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Deep change in mental healthcare, an illusion?

The case of eliminating seclusion

Patricia Mann-Poll

Deep change in mental healthcare, an illusion?

The case of eliminating seclusion

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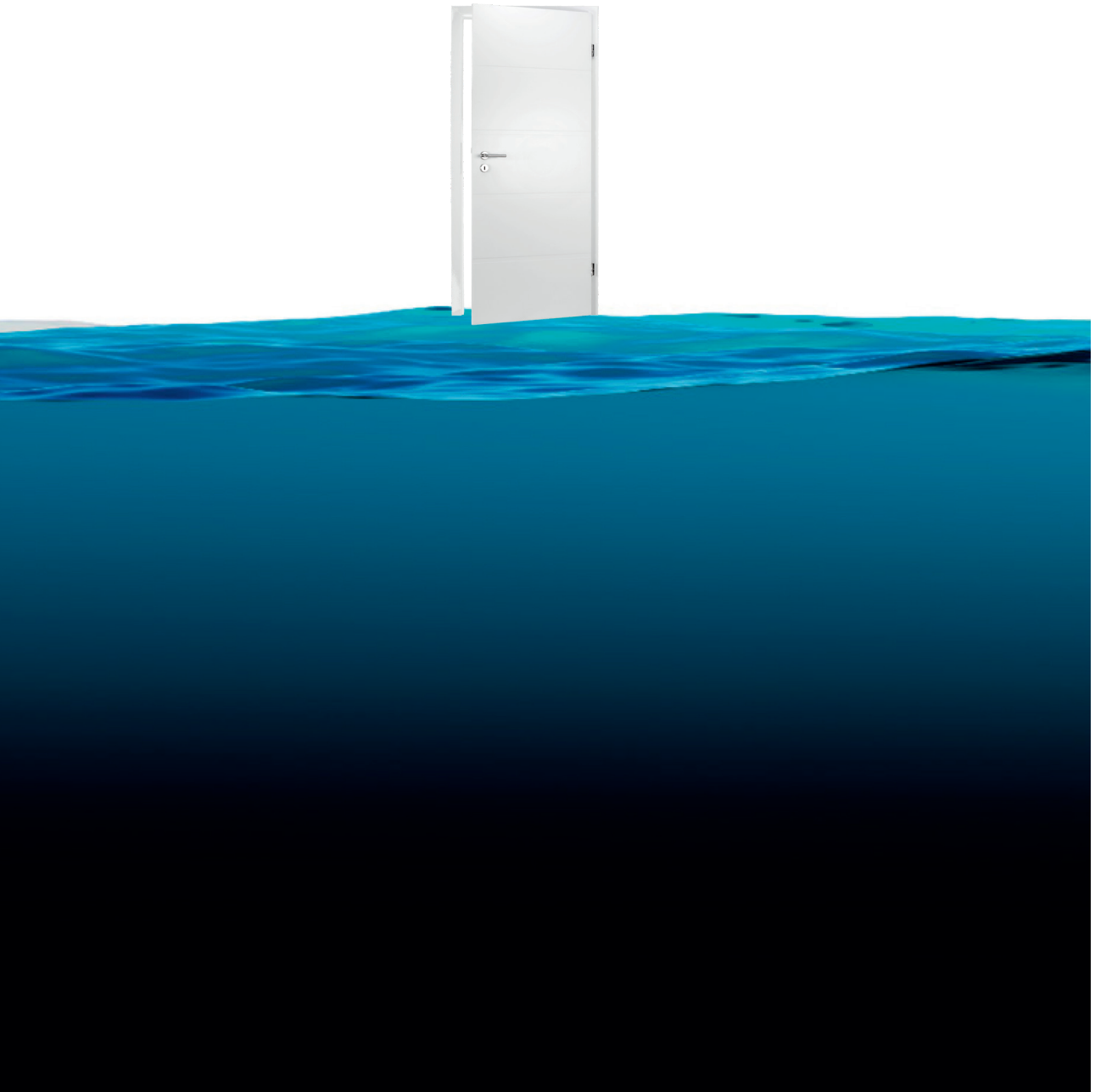

General introduction

1

1. INTRODUCTION

Almost fourteen years ago, I started to study the reduction of seclusion. I defined seclusion as locking a patient into a special unfurnished room with no means to leave until staff permit the patient to leave, in line with several authors [22, 28, 29]. At that moment the use of seclusion was a generally accepted intervention by professionals in Dutch mental health care. It was seen as a necessary 'therapeutic' intervention, helpful for patients [27]. This general view was contrasted by research results in which of patients reported feelings of fear, anger, shame, confusion, helplessness and powerlessness; some of them even showed symptoms that could refer to post traumatic stress disorders [22, 23, 15]. Some professionals involved with this practice, recognized these (side) effects of seclusion on their patients and started to express their doubts on the supposed benefits of the use of seclusion [30, 22, 26, 33]. However, despite professionals' doubts and the discussion among policy makers, the use of coercive measures appeared hard to change. Even a lack of scientific evidence for therapeutic effects of seclusion [45, 46] did not change the clinical practice. This result is remarkable nowadays, given the fact that modern Dutch guidelines theoretically describe non coercive alternatives [20].

Why does daily practice still not result in a deep and sustainable change of professionals in their use of seclusion in the Netherlands? This dissertation is particularly focused on professionals clinically working in Dutch inpatient wards. It is about the desired change of professionals towards their use of seclusion and the difficulties in achieving and sustaining their change. It is about the change in their use, but also about the change in their way of thinking about seclusion, about their decision-making process and about factors influencing their decision. This dissertation is an attempt to investigate the concept of deep change of professionals, which is theoretically seen as an important condition for a sustainable change [24].

1.2 A short history of important developments influencing seclusion use.

To understand the complexity of changing seclusion practice better, a short overview of Dutch mental health care history illustrates since how long seclusion is embedded in Dutch mental health care nowadays. In short, till the end of the 1970s, the mental healthcare in the Netherlands was seen as "a quiet pond in the forest" [38]. At that time, seclusion was an often used intervention, but hardly criticized. There was barely any direct societal influence, nor interest in mental health care and in the treatment of their patients. Until the 1970's, after a long period of ignorance by the society, psychiatry was forced by several external pressures and opened slowly its doors and later started to change its practices.

This pressure was caused by several developments within the society. The first one was particularly by a financial impuls [25]. Up to half of the 20th century, mental health care was financially supported by different communities within 'the law of poor people of 1912'. In 1960, a new law was introduced. Mental health care costs were from then onwards regulated in the AWBZ (law of special medical expenses). This was not only an economical issue, psychiatry was now recognized as a medical discipline and mental illness as a 'real' disease. With this impulse, mental health care institutes gained new funds allowing them to develop their practice and improve the quality of their treatments. Increasingly, mental health care became organized within multidisciplinary teams including professionals as psychiatrists, mental health nurses, psychologists, social workers and all kind of non-verbal therapists (psychomotor therapists, art therapists, music therapists etc.). With the participation of these new disciplines the dominant medical cure-oriented approach shifted into a more integrative treatment with a shift to recovery processes and rehabilitation [31, 11].

A second main development was encouraged by changes in the patient population. Historically, mental health institutes were mainly inhabited by chronically mental ill patients. For most of these patients, it was difficult to return back to society. Along with the development of psychopharmacology and (especially antipsychotic) medication, it became possible for increasingly more mentally ill patients to return back to society after clinical treatment. The return of mentally ill to the society, resulted in a more critical patient population with more influence in both the society as well as within mental health care institutes [25].

In the early 80's, much later than in other countries like the UK, France and Italy, patient movements came into protest against involuntary admission and coercive treatments in mental health care. In the same period the movement of the 'anti-psychiatry' arose, a critical movement consisting of patients as well as professionals, that particularly emphasized the issue of social exclusion of psychiatric patients [3]. The dominant medical model in mental health care became seriously criticized; a model in which mental illness was mainly seen as a biological one, while nor the social and physical environment, nor the society as a whole were recognized as factors of serious influence on their illness or on their recovery process. A more psycho-social view on mental health care arised in the new regional institutes of ambulatory mental health care.

Halfway of the 90's, the discussion about continuity of outpatient and inpatient care got a new impulse, as a consequence of the integration of mental hospitals with outpatient care, called the Riagg's [25]. This resulted in a discussion between professionals working outpatient services and inpatient wards. The influence of the first increased when their

responsibility was pulled though during inpatient stay, which occurred in the early years of the current century. In the same years the upcoming patient movement which was focused on the liberation and emancipation of the mentally ill, 'discovered' the issue of seclusion, which was iconic for the use of coercive measures in mental health care. Mental health institutes reacted on this issue by the introduction of vision documents and plans to reduce the use of seclusion on the grounds of dignity and human rights [30]. In the early years of the XXIe century, new seclusion reduction programs started aimed at reduction or elimination of the use of seclusion. They became funded and encouraged by the Dutch government [41]**.** Internationally as well as nationally the voice of the patient (i.e. consumer) became increasingly of interest, and patients themselves got more and more the role of essential partners (experience experts) in the mental health policy development.

1.3 Context of the thesis

This PhD study started in 2007 as a collaboration of the Radboud University with the mental health institute the Gelderse Roos in Wolfheze, which is also the context of this thesis. At that time the Gelderse Roos was a large integrated mental health institute located in the east of the Netherlands, serving a catchment area of circa 600.000 inhabitants. In 2009, this institute merged with GGZ Nijmegen, Overwaal, Pompestichting and Forum into Pro Persona. Until the merger, the Gelderse Roos Institute of professionalization (GRIP) was a research institute headed by Prof. G. Hutschemaekers. Here I worked as a nurse specialist in training, and as a PhD student until 2016. In the first time frame the first studies of this thesis were developed. We searched for professional characteristics, professional attitudes as well as for professionals' decisions to use seclusion. Due to personal circumstances, I quit the PhD in 2016 and restarted again in 2018 with the same research group supplemented with dr. E.O. Noorthoorn as third supervisor. The time in between provided the opportunity to add two studies to the former. The first was the study into the effects of the seclusion reduction program (SRP) on seclusion use within the Gelderse Roos between 2007 and 2012. The second study was about the sustainability of the results after the SRP compared with three neighboring Mental Health trusts between 2007 and 2017.

The Seclusion Reduction Program (SRP) was initiated around 2000 by the general board of the Gelderse Roos. It was designed by an inspired psychiatrist H. Hesta†[50]. The SRP had the aim to minimalize and finally to eliminate the use of seclusion and replace seclusion with the introduction of more interpersonal therapeutic interventions. This approach was based on the assumption that seclusion was traumatic and did not contribute to a therapeutic relationship nor to a mental health treatment. In 2003 and

2004 a pilot study was started on one of their admission wards [50, 52]. At that time, it was the first successful seclusion reduction program (SRP) executed in the Netherlands, while in the meantime, Dutch seclusion rates nationally showed an increase rather than a decrease [41].

Meanwhile at a national level, the general Dutch seclusion reduction program started in 2005. The national SRP was again headed by the psychiatrist who initiated the pilot project above. A year later in 2006, 34 mental health institutes participated in the general national Dutch program, which covered approximately 70% of all mental health institutes in the Netherlands. In 2009 almost 90% of the institutes (N= 42), were involved. All initiated projects to reduce seclusion within these institutes, resulted in a change in view from the *use* into *the prevention of the use of seclusion* [42]. But still nowadays, it remains difficult to decrease, let alone to eliminate the use of seclusion on the inpatient ward in mental health care. Consistent decrease is hard to realize, as is illustrated in the last publication of this thesis.

Throughout the SRP, we assumed that solely a policy change would not be enough to change clinical practice. The tailores SRPprogram was developed along the hypothesis, that for a real effective and sustainable change in the use of seclusion, a deep change of professionals was required. From the nationwide collaboration we learned that the SRP needed to be tailored and implemented over all wards, from admission to long stay.

Before focusing on the SRP, we will first introduce the underlying concept and theory of deep change in mental health care; which is originally a term from the educational research. So that different parts of the SRP can be understand and explained from out this theory.

1.4 Deep change in relation with the use of seclusion

Deep change has several meanings and is nowadays used in several sciences, (social, psychological, political, organizational, educational). We are aware of different meanings and explanations of the concept. And therefore we define deep change as: "A change that goes beyond surface structures or procedures to alter professionals' beliefs, norms and social interactions" which is adapted from educational research [8]. This means that for realizing a deep change, it is necessary to change professionals' thoughts, beliefs and their norms in the context of their use of seclusion.

1.4.1 Operationalization of deep change.

To conceptualize the several levels of deep change, we use the ice-berg model of Schaveling and Goodman, which is adapted from organizational research [37], see figure 1 below. As illustrated in this model, deep change consists of five different levels located as well as above as beyond the surface. Which means that factors above the surface can be observed (hard factors like numbers of professionals on the ward, or seclusion rates) and hardly be observed (like beliefs, values, norms etc.).

We will investigate deep change as a result of the SRP on several levels as well as above, as beyond the surface. The first level of investigation was that of seclusion rates, a result on top of the iceberg. This change is explained as a change of trial and error, thus learning from each specific seclusion incident. When the result of change is observed a level deeper, than, the organization has been changed in their trends and patterns in their use of seclusion. Professionals will observe their trends and patterns and will anticipate on them. To learn from these trends and patterns and to anticipate to prevent seclusion use in future, is seen as more useful and probably will effect in more sustainable changes. Although the SRP also intervened on the level of systems and structures in the use of seclusion, this was not the focus of our study outcomes. Although the SRP resulted in changes in systems, structures or procedures, we did not focus our study on these changes.

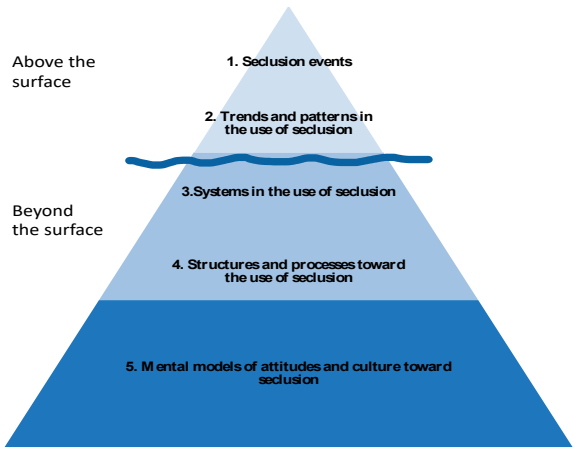

Figure 1. Iceberg of deep change in use of seclusion (Based on the iceberg of Goodman & Schaveling, 2006)

The last and deepest level of the iceberg is that of mental models (illustrated in figure 1). This is the level of invisible thoughts, values, assumptions and beliefs. This is the most

difficult level to investigate and generally remain unclear when not aligned difficult in changing shared visions. We therefore hypothesize that only with a change in mental models, a deep change in practice toward the use of seclusion is realizable. We will investigate the change in professionals' attitude of over time. Secondly, beyond the surface, we will investigate the way of decision making in using seclusion. When and why do professionals decide for the use of seclusion?

1.5 SRP: Institutional project to realize a deep change in seclusion practice

After the successful seclusion reduction project on the pilot ward of the Gelderse Roos between 2003 and 2005 [52], the SRP was adapted and implemented in phases within the whole institute. The SRP in this institute was called "Less and more" and aimed at using less coercive measures and introducing more therapeutic interventions (RvB, de Gelderse Roos, 2006). In total, five inpatient wards participated: three admission wards for adults, one admission ward for elderly (above 60 years) and one ward providing long-stay residential care to adult patients. All these wards had at least one seclusion room at their disposal. The original pilot SRP developed a package of different seclusion reduction interventions that was available for professionals from other wards as well in the institute and were presented during a symposium. Each ward was invited to compose their own selection of interventions, tailored to their own kind of patients and wards. Professionals were also given the opportunity to follow specific training as well as the opportunity to participate in different supervision meetings with an external supervisor. This supervisor functioned also as a mediator between professionals and management. Also each ward realized an intervision program. Finally, for the purpose of research in collaboration with practice, the use of seclusion was monitored during a period of 14 years between 2006 and 2020 for each ward separately and for the organization as a whole. During the program, data driven feedback of seclusion rates were routinely given back to professionals on wards and directors/institutional leaders within the SRP.

1.5.1. The intervention: Seclusion Reduction Program (SRP)

The mission of the pilot SRP was to start an acute admission ward with a minimum of coercive measures, with the ultimate goal to eliminate the use of seclusion. The main interventions directed on professionals to realize the goal can be found in fig. 2. This thesis is mainly directed on professionals' change, so these interventions are explained in more detail below. The other part of the program was mainly directed on patients and has been described elsewhere [50]. Figure 2 explains conceptual the model.

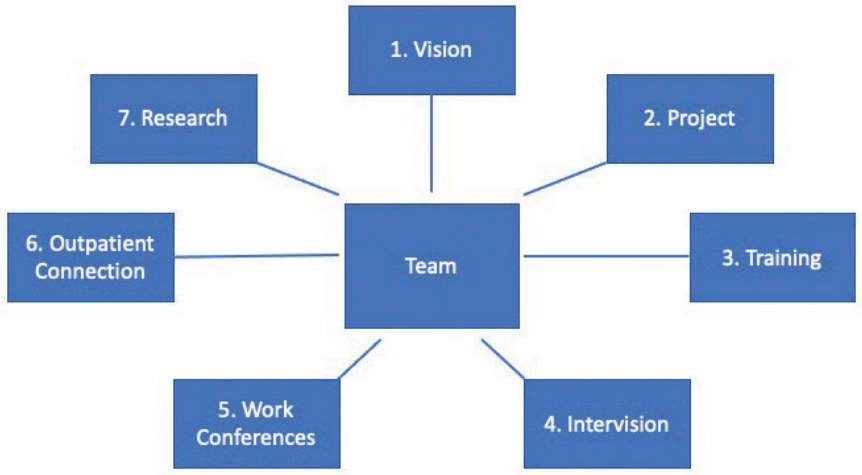

Figure 2: Overview of interventions directed to professionals*

Apart from this figure, we will explain the several parts of the SRP in more detail:

1. *Vision development and professionalization.* Before the start of the SRP, during six days, the whole multidisciplinary team discussed the new vision about the minimal use of coercion on their inpatient clinical ward. The main power of this aspect may be seen in the collaboration of each team member to share reaching the main purpose (elimination of seclusion use).
2. *Training and coaching on the job.* A special verbal training directed on the prevention of aggressive behavior, together with a physical training, was provided. During this training on the job, the trainer developed for each professional an own training program. After this intensive training, two nurses were trained for the 'train the trainers' program to continue training new nurses in de-escalating skills, pro-active working, family involvement and the use of an intensive care room. From the beginning of the project, multidisciplinary supervision meetings held by an external supervisor were held on a weekly basis. In 2003, these meetings became the standard of the care as usual. The purpose to reach a minimum of coercive measures, was seen as a process and the work process of the different members could be discussed, due to the safe environment.
3. *Work conferences.* Important elements of the learning pathways to change views on the use of seclusion, were working conferences and outplacements to other international mental health institutes. Professionals were invited to attend conferences in Sweden and in Italy, which were at that time countries that did not or scarcely use seclusion. Professionals also welcomed colleagues of other mental health institutes

on their wards, as this would help them to explicit their work process and to increase their proud.

4. *Proactive working.* Pro-active working was introduced. This was a professional method to prevent aggressive incidents and to keep in contact with the patient. Training and reflection on proactive working was further worked out as a substantial part in each of the six team days. If there still was a need for the use of seclusion, professionals made an individual seclusion plan. The use of seclusion was evaluated on a daily basis with the patient so that seclusion was used as short as possible.
5. *Collaboration with the (family) system of the patient.* Active involvement of the family or other important system members was seen as a key element. Family was asked regularly for their advice and for help to prevent crisis. Because relatives or other important people for the patient, know the patient best and that's why they are sometimes better capable to calm the patient.
6. *Support by the management team.* From the start onwards, the management team was actively involved, from top till down, every manager was seen as a key figure and each manager had her or his own important contribution in reaching the purpose.
7. *Intensive care unit.* In 2005 and in the years thereafter intensive care units (ICU) were built on each of the project wards, to deliver one to one care to patients.
8. *Monitoring seclusion rates.* During and after the project, seclusion rates were monitored. Main elements and considerations were tested, first by a longitudinal cohort study [52]. Later on the whole program was monitored and evaluated in the different phases of implementation: the phase of development and implementation of the project (from 2004 till 2007), the project phase (from 2008 till 2010) and the consolidation phase (from 2011-2013).
9. *Implementation of the pilot study on the whole institute.* From 2004 till 2010, all key interventions were implemented in phases on all wards were the use of the seclusion room was part of the delivered care. Although teams could choose their own interventions, they all choose a package of interventions as described above.

