IV Axis II-disorders were assessed with the Structured Interview for DSM-IV (SIDP-IV), a structured clinical interview [20], after a positive screening on the 10-item Standardised Assessment of Personality – Abbreviated Scale - Self Report (SAPAS-SR)[21]. The SIDP-IV is a widely used semi structured interview with good psychometric properties[22]. The SAPAS-SR has been found one of the briefest, most sensitive, and specific screening instruments for Axis II disorders and is very useful in clinical populations[23].

Perceived difficulty outcome variable (assessed by community mental health nurse)

The dependent variable was measured using the Difficult Doctor-Patient Relation Questionnaire (DDPRQ), a 10-item instrument that assesses problems in the relationship between patient and professional and the perceived difficulty, e.g.,

"How 'frustrating' do you find this patient?" or "How at ease did you feel when you were with this patient today?" It consists of a six-point Likert response scale from "not at all" to "a great deal". The sum score was based on 10 items, and with a score of 30 or above a patient is considered difficult [24]. Overall is has good to very good psychometric properties, with a Cronbach's alpha of 0.88.[25]

The dependent variable was also measured using a 'Difficulty Single-item' (DSI) question measuring the difficulty of the patient as perceived by the professional. This question was 'to which extent do you rate this patient as difficult?', scored on a 7-point Likert-scale ranging from "not at all difficult" to very "difficult"[26]. This single question has not been validated yet.

Statistical analysis

The socio-demographic variables 'working status' and 'source of income' were dichotomized before further analysis. Upon preliminary inspection, the outcomes of the DSI proved to be bi-modally distributed. For further analysis in a logistic regression, we used a dichotomized variable with two values ('no perceived difficulty' for score 1–3, and 'perceived difficulty' for score 4–7). The DDPRQ had a normal distribution and could be analysed with linear regression.

Univariate linear regression analysis was performed to determine predictors of perceived difficulty based on the DDPRQ-sum score and univariate logistic regression was used for the dichotomized single item DSI-score. A significant value of $p \leq 0.20$ was used to select variables (demographic and clinical variables and level of suicide risk) to be included in the further analysis. Then, multivariate linear regression for the DDPRQ-sum score and multivariate logistic regression for the DSI outcome variable were used, to identify demographic and clinical variables (diagnoses and grading of suicidality) that were independently related to perceived difficulty as assessed by the DDPRQ and the DSI. All variables were entered in a backward stepwise manner, only retaining the variables that were statistically significant in the model. Significance was set at p-values ≤ 0.05. All statistical analyses were performed using SPSS, version 26.

Results

We analysed cross-sectional data of 176 patients who participated in two cohort studies, 92 in the MATCH-cohort study and 84 in the ICPT-study. Perceived difficulty was measured by the DDPRQ andthe DSI. Socio-demographic and clinical variables are shown in table 1.

The sociodemographic and clinical variables were screened for their association with the outcome variable, as shown in table 2 (DDPRQ-sum score, univariate linear regression and DSI, univariate logistic regression). Of these variables, the variables associated $p \leq 0.20$ with the dependent variableswere included in the multivariate analyses for DDPRQ-sum score and DSI (table 3). We found a significant association between perceived difficulty (DDPRQ) and high gradings of suicidality (B: 3.96;SE: 1.44; β: 0.21; p=0.006), ascending age (B: 0.09; SE: 0.03; β:0.22; p=<0.003), gender (female) (B: 2.33; SE: 0.83; β: 0.20; p=0.006) and marital status (being unmarried) (B:1.92; SE: 0.85; β: 0.17; p=0.025). We also found a significant association between the DSI and moderate (OR:3.04; 95%-CI 1.355-6.854; p=0.007) and high gradings of suicidality (OR: 7.11; 95%-CI 1.8.43-24.435; p=0.005).

Table 1. Socio-demographic variables, clinical variables, and perceived difficulty.

Socio-demographic variables	**ICPT and MATCH (N=176)**
Age: mean (SD)	38.7(12.6)
Gender: % (*n*)	
Female	66.5(117)
Male	33.5(59)
Ethnicity: % (*n*)	
Dutch	93.2(164)
Other	6.8(12)
Marital status: % (*n*)	
Married	28.4(50)
Unmarried	71.6(126)
Working status: % (*n*)	
Employed	22.2(39)
Incapacitated	39.8(70)
Volunteer	15.9(28)
Looking for job	4.6(8)
Other	17.5(31)
Education: % (*n*)	
Primary education	4.6(8)
Secondary education	29.6(52)
Tertiary education	65.9(116)
Source of income: % (*n*)	
Salary	21.0(37)
Social benefit	64.8(114)
Student grant	4.6(8)
Other	9.6(17)
Clinical variables according to MINI plus Disorders Axis I: % (*n*)	
Depressive disorder	29.0(51)
Anxiety disorder	18.8(33)
Alcohol abuse	9.1(16)
Substance abuse	6.8(12)
Disorders Axis II: % (*n*)	
Paranoid PD	4(7)
Schizoid PD	1.7(3)
Schizotypal PD	1.7(3)
Anti-social PD	1.1(2)

Borderline PD	14.8(26)
Histrionic PD	0.6(1)
Narcissistic PD	0.6(1)
Avoidant PD	15.9(28)
Dependant PD	6.8(12)
Obsessive-Compulsive PD	11.4(20)
Grading of suicidality % (*n*)	
No suicidality	42.6(75)
Low	27.3(48)
Moderate	21.6(38)
High	14.2(25)
Perceived difficulty	
DDPRQ (mean, SD)	27.3(5.1)
DSI (mean, SD)	3.4(1.4)

Table 2. Unvariate associations between sociodemographic, clinical variables and grading of suicidality and perceived difficulty (DDPRQ and DSI).

	Perceived difficulty (DDPRQ) ICPT and MATCH (N=176)				Perceived difficulty (DSI) ICPT and MATCH (N=176)			
Variables	**B**	**β**	**SE**	***p*-value**	**B**	**Wald**	**95%-CI**	***p*-value**
Socio-demographic variables								
Age	<0.01	0.13	<0.01	0.077	0.00	0.00	0.977-1.024	0.980
Gender (male vs female)	1.67	0.15	0.86	0.053	-0.05	0.02	0.487-1.847	0.877
Ethnicity (Dutch vs other)	-1.28	-0.06	1.53	0.402	-0.52	0.68	0.172-2.048	0.409
Marital status (married vs unmarried)	1.87	0.17	0.84	0.028	0.16	0.24	0.608-2.283	0.628
Working status (job vs other)	0.22	0.02	0.79	0.782	0.13	0.10	0.527-2.439	0.749
Education								
Primary education	REF	REF	REF	REF	REF	REF	REF	REF
Secondary education	-1.00	-0.09	0.86	0.259	0.18	0.26	0.603-2.383	0.606
Tertiary education	-1.45	-0.12	1.00	0.152	0.30	0.59	0.622-2.965	0.442
Income	0.79	0.06	0.94	0.399	-0.18	0.23	0.404-1.730	0.630
Clinical variables MINI plus								
Disorders Axis I	-0.11	-0.01	0.77	0.887	0.26	0.73	0.713-2.356	0.394
Disorders Axis II	0.91	0.08	0.83	0.275	-0.29	0.77	0.392-1.429	0.380
Grading of suicidality								
No suicidality	REF	REF	REF	REF	REF	REF	REF	REF
Low	1.69	0.15	0.93	0.070	-0.12	0.09	0.414-1.907	0.762
Moderate	1.60	0.13	1.00	0.111	1.15	7.37	1.375-7.195	0.007
High	3.64	0.20	1.42	0.011	1.74	7.99	1.713-19.488	0.005

Table 3. Multivariate linear regression model with DDPRQ and DSI as dependent vsriables ($p \leq 0.05$).

Perceived difficulty (DDPRQ)	ICPT and MATCH (N=176)				Perceived difficulty (DSI) ICPT and MATCH (N=176)			
Variables	**B**	**SE**	**β**	***p*-value**	**OR**	**Wald**	**95%-CI**	***p*-value**
Socio-demographic variables	0.09	0.03	0.22	**0.003**				
Age	2.33	0.83	0.20	**0.006**				
Gender (male vs female)	1.92	0.85	0.17	**0.025**				
Marital status (married vs unmarried)								
Grading of suicidality (high vs not high)								
No suicidality	REF	REF	REF	REF	REF	REF	REF	REF
Low	1.44	0.89	0.12	0.109	0.89	0.09	0.414-1.907	0.762
Moderate	1.10	0.97	0.08	0.262	3.04	7.37	1.355-6.854	**0.007**
High	3.96	1.44	0.21	**0.006**	7.11	7.99	1.843-27.435	**0.005**

Discussion

In this study we assessed the association between perceived difficulty of patients by mental healthprofessionals and the grading of suicidality. We hypothesized that a higher grading of suicidality would be associated with more perceived difficulty. Perceived difficulty indeed was significantly associated with moderate and higher grades of suicidality, meaning that perceived difficulty increased with increased grading of suicidality.