1.6 Research questions

In order to reach better understanding and insight in the theoretical concept, definition and operationalization of deep change toward seclusion, we formulated the following main and sub questions:

1. What are the most important factors that influence professionals' decision to use seclusion?
   a. What is the impact of professional, patient and environmental factors on the decision that seclusion is necessary?

b. Which of these factors have the strongest impact on the decision that seclusion is necessary?

2. What is the perception of professionals toward seclusion from a necessity and appropriateness perspective?
   a. In their decision to use seclusion, how do professionals distinguish between necessity or appropriateness?
   b. Which underlying factors explain the differences in decisions about seclusion as a necessary vs. appropriate measure?
3 Does the Seclusion Reduction Program result in the desired attitudinal change?
   a. Do professionals change their attitudes after the SRP?
   b. Given the goal of the SRP: do professional attitudes change in the desired direction?
4. Does the SRP result in a short- and long-term change in professionals' use of seclusion?
   a. What is the short and the long-term impact of the SRP on seclusion rates?
   b. What happened with the achieved seclusion results after governmental funding end?
5. How can we assist mental health institutes empirically in sustaining favorable SRP effects, after governmental funding.

1.7 OUTLINE OF THE THESIS

This thesis contains six chapters followed by a Dutch and an English summary of main outcomes and a general discussion. All chapters are aimed at contributing to a scientific insight and a better understanding of the concept of deep change toward the use of seclusion. We presume this knowledge is essential for finally tackling the problem of the continuous use of seclusion in mental health care, and secondly for contributing to scientific evidence of the theoretical concept of deep change. Finally, this thesis is aimed to provide professionals and mental health care institutes with empirical evidence to improve their clinical practice toward their use of seclusion.

Our first research questions (1a – 1c) are addressed in **chapter 2**. In this study we are mainly interested in professionals from wards with multidisciplinary backgrounds and we will investigate factors of influence in professionals' decision to use seclusion. By using a vignette set especially developed for this purpose, we are able to quantify the impact of different factors on their decision to use seclusion. This form of research is increasingly used to gain insight into the clinical decision-making process of professionals.

In **chapter 3** we will address the second questions (2a-2b). In this chapter, we also measure on a professionals' level, but then monodisciplinary: only mental health nurses (the ones who actually use seclusion) are included. Besides, we will make a distinction between the appropriateness and the necessity in their decision for its use. We hypothesize that, the greater the discrepancy between necessity and appropriateness, the higher the chance that the use of seclusion will change in the right direction (thus reduce). Again, we will use the vignette set. Mental health nurses will be asked to score the rate of appropriateness and of necessity using the vignette set as described above, in order to assess the discrepancy between both kind of motivations in their decision.

Our third study (**chapter 4)** is focused on the change in attitudes of professionals in one institute. We will use the PATS-Q (Professionals Attitudes Toward Seclusion Questionnaire, see Appendix I of this thesis) to evaluate professionals' change at two time points [55]. Aside from some personal questions (age and gender) and questions on professional background (discipline, working experience and experience in the use of seclusion) the PATS-Q consists of three main parts. In the first part, the attitude questions are directed on the *function* of seclusion, for example; is seclusion seen as a necessary evil, or as a form of treatment. In the second part of the questionnaire, the questions are focused on the *reasons* for the use of seclusion; for example, threat or violence, but also the culture on the ward could be seen as a reason. The last part of the questionnaire elaborates on how professionals think about three possible *alternatives*; i.e. more, better and other care. In order to investigate the change in attitudes, both scores will be compared by using a statistical T-test. Secondly, we will investigate if the change is observed in the desired direction of the type 'transformers'. This type professional has little faith in seclusion, and his ethical thinking is strongly prevalent. This type is most in favor of alternatives for the use of seclusion, and wants to change their seclusion practice.

Our next studies **(chapter 5 and 6**) will address questions 5 and 6. In these studies, we performed an analysis on the visible levels of deep change (above the surface). These chapters describe trends and patterns of seclusion and involuntary medication events (see fig. 1 iceberg of deep change). By collecting seclusion rates over a long-term period before, during and after the implementation of the SRP (2004-2012), we were able to evaluate if a long-term change in seclusion use was realizable within the whole institute.

In the last study **(chapter 6)** we were interested in the sustainability of the SRP of participating institutes, after the national grant ended. We compared the trends and patterns of the institute also described in chapter 5 with two other SRP's in different mental health institutes. These studies provided recommendations to further studies

into reduction of seclusion on an institutional level. In both studies, we will used the Argus data set [17].

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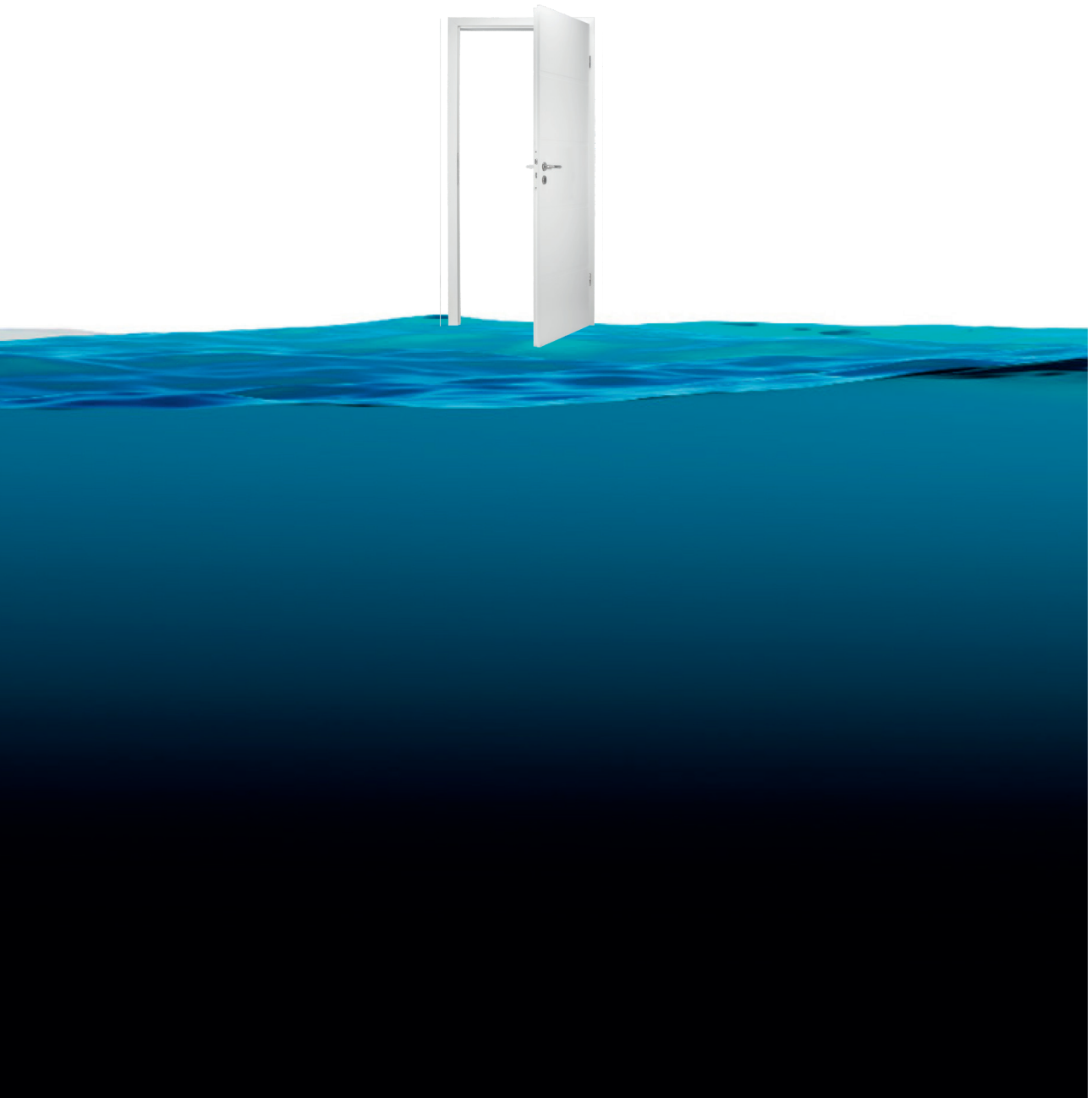


Factors contributing to mental health professionals' decision to use seclusion

2

ABSTRACT

Objective: The authors constructed an explanatory model of factors contributing to the decision to use seclusion.

Methods: Experts helped develop 64 vignettes that manipulated multiple patient and environmental variables. Eighty-two mental health professionals working on inpatient wards in four institutes in the Netherlands rated the vignettes. A univariate general linear model examined vignette variables and rater characteristics influencing the decision to use seclusion.

Results: Almost half of the decision to seclude (46%) could be explained by a combination of rater characteristics and vignette variables. Rater characteristics explained 31.7%, and vignette variables explained 27.9% (with a 13.6% interaction effect). Rater characteristics, in order of explanatory influence, were type of care provided by the professional (such as on a crisis-intensive care or an observation-diagnostic unit), current frequency of participation in seclusion, the specific institute where the professional was employed (of the four participating institutes), experience using seclusion (number of years), and being in training to be a psychiatrist or a community mental health nurse. The primary vignette variables, in order of influence, were the approachability of the patient, seriousness of danger, availability of patient rooms and space, primary diagnosis, the professional's perceived trust in colleagues, staff-patient ratio during the shift, and voluntary or involuntary status.

Conclusions: The model explained nearly half of the decision by mental health professionals to seclude vignette patients. Rater characteristics were at least as important as patient variables, including problem behaviors and diagnosis, and ward features. Because perceived approachability of the patient was a key factor, seclusion reduction policies should focus on supporting professionals in their efforts to manage inpatients with problem behaviors in an appropriate way.

INTRODUCTION

Seclusion is defined as locking a patient into a special unfurnished room until staff permit the patient to leave (1,2). Reducing seclusion rates in mental health settings is a challenging but essential task for professionals and policy makers. Use of seclusion has been criticized for several reasons—first, because patients have reported its negative impact, such as fear, anger, shame, overwhelming feelings of being abandoned, and even traumatic experiences (1,3,4), and second, because many professionals who have been involved in this practice have expressed doubts about the benefits of such invasive measures (5,6). Moreover, no scientific evidence is available for therapeutic effects of seclusion as a treatment intervention (7,8).

Nevertheless, seclusion continues to be a commonly used intervention on Dutch psychiatric wards. It is difficult to find reliable aggregate data from all Dutch institutes; however, according to estimates based on data from 12 institutes, one in four hospitalized patients, on average, experienced a seclusion episode, with a mean duration of 16 days (9).

Pragmatic, top-down-implemented seclusion reduction programs have been established and evaluated in recent years (10–18). Overall, these programs have succeeded in reducing seclusion rates. However, they are typically multifaceted, and studies have not pinpointed with certainty the program factors that increase professionals' reluctance to use seclusion. In addition, concerns have been raised that seclusion rates may rise again when specific reduction programs end.

To effect a "deep change" (19) in actual practice—that is, a sustainable change in the attitudes of mental health professionals toward use of seclusion—we must gain insight into factors that influence professionals' decision to use this invasive measure. Mental health professionals who work on inpatient wards regularly face a number of complex situations that involve patients with diverse problems and needs for care. Handling emergency situations is part of the daily work of these professionals (20,21). Decisions made in such situations are the result of complex interactions between patient, professional, organizational, and environmental factors (22–25).

Recently, Larue and colleagues (22) reviewed the literature on factors considered to play a role in seclusion and restraint decisions. On the patient side, they found several factors that increase the likelihood of a decision to seclude: age (young and middle aged), gender (male), nationality (immigrant), and diagnosis (schizophrenia or bipolar disorder). Among mental health professionals, they also found several important factors: education

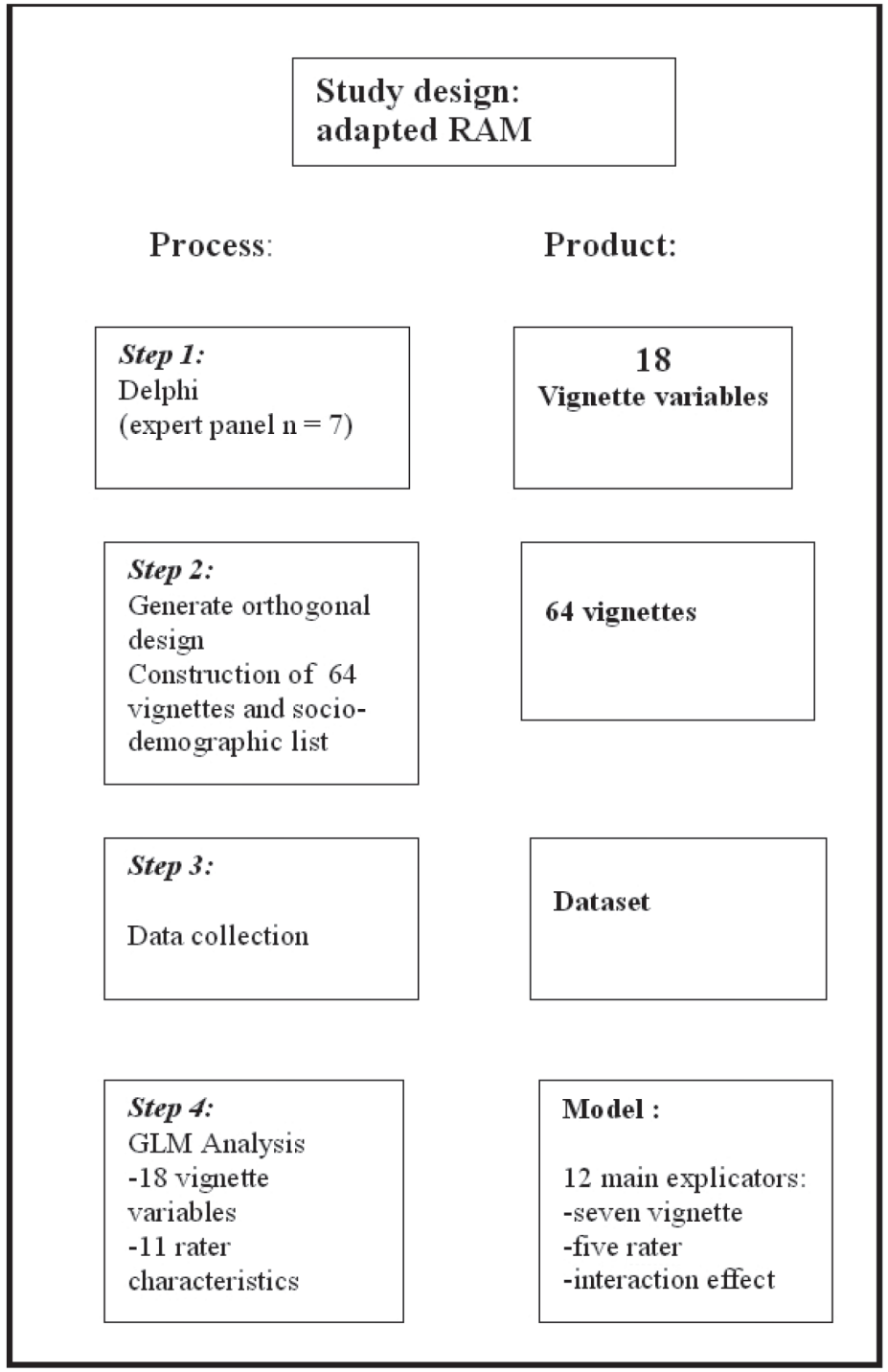
level (low), work experience (limited), stress level (overworked and stressed), training, and attitude (negative attitude toward people with mental health problems). However, no empirical evidence has been reported on the impact of these different factors (22,26).

The aim of our vignette study was to construct an explanatory model of factors that contribute to the decision of mental health professionals to use seclusion. We addressed the following questions: What is the impact of professional factors on the decision that seclusion is necessary? What is the impact of patient and environmental factors on this decision? Which of these factors have the strongest impact on the judgment that seclusion is necessary?

METHODS

We conducted a vignette study to assess professionals' judgment about the necessity of using seclusion. Vignettes are written cases that describe patient, environment, and team characteristics. Vignette studies are increasingly used to gain better insight into the clinical decision-making process of professionals (27,28). To select relevant vignette variables, we used an adapted form of the RAND Appropriateness Method, which is a formal group judgment method (29,30).

The design of the study can be summarized in four steps: a Delphi procedure to select the variables for vignette construction, construction of the vignettes, data collection, and statistical analysis.



Step 1: Delphi procedure

Seven Dutch mental health professionals (three psychiatrists, three mental health nurses, and one psychologist) were invited to participate in an expert panel on the topic of seclusion. All agreed and were present at two separate in-person meetings in June and August 2004. This panel consisted of three mental health nurses, three psychiatrists, and one psychologist. In a modified Delphi procedure consisting of two rounds, these experts were first asked to rate the most important variables influencing practitioners' decision to seclude a patient. The panel reached consensus in the second round on 18 variables, which are described below.

Step 2: construction of the vignettes

Vignettes were constructed by combining the various categories of the 18 variables in unique ways. Because this procedure resulted in too many combinations, we used the generate orthogonal design procedure in SPSS, version 16.0, to reduce the number of vignettes. A series of 64 vignettes was created. Each consisted of four parts, and all were structured identically. The first part described patient characteristics: age, gender, primary diagnosis, psychiatric comorbidity, status of the patient (voluntary or involuntary), seclusion history, and the option of using seclusion in the treatment plan. The second part described the patient's problem behavior: the nature of the problem behavior and the seriousness and direction of danger (toward the patient him- or herself or toward the surroundings). In addition, the possibility of communicating with the patient was described—that is, whether the patient was approachable. The third part of the vignette described characteristics of the context: the type of ward, rooms and space available to patients, atmosphere in the group, and whether the patient's friends or family were supportive of the patient during his or her stay on the ward. The fourth part described the professional team: the culture (open or closed), work shift (day, evening, night, or weekend, including differences in staff-patient ratio during shifts), and the perceived trust of staff in their colleagues.

Step 3: data collection

In September 2004, a total of 128 vignette series with 64 randomly ordered vignettes, accompanied by an instruction manual, were sent to team leaders of 17 different wards of four mental health institutes located in the Netherlands. These team leaders were instructed to ask professionals on their staff to individually read and rate the vignettes on a 9-point Likert scale anchored at the extremes (1, seclusion is absolutely not necessary, to 9, seclusion is absolutely necessary). Also, respondents were asked for sociodemographic

data (age and gender) and other background information about their profession, such as education and training, institute, type of ward (open or closed, or a combination), type of care provided, employment hours, work experience, and experience with the use of seclusion, including both the current frequency of participation in seclusion and the number of years of experience in use of seclusion.

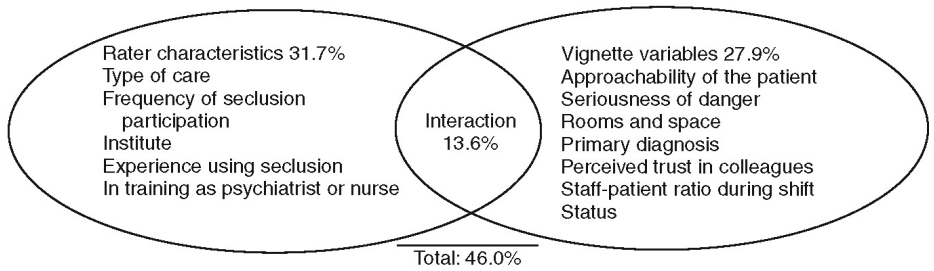
Step 4: statistical analyses

In the first step, we analyzed the data with a univariate general linear model (GLM) in which the influence of all factors (the vignette variables and rater characteristics) on outcome (score on the Likert scale) was computed. This method calculated the variance of the scores that can be explained by all factors (R2), as well as the variance explained by specific factors separately (partial η2). The interaction effect of the rater characteristics and the vignette variables was calculated by computing the explained variance of the two groups (vignette and rater variables) and then subtracting the total explained variance.

To identify the specific vignette variables and rater characteristics that most strongly influenced the decision to use seclusion, we conducted two separate univariate GLM analyses. All calculations were done with SPSS, version 16.0.

Figure 1

An explanatory model of factors contributing to mental health professionals' decision to use seclusion on inpatient wards



RESULTS

Raters

A total of 82 of the 128 invited raters (64%) returned the vignettes and provided the requested sociodemographic and background information. The 44 women (54%) and

38 men (46%) had a mean±SD age of 36.9±9.7 years (range 22-59). Most were nurses (N=72, 88%). In addition, three physicians (4%), four psychiatrists (5%), and three social workers (4%) participated. Only four (5%) of the raters were in training. On average, they worked 33.2±4.7 hours a week. Most raters (N=54, 66%) worked on a closed inpatient admission ward. Mean years of clinical work experience was 9.9±8.7.

The model

A model that used all data on rater characteristics and vignette variables was constructed that explained 46% of the judgments of these mental health professionals about the necessity of seclusion; 28% could be explained by the variables used in the vignettes, and almost 32% could be explained by the characteristics of the raters. An interaction effect of 13.6 % between the vignette variables and the rater characteristics was found (Figure 1).

Rater characteristics contributing to the model

Rater characteristics were found to play a prominent role in the judgments of professionals. The work setting (type of care) of the professionals explained 3.6% of the decision to seclude. Professionals who worked on a crisis-intensive care unit or an observation-diagnosis unit provided higher scores on the necessity scale than those who worked on other types of inpatient ward, such as child and youth, forensic, continued care, addiction, and geriatrics wards. Frequency of participation in the practice of seclusion explained 3.5% of the decision. Professionals who used seclusion frequently (more than once a day) also provided higher scores than those who used seclusion less routinely. The institute where professionals worked accounted for 2.5% of the judgment. Those who worked at one of the four institutes participating in the study provided significantly higher scores on the necessity scale than those at the three other institutes. Experience with use of seclusion (number of years) explained 1.8% of the judgment. Professionals who had more seclusion experience provided higher scores. Finally, education accounted for 1.2% of the decision to seclude. Professionals scored higher than their colleagues who were still in training to be a psychiatrist or a community mental health nurse.

Vignette variables contributing to the model

Several vignette variables played a prominent role in judgments about the necessity of seclusion. Approachability was the vignette variable with the most impact (7.6%); the variable specifies whether communicating with the patient was possible or not. The seriousness of danger was the second important variable, accounting for 6.6% of the

judgment. Professionals more often decided that seclusion was necessary in cases of acute danger than in cases of imminent danger.

A more practical variable that was also statistically significant and contributed to the model was the availability of individual rooms and space, which explained 2.7% of the judgment. When there was only one living room and patients had to share a bedroom, professionals were more likely to rate the necessity of seclusion as high. Primary diagnosis accounted for 1.6% of the judgment. Raters gave higher necessity scores when the vignettes involved patients with schizophrenia or other psychotic disorders than when they concerned patients with a personality disorder or bipolar disorder.

Perceived trust in colleagues accounted for 1.3% of the judgment. Vignettes stating that professionals had little confidence in their colleagues received higher necessity scale scores. Work shift explained 1.2% of the decision. Raters gave higher necessity scores to vignettes that described a work shift (day, evening, night, or weekend) for which staff-patient ratio was low than to vignettes that described a more adequate ratio. Finally, status of the patient explained 1.1% of the judgment. Patients who were involuntarily admitted received higher scores from the raters than those whose admissions were voluntary.

DISCUSSION

To our knowledge, this is the first study to provide empirical evidence of the relative impact of multiple variables on mental health professionals' judgments about the necessity of seclusion. Use of vignettes allowed us to manipulate an array of realistic variables and to collect information that is difficult to gather in real-life situations (27).

A model that included variables on patients, the environment, and mental health professionals explained 46% of the decision to seclude. The most notable finding is that characteristics of the mental health professionals contributed at least as much as the combination of patient and environmental variables in the vignettes (32% compared with 28%). The importance of clinicians' characteristics has only been hypothesized. Larue and colleagues (22) noted that these characteristics might be important factors in the decision to use seclusion but that few studies had examined them. Our results show that professional characteristics are indeed relevant in judgments about the necessity of seclusion.

We found that the treatment setting where professionals work (that is, the type of care provided and the specific institute) was particularly influential in judgments about the

use of seclusion. This finding is in line with the idea that the decision to use seclusion is a function of the broader culture (26,31,32). Studies have shown that in cultures where seclusion is a generally accepted practice, both in the workplace and on a national policy level, it is very likely that professionals will use seclusion with little discussion of its merits. Also, professionals' experience with seclusion and the frequency with which they currently used it were important variables in the model. This finding adds to those of other studies in the Netherlands and United Kingdom (33,34), which indicated that habit was among the most important factors in professionals' acceptance of this coercive measure.

The vignette factors with the strongest impact on seclusion decisions were the patient's approachability, specifically the impossibility of communicating with the patient, and the seriousness of danger, particularly when the danger was described as acute. Although these factors are not described in these terms in the literature, we found several qualitative studies in which professionals used terms such as "agitation" and "disorientation" in describing their decision to use seclusion (2,35). These terms might refer to comparable perceptions of "approachability" and "danger." In line with other researchers (2,36), we found that a schizophrenia diagnosis partly explained the decision to seclude, as did involuntary admission status (37).

We also found that practical factors, such as the type of rooms and the space available to patients, were important variables in the decision to use seclusion. To our knowledge, these factors have not been described in the literature on seclusion, although several studies have shown that factors such as lack of space increase aggressive incidents (38,39). Finally, staffing issues on the ward (staff-patient ratio and work shift) and trust in colleagues played a role in the decision to use seclusion but were on their own less important variables than might be expected. This finding may explain why previous, retrospective studies on the specific influence of staff-patient ratio and experience of staff with the use of seclusion yielded contradictory results and did not explain the complex situation of the influence between the different factors (37).

LIMITATIONS

Although vignette studies of clinical decision making may provide new insights into the judgment of professionals (20–22,24), we cannot be certain that participants' decisions in a real-life setting would be identical to those made in response to the vignettes. Furthermore, although we included a variety of variables selected by experts on the use of seclusion, the list may be incomplete. In addition to the limited number of variables, the number of options per variable was limited. For example, the age of the patient was

not a significant factor in the model; however, the vignettes described patients only as older or younger than 50 years. More nuanced manipulation of the age variable may have produced different results.

This study was conducted in 2004 before seclusion reduction programs were implemented. However, we believe that the factors that influenced decisions to use seclusion continue to be relevant. A follow-up study to assess the impact of seclusion reduction programs is in progress.

In addition, our results are primarily based on the judgments of mental health nurses (89% of the participants) in the Netherlands. The study did not include a range of professionals from various countries, which could limit the generalizability of our findings. However, Steinert and colleagues (26) studied the attitudes of professionals from various disciplines toward use of compulsory procedures in general and found that support for these measures was significantly lower among psychologists and social workers than among psychiatrists and nurses. In light of our findings, this may be explained by the fact that psychologists and social workers generally do not have any experience with the use of seclusion.

RECOMMENDATIONS

On the basis of our findings, we can suggest areas where seclusion reduction programs have a good chance of being successful, thus providing a theoretical framework for the wide range of measures tested in pragmatic seclusion reduction programs.

First, professionals should be trained in methods of communicating with patients, particularly in situations where they perceive the patient as unapproachable. Such training has already been successfully employed in several seclusion reduction programs (12,13,15,17,18). Second, professionals should be trained to use techniques in emergency cases. Examples of successful approaches are positive reinforcement, motivational conversation, cognitive-behavioral change, active listening, and systematic risk assessment (16). Third, professionals should learn appropriate interventions that are tailored to different situations to calm patients, especially those who are involuntarily admitted and who have a diagnosis of schizophrenia. National guidelines and decision-making frameworks could be important in ensuring use of such interventions Because psychiatry residents and nursing interns were less likely to deem seclusion necessary, continuing education and career development for mental health professionals are important, and knowledge from individuals training to be psychiatrists or nurses should be shared for this purpose.

Professionals who work on wards where seclusion is common practice—that is on crisis-intensive care and observation-diagnostic units—should regularly have opportunities for supervision. Supervision is also helpful in the process of team building, where professionals learn to trust each other (The finding that experience using seclusion increased the likelihood that it was deemed necessary emphasizes the importance of regularly rotating professionals. Teams should be well balanced with respect to work experience in general and experience with seclusion in particular Our findings point to other important factors in reducing the use of seclusion, such as ensuring an adequate staff-patient ratio and sufficient individual and group rooms and space for patients. Many countries now use alternative rooms tailored for patients with aggressive behavior.

CONCLUSIONS

Our model explained nearly half of mental health professionals' decision to use seclusion. The characteristics of professionals were at least as important as patient variables, such as dangerous behavior and diagnosis, and ward features. Because the perceived approachability of the patient was a key factor, seclusion reduction policies should focus on supporting mental health professionals in their efforts to manage inpatients with problem behaviors in an appropriate way.

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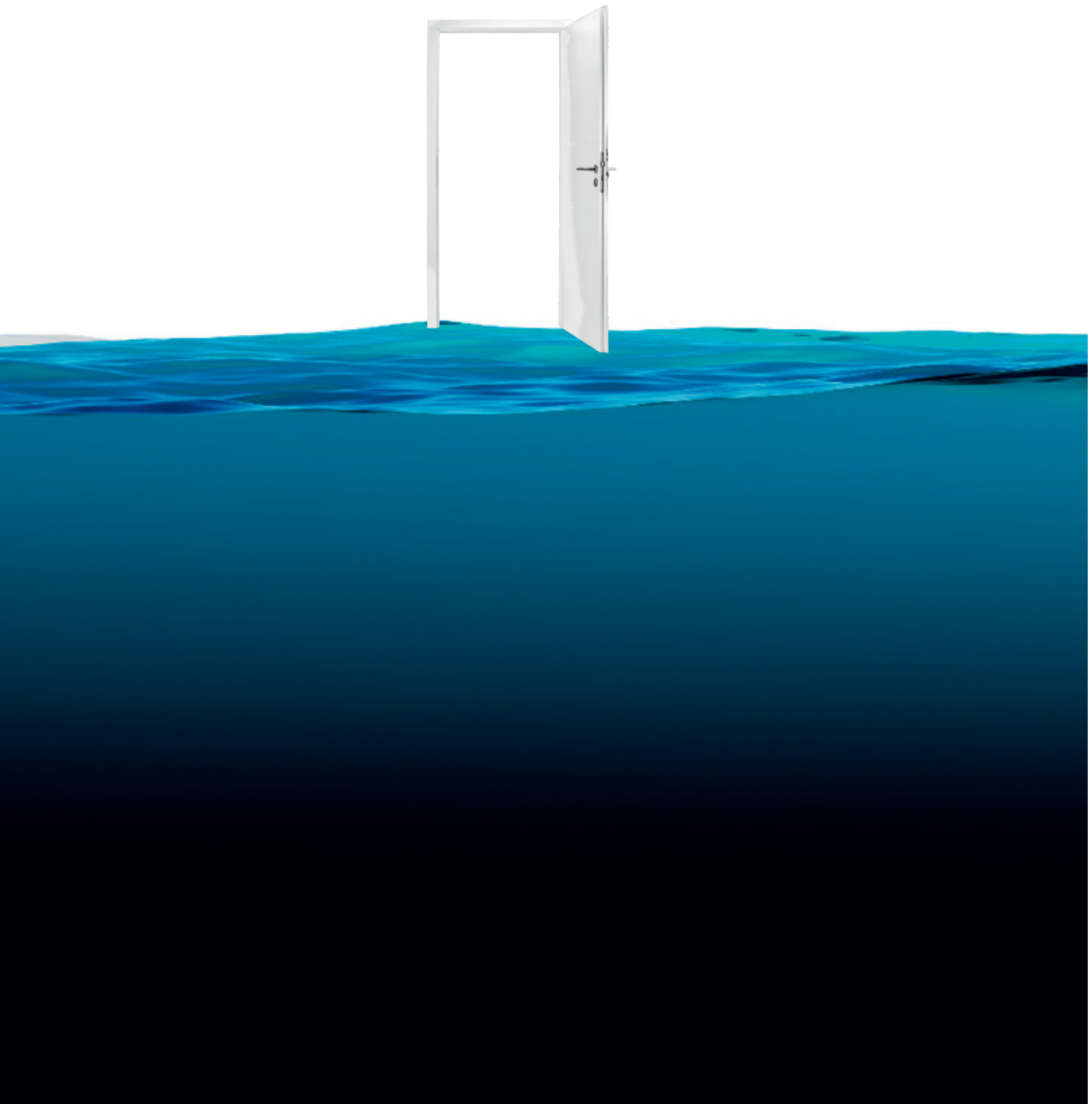

Seclusion as a necessary vs an appropriate intervention: a vignette study among mental health nurses

3

ABSTRACT

Accessible summary

- The use of seclusion is either based on the necessity of its use or on the appropriateness. Factors of influence on both decisions are unclear.
- In a vignette study, mental health nurses were asked to score vignettes on a necessity and an appropriateness Likert scale.
- Although seclusion was scored significantly higher on necessity, factors of influence and underpinning patterns were shown largely the same.
- According to the theory of Festinger, focusing on a greater discrepancy between necessity and appropriateness is seen as a necessary condition to achieve a reduction in the use of seclusion.

In a vignette study, mental health nurses were asked to score vignettes on necessity and appropriateness using a Likert scale. Sixty-nine clinical nurses from four mental health institutes scored 64 vignettes on necessity (there is no alternative) and appropriateness (seclusion supports patients' treatment) of seclusion simultaneously. Data analysis focused on the differences between both scores, and included general linear model analysis, *t*-test statistics and Kendall's tau. The *t*-test resulted in a significantly higher score on necessity than on appropriateness. Differences between both scores could be explained for 32% by a combination of nurse characteristics and vignette variables. Necessity and appropriateness were found to be strongly associated with each other, showing that underpinning patterns were largely the same. This research enhances the understanding of underlying factors that influence the decision of nurses to use seclusion. This is essential for the development of interventions aimed at the reduction of seclusion use in mental health practice.

INTRODUCTION

Reducing the use of seclusion in mental health services is a priority in many countries, including the Netherlands. Supported by a national policy and national funding, a number of nationwide surveys have been carried out in Dutch services during the last decade (Bongers *et al*. 2010). Although many projects started with the aim to reduce or even eliminate the use of seclusion (defined as locking a patient into a special unfurnished room until staff permits the patient to leave; Kaltiala-Heino *et al*. 2003, Hoekstra *et al*. 2004), it continues to be a commonly used intervention in the Netherlands compared with other European countries (Janssen *et al*. 2008). Why is it so difficult to eliminate the use of seclusion? To answer this question, we think that it is of particular interest to focus on mental health nurses because they are the ones who apply this measure (Mason 1997, Holzworth & Wills 1999, Happell & Koehn 2010), and thus are the primary professionals to be targeted for successful seclusion reduction.

Literature suggests that historically, nurses' reasons to use seclusion can be understood from two extreme perspectives: seclusion as an inevitable intervention to manage violent behaviour, necessary to maintain safety on the ward (Wynaden *et al*. 2001, Duxbury 2002, Meehan *et al*. 2004, Larue *et al*. 2009, Happell & Harrow 2010); and as a therapeutic intervention, appropriate to use in patient treatment (Alty 1997, Busch & Shore 2000, Terpstra *et al*. 2001, Duxbury 2002, Meehan *et al*. 2004).

National and international guidelines allow the use of coercive interventions only under special conditions (Van Tilburg *et al*. 2008, Vine 2011). The use of seclusion is further regulated in the Dutch Special Admission in Psychiatric Hospitals Act (the BOPZ) and restricted to use in case of aggressive behaviour of the patient that cannot be dealt with otherwise (Dutch Health Care Inspectorate 2008). However, there is a lot of discussion about the use of seclusion as a means of supporting treatment in helping patients regain control over their symptoms by stimulus reduction, for example in case of hallucinations, anxiety or restlessness (Alty 1997, Kaltiala-Heino *et al*. 2003, Meehan *et al*. 2004).

In this study, mental health nurses' perspectives on necessity and appropriateness of seclusion were investigated simultaneously by means of a vignette study. Insight about underlying rationales and patterns may help in achieving a deep and lasting change in the beliefs of mental health nurses about seclusion. Deep change is defined by Coburn (2003) as '[a] change that goes beyond surface structures or procedures to alter professionals' beliefs, norms and social interactions' (Coburn 2003).

The following questions were addressed:

1. How is seclusion scored on: (1) necessity and (2) appropriateness?
2. Which underlying factors explain the differences in decisions about seclusion as a necessity vs. appropriate?

Design

A vignette study was conducted to assess nurses' decision to use seclusion, both from an appropriate and a necessity perspective. Vignette studies are often used to gain better insight into the clinical decision-making process of professionals (Hughes & Huby 2002, Hutschemaekers *et al*. 2005, Bachmann *et al*. 2008). Vignettes are written cases, describing patient characteristics, behaviour and the context in which a certain situation took place. The development and further description of the used vignette set and attached instruction manual for this purpose were described in a previous paper (Mann-Poll *et al*. 2011).

Procedures

Team leaders from 17 different inpatient wards, including acute wards, specialized care wards and wards providing continued care from four mental health institutes, agreed to participate in this study. All mental health nurses from these wards were orally invited to participate in this study. The only requirement for participation was that the participant was working in a ward with a seclusion room that was in use.

Participants were informed about the aims of the study and were given instructions to individually read and rate the vignettes by a research assistant. A handbook specifying the used terminology was provided to all participants to ascertain uniform interpretation and scoring of the vignettes. Sociodemographic data (age, gender) and other background information about their profession and work setting (like type ward, type care they provided, work experience, experience with the use of seclusion and the number of years of experience in use of seclusion) were collected.

Participants

One hundred twenty-eight professionals were invited to participate and were sent the vignette set. Eventually, 82 agreed to participate, scored all vignettes and returned the set. This represents a return rate of 64%. Since this part of the study is specifically focused on nurses, 13 other kinds of professionals were excluded in the current data analysis, which resulted in a total of 69 participants.

Older female patient.
Diagnosis 'schizophrenia' (currently psychotic).
No comorbidity.
There are no relatives involved.

Problem behavior: transgressive, acute dangerous behavior, directed outwards.
Patient is hardly approachable.
The group is restless.

Involuntary admission.
Patient was secluded before.
Seclusion is an option in the treatment plan.

Stays on a closed admission ward for continued treatment.
Patients have to share their bedroom.
There are several living rooms.

The team culture is described as open.
Colleagues are not used to work with each other.
It is during an evening (night-, weekend) shift with only

Hardly necessary o o o o o o x 0 0 Highly necessary

Hardy appropriate 0 0 0 0 x 0 0 0 0 Highly appropriate

Figure 1 Example of a vignette and the Likert scales

Vignettes

The structure of the vignettes was identical for each vignette and consisted of four parts. The first part described *patient characteristics*, for example age, gender and the primary diagnosis of the patient. The second part described *patients' problem behaviour*, such as the seriousness of danger and the possibility or impossibility to communicate with the patient. The third part described *context characteristics*, like the type of ward, available rooms and atmosphere in the group. The fourth and last part described the *professional team*, with factors like team culture and staff occupation. An example of a vignette is presented below.

The vignettes had to be rated on two separate 9-point Likert scales, one indicating necessity and the other appropriateness of seclusion. The answer scales were anchored at the extremes, with a score of 1 indicating that seclusion is absolutely not necessary/ appropriate, and a score of 9 indicating that seclusion is absolutely necessary/appropriate

(see Fig. 1). In the attached instruction manual, necessity was defined as the following: 'There is no alternative for the use of seclusion'. Appropriateness was defined as the following: 'Seclusion is indicated and supports patients' treatment'.