Not much empirical research has been done on perceived difficulty, but contributing factors are merely a combination of professional factors (poor communication skills or stress management), patient factors (a personality disorder or showing self-destructive behaviour) and organisational factors (conflicts within a team)[9,27]. A cross-sectional survey shows that perceived difficulty cannot be explained by individual patient characteristics, but merely to treatment characteristics, e.g. ''feeling powerless''[28]. Our findings partly underline these conclusions. However, we did find some patient characteristics. As far as we know, there is no research suggesting or proving that marital status, age, and gender contribute to perceived difficulty.

Previous studies have stressed the complexity of working with suicidal patients[29–31]. More than half of all patients in our sample had some degree of suicidality (57.4%). A diligent clinical assessment of suicide risk by mental health professionals, is important when a patient has suicidal thoughts or plans[32]. Besides an assessment, also decisions about the necessary care have to be made, with possible important consequences to the patient[33]. This study shows that patients with a moderate or high level of suicide risk were perceived difficult in the interpersonal relationship by their mental health professional. Several other studies find similar results[29,31,34], but do not differentiate in levels of suicide. Difficulties in the clinical work with suicidal patients occur due to a lack of knowledge about suicidality or using ineffective interventions (e.g., the use of non-suicide contracts)[35], but also negative prejudices and attitudes towards suicidal patients[11]. The feeling of not being taken seriouslyby their mental health professional, is harming to patients' feelings and may strengthen their feelings of incompetence of hopelessness. Systematic research shows an association between a strong therapeutic alliance and fewer suicidal thoughts. This was found in longitudinal studies where alliance with a mental health professional was evaluated[36].

The therapeutic alliance therefore requires special attention in treatment settings[37].

Strengths and limitations

To our knowledge this is the first attempt to describe the direct association between perceived difficulty and suicidality. The present analysis has a few limitations. First, the cross-sectional nature of our data precludes predictive, causal conclusions. Future research could further clarify the relations among perceived difficulty and level of suicide risk e.g., by utilizing longitudinal and experimental methodologies. Second, we realise that the suicide grading measure used in the current study was relatively limited in scope. The items used in this research were taken from the MINI Plus [18], as part of the assessmentof axis I diagnoses, which is not a structured assessment of suicide risk. Future research should carefully examine the replicability of the current results using more sophisticated suicide risk measures[38].

Relevance for clinical practice

In this study moderate and high gradings of suicidality were significantly associated with perceived difficulty by community mental health nurses. Training to improve practices in dealing with suicidal patients is recommended, however scarce In the Netherlands, the Dutch multidisciplinary guideline assessment and treatment of suicidal behaviour, recommends the use of the CASE-approach[39]. The CASE-approach is originally developed by Shea. It includes 1) gathering information related to risk factors, protective factors, and warning signs of suicide; 2) collecting information related to the patient's suicidal ideation, planning, behaviours, desire, and intent; and 3) making a clinical formulation of risk based on all the information[40]. A recent Dutch study shows that the CASE- approach is used in a simplified form in the Netherlands and recommends educating and utilize the CASE-approach more thoroughly[41]. The CAMS (The Collaborative Assessment and Management of Suicidality), developed by Jobes and colleagues is a treatment framework in which a patient and a mental health professional work together to keep the patient stable, ideally in outpatient therapy. It aims specifically at the evaluation, treatment and dealing with chronic suicidal behaviour[42].

A recent meta-analysis showed promising results in terms of significantly lower suicidal ideation and general distress, significantly higher treatment acceptability and significantly lower hopelessness[43]. It is fully implemented in Denmark and Norwegian mental health care, not yet in other countries as far as we know. Another well-known model in the US is the Assess, Intervene and Monitor for Suicide Prevention model (AIM-SP). It is a model is proposed as a framework for

implementing zero suicides in clinical care. “Assess” refers to the use of screening and risk assessment to identify patients at risk. “Intervene” consists of conducting suicide-specific brief and psychosocial interventions. “Monitor” provides strategies for ongoing monitoring and increased contact during known high-risk periods. AIM-SP provides guidelines for clinical training and best practice in suicide prevention that can be applied in a wide range of care settings[44]. The framework can be used in outpatient long-term care[45].

Besides evidence-based programs or frameworks, clinical supervision and intervision remain an embedded resource for practice quality in community mental health institutions and increase competence and decrease stress and have been associated with decreased depressive symptoms in mental health care professionals[46]. Since professional-perceived difficulty often results in ineffective treatment, higher care use and persistence of symptoms[47,48], it is ever so important to do further research to understand the underlying factors of the perceived difficulty, to enhance better outcomes for patients and better understanding for mental health professionals.

Conclusion

We observed that perceived difficulty is significantly associated with moderate and high gradings ofsuicidality, ascending age, gender (being female) and marital status (being unmarried).

Ethical approval

All procedures comply with the ethical standards of the relevant national and institutional committees on human experimentation and with the Helsinki Declaration of 1975, as revised in 2008. The MATCH-study was approved by a certified Medical Ethics Review Committee, The Clinical Research Centre Nijmegen (CRCN), in The Netherlands Ref: NL41139.091.12), as was the ICPT-study (Ref: NL44744.091.13 with NTR:3988).

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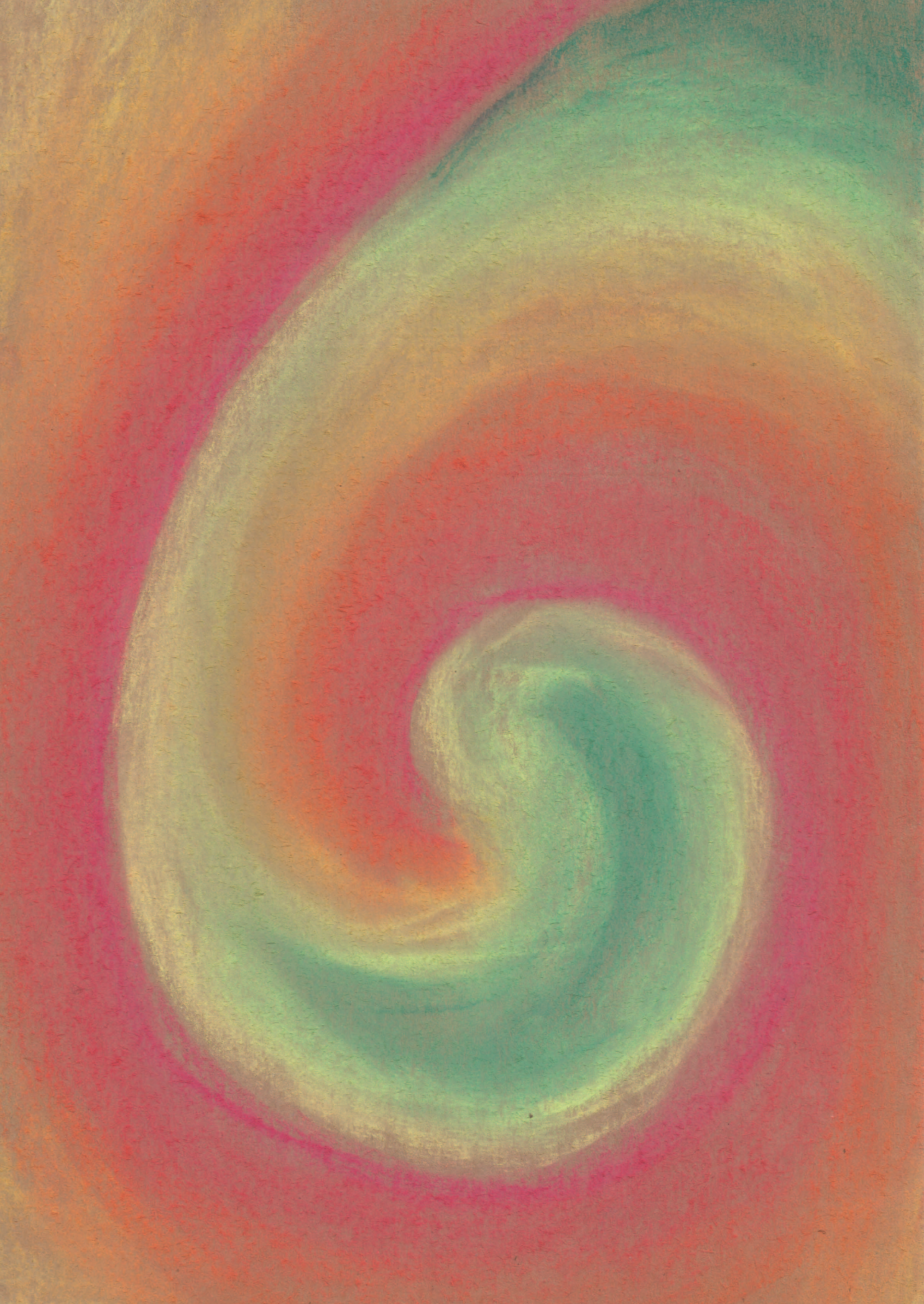

8

Summary and general discussion

Purpose of the dissertation

This chapter first discusses answers on the general research questions, as presented in chapter 1. Next, we will reflect on these findings. Finally, we will formulate recommendations for future research and practice. The overall aim of this thesis was to explore and further understand novel and methodical ways to enhance long-term CMH treatment for non-psychotic SMI-patients, who are perceived as difficult by their CMH nurses. Although several answers on the research questions have been obtained, new and fundamental questions emerge about the care for non-psychotic SMI-patients.

Main findings and conclusions

Conclusions that can be drawn from this thesis, regarding the main research themes touch several elements of methodical interventions by CMH nurses caring for non-psychotic SMI-patients.

What is the effectiveness and cost-effectiveness of ICPT on quality of life?

As described in chapter 3, the study aimed at the evaluation of the effectiveness and cost-effectiveness of ICPT for non-psychotic SMI-patients.

Due to the lack of evidence-based community psychiatric treatment by CMH nurses for non-psychotic SMI-patients, the effectiveness and cost-effectiveness of a newly developed method, ICPT, was evaluated. ICPT was compared with Care as Usual (CAU), on quality of life and professional-perceived difficulty in a multi-centre cluster randomised trial. Three large community psychiatric services in the Netherlands participated, with a total of 56 CMH nurses who were randomly allocated to either ICPT or CAU. A total of 93 patients were included in the trial (59 in the ICPT-group and 34 in the CAU-group). CMH nurses in the ICPT-group received a 4-day training program, over 4–6 weeks' time. ICPT-treatment was conducted for one year, and patients and CMH nurses were assessed at baseline, during treatment (6 months), after treatment (12 months) and at 6 months follow-up (18 months).

Besides quality of life (the primary outcome), other outcome measures included professional-perceived difficulty, general mental health, treatment outcomes, illness management and recovery, therapeutic alliance, care needs and social network. Cost-effectiveness was evaluated using costs, quality of life and quality adjusted life years (QALYs).

No significant treatment effect in the primary outcome variable (quality of life) was found. However, significant treatment effects were found in professional-perceived

patient difficulty, and patient-perceived illness management and recovery. No statistically significant efficiency gains of ICPT on societal and medical costs or QALYs were found. We need to look carefully which elements of ICPT are eligible for further development, e.g., professional-perceived patient difficulty.

How is the therapeutic alliance shaped by ICPT-elements, and how does that alliance affect the self-determination of patients with a severe, long-term, non-psychotic disorder?

Chapter 4 described a qualitative study on how the ICPT-elements shape the therapeutic alliance and the possible self-determination of patients in general. Thirteen semi structured interviews were conducted patients. The results are linked to Bordin's theory of the therapeutic alliance, which include agreement on therapeutic tasks, agreement on therapeutic goals, and the quality of the personal relationship. The therapeutic alliance could be analysed from three different perspectives: a) mutually agreed on goals, b) tasks, and c) experienced interpersonal relationships. ICPT mainly influenced the mutually agreement on therapeutic tasks and had limited influence on perspective of the mutually agreement on goals or interpersonal relationships. Insight could be increased by interviewing respondents in different stages of their treatment with emphasis on the therapeutic relationship. The main factors that affected the perceived therapeutic alliance during ICPT were the tasks that had been mutually agreed on: the use of an agenda, the structure of the sessions, the alliance between the CMH nurse and the patient, and the patient's own self-determination.

What are the psychometric properties of the Dutch version of the Nurses' Global Assessment of Suicide Risk (NGASR)?

Chapter 5 described the properties of the Dutch version of the Nurses' Global Assessment of Suicide Risk scale (NGASR), and the feasibility of its use in assessing suicide risk. A psychometric study of acceptability, reliability, and predictive validity among 252 patients was performed.

The NGASR was completed by CMH nurses, as part of the psychiatric emergency service's routine assessment through a psychiatric interview by both a CMH nurse and a psychiatrist or a psychiatrist in training. In one subsample, patients were also rated with another scale for suicidal intention, the Suicide Intention Scale (SIS). The association between NGASR and SIS was substantial and significant. The NGASR had a significant and moderately strong association with judgement by the clinician

on 'suicidal thoughts' or 'suicidal thoughts or plans'. No significant association of NGASR scores and 6-month follow-up (*n*=79) of suicidality was found. Internal consistency of the NGASR and most of the subscales identified was low, whereas other indicators of reliability of the NGASR were sufficient. The predictive validity over time was poor. The NGASR did not outperform other instruments. However, the NGASR is easy to use, and may contribute to identification of risk factors, as well as to a more integral assessment of suicide risk.

What is the association of being diagnosed with a personality disorder and psychiatric of admission in crisis situations?

Chapter 6 described the associations between the level of suicidality and risk of voluntary or involuntary admission in patients with and without a personality disorder who were presented to mobile psychiatric emergency services.

Observational data were obtained in three areas of the Netherlands from 2007 to 2016, including 71,707 contacts of patients aged 18 to 65 years. The outcome variable was voluntary or involuntary psychiatric admission. Suicide risk and personality disorder were assessed by clinicians working in psychiatric emergency services. Suicide risk was assessed using the Severity of Psychiatric Illness scale (SPI). It contains 14 items, including level of suicide risk, substance abuse, and danger to others. The SPI is rated on a 4-point scale, from 0 to 3, with 0 indicating no current suicidal ideation or recent suicide attempts. A rating of 3 indicates recent suicide attempts (within the past 30 days). Independent of the level of suicide risk, suicidal patients diagnosed with personality disorder were less likely to be admitted voluntarily than those without such a diagnosis. However, when the level of suicide risk was moderate or high, those with a personality disorder had the same probability of involuntary admission as those without such a disorder. While the probability of voluntary admission was lower in those diagnosed with a personality disorder (independent of the level of suicidality), the probability of involuntary admission was only lower in those whose risk of suicide was low. In other words, while the probability of voluntary admission was lower in patients diagnosed with a personality disorder, the probability of involuntary admission was only lower in those whose risk of suicide was low. Future longitudinal studies should investigate the associations between (involuntary) admission and course of suicidality in personality disorder.

What is the association between suicidality and clinician-perceived difficulty?
Chapter 7 described the association between perceived difficulty and the grading of suicidality. Cross-sectional data of 176 patients who participated in two cohort studies, 92 in the MATCH-cohort study and 84 in the ICPT-study, were analysed. The dependent variable was perceived difficulty, measured by the Different Doctor-Patient Relationship Questionnaire (DDPRQ) and the Difficulty Single-item, a single item measuring the difficulty of the patient as perceived by the professional. A significant association was found between high gradings of suicidality and perceived difficulty (DDPRQ). A significant association was also found between moderate and high gradings of suicidality and the Difficulty Single-item. Therefore, perceived difficulty is significantly associated with moderate and high gradings of suicidality. Further research to understand the underlying factors of the perceived difficulty, to enhance better outcomes for patients and better understanding for mental health professionals is recommended, besides clinical supervision and intervision.

The main findings, as discussed above, are summarized in Figure 1. The interpersonal relationship is the starting point and is determined by both the patient and the CMH nurse. Suicidal behaviour acts as a complicating factor in the therapeutic relationship, causing the CMH nurse to perceive the patient as difficult. Suicidal behaviour can even lead to a psychiatric admission. ICPT is focused on the therapeutic relationship in an attempt to reduce suicidal behaviour or to decrease patient perceived difficulty. Decreased suicidal behaviour might eventually lead to less psychiatric admissions for this group of patients. Which elements of ICPT (e.g., focusing on tasks or the means of supervision) cause CMH nurses to perceive their patients as less difficult is interesting to identify in a subsequent study.