Data analysis

All calculations were performed using SPSS, version 20.0 (Chicago, USA).

First, the total mean score of all vignettes together was used to compare the necessity with the appropriateness scores by a paired t-test. Second, the data were analysed with a univariate general linear model in which the influence of both (vignette variables and rater characteristics) on the outcome (difference between scores of necessity and of appropriateness) was computed. This method calculated the variance that can be explained by all factors (R^2), as well as the variance explained by specific factors separately (partial Eta^2). The interaction effect of the nurse characteristics and the vignette variables was calculated by computing the explained variance of the two groups (vignette variables and rater characteristics) and then subtracting the variance.

Finally, in order to answer the last question on a possible relationship and to investigate underlying patterns between necessity and appropriateness scores, the correlation coefficient Kendall's tau was calculated, and the scores of necessity vs. appropriateness were observed.

Findings

Demographic characteristics

Data from 69 mental health nurses were available. There were more female nurses (n = 41, 59.4%). Participants had a mean age of 35.1 years (SD = 8.6) ranging from 22 to 52 years. They worked on average 33.2 h (SD = 4.7) a week and had a mean clinical work experience of 8.2 years (SD = 6.9). Except for one nurse, all of them had experience with the use of seclusion, and 47.8% participated one to four times a month in the use of seclusion at the time of data collection (Table 1).

Table 1. Sociodemographic characteristics of the raters

	Variable	*n*	%
Age	20–29	23	33.3
	30–39	24	34.8
	40–49	16	23.2
	50–60	6	8.7
Gender	Male	28	40.6
	Female	41	59.4
In training	Yes	3	4.3
	No	66	95.7
Institute	I	25	36.2
	II	10	14.5
	III	13	18.8
	IV	21	30.4
Type of ward	Open	13	18.8
	Closed	50	72.5
	Combination	6	8.7
Type of care provided	Specialized care	6	8.6
	Crisis/observational care	47	68.1
	Long stay	15	21.7
	Missing	1	1.4
Employment hours	12–23	3	4.3
	24–36	64	92.7
	>36	2	2.8
Work experience	1–5 years	30	43.5
	6–9 years	20	29.0
	10–19 years	11	15.9
	>20 years	8	11.6
Frequency of seclusion use	< once a month	12	17.4
	1–4 times a month	34	49.3
	2–7 times a week	20	29.0
	>once a day	3	4.3
Experience with the use of seclusion	No	1	1.4
	Yes <a year	4	5.8
	Yes 1–2 years	11	15.9
	Yes 2–5 years	23	33.3
	5–10 years	18	26.1
	Yes >10 years	12	17.4

Difference score between necessity and appropriateness

Analysing all vignette scores on necessity and appropriateness, there was a significant difference between both mean scores. Seclusion as a necessary measure was scored significantly higher than seclusion as an appropriate intervention: M = 5.57 (SD = 1.98) vs. M = 4.91 (SD = 1.96); $P < 0.001$.

Factors explaining the difference score between necessity and appropriateness

General linear model univariate analysis resulted in the finding that rater characteristics and vignette variables together explained 32.1% of the difference between the scores of necessity and appropriateness. However, the difference between both scores was more explained by rater characteristics (25.6%) than by vignette variables (11.4%) (see Table 2).

Table 2. Explained variance of factors most of influence on the difference between decisions of necessity vs. appropriateness

	Difference between necessity and appropriateness scores
	E^2
Vignette variables	
Primary diagnosis	3.7*
Seriousness of problem behaviour	1.6*
Total E^2	11.4*
Nurse characteristics	
Type of care	3.7*
Experience with the use of seclusion	2.2*
Institute	1.5*
Kind of ward	1.4
Total E^2	25.6*
Interaction effect	4.9
Sum total R^2	32.1*

* Significant $P < 0.05$.

Rater characteristics explaining the difference score between necessity and appropriateness

Of the rater characteristics, especially the environment in which nurses are working, proved to be of influence on the difference between necessity and appropriateness (type of care 3.7%, institute 1.5%, kind ward 1.4%). The type of care delivered by the rater has shown to be the most important variable. Raters working on a crisis/intensive ward made the largest difference between necessity and appropriateness, while raters working on specialized wards with multi-complex patients had the smallest difference in scores on necessity and appropriateness of using seclusion. Furthermore, experience with the use of seclusion made a difference (2.2%). Nurses at the beginning of their career made the greatest difference between scores of necessity vs. appropriateness comparing with those with longer experience in seclusion use (see Fig 2).

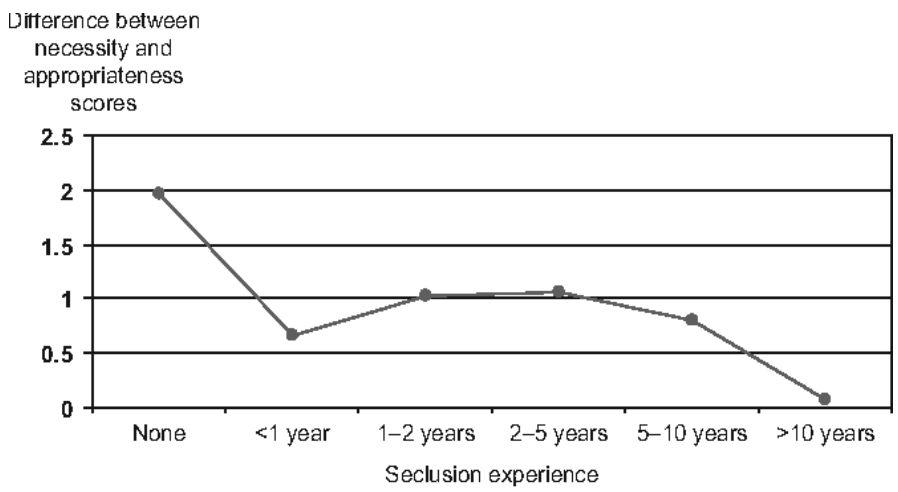

Figure 2. Seclusion experience and the difference scores between necessity and appropriateness

Vignette variables explaining the difference score between necessity and appropriateness

Although the contribution of vignette variables is less than that of the nurse characteristics, two variables played a prominent role in the difference score between necessity and appropriateness. The primary diagnosis was the vignette variable with the most influence (3.7%), followed by the seriousness of problem behaviour (1.6%).

Patients diagnosed with schizophrenia or another psychotic disorder received the smallest difference in scores, while patients diagnosed with a personality disorder received the highest difference in score between necessity and appropriateness.

The second variable was the seriousness of problem behaviour. Nurses made the greatest distinction between necessity and appropriateness scores in case of acute danger and less in the case of imminent dangerous behaviour.

Association between seclusion as a necessary vs. an appropriate measure

Correlation was computed between the appropriateness and necessity scores to examine whether there was a relationship between both scores. Kendall's tau correlation was 0.48 ($P < 0.01$, two-tailed), indicating a moderate to strong association. Thus, although all vignettes were scored significantly higher on necessity, the appropriateness scores were shown to move along in the same direction. Vignettes that received a high score on necessity of seclusion were generally also given a high score on appropriateness, and vignettes that were given a low score on necessity also received a low score on appropriateness.

DISCUSSION

The main finding of our study is that seclusion was scored significantly higher on necessity than on appropriateness. Rater (nurse) characteristics and vignette variables together explained 32.1% of the difference between the scores of necessity and that of appropriateness. The difference between both scores was explained more by rater characteristics (i.e. work setting and experience with the use of seclusion: 25.6%) than by vignette variables (primary diagnosis and seriousness of problem behaviour: 11.4%). Nevertheless, scores of necessity and appropriateness were positively associated with each other pointing at similar underlying factors.

Rater characteristics, such as work setting and the duration of their experience with seclusion, were shown to be the main variables for explanations about the differences between scores. This implies that when raters/nurses work in an environment in which seclusion is a commonly used measure, chances are high that the discrepancy between necessity and appropriateness is diminished. Consequently, when seclusion is deemed necessary, it will also be perceived as appropriate, and therefore more easily used. De Benedictis *et al*. (2011) also found that the type of ward was predictive for seclusion use (e.g. higher seclusion use on acute and crisis wards). Janssen *et al*. (2013) were searching for explanations for the difference in seclusion rates between admission wards of seven

Dutch mental health-care institutes, and concluded as well that ward policy and adequate staffing seemed to be key issues in the use of seclusion (Janssen *et al*. 2013), which can be explained by our results.

Vignette variables were of less influence on the difference between seclusion as a necessity vs. seclusion as an appropriate measure (11.4%). The primary diagnosis was the vignette variable with the most influence, followed by the seriousness of problem behaviour. Seclusion was explicitly seen as more necessary than appropriate when patients were diagnosed with a personality disorder and when patients showed an acute dangerous behaviour. In the treatment of these patients, professionals are thus faced with a large internal conflict when seclusion cannot be avoided. In contrast, in patients with schizophrenia and other psychotic disorders, the difference score is much less pronounced, and the use of seclusion is therefore probably more acceptable to the professionals. This result was also confirmed in a qualitative Dutch study by Van der Nagel *et al*. (2009), in which professionals felt more tense while secluding a patient with a personality disorder than while secluding a patient diagnosed with an axis I disorder. There is, thus, still confidence in seclusion to support treatment for this category of patients and helping them regain control over symptoms like anxiety, hallucinations and restlessness. This is in line with other studies that found that patients diagnosed with schizophrenia or other psychotic disorders were most at risk of being secluded (Steinert *et al*. 1999, Kaltiala-Heino *et al*. 2003, Keski-Valkama *et al*. 2010, Knutzen *et al*. 2011). We are of the opinion that seclusion should never be seen as an appropriate measure because it is not supported by any guideline nor is allowed from a legal perspective. Unfortunately, in some circumstances, the use of seclusion is inevitable in current practice, and therefore it is difficult to totally eliminate this measure.

Although seclusion was scored as significantly more necessary than appropriate, the patterns of both scores were shown to be quite similar and both scores oscillated in the same direction: When seclusion was perceived as highly necessary, it was in general also seen as highly appropriate and vice versa. How can this phenomenon be explained?

An explanation could simply be that it is a tradition or a habit. It is known that a habituation process blinds people to its negative effects. The more seclusion is used, the greater the belief in its effectiveness and the fewer ethical questions will arise. This suggestion is in line with several other studies among mental health professionals (Wynaden *et al*. 2001, Steinert *et al*. 2005, Van Doeselaar *et al*. 2008, Whittington *et al*. 2009).

The reduction of ethical concerns due to seclusion experience might be explained by the cognitive dissonance theory of Festinger (Festinger 1957). Festinger provides a conceptual basis for the so-called self-justification phenomena. In short, the main assumption of this theory is that people have a need for their cognitions (attitudes, beliefs, perceptions) to be consistent. The moment they become aware of inconsistencies, they want to reduce the accompanying feelings of discomfort. The most common way of achieving this is by adapting their original cognitions. Applied to our subject, this would mean that professionals will unwittingly force their own minds to believe in therapeutic advantages of seclusion, even though they are well aware of the negative side effects and the lack of evidence for therapeutic benefit. This is supported by outcomes from a study by Lind and co-workers in Finland (2004), who demonstrated that despite the special attention given to the ethical problems surrounding the use of seclusion and restraint, 74% of the participating nurses (n = 170) still did not perceive seclusion as ethically problematic (Lind *et al*. 2004).

The processes of justifying seclusion and suppressing unpleasant emotions allow a nurse to engage in the use of seclusion while still retaining a good self-image (Olofsson *et al*. 1998, Marangos-Frost & Wells 2000, Vuckovich & Artinian 2005, Moran *et al*. 2009).

IMPLICATIONS OF THE STUDY

This study adds to the understanding about the role of nurses in the use of seclusion. The findings can be used for the development of educational strategies to further reduce or even eliminate the use of seclusion.

In line with the researchers' expectations, scores on necessity of seclusion were higher than the ratings of appropriateness. However, both scores were positively associated with each other, pointing at a similar underlying rationale. When the aim is to reduce the use of seclusion, it is important to focus on achieving a greater discrepancy between necessity and appropriateness scores, thus feeding the feelings of discomfort when seclusion is being used. In this way, the chance of reaching a deep and sustainable change in nurses' beliefs, norms and social interactions will be the greatest.

In line with the study findings, several educational strategies are suggested. First, open discussion should be facilitated, and supervision sessions should be encouraged in which nurses are given the opportunity to question and criticize their own use of seclusion and search for better alternatives. Evaluating and debriefing seclusion episodes should be protocolled and become a part of usual care with the aim to prevent the next initiation of using seclusion (Gaskin *et al*. 2007, Scanlan 2009, Stewart *et al*. 2010). Second,

professionals should have the opportunity to learn appropriate interventions tailored to patients with different diagnosis, especially to prevent acute dangerous situations in which nurses do not have a choice and have to use seclusion because there is no other alternative (Gaskin *et al*. 2007, Scanlan 2009, Stewart *et al*. 2010).

There should be more dialogue between patients and nurses to better understand patients' feelings regarding the use of seclusion and restraints (Olofsson & Norberg 2001). Evidence about the negative effects of the use of seclusion on patients and nurses should be emphasized (Holmes *et al*. 2004, Frueh *et al*. 2005). Finally, national and international guidelines should be consulted and discussed (Van Tilburg *et al*. 2008, Vine 2011). All described interventions might enhance the difference between seclusion as a necessary vs. an appropriate measure, and might therefore ultimately reduce the use of seclusion.

LIMITATIONS

The findings of this study must be considered in the light of some limitations. First, although a relationship between the necessary and appropriate scores of seclusion use was found, the cause of this relation can only be speculated. Second, a vignette study offers the possibility to determine the underlying rationale in the decision-making process to use seclusion, but it is not known whether nurses' thought and beliefs will be the same in daily practice. Finally, this study was carried out in the Netherlands, and might therefore not be generalizable to other countries.

CONCLUSION

Nurses perceive the use of seclusion more as necessary than as appropriate. The difference between these scores is largely explained by experience with seclusion and work setting, and is smaller in nurses who have used seclusion during a longer period. Nevertheless, necessity and appropriateness scores in general are highly associated with each other. Realizing an increased difference between both perspectives is based on the theory of Festinger, and is seen as a necessary condition to achieve and sustain a reduction in the use of seclusion.

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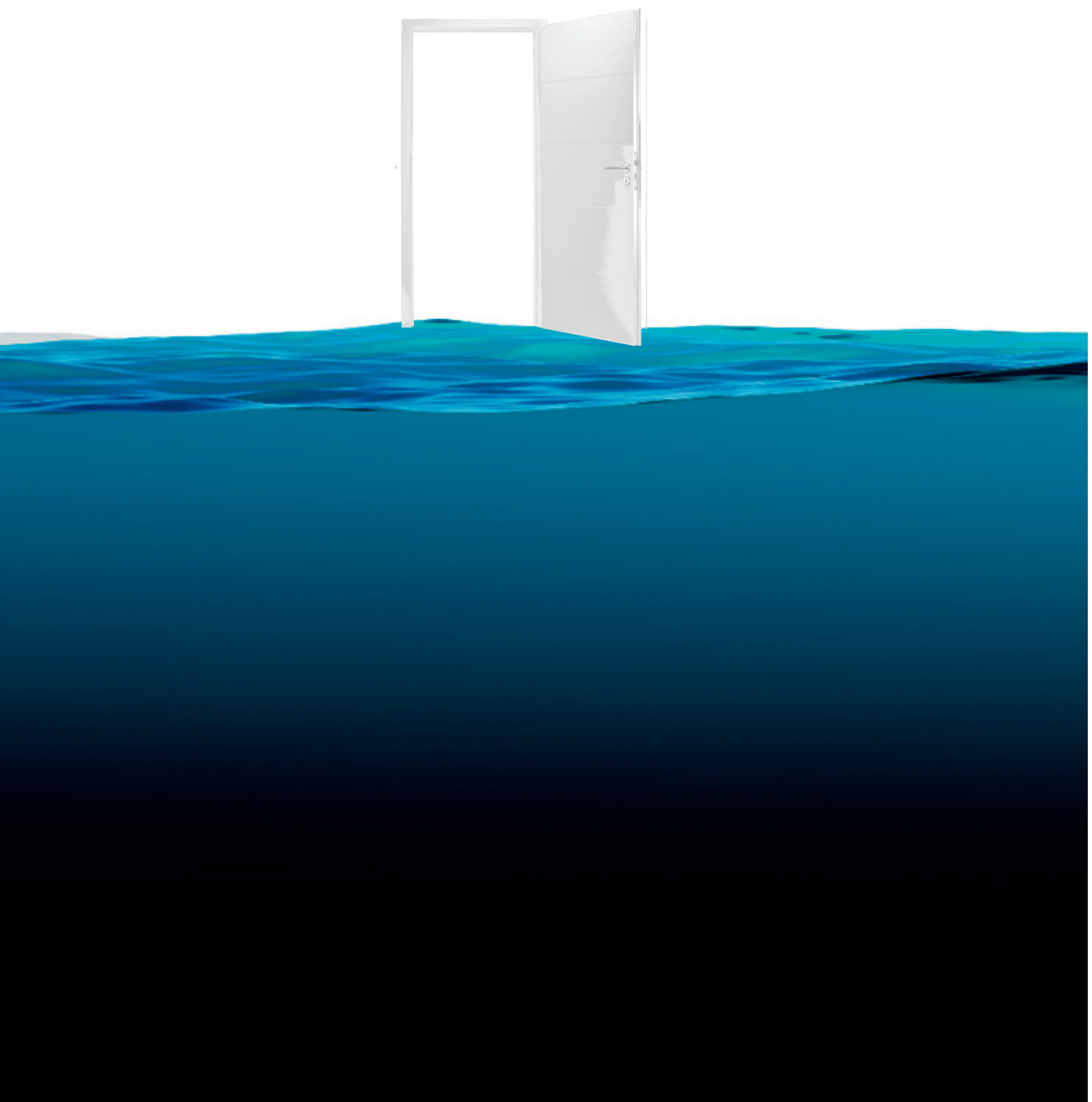

Professionals' attitudes after a seclusion reduction program: anything changed?

4

ABSTRACT

Changing professionals' attitudes toward seclusion is seen as an important condition to reduce its use. The purpose of this study was to determine whether professionals from a mental health institute in the Netherlands changed in their attitudes toward seclusion after implementation of a multifaceted seclusion reduction program. Professionals working on four acute admission wards filled in the Professional Attitudes Toward Seclusion Questionnaire (PATS-Q) before and after a seclusion reduction program. Changes were analyzed by comparing mean scores on the PATS-Q. After the program, professionals scored significantly higher on 'ethics' and 'more care'. As expected, no change occurred on 'reasons' for the use of seclusion. In addition, no significant changes were found on 'confidence', 'better care' and 'other care'. Significant changes in professional attitudes concerning the ethics of using seclusion and involving issues of more care were observed after a seclusion reduction program. Mental health professionals moved in the direction of 'transformers', indicating an increased criticism of the practice of seclusion and increased willingness to change their own use of seclusion.

INTRODUCTION

The use of seclusion is increasingly seen as controversial and reducing its use in mental health care is a priority health policy issue in many Western countries including the Netherlands [1, 2]. Seclusion in this study is defined as locking a patient into a special, unfurnished room which he or she cannot leave without permission by staff [3, 4]. Despite the controversy, seclusion continues to be a commonly used intervention in Dutch psychiatric wards, while no scientific evidence is available for the therapeutic effects of its use [5, 6]. Although it is difficult to find reliable data of seclusion rates in the Netherlands, on average, still one in four hospitalized patients will experience a seclusion episode [7]. Furthermore, a study evaluating different European cultures and perspectives toward the use of seclusion showed that Dutch professionals, compared to those in Finland and the UK, are less in favour of using seclusion than their colleagues in Finland, but more than their colleagues in the UK [8].