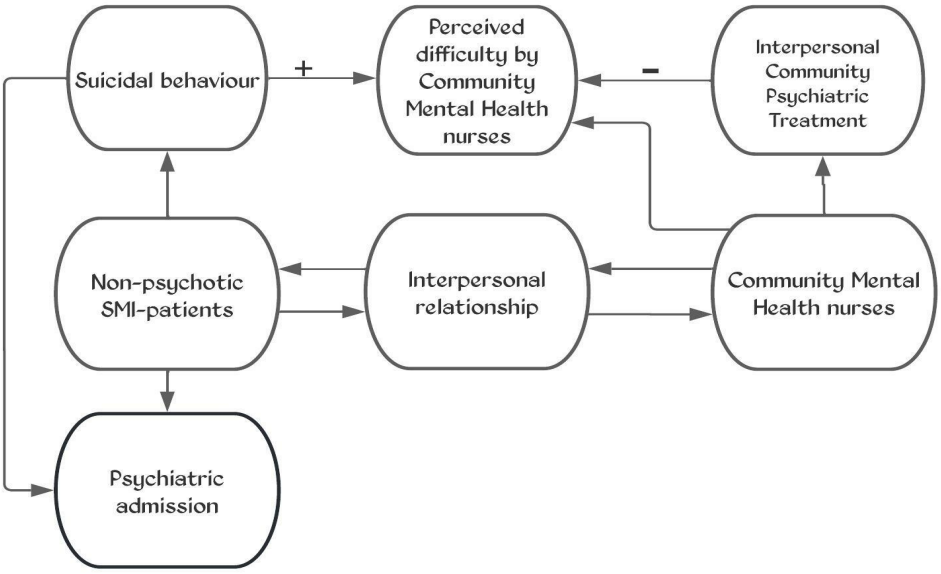

Figure 1. Summary of main findings

Clinical implications and future research

In general, the results of this thesis underline the importance of further development of community mental health nursing regarding patients' quality of life, suicidal behaviour and professional-perceived difficulty. Here, attention is required for ethical issues in nursing practice, regarding patients with long term, non-psychotic severe mental illnesses. In the following paragraphs, the clinical implications of the results, as well as suggestions for future research are presented.

Ethical issues in community mental health nursing

All articles previously discussed in this thesis are more or less about treatment contacts, treatment relationships and particularly about the difficulties perceived by professionals in treatment relationships. Professionals face difficulties that occur as a result of certain patient behaviours, e.g., repetitive suicidal gestures, not being able to meet treatment appointments, or showing anger or even aggressive behaviour. Mental health professionals (or CMH nurses) also feel their own difficulties: e.g., feelings of frustration, doubt about treatment effectiveness or doubt about one's own abilities or lack of perspective. Recent research showed that these difficulties might lead to burn-out and eventually to nurses quitting their jobs[1].

As mentioned before, ICPT articulates for a substantial part equivalence in the interpersonal treatment relationship between mental health professional and patient. This relationship, e.g., between mental health professional and patient is also described on page 51 in the most important work of Levinas: *Totality and infinity*, which first appeared in 1961[2]. In this work, it is all about the actual meeting of the Other (i.e., the patient), who comes into your life. Justice, compassion, and empathy are not ethical values which are 'performed' by the Ego, but they form an answer to the appearance of the other person.
For Levinas, the basis of ethics is the unavoidable and necessary encounter with the Other. According to Levinas, to be a *subject* means vulnerability.
Levinas disapproves of ethics in which autonomy, self-reliance and individual responsibility predominate. The ethical question of responsibility (*the good*), becomes apparent in the appeal of the other, in the vulnerability of any person one encounters. True interpersonal contact is about showing presence, giving space to the narrative and the conversation, sometimes even without words.

For long-term psychiatric treatment this means creating opportunities for meaningful encounters with other people, resulting in interpersonal relationships. This is also the core of the ethics of care, originated in the 1980s, an interdisciplinary field of inquiry which is driven by societal concerns, which focuses on responsiveness in interpersonal relationships. It is not about universal principles such as autonomy, but a contextual concern (*caring about*), responsibility (*taking care of*) and the care itself (*care giving*)[3]. Gilligan, an American developmental psychologist, stated that: "*The ideal of care is an activity of relationship, of seeing and responding to need, taking care of the world so that no one is left alone.*"
Tronto, a professor of political science, stated that care must be a central theme in society and politics and that care is an interaction between the health care professional and the patient. In life, each of us takes on both roles of professional and patient in care, either alternatively or simultaneously[4]. She also formulated the following four qualities or phases of care: the first phase is *recognition of need (caring about)*, the second phase is *willingness to respond to (take care of) a need*, the third stage is *direct action (caregiving),* and the fourth phase is *reaction to the care process (by the care receiver)*.

The ethical element in the first phase (*caring about*) is *attentiveness*. Here, a professional must notice the care need of the other. It is a moral quality of mental

health professionals that they are sensitive to the unmet needs of the other. A mental health professional must be able to put oneself in the perspective of the other in need. The ethical element in the second phase is: *responsibility* (*caring for*). When the care needs are known, someone must take responsibility for attending those needs. The third phase (*care giving*) concerns a moral *competence* to conduct the needed care, while *responsiveness* means that the other responds to the care he or she received (the fourth phase). It is the time to see if the patient and the professional have met the needs. It is about connecting with the Other.

A possible pitfall is the professional's tendency to adopt an attitude of professional authority, which can be perceived as arrogance. Both the professional and the patient should however try to be open to each other's perspectives: patient and professional both have a moral responsibility in the care process and cannot avoid this[4]. The four phases as distinguished by Tronto, are not linear but must be seen as a permanent circle of care demand and care action. The phases offer a framework that can be used to analyse what is really happening in health care. Do mental health professionals really know what care is needed? Do the actual mental health professionals have the time and space to provide the needed care? What about the patient, the Other? Do they contribute to the care process?

In her book Moral Boundaries, her definition of 'care' is as follows: *"On the most general level, we suggest that caring be viewed as a species activity that includes everything that we do to maintain, continue and repair our 'world' so that we can live in it as well as possible. That world includes our bodies, ourselves and our environment, all of which we seek to interweave in a complex, life-sustaining web"*[5].
The four phases of Tronto work together towards one goal, namely good care. They constitute an integral whole in which thinking, feeling and acting go together but can also explain where conflicts take place. From Tronto's point of view, quality of life is about jointly maintaining and restoring the conditions for a good life.

Care ethics is concerned with whether patients can shape their lives in a meaningful way, and how this can be seen as a good life. From the care ethics point of view, autonomy and dependence are not seen as opposed to one another. In fact, autonomy can be increased in a relationship of dependence, from a care-ethical perspective[6]. Patients can be more or less autonomous, just because they are

dependent and connected to others and get support from their peers and living environment. Care ethics supports their autonomy (relational autonomy) to enable them to lead meaningful lives.

The care ethics interpretation of autonomy is the so-called relational autonomy. This puts the emphasis on the relationship between professional and patient and on the relationship between the patient and his or her environment. Verkerk describes the relationship between professional and patient as "*a relationship in which responsibilities towards each other are set. Compassionate interference as a treatment can be conceived as the form of a caring relationship in which the responsibilities of the caregiver as well as of the care-receiver are put at the forefront*"[7]. According to Verkerk, the care-ethical perspective thus provides a two-fold answer to the autonomy issue. Firstly, it criticises the interpretation of autonomy in terms of independence and self-reliance and, secondly, it opposes this with a more relational concept of autonomy[7].

One of the main themes of this thesis, is professional-perceived difficulty. Especially in the treatment of non-psychotic SMI-patients who have an ambivalent wish for treatment or who sometimes do not show up for treatment appointments or refuse care, it is a challenge to work together in the phase of *responsibility* and the phase of *responsiveness*. If treatment goals are unclear or the patient and the CMH nurse have different ideas about which interventions should be used, this will put pressure on the care process in terms of both patient-perceived difficulty and professional-perceived difficulty. However, the theory of Tronto, mentioned earlier, is sometimes in contradiction with the daily practice of the CMH nurses. Some patients are traumatised or have other severe mental problems that maki it very difficult for them to engage in *caring for* or *receiving care*. Then it appears that 'caring for someone' or *care receiving* does not work, or even works in the opposite direction, and so it is up to the CMH nurse and the patient to learn to deal with this in the therapeutic relationship.

From an ethical care perspective, clinical ethics support might help in dealing with this difficulty. Clinical ethics support[8] has many forms, but in Europe, the bottom-up approach is most common: group deliberations (e.g., moral case deliberation, ethics rounds, reflections or discussion groups) are examples of ethics support services. The ethicist facilitates the conversation without having an advisory role. The focus

is on the reflection process of healthcare professionals, rather than on a decision or solution for a clinical problem[9].

In ICPT, attention is paid on the reflection process through teamwise supervision sessions (every two weeks), in which a treatment situation of two different professionals is jointly analysed. A brief version of a supervision protocol that has been developed and evaluated in Dutch long-term mental health care is used throughout the sessions. A specific form of group meeting is moral case deliberation: a group of health care professionals jointly reflects on a moral question, dilemma, or issue. It is structured by a conversation method and moderated by an ethicist[10,11]. In these sessions, professionals have the opportunity to freely speak and share their experiences, perspectives, stories and opinions[12–14]. A recent literature review showed that moral case deliberation has impact, mostly on the inter-professional interactions. Positive changes were, for example, one's feelings of relief, relatedness and confidence, understanding of the perspectives of colleagues, awareness of the moral dimension of one's work and awareness of the importance of reflection. Negative changes were, for example, frustrations and absence of change. Impact on the quality of patient care is limited and lacks scientific research[15].

Below, figure 2 offers a summary of the relationship between ICPT and the phases of Tronto, as discussed earlier. Especially working in phase 2 (*caring for*) and phase 4 (*receiving care*) is challenging in working with non-psychotic SMI-patients. Both models require specific moral actions per phase and both models have phases that are interrelated.

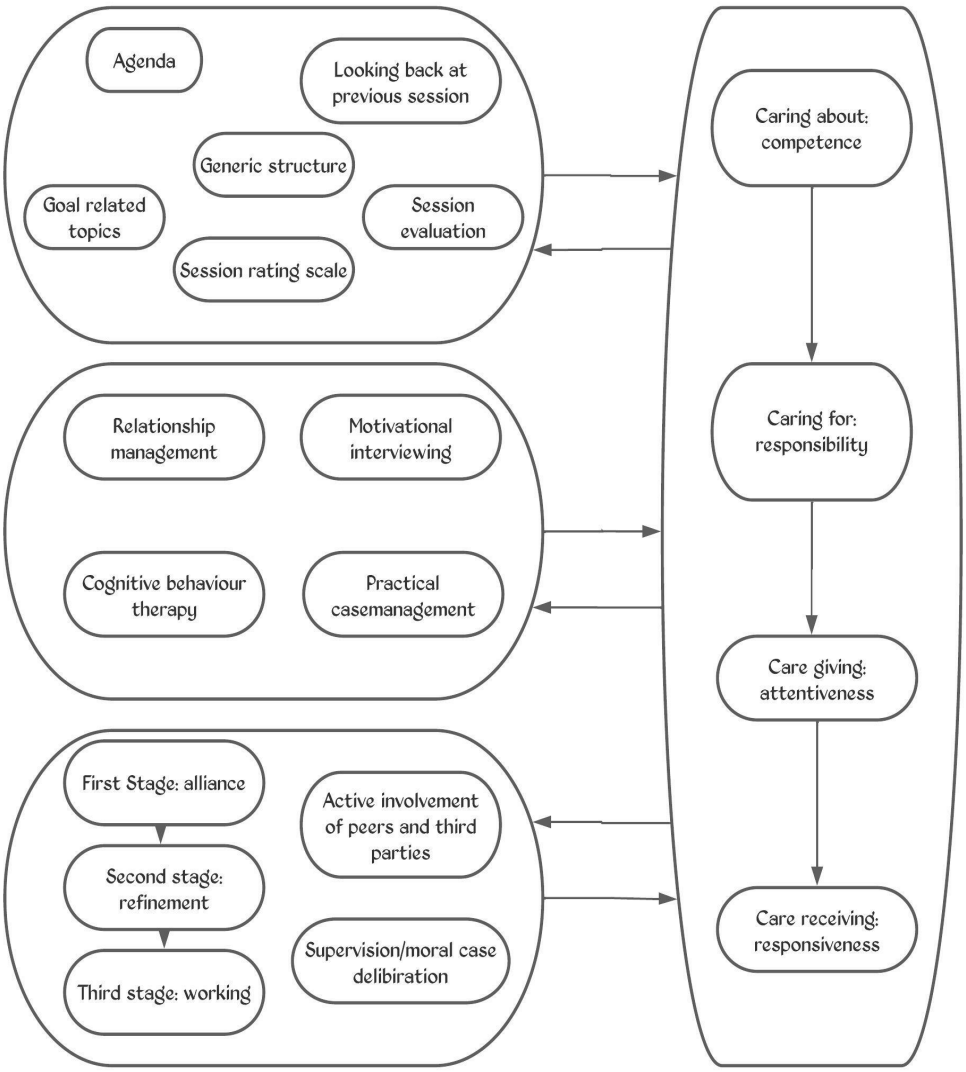

Figure 2. Connections between ICPT and phases of Tronto

Professional-perceived difficulty and ICPT

As mentioned before, professional-perceived difficulty decreased during the ICPT-treatment. A possible explanation is the focus on the mutual agreement on goals and the clear structure of the treatment sessions. Also, the focus on *working together*, established within the patient – professional contact, may have contributed to that.

The different methods used in ICPT, especially relationship management and motivational interviewing, focus on the interpersonal relationship and mutual agreement on treatment goals, with close relatives and third parties involved. This fits in with, for example, Shared Decision Making (SDM). SDM is an effective health communication approach where professionals and patients share the best available evidence when faced with the task of making decisions, and where patients are supported to consider options, to achieve informed preferences[16]. It is based on clinical evidence that balances risks and expected outcomes with preferences and values between patients, CMH professionals and other stakeholders[17]. Other SDM approaches include decision coaching, guidance, and motivational and self-management strategies[18]. Studies show that SDM contributed to more awareness of the CMH professionals' own communication patterns with patients and that they became more aware of the patients' views including concerns and worries. Furthermore, they gained confidence to open dialogs about mental illnesses and related options with the service users[19,20]. These conclusions may implicate less perceived difficulty, less moral distress and improved capabilities, although no research has been done yet as far as we know.

Perceived difficulty and suicidality

As previous studies show, self-destructive or suicidal behaviour contribute to professional perceived difficulty[21,22]. Studies have indicated that a positive alliance with a mental health-care professional significantly reduces patients' suicidal thoughts, self-harm and/or suicide attempts[23,24].

How does the work situation of the CMH nurse influence the perceived difficulty of working with suicidality? Previous research indicates that fragmented healthcare may influence the difficulty of connecting meaningfully with suicidal patients[25]. Working with suicidal patients remains challenging even for experienced CMH professionals. Improved confidence in coping with suicidality may require specific training, rather than simply years of work[26]. Further research could explore the use of deliberate practice specific situations. In psychiatric emergency services, CMH nurses often make time for reflecting with colleagues, in particular those who collaborate in treatment of acute suicidality. To practice ways of establishing a therapeutic alliance with desperate patients, CMH professionals might need to practice how to cope when not being able to develop a therapeutic alliance, while still passionately wanting to help.

One of the remaining and recurring questions is when to take over responsibility for the patient's safety. When is the moment that a patient can no longer be held responsible for his or her own actions? These are considerations that are preferably discussed with the patient, relatives, and peers.

One way to assess suicidality or suicidal behaviour is the use of suicide risk scales. However, mental health cannot rely on suicide risk scales to gain confidence in dealing with patients who are suicidal or show suicidal behaviour. A meta-analysis of the positive predictive value of several clinical suicide risk scales found that such instruments were unable to predict suicide with a level of accuracy that makes them useful in daily practice, for deciding on the right treatment[27]. In fact, the accuracy of suicide prediction models predicting a future event is negligible[28]. Therefore, suicide risk scales cannot be of major influence to decrease perceived difficulty or increase trust. However, suicide risk assessment instruments may still have some value to gather more relevant information (such as provoking and protective factors), when integrated in a more thorough suicide assessment providing space for the narrative of the patient[29]. In fact, using scales, or having experience with assessment scales during education, may be hypothesized to help, as a methodical intervention to sustain a therapeutic relationship and lower levels of perceived difficulty.

Recovery movement

Anthony defined recovery as a personal process in which persons discover how to live a meaningful and satisfying life despite the limitations of the illness[30]. He suggests that the process of recovery may be possible regardless of symptoms and social and functional limitations. Recovery implies (small) steps toward more community participation, enabling people to regain grip on daily life and finding confidence and hope in the possibility of a meaningful life.