According to Quinn (1996) a 'deep change' is necessary for a sustainable change in actual practice [9]. Deep change defined as: "A change that goes beyond surface structures or procedures to alter professionals' beliefs, norms and social interactions" is adapted from educational research [10]. Huckshorn (2006) [11] translated deep change to psychiatric practice and the aim to consequently reduce the use of seclusion and saw a change in attitude of professionals toward seclusion as an important condition to achieve this goal. Professional attitudes and ward culture are often mentioned as important determinants in the reduction of the use of seclusion in mental health care [12–19]. Several educational programs to help staff learn about different ways to handle violent or disturbed patients seemed to be successful in decreasing seclusion rates [13, 17, 19–22]. Implicitly, the success was related to an attitude change of professionals although these studies did not actually assess these attitudes, let alone the attitudinal change. In general, empirical evidence concerning the way to achieve attitude change of mental health professionals toward the use of seclusion is lacking [23–25]. Although the attitude change toward seclusion as a separate subject has never been measured, two studies in which changes in professionals' attitudes toward coercive measures in general were found. Bowers et al. (2004) assessed the change of attitudes of nurse students during their training repeatedly over time using the ACMQ (Attitude Toward coercive Measurements Questionnaire) [26]. Pellfolk et al. [27] used the PRUQ (Perceptions of Restraints Use Questionnaire) in geriatric care. Contrary to expectations, both studies did not find any change in attitudes after the training.

In the Netherlands, van Doeselaar et al. [28] developed and used the Professionals' Attitude Toward Seclusion Questionnaire (PATS-Q), which is also used in this study

before and after a seclusion reduction program [29, 30]. This questionnaire is described in more detail in the methods section.

Van Doeselaar et al. [28] conducted a cluster analysis, using PATS-Q scores of 540 Dutch professionals and identified three types of professionals; maintainers, doubters and transformers. The group maintainers scored low on average for all attitude sub scales. The doubters, contrary to the other types, saw seclusion primarily as a therapeutic intervention rather than that they questioned its use. The third group, the transformers, showed relatively little confidence in seclusion. For transformers, ethical considerations dominated the picture. Also, they were strongly in favour of finding alternatives for seclusion and showed a greater willingness to change existing practices, even though their reasons for using seclusion did not differ that much from the doubters and the maintainers.

Building on the results of van Doeselaar [28], we expected that after participating in a seclusion reduction program (SRP) from 2004 till 2008, professionals would show a significant change in their attitudes on the PATS-Q. Moreover, we hypothesized that professionals would change their attitude in the direction of the 'transformers', because of the three different types determined, especially these professionals wanted to change the current seclusion practice. Thus, the desired attitude change would be shown as the following PATS-Q outcome:

A higher score on the ethics and a lower score on the confidence sub scale.

No changes on any of the three sub scales for reasons, because the group of 'transformers' could not be distinguished from the other groups (of doubters and maintainers) on these scales.

A higher score on all three subscales for alternatives, especially for other care in which the transformers distinguished themselves.

In summary: after implementation of the SRP, we expected to find a change on five of the eight sub scales on the PATS-Q in the desired direction of the 'transformers'.

The aim of this study was to determine changes in professional attitudes after a seclusion reduction program (SRP) by answering the following research questions:

Did professionals change their attitudes after the SRP?

Given the goal of the SRP: did professionals change their attitudes in the desired direction of the 'transformers'?

METHODS

Professionals' attitudes toward seclusion were assessed on four acute admission wards (three wards for adults 23–60 years and one for the elderly >60 years) both at the start of the SRP in 2004 and at the end in 2008. One of these wards started at the end of 2002 with the development and implementation of a SRP program [29]. Successively, from 2003 onwards, the other three admission wards followed and by 2008, the program was implemented in the whole institute [30]. Teams of each ward were free to choose their own package from the interventions offered in the program as described below.

The Seclusion Reduction Program (SRP)

The main elements of the SRP used in this institute were:

1. Vision development of multidisciplinary teams (including the psychiatrist, mental health nurses, the psychologist and the activity therapist),
2. Training (on the job) (risk taxation, pro-active working, approaching patients and making contact especially when this is hardly possible),
3. Weekly clinical supervision meetings by an external supervisor,
4. Monitoring and feedback of seclusion rates,
5. Exchange with other (national and international) acute admission wards and visiting national and international work conferences directed on the subject.

Instruments

To investigate the attitude changes of professionals toward seclusion, we used at two time points the validated Dutch Professionals Attitudes Toward Seclusion Questionnaire (PATS-Q) before and after the SRP [28]. The PATS-Q is sensitive to change and therefore appropriate to provide insight in the change of professional attitudes.

Aside from a few socio-demographic questions, the questionnaire consists of three main scales, eight subscales (see Fig. 1). The first main scale: 'Function' (with two subscales: ethics and confidence) consists of 14 statements on the different functions of seclusion, such as: 'a form of treatment', 'a necessary evil' and as having an unjustifiable impact on patients. The second main scale: 'Reasons' (with three scales: culture, treatment and threat) is built from 17 statements on possible causes of seclusion, including violence and

the prevailing ward culture. The third main scale: 'Alternatives' (with three sub scales: better care, other care, and more care) contains a list of 12 alternatives for seclusion such as 'improving protocols', 'make ward rules more flexible', and 'more nurses'. Respondents were asked to rate statements on a four point Likert scale, ranging from (1) strongly disagree to (4) strongly agree.

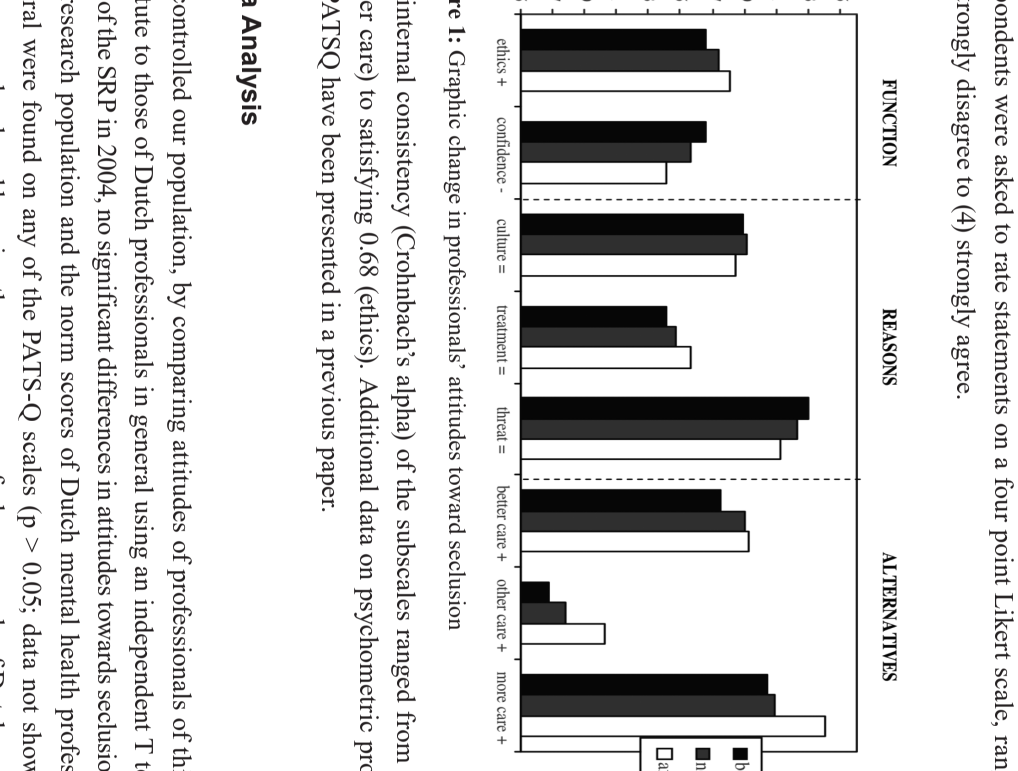

Figure 1: Graphic change in professionals' attitudes toward seclusion

The internal consistency (Crohnbach's alpha) of the subscales ranged from good 0.84 (better care) to satisfying 0.68 (ethics). Additional data on psychometric properties of the PATSQ have been presented in a previous paper.

Data Analysis

We controlled our population, by comparing attitudes of professionals of this specific institute to those of Dutch professionals in general using an independent T test. At the start of the SRP in 2004, no significant differences in attitudes towards seclusion between our research population and the norm scores of Dutch mental health professionals in general were found on any of the PATS-Q scales ($p > 0.05$; data not shown). Norm scores were developed by using the mean scores of a large sample of Dutch professionals collected in various working environments and presented in a previous study [28].

Successively, changes were analyzed by comparing mean ward PATS-Q scores of 2004 with those of 2008 using a paired sample T test (see Table 1). To investigate if the change occurred in the desired direction, we designed a graphic bar chart (see Fig. 1). Finally, to investigate if the attitude change was significant, we computed deviation scores (distances from the norm scores) for 2004 and 2008 and compared them using a paired sample T test (see Table 2). All calculations were performed using SPSS

Table 1Assessment of professionals' attitude before and after the SRP

PATS-Q sub scales	Ethics mean (SD)	Confidence mean (SD)	Culture mean (SD)	Treatment mean (SD)	Threat mean (SD)	Better care mean (SD)	Other care mean (SD)	More care mean (SD)
Scores 2004	**2.66 (0.13)**	2.66 (0.22)	2.89 (0.16)	2.41 (0.28)	3.30 (0.19)	2.75 (0.28)	1.68 (0.27)	**3.04 (0.12)**
Scores 2008	**2.81* (0.18)**	2.41 (0.33)	2.84 (0.32)	2.56 (0.28)	3.12 (0.51)	2.93 (0.25)	2.03 (0.43)	**3.40* (0.19)**

Bold values indicate a significant change on these subscales

* $p < 0.05$

Table 2 Mean and SD deviation scores

PATS-Q sub scales	Ethics mean (SD)	Confidence mean (SD)	Culture mean (SD)	Treatment mean (SD)	Threat mean (SD)	Better care mean (SD)	Other care mean (SD)	More care mean (SD)
Deviation scores 2004	**−0.2 (0.34)**	0.35 (0.42)	−0.04 (0.30)	−0.13 (0.59)	0.20 (1.13)	−0.29 (0.54)	−0.15 (0.36)	**−0.11 (0.26)**
Norm score	**2.74 (0.38)**	2.56 (0.42)	2.91 (0.53)	2.47 (0.48)	3.23 (0.45)	2.90 (0.52)	1.79 (0.73)	**3.09 (0.46)**
Deviation scores 2008	**0.17* (0.48)**	−0.35 (0.78)	−0.14 (0.61)	0.18 (0.61)	−0.25 (1.13)	0.05 (0.49)	0.33 (0.59)	**0.67* (0.21)**

Bold values indicate a significant change on these subscales

* $p < 0.05$

RESULTS

Sample

Response rates were 79.5 % (35 of 44) in 2004 and 60 % (24 of 40) in 2008. There was a significant difference in gender (p = 0.001) of the respondents: At the first measurement, 60 % were female, while this percentage was 41 % at the second measurement. Also, the respondents in 2008 had significantly more experience with the use of seclusion: 5–10 years versus 2–5 years in 2004 (p = 0.024). Most respondents were between 40 and 50 years old (2004 = 41 %; 2008 = 32 % p = 0.164). Respondents were predominantly nurses, (2004 = 88.6 % and 2008 = 95.5 %) a small minority (2004 = 11.4 % and 2008 = 4.5 %) were medical doctors and/or psychiatrists. Most respondents in 2004 (2004 = 47.1 %) were personally involved with seclusion one to four times a month (47.1 %) and in 2008 less than once a month (50 %). There were no statistically significant differences between the variables age, discipline and personal involvement in the use of seclusion (p > 0.05).

Change

Two of the eight sub scales showed statistically significant differences; 'ethics', part of the function scale (mean difference 0.14; p = 0.04) and 'more care', part of the scale that involved alternatives for seclusion (mean difference 0.36, p = 0.01) (see Table 1). Scores on ethics and confidence in seclusion were more strongly opposed to each other in 2008, which is a typical phenomena for the group of 'transformers'. In line with our hypotheses, we did not find any significant changes in the reasons for seclusion scales. In the opinion of the professionals, threat remained the most dominant reason for the use of seclusion, followed by ward culture.

The higher scores on ethics in 2008 indicate that professionals became more reflective and ask themselves more ethical questions about the necessity and the desirability of the use of seclusion. However, contrary to our hypothesis, no significant changes were found for confidence and alternatives like other care, and better care. Professionals did not change in their search for alternatives like 'making ward rules more flexible' or 'closing seclusion rooms'. Apparently, professionals were even more convinced of the benefits of utilizing 'more care' alternatives, like more nurses, more medication and earlier risk taxation, than of 'out of the box' thinking alternatives after the SRP.

Direction of Change

Figure 1 shows the graphic change in direction of professionals' attitudes compared to the general Dutch norm scores (the symbols behind the scales show the desired direction of change). As shown, the attitude changes occurred in the desired direction of the 'transformers'.

In order to determine whether the change was significant, we computed deviation scores (the relative distance of the scores from the norm before and after the implementation of the SRP). Comparing these scores, significant changes on the sub scales 'ethics' (p = 0.04) and 'more care' (p = 0.007) in the direction of the transformers were observed. Thus it seems that mental health professionals in these teams not only changed their own opinion about seclusion after the SRP, but their attitudes also changed in comparison to their Dutch colleagues. In other words: after the SRP, professionals of this institute had a more critical attitude towards the use of seclusion than their Dutch colleagues in general. Furthermore 'more care' (i.e. more nurses, more medication and earlier risk taxation) became the main alternative for the use of seclusion. Thus, although the graphic change of ethics, confidence, better care, other care and more care seemed to change in the desired direction of the group 'transformers' (see Fig. 1), the change of ethics and more care reached the level of significances (see Table 2).

DISCUSSION

With PATS-Q assessments before and after the SRP, this is the first study that provides empirical evidence regarding professionals' changes in attitudes toward the use of seclusion in a mental health care setting over time. Significant changes were observed on two sub scales; within the main scale Function (consisting of sub scales 'ethics' and 'confidence'), the sub scale 'ethics' showed a significant change in the desired direction. Likewise, within the main scale Alternatives (containing sub scales 'better care', 'more care' and 'other care'), the sub scale 'more care' showed a significant improvement. As expected, no changes were observed on any of the three subscales concerning reasons for using seclusion. Overall, findings showed a shift in professionals' attitudes in the direction of the 'transformers'.

A recent review by Happell and Harrow [31] concluded that the majority of mental health nurses still consider the use of seclusion to be an important strategy for the management of violence and aggression, even after several initiatives to reduce seclusion [32]. Given this result, could we actually expect an attitude change after the implementation of the SRP? In our view, this expectation was justified because the SRP was a multifaceted

program principally focused on altering professionals' beliefs and norms. The program consisted of vision development, training and supervision combined with regular feedback on actual use of seclusion, all of which are considered essential elements of successful elimination programs [13, 17, 19–22]. Moreover, we were able to specify the desired direction of attitude change by building on the results of the study by van Doeselaar et al. (2008) in which a correlation between willingness to change and type of professional was found.

We found that professionals changed their attitudes toward seclusion into more critical ones, despite their significant increased work experience. This is a remarkable finding, given that several studies investigating the impact of clinical work experience have shown the opposite; the more clinical work experience the more positive about the use of coercive measures [28, 33–35]. Nevertheless, scores on confidence in seclusion showed no significant decrease, and no shifts were observed regarding the use of alternatives described in 'other care' and 'better care'. It seems that although professionals proved to be able to distance themselves somewhat from daily practice, they may feel unable to think in solutions other than those already existing.

Van Doeselaar gave two possible explanations for becoming the type of 'transformer'. The first one was of self-selection: 'especially teams that were dissatisfied with the current situation and wanted to change, took part of a SRP and were willing to change'. The second explanation, which van Doeselaar could not definitively prove by her results, was that of becoming a 'transformer' as a consequence of participation in a SRP. In that way, professionals have become more critical of seclusion and have learned to distance themselves from prevailing professional practice. Given that professionals' attitudes at this specific institute by start of the SRP did not differ from the attitudes of their Dutch colleagues in general, indicates that participation in the SRP itself resulted in a grown critical attitude toward the use of seclusion. Thus implementing a SRP leads to a change in professional attitudes. This is a hopeful result for policy makers and professionals who actively want to implement an attitude change toward the use of seclusion practice in mental health care.

Taking into account that professionals became more critical after the SRP, an important question still remains: is this attitude change of professionals a necessary condition for realizing a deep change in seclusion practice [12–18] or does a reduction in the use of seclusion automatically imply a change in attitudes [13, 17, 19–22]?

Also: an important question arises whether a complete attitude shift of all participating professionals into the desired direction of the 'transformers' will be necessary to realize a

deep and sustainable change. It might be possible that we only need some 'transformers' working on an admission ward to lead the reduction in the use of seclusion. This is suggested by several policy studies [10, 16, 24].

To answer these questions, more differential methods and strategies to investigate change of professionals in mental health care practice are needed.

LIMITATIONS

Due to the regulatory rotation of professionals in an acute admission setting, the individual respondents representing the wards participating in this study, changed over time. While this enables us to draw conclusions on a group level, it does not allow us to analyse changes on an individual level.

We cannot be certain if the individual respondents working on participating wards were also actively participating in the SRP.

Significant differences in gender and work experience with seclusion between the respondents in 2004 and 2008 were observed. However, van Doeselaar et al. (2008) investigated associations between type of professional and personal characteristics and found no correlations. Thus, we assume that these differences have no consequences for our main findings.

We only assessed the teams two times, before and after the SRP. In order to get more insight in the process of attitude change, further assessments over time are preferable.

CONCLUSION

Significant changes in professional attitudes concerning the ethics of using seclusion, and involving issues of more care were observed after a seclusion reduction program. Mental health professionals moved partly in the direction of "transformers", indicating an increased willingness to question and change their own seclusion practice.

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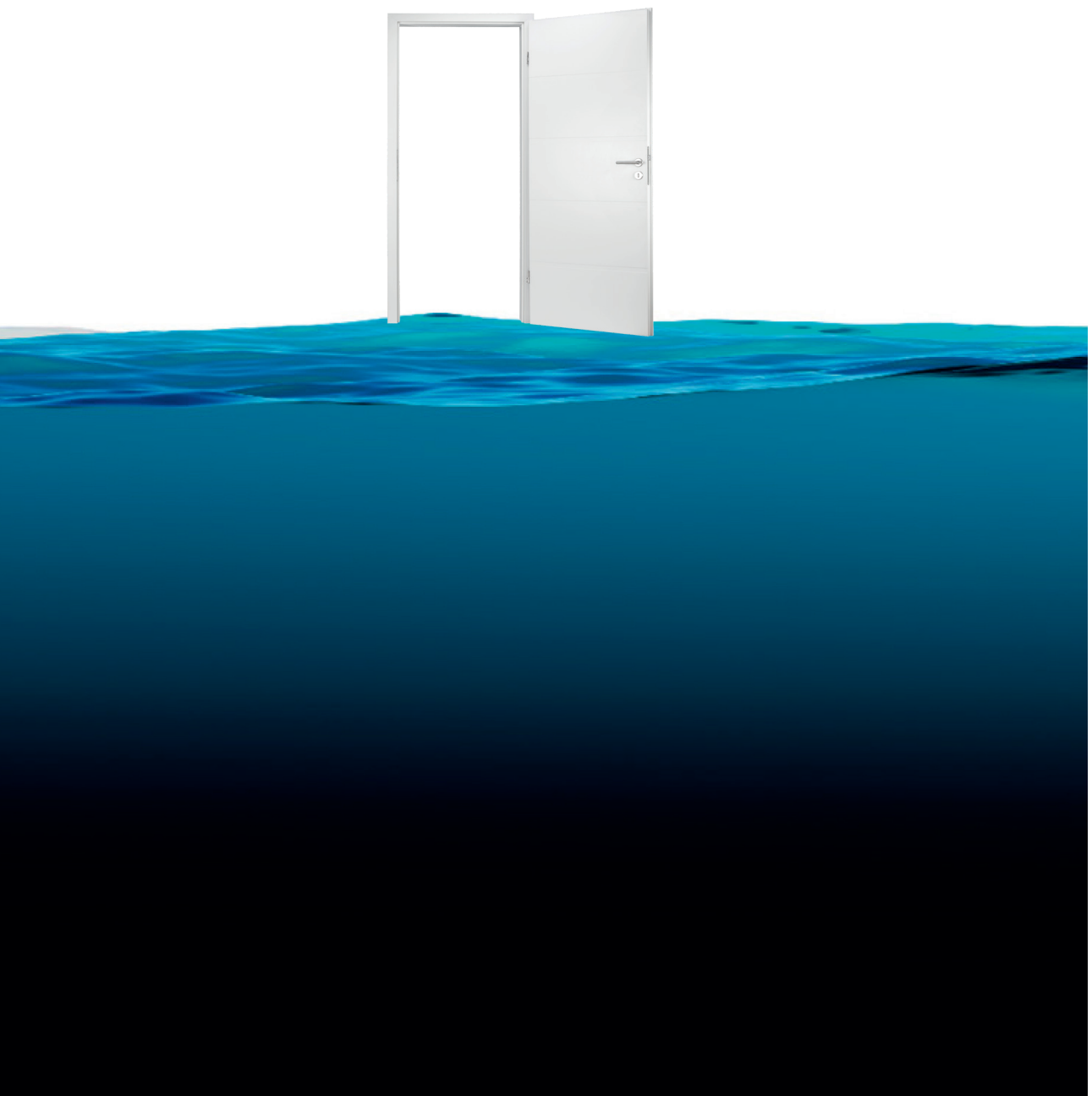

Long-term impact of a tailored Seclusion Reduction Program: evidence for change?

5

ABSTRACT

International comparative studies show that Dutch seclusion rates are relatively high. Therefore, several programs to change this practice were developed and implemented. The purpose of this study was to examine the impact of a seclusion reduction program over a long time frame, from 2004 until 2013. Three phases could be identified; the phase of development and implementation of the program (2004-2007), the project phase (2008 -2010) and the consolidation phase (2011-2013). Five inpatient wards of a mental health institute were monitored. Each ward had one or more seclusion rooms.

Primary outcome were the number and the duration of seclusion incidents. Involuntary medication was monitored as well to rule out substitution of one coercive measure by another. Case mix correction for patient characteristics was done by a multi-level logistic regression analysis with patient characteristics as predictors and hours seclusion per admission hours as outcome.

Seclusion use reduced significantly during the project phase, both in number (-73%) and duration (-80%) and was not substituted by the use of enforced medication. Patient compilation as analyzed by the multi- level regression seemed not to confound the findings. Findings show a slight increase in number and seclusion days over the last year of monitoring. Whether this should be interpreted as a continuous or temporary trend remains unclear and is subject for further investigation.

Key words: inpatient psychiatry, seclusion, organizational change, program evaluation

INTRODUCTION

Seclusion is traditionally a frequently applied intervention in inpatient mental health care, especially in the Netherlands (1). Seclusion involves the placement of a patient in a special unfurnished locked room where he or she stays alone and is unable to leave until staff permit exit (2). There are many ethical and humanitarian concerns about the use of this containment strategy. Patients report on the negative impact of these measures such as fear, anger and overwhelming feelings of being abandoned (3, 4) which may even lead to posttraumatic stress disorders long after the actual experience took place (5, 6). Secluding a patient can also have detrimental effects on staff, with nurses reporting feelings of distress and powerlessness (7). Moreover, there is no scientific evidence for the supposed therapeutic effects of seclusion (8, 9).

A number of explorative studies showed that compared with other western countries seclusion rates in the Netherlands were high, both in number and duration (10, 11). A nationwide effort was undertaken by the Dutch branch organization for mental health and addiction care (GGZ Nederland), with the aim of a substantial decline in the use of seclusion (annual reduction of 10% a year from 2006 onwards). Supported by governmental grants, mental health institutes set up a range of initiatives in which alternative interventions and preventative approaches were developed (12, 13). Some focused on changing objective factors such as increasing number of beds and upgrading the patient environment, while others concentrated more on the ‘soft skills’ like analyzing the decision-making process (14,15) or identifying patient factors associated with increased risk of seclusion (16). In the absence of evidence resulting from controlled trials, Voskes and colleagues (2011) categorized the Dutch best practices into five clusters: therapeutic engagement, prevention and de-escalation, evaluation and reflection, consumer participation and collaborative care. The diversity of approaches used to change seclusion practices can also be summarized in innovations aimed at the patient, the professional and the organizational culture as a whole (17).

The purpose of this study was to investigate the long term impact of a Seclusion Reduction Program (SRP) during and after it was brought into practice.

METHOD

Design

Clinical designed dynamic cohort study examining the impact on seclusion use before, during and after the implementation of a SRP over a time frame of ten years, corrected for potentially confounding patient characteristics.

Setting and participants

The mental health care trust running the SRP is a large psychiatric service in the east of the Netherlands, serving a catchment area of about 600,000 inhabitants. Five inpatient wards participated: three admission wards for adults, one admission ward for elderly (> 60 years) and one ward providing long-stay resident care to adult patients. At the beginning of the project all these wards had at least one seclusion room at their disposal.

The Seclusion Reduction Program (SRP)

The program was organised along a number of main considerations which was tested in a longitudinal cohort study (19):

1. All personnel was selected on consent with the main goals of the ward, aimed at prevention of seclusion as containment measure;
2. Team cohesion was stimulated by weekly team meetings supervised by an external team supervisor also covering feedback of seclusion figures;
3. Team training was aimed at prevention of aggression, risk assessment, and dealing with conflict in order to restoring contact with the patient even when this is hardly feasible;
4. Individual job coaching was provided as follow up of team training;
5. A proactive approach in detecting behaviour preceding aggression was implemented by using information of patient family and community nurses in developing means to deal with patient behaviour described in specified signalling plans;
6. Clear boundaries and limitations with respect to acting out behaviour was communicated to patients at admission;
7. At an involuntary admission, the dangerousness criteria as observed in home environment were re-evaluated within the context of the admission, and treatment plans were adjusted to the context of the admission;
8. During first admission information was gathered to compile specified observation signalling plans, and plans aimed at early detection of behaviour preceding aggression

9. Agreement with the patient on treatment was valued as an important means in identifying behaviour preceding aggression in order to add information contributing to early detection of aggression;
10. Family participation was appreciated as a main component of treatment both in developing signalling plans aimed at detection of behaviour preceding aggression as in developing treatment goals;
11. Family rooming in was provided to establish family participation;
12. All staff members had an important input in developing treatment planning, including nurses, psychiatrist, the psychologist and activity therapists.

Exchange with other acute admission wards was facilitated by visiting national and international work conferences directed on the subject (41). A combined top–down and bottom-up approach was used: leadership and support from the top was seen as essential while acknowledging that changes could not be implemented without the active involvement, participation and fiat of the professionals working on the wards. This approach was implemented at two admission wards between 2005 and 2007 (19).

Intensive care wards

From 2008 onwards the approach was extended to the other participating wards. Changes in the wards' facilities were supported by management and the board of directors, including the closure of several seclusion rooms of which a number were subsequently rebuilt into psychiatric intensive care units. This unit was built as an apartment and contained a living room, a bedroom and a high security room allowing continuous individual observation and one-in one support to the patient, also adopting healing environment principles (20). Each major location of the Mental Health Trust could refer their patients to such a unit, avoiding complex patient transfers, a shortcoming identified in some hospitals in the English context (21). These units followed the design features of the English and Scandinavian examples of psychiatric intensive care wards (22, 23, 24). In the Netherlands, the current hospital was the first to invest in such building environment innovations, of which more recently more were to follow (25). Table 1 presents an overview of the five participating wards where these facilities were implemented over time.

Table 1: Characteristics of participating wards

Type Ward	Number of beds	Number of Seclusion rooms	Psychiatric intensive care units	
			number	Opened in
Ward 1 – Adult admission 1	24	2	1	2004
Ward 2 – Adult admission 2	36	1	1	2009
Ward 3 – Adult admission 3	40	2	1	2011
Ward 4 – Elderly	33	1	1	2009
Ward 5 – Long term care *	156	4	2	2010
Total	289	10	6	

*In addition: 2 comfort rooms opened in 2011 on the ward for specialized long term care.

From a bottom-up perspective, teams could choose their own package of interventions tailored to their ward. They could for example choose to make their ward rules more flexible, or to develop behavioral or low-conflict interventions as well as pro-active approaches and risk assessment interventions. In weekly clinical supervision sessions, relevant data on seclusions and the circumstances leading up to its use were systematically discussed, in order to find ways to prevent future occurrence (26). Contact with relatives of the patient was encouraged, from the view that they know the patient best. Advance directives and specified crisis signaling plans were used to determine therapeutic strategies to prevent aggression. During a first admission, information was gathered to compile signalling plans aimed at early detection of disruptive behaviour as observed in the home environment. Finally, a researcher collaborating with ward members gave regular (minimum of quarterly intervals) feedback to the teams on trends in use of coercive measures.

Outcome: seclusion incidents

Data on seclusion use were collected daily on each ward, mainly by mental health nurses. The registration of seclusion covers incidents in two ways. First, as an episode: seclusion is assessed from the beginning (locking the door when the patient is in the room) to the moment of discontinuation (opening of the locked door). Secondly, as a seclusion incident, that may cover a sequence of episodes without a discontinuation of more than 24 hours. Number of seclusion incidents as well as duration per incident were important counters. Involuntary medication incidents were also monitored to rule out substitution i of one coercive measure by another (11,13). The data were accumulated in the national Argus register that was set up in 2006 (1). Comparison between register findings and other data sources showed good inter-rater reliability for seclusion (Cohen's kappa's of 0.92; see reference 2). The method of counting is consistent with the epidemiological

term 'incidence' and allows cross-regional as well as cross-national comparisons between wards and hospitals.

Data analysis

The change in number of seclusion incidents as well as their duration were analyzed. Differences between years were tested by means of chi-square. As the number of seclusion incidents may decrease where the duration may increase consequently, we also calculated the duration of the seclusions. We divided the 10 year period into three periods, the first four years (2004-2007) were of preparing and implementation of the program, followed by the project phase (2008-2010) in which the SRP was implemented, while the last period of three years (2011-2013) was labelled as a consolidation period. For the first period no patient compilation data could be related to seclusion incidents, case mix correction was therefore performed over the periods 2008-2010 and 2011-2013.

In order to check if the mental health institute is representative of other Dutch mental health institutions, the percentage of admitted patients exposed to seclusion in the current institute was compared with data from the national register.

The findings of the seclusion counts were compared to patient compilation data over a subsample of the full time period, to estimate whether possible changes in patient compilation during and after the project phase perhaps confounded the findings. Data of the last two phases were included in this analysis, covering three years during the project (2008-2010) and three years after the project phase (2011-2013). To investigate the influence of patient compilation on seclusion use and enforced medication, first patient characteristics and admission data were related to having been secluded in a multi-level logistic regression analysis. This analysis used an empirical database nesting patients into wards. Each record covered a single admission. The logistic regression was used to identify predictors of seclusion. The variables age, gender, ethnic descent, ICD-10 diagnosis were included as predictors in the database. Admission duration and ward were used as exposure variables. This analysis was repeated with involuntary medication incidents as outcome, to control for an eventually substitution effect.

Secondly, we aggregated the data to the patient level to assess the patient compilation in the two time periods, the years 2008 – 2010 and the years 2011-2013. We wanted to know whether characteristics identified as predictors of seclusion or involuntary medication occurred differently in the years 2008 to 2010 as compared to 2011 to 2013, which could be another explanation for a change in seclusion use.

RESULTS

The number of seclusion use (figure 1) decreased from a mean of 457.8 a year in the first five years (2004-2008) to a mean of 125.4 seclusions a year in the last five years (2009-2013). This decrease of 73% is statistically significant (Chi-square=204.9, df=36, p<0.0001).

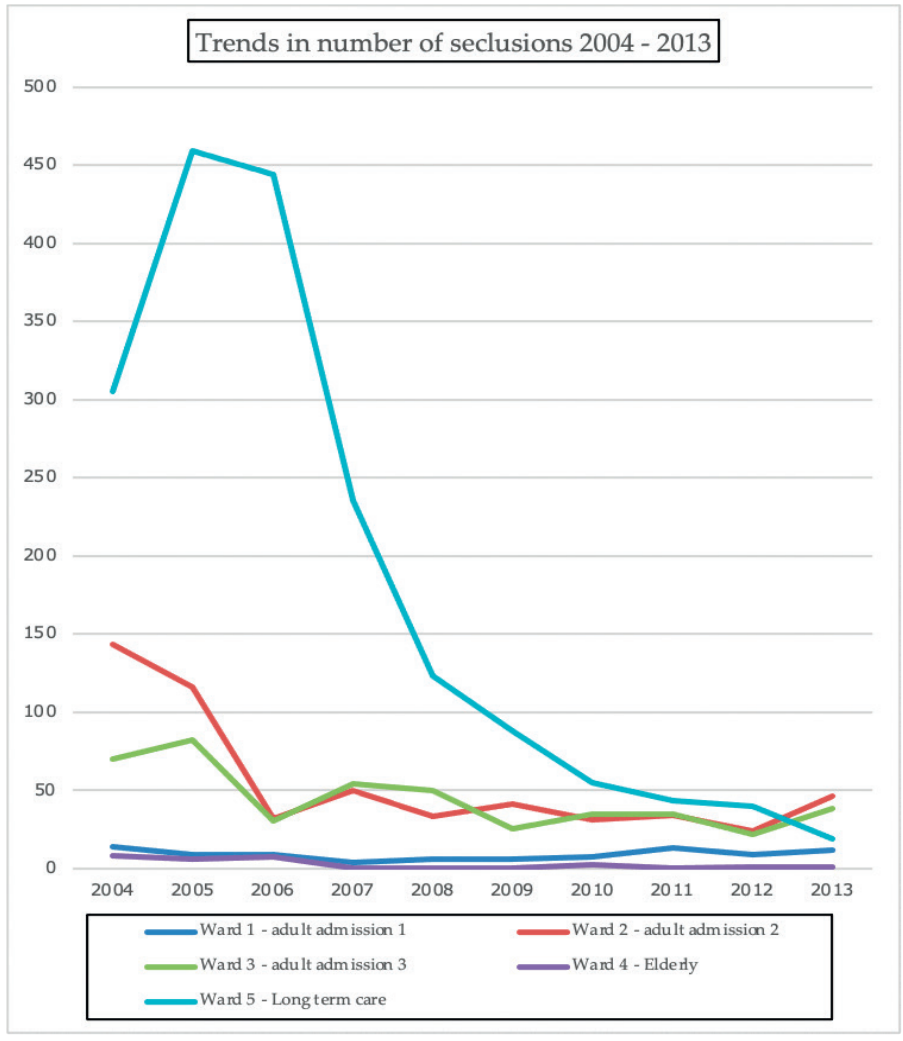

Figure 1

Figure 2 presents the total duration in days of the seclusions per year. A steep decrease is observed, from a mean of 1999 days per year over the first five years against a mean of 392 days a year in the last five years, again a statistically significant decrease of 80% is observed (Chi-square-2367.3 df=36, p<0.0001). However, as can be seen in figure 2, a slight increase of approximately 20% in the last year can also be observed. When comparing the years 2010 and 2011 with 2012 and 2013 data show a significant increase from a mean of 418 days a year to 528.5 a year (26%, Chi-square=96.4, df=36, p<0.0001).

While considering all changes together, the most important change occurred between 2007 and 2011. Decrease of seclusion use was largest on the long–stay residential care ward. Two of the admission wards (ward one and ward four, the admission ward and the ward for the elderly) compared favorably with the other two admission wards, with (very) low seclusion rates throughout these ten years.

Table 2 presents the percentage of patients exposed to seclusion within the institute compared with national data over the period 2008 till 2013. Unfortunately, there are no complete reliable national data on the number of patients secluded during their hospitalization from the period 2004 to 2007. It proved to be difficult to extrapolate trends from the Dutch Health Care Inspectorate (27). From 2006 onwards, a growing number of mental health trusts recorded their use of coercive measures in the Argus register which covered nearly all psychiatric facilities by 2013, after participation became mandatory a year earlier. The findings show that in this specific institute, the use of seclusion was from the start of the program, far lower than the nationwide use, for the years observed.

Table 2: Comparison of institute and national data on patient seclusion rates

	Institute Data				National data			
Year	Wards (N)	Admitted Patients, n =	Secluded Patients, n =	% of patients secluded per total admitted	Wards (N)	Admitted Patients n=	secluded Patients n=	% of patients secluded per total admitted
2008	5	2408	122	5.1	68	11300	1338	11.8
2009	5	1968	105	5.3	198	21500	2322	10.8
2010	5	1567	79	5.0	227	26686	2722	10.2
2011	5	2002	105	5.2	589	42960	3743	8.7
2012	5	1904	103	5.4	1772	113290	7364	6.5
2013	5	1994	127	6.3	1826	100328	7023	7.0

Case mix correction

Male gender, having the age below 35 years, having a psychotic disorder and being rated with a GAF score below 40 were associated with an increased chance of being secluded (table 3). Having a psychotic disorder was associated with an increased change of receiving involuntary medication.

Table 3 Logistic regression analysis

		Standard	Significant	Exp	95% CI Exp (B)	
Predictors	Beta	Error	difference	(B)	Lower	Upper
Seclusion						
Young	0.394	0.0898	<0.001	1.482	1.243	1.768
Male gender	1.193	0.0952	<0.001	3.303	2.732	3.968
F1_drug_max	0.301	0.1249	0.016	1.351	1.058	1.726
F2_psychotic	0.525	0.1404	<0.001	1.690	1.283	2.226
F4_neurotic	-0.678	0.3242	0.037	0.508	0.269	0.959
Gaf < 40	0.648	0.0904	<0.001	1.911	1.601	2.282
Involuntary medication						
Male gender	-4.365	0.1494	0.010	0.013	0.009	0.017
F2_psychotic	0.680	0.1968	0.003	1.974	1.257	3.099
F4_neurotic	-2.212	0.9662	0.033	0.120	0.017	0.845
F6_personality	-0.595	0.3010	0.048	0.552	0.306	0.995
Gaf < 40	0.491	0.1968	0.013	1.635	1.112	2.404

As table 4 shows, the variables identified as predictors in table 3 were in general differently distributed during the phase 2008-2010, compared with the phase after the implementation of the seclusion reduction program (2011-2013). First, we observe an effect of bed reduction after 2011 which resulted in a lower number of patients admitted. As a consequence, after 2011, the sample contained less young patients, more patients with undetermined diagnosis, more with organic disorder, more with drug abuse disorders, less with schizophrenia, more with mood disorders, less with neurotic disorders, more with personality disorders and more with a low GAF. However, both the seclusion incidents as well as involuntary medication incidents were distributed the same over both time frames. This suggest that these characteristics had a limited effect on seclusion reduction. We may conclude the findings were not confounded by substantial changes in patient compilation. The changes in patient compilation were not reflected in a substantial change in use of involuntary medication over both time frames.

Table 4 Patient compilation, seclusion and enforced medication during and after the SRP*

Patient characteristics	During SRP 2008-2010			Consolidation SRP 2011-2013			Significant difference**		
	Sample	Seclusion	Medication	Sample	Seclusion	Medication	Sample	Seclusion	Medication
Age <35 years	820 (35%)	142 (6%)	30 (1%)	460 (29%)	136 (6%)	22 (1%)	<0.001	n.s.	n.s.
Male Gender	1095 (47%)	162 (7%)	27 (1%)	748 (48%)	207 (10%)	41 (2%)	n.s.	n.s.	n.s.
Non-western descent	213 (9%)	46 (2%)	10 (0.4%)	139 (9%)	58 (3%)	57 (3%)	n.s.	n.s.	n.s.
ICD-10 diagnosis***	179 (8%)	9 (0.4%)	1 (0.04%)	314 (20%)	40 (2%)	3 (0.1%)	<0.001	<0.001	n.s.
No ICD-10 diagnosis	82 (4%)	5 (0.2%)	0	134 (9%)	18 (0.8%)	5 (0.2%)	<0.001	n.s.	n.s.
F0 organic disorders	75 (3%)	14 (0.6%)	4 (0.2%)	199 (13%)	67 (3%)	11 (0.5%)	<0.001	<0.001	n.s.
F1 disorders due to psychoactive substances	804 (34%)	172 (7%)	44 (2%)	369 (24%)	188 (9%)	42 (2%)	<0.001	n.s.	n.s
F2 Schizophrenia and other psychotic disorders	595 (25%)	53 (2%)	9 (0.4%)	558 (36%)	67 (3%)	20 (0.9%)	<0.001	n.s	n.s.
F3 Mood disorders	185 (8%)	5 (0.2%)	1 (0.04)	89 (6%)	5 (0.2%)	0 (0%)	0.008	n.s	n.s
F4 neurotic disorders	507 (22%)	50 (2%)	6 (0.2%)	435 (28%)	92 (4%)	17 (0.8%)	<0.001	<0.005	n.s.
F6 personality disorders	873 (37%)	177 (8%)	41 (1.8%)	699 (45%)	230 (11%)	52 (2.4%)	<0.001	n.s	n.s
GAF < 40									
All patients	2336 (100%)	352 (15%)	72 (3%)	1564 (100%)	332 (15%)	71 (3.3%)			

* Percentages represent the number of patients within the cell compared to the total number of the measurement window (during = 2336 and after = 2144)

**Significant differences ($P < 0.005$) tested by means of χ^2 between the same item during and after SRP

***Diagnostic data were recoded into ICD-10 principal diagnostic groups

DISCUSSION

This study shows that a successful reduction of both number and duration of seclusion use in usual inpatient mental health care is feasible and could be sustained over time. Effects of the multifaceted SRP on the five participating wards were generally favorable, although there was a slight downturn over the last year. This downturn might be related to organizational changes taking place at the same time, i.e. an institutional merge of two different organizations and could be simply an effect of ending the program. Several authors have reported negative effects of organizational instability on staff performance and their use of seclusion (17), highlighting relevance of the organizational context (28 - 30).