As mentioned before, various interventions and rehabilitation approaches designed for patients with long-term SMI have been described in the literature, but not specifically for non-psychotic SMI-patients. Key elements of ICPT are an active involvement of patients in their treatment, with a strong emphasis on the interaction between patient, social system, and recovery. Building or strengthening the interpersonal relationship between patient and CMH nurse is of essence in reaching mutual agreement on treatment goals. In that light, ICPT is compatible with the recovery movement approaches and the principles are similar. How these considerations implicitly or explicitly pertain tot the interaction of the CMH nurse with non-psychotic SMI-patients deserves further attention.

According to Tronto, care can be understood as a process of answering the Other person's question[31]. A severe non-psychotic mental disorder can cause limitations in interpersonal functioning; therefore, the attentiveness, responsibility and responsiveness mentioned earlier, are under pressure, making it difficult for both the patients (and their relatives) and CMH nurses to develop. Care can become paternalistic according to Tronto (we know what is wrong with you and what is good for you) and parochial (preference for people close to us), and that interpersonal relationships between CMH nurse and patient are always asymmetric (an unequal balance of power between them). Tronto pleads for communitive ethics, which aim for horizontal relationships, in which caring can develop[31].

Recommendations for future research

Despite having answered the research questions, the studies have raised new ones as well. The RCT did not show any significant treatment effect in improving quality of life of non-psychotic SMI-patients, the primary outcome. However, CMH nurses perceived their patients as less difficult during the given ICPT-treatment period, compared to care as usual. The qualitative research showed that patients experienced a positive influence on the therapeutic alliance, using a mutual agreement on goals and structured sessions. Effective nursing interventions in non-psychotic SMI-patients are still scarce, to date, regarding therapeutic alliance[32]. ICPT is primarily focused on the interpersonal relationship and perceived difficulty and remains an interesting alternative for the present care for non-psychotic SMI-patients.

Since there is no optimal ethical-theoretical framework in mental health services[33], researchers have suggested to integrate ethics of care and ethics of justice in professional mental health care[34,35]. As mentioned before, ethics of care is a discipline or philosophy that focuses on responsiveness in interpersonal relationships, maintaining relationships through responding to needs of others and avoiding hurt[6]. Ethics of justice on the other hand, focusses on maintaining obligation, equity, and fairness through the application of moral principles, rules, and established standards[6]. Both ethics should be acknowledged in clinical practices and included in ethics education.

Some expressions of care mental health professionals express (e.g., paternalism and feelings of incompetence), seem to be in need of attention considering the ethics

of care to analyse and reflect caring practices[36]. Especially in the care of suicidal patients, the ethics of care in practice and policy might bring ethical dilemmas more under attention. In fact, ethics of care might promote caring interpersonal relationships and contribute to a more context sensitive and personalised mental health care for suicidal patients of patients who are perceived as difficult. It is recommended to utilize clinical ethics support, to avoid that CMH nurses remain too isolated in their care to non-psychotic SMI-patients.

Essentially in contrast to other kinds of (more informal) meetings, a moral case deliberation is structured by a conversation method and moderated by a facilitator, often an ethicist[37]. This might help CMH nurses to further develop their professional attitude in treating non-psychotic SMI-patients. Further studies are needed to explore in more detail, which specific challenges in working with suicidal patients are needed, how CMH nurses and suicidal patients may manage to resolve different types of challenges[15], and which training of treatment programs are effective in increasing both confidence and skills in this area.
Unfortunately, there are no unambiguous answers to all the questions raised in this thesis. The most important thing remains: CMH nurses and patients should try to reach an effective therapeutic relationship, however complicated the interpersonal contact may sometimes be.

To end with Levinas: "The relation with the Other will always be offering and gift, never an approach with 'empty hands'."

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Samenvatting van de belangrijkste bevindingen en antwoord op de onderzoeksvragen

In dit hoofdstuk wordt eerst ingegaan op de antwoorden op de algemene onderzoeksvragen. Vervolgens wordt gereflecteerd op deze bevindingen. Tenslotte worden aanbevelingen geformuleerd voor toekomstig onderzoek en de praktijk.

Het algemene doel van dit proefschrift was het verkennen en evalueren van nieuwe en methodische manieren om de langdurige behandeling van patiënten met een ernstige niet-psychotische psychiatrische aandoening, die door hun sociaal-psychiatrisch verpleegkundigen als moeilijk worden ervaren, te verbeteren. Daarbij was het belangrijk om inzicht te krijgen in waarom zij als moeilijk worden ervaren. Hoewel er verschillende antwoorden op de onderzoeksvragen zijn verkregen, komen er nieuwe en fundamentele vragen naar voren over de zorg voor deze groep patiënten.

De conclusies die getrokken kunnen worden uit dit proefschrift over de belangrijkste onderzoeksthema's, raken verschillende elementen van methodische interventies door sociaal-psychiatrisch verpleegkundigen die patiënten met een ernstige niet-psychotische psychiatrische aandoening in behandeling hebben.

Wat is het effect van een methodische interventie op patiënten met ernstige psychiatrische, niet-psychotische aandoeningen die door hun sociaal-psychiatrisch verpleegkundige tijdens de behandeling als moeilijk worden ervaren?

Hoofdstuk 3 beschrijft de resultaten van een RCT die gedaan werd naar de effectiviteit en kosteneffectiviteit van Interpersoonlijke Sociaal-psychiatrische Behandeling (ISPB) voor patiënten met een ernstige niet-psychotische psychiatrische aandoening. Momenteel zijn er geen evidence-based psychiatrische behandelingen door sociaal-psychiatrisch verpleegkundigen voor patiënten met een ernstige niet-psychotische psychiatrische aandoening.
ISPB werd vergeleken met Care as Usual (CAU). Er werd gekeken naar kwaliteit van leven en ervaren moeilijkheid door de sociaal-psychiatrisch verpleegkundige, in een cluster gerandomiseerde trial. Drie grote GGZ-instellingen in Nederland namen deel, met een totaal van 56 sociaal-psychiatrisch verpleegkundigen die willekeurig werden toegewezen aan ofwel ISPB ofwel CAU. In totaal deden 93 patiënten mee in de studie (59 in de ISPB-groep en 34 in de CAU-groep). Sociaal-psychiatrisch

verpleegkundigen in de ISPB-groep kregen een 4-daags trainingsprogramma, over een periode van 4-6 weken.

ISPB werd gedurende een jaar uitgevoerd en patiënten en sociaal-psychiatrisch verpleegkundigen vulden vragenlijsten in aan het begin van de studie, tijdens de behandeling (6 maanden), na de behandeling (12 maanden) en bij 6 maanden follow-up (18 maanden). Naast kwaliteit van leven (de primaire uitkomstmaat), ware er nog de volgende uitkomstmaten: ervaren moeilijkheid door de sociaal-psychiatrisch verpleegkundige, algemene geestelijke gezondheid, behandelingsresultaten, management van ziekte en herstel, therapeutische alliantie, zorgbehoeften en sociaal netwerk. De kosteneffectiviteit werd geëvalueerd aan de hand van kosten, kwaliteit van leven en voor kwaliteit gecorrigeerde levensjaren (QALY's).

Er werd geen significant behandeleffect gevonden in de primaire uitkomstvariabele (kwaliteit van leven). Er werden echter wel significante behandelingseffecten gevonden in de door de sociaal-psychiatrisch verpleegkundige ervaren moeilijkheid van de patiënt en de door de patiënt ervaren omgang van ziekte en herstel. Er werd geen statistisch significante efficiëntiewinst van ISPB op maatschappelijke en medische kosten of QALY's gevonden. ISPB draagt bij aan de ontwikkeling van evidence-based methoden in de behandeling van patiënten met een ernstige niet-psychotische psychiatrische aandoening, die als moeilijk worden ervaren door hun sociaal-psychiatrisch verpleegkundige.

Hoofdstuk 4 beschrijft een mixed-methods studie naar hoe de verschillende ISPB-elementen vormgeven aan de therapeutische alliantie en de mogelijke zelfbeschikking van patiënten in het algemeen. Er werden dertien semigestructureerde interviews afgenomen onder patiënten. De resultaten zijn gekoppeld aan Bordin's theorie van de therapeutische alliantie, waaronder overeenstemming over therapeutische taken, overeenstemming over therapeutische doelen en de kwaliteit van de persoonlijke relatie. De therapeutische alliantie kon worden geanalyseerd vanuit drie verschillende perspectieven: a) onderling overeengekomen taken, b) doelen, en c) ervaren interpersoonlijke relaties. ISPB had een beperkte invloed op het perspectief van de wederzijds overeengekomen doelen of interpersoonlijke relaties en had invloed op de wederzijds overeengekomen therapeutische taken.
In de dagelijkse praktijk kan ISPB een positieve invloed hebben op de therapeutische alliantie.

De belangrijkste factoren die van invloed waren op de ervaren therapeutische alliantie tijdens ISPB waren de onderling afgesproken taken, het gebruik van een agenda, de structuur van de sessies, de alliantie tussen de sociaal-psychiatrisch verpleegkundige en de patiënt, en de eigen zelfbeschikking van de patiënt. Dit kwalitatieve onderzoek benadrukt het belang van de therapeutische alliantie binnen ISPB en wat helpend of niet helpend kan zijn in de relatie tussen de patiënt en zijn sociaal-psychiatrisch verpleegkundige.

Welke methodologische methode en welke vormen van omgaan met suïcidaliteit worden gebruikt door sociaal-psychiatrisch verpleegkundigen?

Hoofdstuk 5 beschrijft de eigenschappen van de Nederlandse versie van de Nurses' Global Assessment of Suicide Risk scale (NGASR), en de haalbaarheid van het gebruik ervan bij de beoordeling van het suïciderisico. Het betrof een psychometrisch onderzoek naar de bruikbaarheid, betrouwbaarheid en validiteit onder 252 patiënten. Ook werd er gebruik gemaakt van een ander instrument, de Suicide Intention Scale (SIS). Beide instrumenten werden zowel door een sociaal-psychiatrisch verpleegkundige als een arts ingevuld bij een psychiatrische beoordeling van een patiënt. Ook werd er een 6-maanden follow-up uitgevoerd onder 79 patiënten ten aanzien van suïcidaal gedrag, voor zover bekend uit de dossiers. De samenhang tussen de NGASR en de SIS was aanzienlijk en significant. De NGASR had een significante en matig sterke samenhang met het oordeel van een arts over 'suïcidale gedachten' of 'suïcidale gedachten of plannen'. Er werd geen significant verband gevonden tussen NGASR-scores en 6-maanden follow-up van suïcidaliteit. De interne consistentie van de NGASR was laag, terwijl andere indicatoren van betrouwbaarheid van de NGASR voldoende waren. De voorspellende validiteit was matig. De NGASR presteerde niet beter dan andere instrumenten. De NGASR is echter gemakkelijk te gebruiken, en kan bijdragen aan de identificatie van risicofactoren, en ook bijdragen aan een meer integrale beoordeling van het suïciderisico.

Hoe beïnvloeden suïcidaliteit en een persoonlijkheidsstoornis de kans op een opname in een psychiatrisch ziekenhuis?

Hoofdstuk 6 beschrijft de samenhang tussen de mate van suïcidaliteit en het risico op vrijwillige of onvrijwillige opname bij patiënten met en zonder een

persoonlijkheidsstoornis, die werden beoordeeld door een crisisdienst van een GGZ-instelling.
Van 2007 tot 2016 werden observationele gegevens verkregen binnen drie regio's in Nederland, gebaseerd op 71.707 contacten van patiënten van 18 tot 65 jaar. De uitkomstvariabele was een vrijwillige of onvrijwillige opname in een GGZ-instelling. Het suïciderisico en de aanwezigheid van een persoonlijkheidsstoornis werden beoordeeld door hulpverleners die werkzaam waren binnen de crisisdienst, waaronder sociaal-psychiatrisch verpleegkundigen en psychiaters. Het risico op zelfdoding werd beoordeeld aan de hand van de Severity of Psychiatric Illness scale (SPI). Deze schaal bevat 14 items, waaronder het risico op zelfdoding, middelenmisbruik en gevaar voor anderen. De SPI wordt gescoord op een vierpuntsschaal, van 0 tot 3, waarbij 0 staat voor geen huidige suïcidale gedachten of recente suïcidepogingen. Een score van 3 wijst op recente zelfmoordpogingen (in de afgelopen 30 dagen).

Onafhankelijk van de hoogte van het suïciderisico werden suïcidale patiënten met een persoonlijkheidsstoornis minder vaak vrijwillig opgenomen dan patiënten zonder een dergelijke diagnose. Echter, wanneer het niveau van het suïciderisico matig of hoog was, hadden degenen met een persoonlijkheidsstoornis dezelfde kans op onvrijwillige opname als degenen zonder een dergelijke stoornis. Terwijl de kans op vrijwillige opname lager was bij degenen met een persoonlijkheidsstoornis (onafhankelijk van het niveau van suïcidaliteit), was de kans op onvrijwillige opname alleen lager bij degenen bij wie het risico op suïcide laag was. Het is aanbevelenswaardig dat toekomstige longitudinale studies de samenhang tussen (onvrijwillige) opname en beloop van suïcidaliteit bij mensen met een persoonlijkheidsstoornis verder onderzoeken.

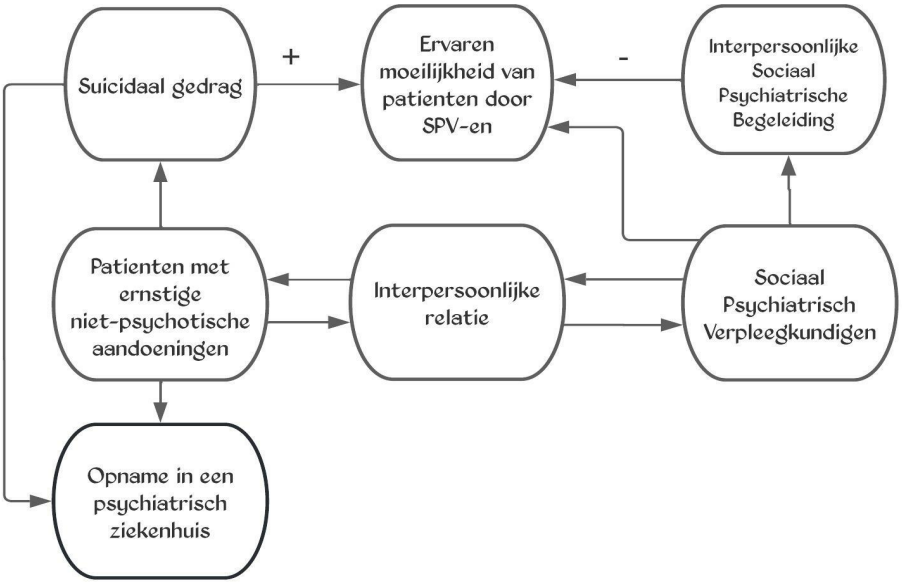
Hoe beïnvloeden suïcidaliteit en een persoonlijkheidsstoornis de ervaren moeilijkheid door sociaal-psychiatrisch verpleegkundigen?

Hoofdstuk 7 beschrijft het verband tussen de mate van suïcidaliteit en de door de hulpverlener ervaren mate van moeilijkheid in het contact met patiënten.
Hulpverleners in de GGZ spelen een belangrijke rol bij de behandeling van patiënten na een zelfmoordpoging of opzettelijke zelfverwonding. Wanneer dergelijk gedrag negatief wordt geïnterpreteerd, kunnen patiënten als moeilijk worden gezien, en dit kan leiden tot ineffectieve behandeling en wederzijds onbegrip. De hypothese

was dat een hogere inschaling van suïcidaliteit geassocieerd is met een verhoogde ervaren moeilijkheid.

Data van 176 patiënten die deelnamen aan twee cohortstudies, 92 in de MATCH-cohort studie en 84 in de ICPT-studie, werden geanalyseerd. De afhankelijke variabele was waargenomen moeilijkheden, gemeten met de Different Doctor-Patient Relationship Questionnaire (DDPRQ) en de Difficulty Single-item (DSI), een enkel item dat de ervaren moeilijkheid van de patiënt meet zoals ervaren door de sociaal-psychiatrisch verpleegkundige.
Er werd een significante samenhang gevonden tussen hoge gradaties van suïcidaliteit en ervaren moeilijkheid (DDPRQ). Er werd ook een significant verband gevonden tussen een matige en hoge graad van suïcidaliteit en de DSI. Ervaren moeilijkheid hangt dus significant samen met matige en hoge suïcidaliteit. Naast supervisie en intervisie wordt verder onderzoek aanbevolen om de onderliggende factoren van de ervaren moeilijkheid te begrijpen, om zo betere uitkomsten voor patiënten en een beter begrip voor professionals in GGZ te bevorderen.