This study adds to the still limited body of research on change in seclusion use in inpatient mental health care as it described project effects over a long time frame. Internationally, one may compare the current implementation of psychiatric intensive care largely to Scandinavian and English examples (20 -24). Core issue is that all major locations of the institute contain one PICU. It is well known that implementation of innovations and improving mental health practice in general is challenging (31, 32). Moreover, despite its widespread controversial status, the use of seclusion seems to be an intervention difficult to eliminate (33). Studies on effects of extra funding for seclusion reduction initiatives by the Dutch government show that in many cases daily practice still falls short from policy ambitions (27, 34). As shown by Noorthoorn et al. only half of the psychiatric institutes managed to achieve a substantial reduction in seclusion use (9% on average) while others did not meet this aim or even saw increases in seclusion rates (13).

In a review, Scanlan (35) concluded that the least successful programs were only 'bottom up' programs that were established without local executive support. In our approach, professionals committed to the SRP worked on different levels, so that the impetus for change came predominantly from within the institute, and not only from involved professionals. Thus, support came both from 'above' (board of directors) as well as from 'below' (staff on the wards). Furthermore, a combination of tailored strategies was used simultaneously, following Gaskin et al. who underline that this is required since none of the separate interventions seem to be sufficiently powerful on its own (36). The issue about which program elements have the highest impact on seclusion reduction remains unsolved in literature (37). Because of the tailored approach of the SRP, we cannot assess whether one element is more effective than the other. All wards were offered a choice of tailored interventions, resulting in high levels of engagement with the SRP as its goal. The contribution of staff education and changes in the therapeutic environment to the reduction of seclusion use adds to comparable findings of other recent studies (12, 16,

38 – 40), as is the motivational role of data transparency and feedback (41). In addition, Noorthoorn et al. observed that the hospitals that participated in reduction efforts for a longer period of time proved to be more successful than institutes engaged for a shorter period (13). The present mental health trust was involved in seclusion reduction efforts and the setting up of the Argus register from the beginning of the large nationwide program and continued to focus on the need to change the culture and clinical routines concerning seclusion throughout the years (38,39). Overall, this implies that in daily practice the use of seclusion can be successfully reduced by focusing on the professional context in which the interplay of patient, ward, staff and institutional factors takes place.

In a former study, we reported that small but statistically significant changes in professional attitudes concerning the ethics of using seclusion were observed after the SRP (45). We can now add that actual seclusion use and time spent in seclusion were also significantly reduced as a result of the SRP, even compared with national data. The finding that over the last year of monitoring seclusion use increased slightly, underscores the necessity of ongoing institutional commitment to the goal of a seclusion free treatment culture (42 – 44).

STRENGTHS AND LIMITATIONS

Our study examines the effect of a multifaceted SRP on seclusion rates over ten years including five different inpatient wards (January 2004 through December 2013). Since there is a lack of published findings on the long-term impact of these kind of programs, we consider these results to be valuable for psychiatric clinical practice and organizational development. Moreover, the data represent a large number of patients over a substantial time frame. The SRP was implemented at a single mental health trust in the Netherlands, which possibly impairs generalizability to other psychiatric services. Finally, the logistic process of the collection of data on coercive measures on clinical wards through pen and paper before the introduction of electronic collection provides opportunities for errors and loss of data. As we couldn't access data on patient characteristics over the period 2004 until 2007, we could only correct for these characteristics during the implementation of the SRP at trust level and in the consolidation phase, after 2012. In these two timeframes, patient compilation did not seem to confound the findings.

CONCLUSION

This study shows a significant reduction in number and duration of seclusion incidents over a long time frame. Organizational leadership and a tailored package of interventions to reduce seclusion were used as key elements. However, reducing the use of seclusion

remains challenging and requires time, grounding in the organization and continuous organizational and professional awareness.

COMPLIANCE WITH ETHICAL STANDARDS

The authors declare no conflict of interest. The study was performed as part of a PhD, with no specific funding. With respect to ethical approval, the article does not contain any direct participation of subjects interviewed by any of the authors. Data were gathered for health care policy monitoring purposes and were based on health care information, which in the current Dutch law does not require procedures involving informed consent. The procedure followed in the study was formally agreed upon by the ethical committee of the General Hospital of Enschede in 2006 and is in line with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

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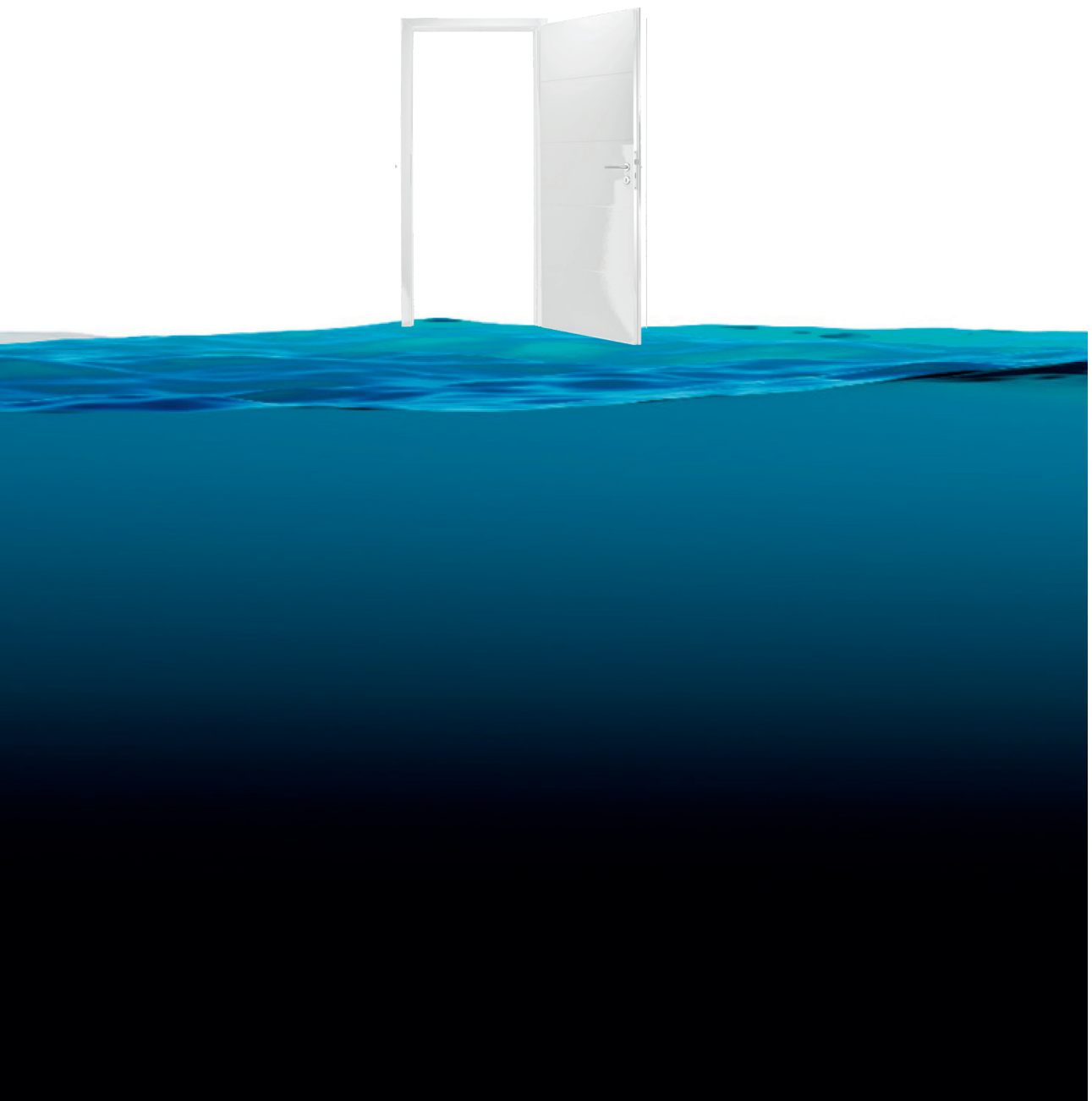


Three pathways of seclusion reduction programs to sustainability: ten years follow up in psychiatry

6

INTRODUCTION

Seclusion is defined as bringing the patient into a special furnished room until staff permit the patient to leave [21, 15]. Historically, it is the coercive measurement of first choice in dealing with aggression in the Netherlands. According to Janssen et al [19] seclusion is a frequently used intervention in the Netherlands, far more than elsewhere [19]. However, in the past decades, perspectives and views on the use of seclusion in mental health care have dramatically changed [16, 30, 9]: seclusion is no longer considered an appropriate intervention [14]. Recent studies advocate to comply patients' preferences as described in advance directives [31, 6].

From 2006 to 2012, the Dutch government funded a large number of programs aimed at the reduction of seclusion use by at least 10% a year [37]. While some national and international seclusion reduction programs (SRP) proved to be successful in the first years [12, 4, 28, 26, 1, 10, 9, 11], most fail in capturing their sustainability of this effect over a longer timeframe (sustainability is defined as a process or state that can be maintained at a certain level for as long as wanted). As a whole, Dutch mental health care showed a reduction of 10% a year between 2007 and 2012, during the funded period [27, 37]. However, the effects of the different SRPs varied from institute to institute in their SRPs and results.

The current study is directed on the sustainability of earlier reached seclusion reduction after governmental funding. Three mental health institutes participate in this study. Each of these developed a different policy upfront and during the funded SRP.

The program of the first institute started with a shared vision policy. Main goal was seclusion free treatment. Each professional had a task in reducing the use of seclusion. This institute showed a successful reduction in seclusion events on two pilot wards between 2003 and 2005 [26] some years before the national funding started. Between 2004 and 2013, while receiving governmental funding, the SRP resulted in a significant reduction of seclusion events [23]. The largest reduction was reached between 2007 and 2008, while in the years thereafter a stable, low rate in seclusion events was observed [17].

The second institute started with the SRP based on a personal engagement policy. Professionals working on a ward were encouraged to involve with the SRP and developed their own ward strategies. The program started by onset of the national funding. This institute showed a fluctuating trend in seclusion rates during the complete project between 2007 and 2012 [25, 17].

The third institute started with a personal management policy and ward initiatives in a comparable way as the second institute. After 2010, the policy became primarily top down, using audits, weekly seclusion event analysis and an approach following international literature in this domain, advocating an early intervention with medication [36]. This institute also started a project to reduce the seclusion rates by introducing the policy of prioritizing the use of enforced medication, which resulted in a significant reduction of seclusion events in the period between 2007 to 2013 [36].

In this study, we are interested in the sustainability of earlier reached program results after governmental funding ended. While the idea of sustainability is fundamental before introducing a new program, few studies investigated it empirically [7]. Our first research question is: What happened with the achieved seclusion results after governmental funding ended? And secondly: How can we assist mental health institutes empirically in sustaining favorable SRP effects, after governmental funding?

METHODS

Design

Interviews and document analysis. Firstly, we investigated the individual documents of each institute, in which the different SRPs with their scope, interventions and goals were described for the funded period (between 2006 and 2012). On base of these documents, we drafted a general summary identifying the main elements and highlights of each SRP. To verify the program descriptions and to examine to which extend the SRP intentions were implemented, we interviewed key figures in each institute. The key elements of the SRPs are summarized in Table 1 and will be described in more detail in paragraph 2.2.

Table 1: Key characteristics of the SRP in each mental health institute

	Mental health Institute I	**Mental health Institute II**	**Mental health Institute III**
Policy	Shared-vision	Personal-engagement	Leadership
Model	Seclusion-free treatment	2008-2009: Ward level initiatives 2011 onwards: Engagement model	2007-2009: Engagement model 2010-2013 Enforced medication policy.
Implementation	Top-down/ bottom-up	Bottom-up	Top-down
Interventions	Multi-faceted	Multi-faceted	Multi-faceted
(P) ICU	2008	None	2015
Continuity	2002 till 2012	2006-2012	2007- till currently

Trend analysis. To analyze the differences in sustainability, we performed a dynamic cohort study examining the seclusion events. The total time frame was ten years, from 2008 to 2017. By monitoring seclusion rates within three different institutes in the same period, this study design allowed us to investigate differences between the mental health institutes in sustaining their SRP. We chose to compare three periods within each hospital, following the three funding waves provided by the government. The focus of sustainability was on the last period, which covers 2015 to 2017. We corrected for potential confounding by patient characteristics over time.

Setting, policy and implementation

This study was carried out across three mental health institutes with a total of 37 participating inpatient wards. All institutes had their own focus, policy and way of implementation to reduce their use of seclusion and received for their SRP a governmental funding in the period between 2006 and 2012. The institutes were monitored on an identical way by using the Argus rating scale allowing comparison of sustainability differences in trends and patterns of seclusion use over time [17, 25].

Institute I

The first institute we investigated, was a large mental health care institute in the East of the Netherlands, serving a catchment area of about 1.000.000 inhabitants in 2017. The institute had a total of 2.288 staff members and treated a total of 20.652 patients a year (institutional year report 2017). Efforts to reduce seclusion use were already undertaken at the end of 1990's [32], thus before the governmental funding started. After a successful pilot project at one ward, the funded SRP was implemented on five inpatient wards between 2006 and 2012 [23].

Policy

This institute worked with a shared vision policy. Each professional had their own task in reducing the seclusion use, and was committed with the main goal; seclusion free treatment.

Model

Seclusion free treatment was encouraged, facilitated and financed by the management of the institute. Teams of professionals were asked to develop their own methods and interventions to reduce the use of seclusion by at least 10% a year.

Implementation

From June 2002 till 2005, this institute started with a pilot study at one admission ward. The aim was to create an admission ward with a minimum use of coercion [23]. The main strength of the SRP was a strong collaboration between several management levels and professionals. The pilot team shared their experiences and knowledge during a symposium. Following the symposium, four other wards carried on learning from experiences of this ward. A combined top-down and bottom-up approach was used. Teams could choose their own package of interventions from the SRP to reduce the use of seclusion. Management facilitated implementation by sharing the goal, and raising awareness of seclusion free treatment.

Interventions

A multifaceted program covering a variety of interventions was used. There was a focus on education and professionalization using interventions as team training aimed at prevention of aggression, risk assessment and dealing with conflict in order to restore contact. Team cohesion was seen as an essential element and supported by weekly team meetings supervised by an external team supervisor. Family participation was appreciated as a main component [23].

(P) ICU

The pilot admission ward started with the development and use of a PICU (psychiatric intensive care unit) in 2008. The following years the other wards followed by building of these units replacing seclusion facilities.

Continuity

The project ended in 2012, assuming all elements of the SRP were successfully implemented within the whole institute. Thus, seclusion free treatment was no longer a separate spearhead.

Institute II

The second mental health institute was also a large institute located in the east of the Netherlands, serving a catchment area of 900.000 inhabitants. This institute had 2.145 staff members and treated 20.452 patients a year (institutional year report 2017). Seven

inpatient ‘project wards’ participated, spread over four locations: four admission wards, one long-stay ward, one forensic ward and one ward for youth.

Policy

The SRP was based on a personal engagement policy. Professionals working on a ward were encouraged to involve with the SRP and develop their strategies to reduce the use of seclusion.

Model

Professionals started with several ward initiatives to reduce the use of seclusion. Wards described their own plans to reduce seclusion use in various ways. Up to 2010, central institute guidance was limited. From 2011 onwards the engagement model was introduced top-down on all wards.

Implementation

The implementation of the SRP was first bottom up, later on encouraged by management. Team supervision, seclusion incident evaluations and moral deliberation [24] were key elements. Each three months, management as well as wards received information on seclusion rates, allowing for program modification. However, implementation of evidence-based interventions was limited. From 2011 onwards, this institute implemented treatment according to the engagement model. Professionals were trained in this model and in aggression handling techniques (ATAS) while the program was implemented more top down.

Interventions

In line with the former, this institute used various interventions to reduce seclusion use. A key element was the realization of a consultation team, consisting of professionals available for advice when the situation on the ward might become too complex. As a rule, teams were obliged to request a second opinion when a patient was secluded for two days. The team asking a second opinion remained responsible for the treatment, but could learn from the way difficult cases were handled by the consultation team.

(P)ICU

Although the name of a seclusion room was changed into intensive care room, none were actually rebuilt. In line with the engagement model, comfort rooms were introduced. Contrary to the use of PICU’s, the use of these rooms is considered to prevent rather than substitute seclusion use [34].

Continuity

After funding ended, a steering group evaluating seclusion rates remained in place. At ward level, nurses, managers and medical directors were kept aware of the issue, but the structured program was finished. This institute also ended the SRP when governmental funding ended in 2012, assuming the SRP was sufficiently implemented.

Institute III

The last institute is the smallest of the three, serving a catchment area of 635.000 inhabitants in the east of the Netherlands in 2017. The institute had 923 staff members and treated a total of 12.400 patients a year on average (institutional year report 2017). Two main locations with 217 beds participated [33]. This institute began their SRP from start of funding in 2007 until currently**.**

Policy

This institute started with personal management policies and ward initiatives in a comparable way as the second institute. After 2010, the policy was primarily top down, with a leadership policy following the six core strategies of Huckshorn [16]. The new medical director started with ward audits, weekly seclusion event analysis and an approach in line with the main body of international literature in this domain, advocating an early intervention with medication [33].

Model

The engagement model, an evidence-based intervention for reducing seclusion by collaboration and partnership, was implemented in 2007. The model is especially focused on a hospitable welcome for patients and starts at an early stage with the development of a therapeutic relationship with the patient. The comfort room is an important asset within the model. However, in 2010 a new model was introduced, as the engagement model

showed limited effect. In this new approach, enforced medication rather than seclusion became the first choice of treatment in dealing with aggression [33].

Implementation

The institute started with small projects at two wards. After a year, all wards followed [34, 25]. From 2009 onwards, seclusion reduction became the focus of not only ward staff, but also the medical director. Management was convinced of the need to reduce the use of seclusion and willing to support professionals by for example adjusting staff numbers to patient needs.

Interventions

Two interventions over ten years are identified; involuntary medication as coercive intervention of first choice and availability of various environmental and building alternatives, that supported intensive care treatment protocols.

(P)ICU

In 2015, a high and intensive care ward conforming to state of the art building requirements [30] was built. All involuntary treatment in the catchment area was provided in this single PICU.

Continuity

In contrast with both other two mental health institutes, this institute continued with the SRP after ending of the governmental funding.

Outcomes of seclusion events

A database covering all available Argus data from January 1st 2008 to December 31st 2017 was developed. For the purpose of this study we focused exclusively on the use of seclusion. We analyzed the number of seclusion events as well as the duration in number of days. On the wards that participated, professionals were trained to correctly and uniformly fill in the Argus set. Data on seclusion rates were collected on a daily base on these wards from 2008 to 2017 [18]. To compare results of the three institutes, a ten year span was divided in three periods: the first covering development (2008-2011), the second one the actual SRP (2011-2014) and the last covering sustainability (2015-2017).