De belangrijkste bevindingen, zoals hierboven besproken, zijn samengevat in figuur 1. De interpersoonlijke relatie is het uitgangspunt en wordt bepaald door zowel de patiënt als de sociaal-psychiatrisch verpleegkundige. Suïcidaal gedrag werkt als een complicerende factor in de therapeutische relatie, waardoor de sociaal-psychiatrisch verpleegkundige de patiënt als moeilijk ervaart. Suïcidaal gedrag kan zelfs leiden tot een psychiatrische opname. ISPB is zeer gericht op de therapeutische relatie in een poging om suïcidaal gedrag te verminderen en probeert daarom de door de patiënt ervaren moeilijkheid te verminderen. Afname van suïcidaal gedrag zou uiteindelijk kunnen leiden tot minder psychiatrische opnames voor deze groep patiënten. Welke elementen uit ISPB (bijvoorbeeld het gebruik van intervisie) ervoor zorgen dat hulpverleners hun patiënten als minder moeilijk ervaren, is interessant om in een volgend onderzoek in kaart te brengen.



Figuur 1. Samenvatting van de belangrijkste bevindingen

Zorgethiek

In de zorgethiek gaat het om de vraag of patiënten hun leven op een zinvolle manier kunnen vormgeven, en hoe dit gezien kan worden als een goed leven. Vanuit de zorgethiek worden autonomie en afhankelijkheid niet als tegengesteld aan elkaar gezien. Sterker nog, autonomie kan worden vergroot in een relatie van afhankelijkheid, vanuit een zorgethisch perspectief. Patiënten kunnen meer of minder autonoom zijn, juist omdat ze afhankelijk zijn en verbonden met anderen en steun krijgen van hun lotgenoten. Volgens Tronto kan zorg worden opgevat als een proces van het beantwoorden van de vraag van de ander. Dit impliceert dat patiënten de zorgvraag herkennen (aandacht), zich aangesproken voelen (verantwoordelijkheid), weten hoe ze met de vraag moeten omgaan (competentie), en in het antwoord beseffen dat het geen eenrichtingsverkeer is, maar een wederzijdse onderneming (responsiviteit van de ander) en dat zorg gebaseerd is op vertrouwen. Deze oplettendheid, verantwoordelijkheid, responsiviteit en vertrouwelijkheid die onder druk staan, maken het zowel voor de patiënten (en hun naasten) als voor de sociaal-psychiatrisch verpleegkundigen moeilijk om een behandelrelatie te ontwikkelen. Een ernstige niet-psychotische psychiatrische aandoening kan immers

beperkingen opleveren in het interpersoonlijk functioneren. De zorg kan volgens Tronto paternalistisch worden (wij weten wat er met je aan de hand is en wat goed voor je is) en parochiaal (voorkeur voor mensen die dicht bij ons staan), en dat de intermenselijke relaties tussen sociaal-psychiatrisch verpleegkundige en patiënt altijd asymmetrisch zijn (een ongelijke machtsverhouding tussen hen). Tronto pleit voor een gemeenschappelijke ethiek, die gericht is op horizontale relaties, waarin zorgvuldigheid zich kan ontwikkelen.

Richtingen voor toekomstig onderzoek

Hoewel de studies de onderzoeksvragen hebben beantwoord, hebben zij ook nieuwe onderzoeksvragen opgeworpen. De RCT toonde aan dat er geen significant behandeleffect werd gevonden in het verbeteren van de kwaliteit van leven van patiënten met een ernstige niet-psychotische psychiatrische aandoening. Wel ervoeren sociaal-psychiatrisch verpleegkundigen hun patiënten als minder moeilijk tijdens de gegeven ISPB-behandelperiode, vergeleken met de gebruikelijke zorg. Het kwalitatieve onderzoek toonde aan dat patiënten een positieve invloed ervoeren op de therapeutische alliantie, gebruikmakend van een wederzijdse overeenstemming over doelen en gestructureerde sessies. Effectieve methodisch verpleegkundige interventies bij patiënten met een ernstige niet-psychotische psychiatrische aandoening zijn tot op heden nog schaars met betrekking tot de therapeutische alliantie. ICPT is vooral gericht op de interpersoonlijke relatie en de ervaren moeilijkheid en blijft een interessant alternatief voor de huidige zorg bij patiënten met een ernstige niet-psychotische psychiatrische aandoening.

Met betrekking tot suïcidaliteit zijn goede therapeutische relaties cruciaal voor therapeutische effectiviteit en hebben ze een positieve invloed op de kwetsbaarheid van de patiënt. Omdat er geen optimaal ethisch-theoretisch kader bestaat in de psychiatrie, hebben onderzoekers voorgesteld om de zorgethiek en de rechtvaardigheidsethiek te integreren in de professionele GGZ. Zoals eerder gezegd is de zorgethiek een discipline of filosofie die zich richt op responsiviteit in interpersoonlijke relaties, het onderhouden van relaties door in te spelen op de behoeften van anderen en proberen niet te kwetsen. De ethiek van de rechtvaardigheid daarentegen is gericht op het handhaven van verplichtingen, billijkheid en rechtvaardigheid door de toepassing van morele principes, regels en gevestigde normen. Het zou goed zijn om beide vormen van ethiek te erkennen in de klinische praktijk en op te nemen in het ethiekonderwijs.

Sommige variaties van zorg, die professionals in de geestelijke gezondheidszorg tot uitdrukking brengen (bijv. paternalisme en zelfopoffering), vereisen meer aandacht voor de ethiek van de zorg om zorgpraktijken te evalueren. Vooral in de zorg voor suïcidale patiënten zou de ethiek van de zorg in praktijk en beleid ethische dilemma's meer onder de aandacht kunnen brengen. In feite zou die ethiek aandachtige intermenselijke relaties kunnen bevorderen en bijdragen tot een meer contextgevoelige en holistische geestelijke gezondheidszorg voor suïcidale patiënten of patiënten die als moeilijk worden ervaren.
Het wordt aanbevolen om gebruik te maken van klinische ethische ondersteuning omdat dit helpt bij het omgaan met complexe morele kwesties, bijvoorbeeld een moreel beraad.

Moreel casusoverleg is een samenwerkingsbijeenkomst waarbij een groep zorgprofessionals gezamenlijk nadenkt over een concrete morele vraag, kwestie of dilemma. In essentie, en in tegenstelling tot andere soorten (meer informele) bijeenkomsten, wordt een moreel casusoverleg gestructureerd door een gespreksmethode en vaak voorgezeten door een ethicus of geschoolde gespreksleider. Dit zou sociaal-psychiatrisch verpleegkundigen kunnen helpen om hun vaardigheden in de behandeling van patiënten met een ernstige niet-psychotische psychiatrische aandoening verder te ontwikkelen.

Helaas zijn er geen eenduidige antwoorden op alle vragen die in deze scriptie aan de orde komen. Het belangrijkste blijft dat de sociaal-psychiatrisch verpleegkundigen en patiënten proberen een effectieve therapeutische relatie te bereiken, hoe gecompliceerd het intermenselijk contact soms ook is.

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Curriculum Vitae

Mark van Veen werd op 4 november 1973 geboren in Kampen. Na het behalen van zijn atheneum verhuisde hij naar Zwolle, waar hij de tot verpleegkundige begon aan de HBO-V (Hogeschool Windesheim, diploma 1996). Vanaf de eerste stage in de psychiatrie in 1993 in Ermelo (locatie Veldwijk) werkte hij vele jaren als invalkracht op verschillende afdelingen aldaar. Daarnaast werkte hij vanaf zijn diplomering, 3 jaar in het UMCU als psychiatrisch verpleegkundige op acute opnameafdelingen. Eerst op een afdeling voor volwassenen en daarna op een afdeling voor jeugdigen tot 18 jaar. In 2000 volgde voltooiing van zijn opleiding tot sociaal psychiatrisch verpleegkundige (post-HBO SPV aan de Hogeschool Utrecht, diploma 2000). Hij werkte sindsdien op verschillende afdelingen binnen de ambulante psychiatrie (ADHD, autisme, persoonlijkheidsproblematiek, psychose), maar altijd ook binnen de crisisdienst. In 2010 voltooide hij de opleiding tot verplegingswetenschapper aan de Universiteit Utrecht. In 2013 kreeg hij de mogelijkheid om te starten met een promotietraject, naast het werken als sociaal psychiatrisch verpleegkundige. In 2020 volgde een overstap naar het onderwijs en werd hij docent verpleegkundige met aandachtsveld GGZ.
Mark is vader in co-ouderschap van 3 zoons, Jasper (13), Douwe (12) en Onno (8).

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