Data analyses

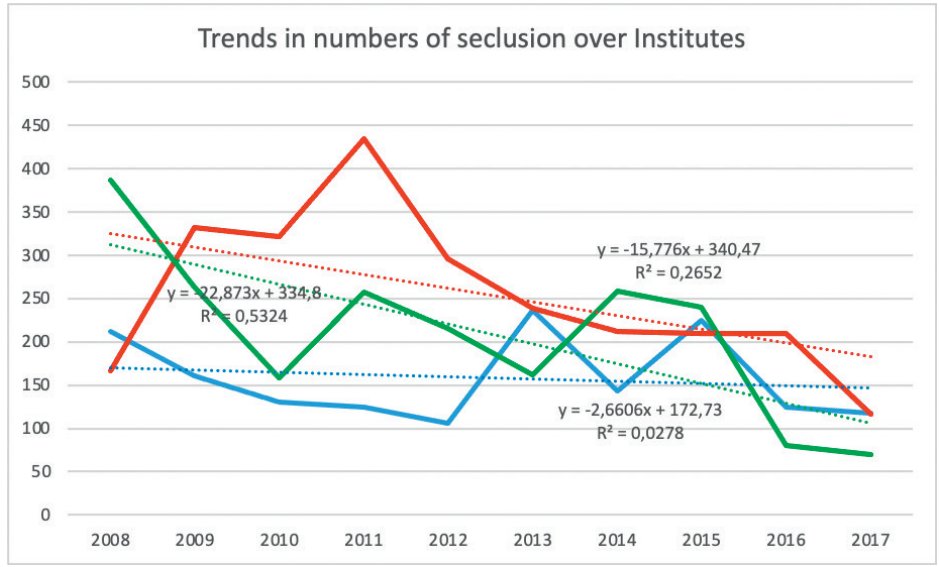
Sustainability, in effect whether the accomplished seclusion reduction could be maintained, was analyzed by investigating the number of seclusion events and seclusion days between 2008 and 2017. Two trend analysis were performed, year by year. Firstly, we analyzed the change over time in number of seclusion events and secondly in number of days in seclusion. To identify change during the different phases, we plotted these findings. The square of the regression slope presented in the plots was calculated and can be found in the figures. Cumulative change was calculated by extracting the second power square root of the sum scores of seclusion events per year as well as number of days per year over three time frames. This technique allows a reliable judgement of the significance of change over time. Next to this, we investigated confounding of outcome by changes in patient compilation over the institutes [20, 36].

RESULTS

The number of seclusion events and the number of seclusion days per mental health care institute are presented in table 2. The trends are presented in figure 1 and figure 2. The first figure presents the change in number of seclusion events over the whole period. To observe the last phase in more detail, we accentuated the last phase of sustainability (2015-2017). The second figure presents the change in number of seclusion days over the ten years. Also in this figure, we accentuated the last phase of sustainability.

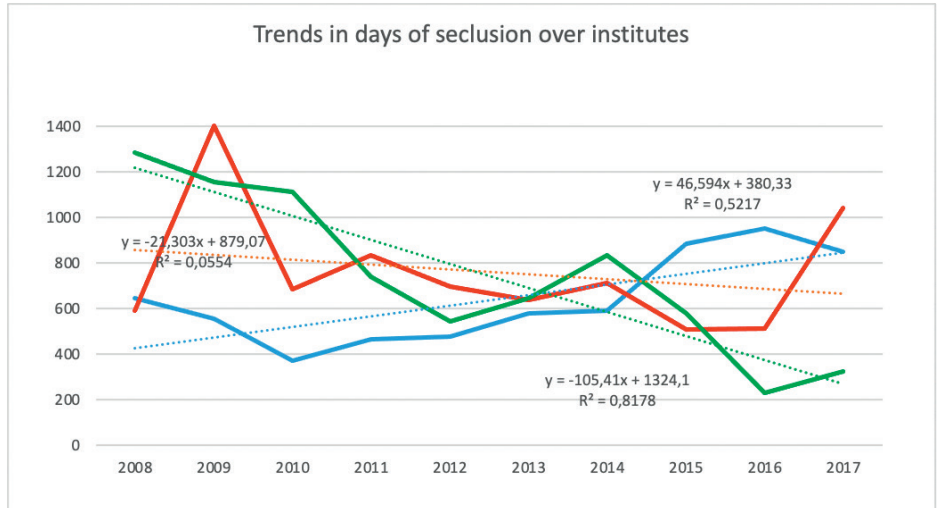
Table 2 Trends of three hospitals in numbers and time in seclusion

	Year		2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	change	R^2	p
MH Institute I	Admission ward	Events seclusion	89	72	73	82	58	95	106	185	101	91	61%	0.75	<0.001
		Time seclusion	3832:45	2337:44	1970:45	3528:29	4653:00	5449:00	6203:44	11187:48	10587:59	11292:40	306%	0.90	<0.001
	SMI	Events seclusion	123	88	55	43	47	140	36	38	23	26	-67%	0.89	<0.001
		Time seclusion	2864:59	3073:30	1318:29	1359:45	749:29	585:00	679:15	1390:59	4592:20	3524:20	31%	0.10	>0.25
	Elderly	Events seclusion	0	1	2	0	1	1	1	2	1	1	33%	0.25	<0.05
		Time seclusion	0:00:00	4:29:59	60:00:00	0:00:00	1:00:00	2:15:00	27:00:00	33:45:00	64:30:00	11:30:00	70%	0.18	<0.05
	Days in seclusion hospital		644	553	372	463	477	580	592	885	950	850	71,1%	0.71	<0.001
MH Institute II	Admission ward	Events seclusion	89	228	204	305	222	169	151	112	166	98	-28%	0.20	<0.05
		Time seclusion	4660:15	13140:59	9783:06	8553:13	6989:48	7260:55	9302:24	3789:12	5617:10	9415:10	110%	0.31	<0.05
	SMI	Events seclusion	76	103	109	124	72	66	59	94	34	13	-51%	0.87	<0.001
		Time seclusion	3127:45	3652:34	5657:17	4031:45	2404:50	2110:28	2370:10	2279:24	688:08	998:24	-68%	0.99	<0.001
	Elderly	Events seclusion	2	1	9	5	2	4	2	4	9	5	50%	0.62	<0.01
		Time seclusion	138:30	146:42	611:45	754:30	65:02:00	358:55	49:20:00	71:14:00	936:30	85:24:59	22%	0.46	<0.01
	Days in seclusion hospital		592	1402	685	834	696	639	712	509	510	1040	-23%	0.87	<0.001
MH Institute III	Admission ward	Events seclusion	210	190	98	153	161	153	228	229	77	64	-26%	0.91	<0.001
		Time seclusion	18302:40	13649:59	8366:20	10604:02	11808:24	8108:42	9862:26	12925:07	5935:57	6363:23	-37%	0.97	<0.001
	SMI	Events seclusion	25	57	34	12	4	3	5	7	1	2	-91%	0.81	<0.001
		Time seclusion	1474:00	4093:59	4492:17	379:05	284:10	19:30:00	71:24:59	98:25:00	15:45:00	30:51:00	-99%	79	<0.001
	Elderly	Events seclusion	152	16	26	92	50	6	25	4	2	4	-95%	0.92	<0.001
		Time seclusion	2379:39	1153:59	2448:17	342:50	1872:19	23:55:00	868:20	133:15	470:03	113:05	-88%	0.94	<0.001
	Days in seclusion hospital		1285	1154	1110	739	544	644	834	580	231	322	-68%	0.96	<0.001



Sustainability

Figure 1: Trends in numbers of seclusion in three institutes



Sustainability

Figure 2: Trends in days of seclusion in three mental health institutes

Although in different rate (institute I: y = -2,6606x; R^2 = 0,0278) (institute II: y = -15,776x; R^2 = 0,2652) (institute III: y = -22,873x; R^2 = 0,532), all institutes showed a continuous reduction in number of seclusion events on average (Figure 1 and table 2). Possibly due to the fact that the first institute already started the SRP earlier, the number of seclusion events was already low at the start and did not decrease much further anymore. The second institute started with the lowest number of seclusion events in 2008, but events were rising till 2011. However, after 2015 this institute showed a continuous reduction in seclusion events till 2017. Although the third institute started with the highest number of seclusion events and days in 2008, the strongest reduction in number and days from 2008 onwards was observed. In 2017 this institute ended with the lowest rate of seclusion events.

As shown in figure 2, the first institute displayed an increase in number of seclusion days. This means that, although the seclusion events were decreasing, the days in seclusion were significantly rising (71%; $p < 0{,}001$). The second institute showed a small decrease in number and days of seclusion events (-23%; $p < 0{,}001$). The last institute showed, next to a significant reduction in number of seclusion events, also a significant reduction in days of seclusion (-68%; $p < 0{,}001$). This institute thus showed the possibility to sustain, or even to continuously keep reducing seclusion events, even without extra funding.

Patient compilation

To understand the influence of patient compilation on results, we calculated percentages of several patient characteristics over time, over the three phases (see table 3). We used known predictors for the use of seclusion (age < 35, male gender, depressive disorder, bipolar disorder, psychotic disorder, personality disorder and psychoactive drug abuse) [20, 36].

Table 3: Patient compilation over time (phase 1: 2008-2010; phase 2: 2011-2014; phase 3: 2015-2017)

		n=	Bed days	Age < 35	Male gender	Depressive disorder	Bipolar disorder	Psychotic disorder	Personality disorder	psychoactive drug abuse
Institute I	phase 1	2942	**852046**	32,8%	46,6%	27,0%	8,3%	**31,7%**	22,2%	**5,0%**
	phase 2	1634	**663037**	31,8%	49,7%	31,8%	6,9%	**33,2%**	29,6%	**11,30%**
	phase 3	1880	**470750**	30,8%	45,7%	29,7%	7,5%	**53,9%**	24,8%	**30,6%**
Institute II	phase 1	7802	858147	**38,2%**	48,3%	33,2%	7,1%	20,6%	**22,3%**	**5,2%**
	phase 2	6601	**795856**	**42,0%**	47,0%	28,0%	7,8%	21,6%	**13,6%**	**5,6%**
	phase 3	5346	**661178**	**27.4%**	48,7%	32,3%	8,3%	27,4%	**9,3%**	**14,2%**
Institute III	phase 1	1392	286328	**35,0%**	47,0%	**11,5%**	**5,3%**	26,0%	36,4%	**2,4%**
	phase 2	1836	301757	**40,0%**	50,0%	**18,5%**	**6,4%**	30,1%	23,4%	**5,0%**
	phase 3	2483	285223	**27,6%**	50,9%	**27,8%**	**9,4%**	29,7%	35,4%	**19,5%**

*Bold = significant differences, $p < 0.001$

We observed three important changes over time. First, the percentage of patients with a psychotic disorder which increased significantly in institute I from 31.7% in phase 1 to 53.9% in phase 3 ($p < 0.001$). In the other institutes, no such rise occurred. Secondly, we observed a substantial increase of drug abuse in all institutes, but the most in institute I ($p < 0,001$ of all institutes). Taken together, these factors may partly explain the increase in seclusion use in the first institute. Third, we found higher reductions in admission days in institute 1, compared with institutes 2 and 3.

DISCUSSION

In this study, three pathways of SRPs to sustainability were described, monitored and analyzed to understand what contributes to maintaining realized results of reduced seclusion use. Overall, this study contributes to the limited studies focused on sustainability performed in mental health care.

Three mental health institutes with a different scope and focus and a different way of implementation of SRP were monitored between 2008 and 2017. Although in different rates, all three showed that they were capable to achieve a decline in *number* of seclusion events during governmental funding, but only partly after the funding. Thus all SRP's were effective in their own way. However, beside this positive effect, one institute showed even an increase in *number of seclusion days* between 2015-2017, three years after governmental funding. Unfortunately, the findings of this study confirm that after the successful SRP results before and during the governmental funding [23], these effects relapsed easily when the institutional awareness end. While this institute started with a relatively low number of seclusion events in 2008, in 2017 they ended with a comparable number as the second institute. The reason could be that this institute already started the SRP far before the governmental funding in the end of the 90's and their biggest effect was before this period [23]. In contrary the second and third institute started the SRP in respectively in 2006 and 2007. The third and most successful institute never stopped their SRP and still continues nowadays. This institute proved to remain capable of reducing seclusion events. While this institute started with the highest rate of seclusion events, they ended with the lowest, and thus made the largest progression in seclusion reduction. Another factor that could influence the sustainability of results, might be the patient compilation on the wards in combination with bed day reduction. We found a significant increase in patients with psychotic disorder admitted in the first institute, which is a predictive variable for the use of seclusion [35, 26]. Combined with the largest reduction in bed days, this could be an explanation. But these factors were not the focus of our research.

The first studies about SRPs were already described at the end of the previous century and originated from the United States of America [8, 16]. Subsequently, a number of studies came from Australia in around 2005 [3] followed by several European studies [29], Various Dutch studies about SRPs [27, 37, 23]. Most (international) studies on seclusion reduction were directed on the successes or failures of SRPs during the implementation period or shortly after [26, 12, 4, 1, 10, 9, 11]. Hardly any of them addressed sustainability, after temporary financial resources such as national funding ended. However, in line with Coburn (2003), professionals and policy-makers are in need of strategies providing them with tools they need to sustain, or even further reduce their use of seclusion. We found only one study that included data on long-term outcome [22]. This is a study from the United States of America, in which sustainability of results after a successful reduction in seclusion events was investigated. Authors found a significant decline of 82% in seclusion rates due to changes in the physical environment and also demonstrated that these results lasted over a period of ten years [22]. This suggests that sustaining reached results is possible in mental health care practice, but the big question remains, how?

The first institute in this research, was up front the national leader in reducing seclusion events [23]. However, although this institute was capable in sustaining their low number of seclusion events, it failed in sustaining the duration in seclusion, numbers of *seclusion days* are even rising. The SRP in this institute ended at the end of 2011; after that, there was no specific awareness of the subject of seclusion use anymore. In contrary, the third institute, which is still executing the SRP showed to be capable in reducing their seclusion events and days. This fact brings us to the idea that it remains important to recognize the need for a sequential implementation process sustaining or even improving results [13]. Huckshorn and colleagues (2006) described six core strategies to prevent the use of seclusion which are successively: leadership, using and monitoring seclusion rates, workforce development, inclusion of family or peers, specific seclusion reduction interventions and rigorous debriefing. In addition to these core strategies, we add that there is also a need for an ongoing developmental process of implementation, to reach sustainability in results and to prevent teams to easily fall back on old routines.

Recommendations

A common factor in successful implementation of the SRP is either top-down or top-down and bottom-up simultaneously.

There are more ways to reduce the use of seclusion, but for sustaining these results, there is a need for an ongoing developmental process of implementation to prevent teams to easily fall back on old routines.

While the population changed into significantly more patients with a psychotic disorder in institute I, it is important that good policy directed on this population and use of guidelines continue to be used. In addition, substitution of coercive measures is not recommended, but in these cases enforced medication may be a better alternative than the use of seclusion.

Conclusion

Successful SRPs do not ensure a sustainable result for the future. When SRPs end, there is a risk that positive results will easily disappear again. We found relevant factors of organizational policy, leadership and continuous awareness of seclusion events to be strongly associated with sustainability of reduced seclusion events.

Limitations

SRPs were developed, implemented and led in different ways, by using typical multifaceted interventions, which makes it complex to compare these programs. We only included three SRPs in the Netherlands (with 37 participating inpatient wards), and monitored them during a long-term period of ten years. Although it is a start, it still remains impossible to generalize these findings in an international context.

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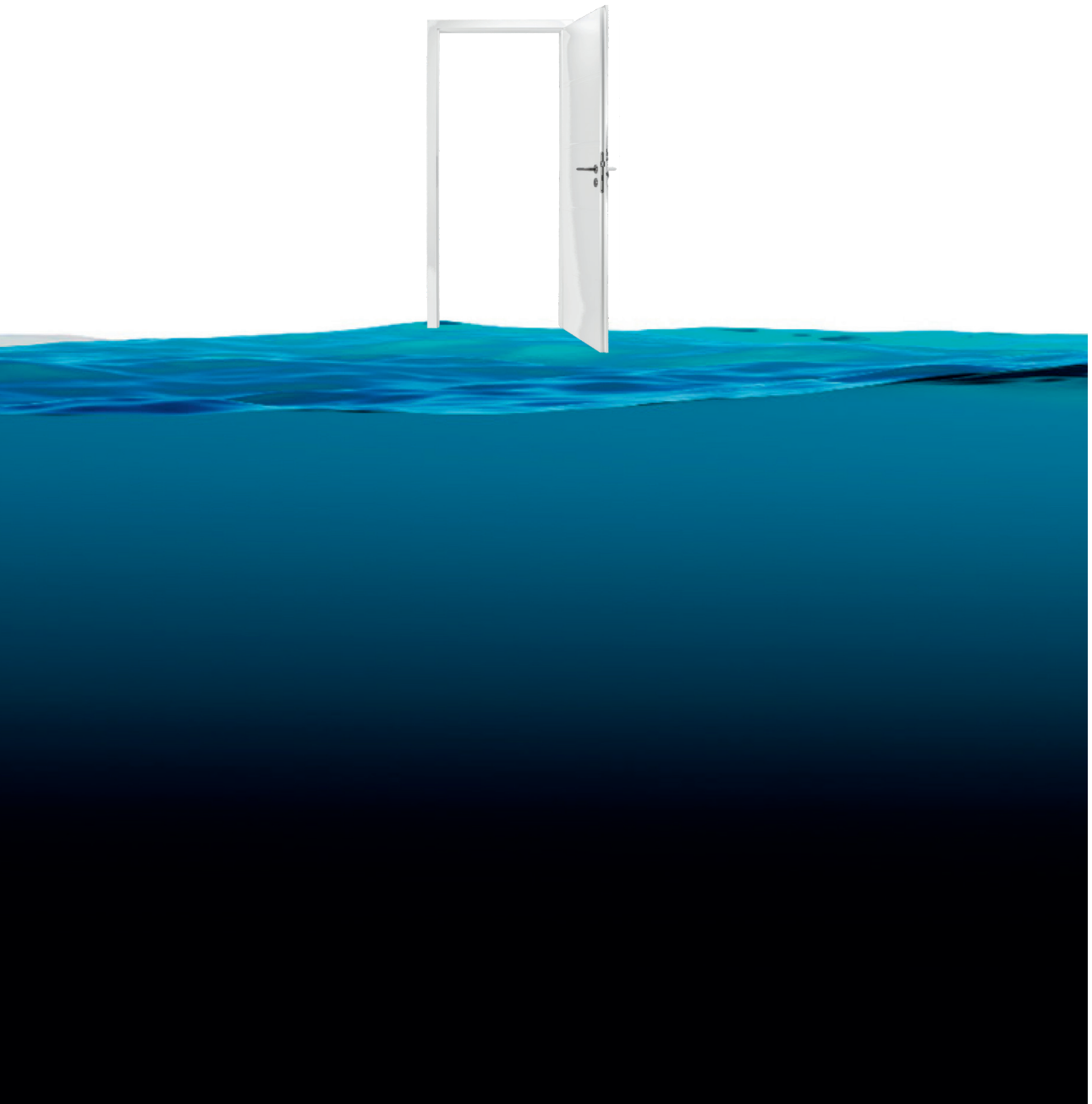


Summary and general discussion

7

7 GENERAL DISCUSSION

The studies presented in this thesis were performed not only to gain a better insight in the reduction of seclusion, but also to obtain a more profound understanding of the theoretical and abstract concept of *deep change* in mental health professionals' care practice. Our study target group concerned mental health professionals working in inpatient wards where seclusion rooms were available and regularly used. In this general discussion, we first summarize our main findings. Next, we discuss our results and reflect on their theoretical and clinical impact. Finally, we propose recommendations to apply the concept of deep change in mental health care and (re)consider the theoretical impact. In addition, we present research questions that could be addressed in future studies about deep change in mental health care.

7.1 Main findings

In **chapter 1 (general introduction)** we focused on the issue of the continuing use of seclusion in mental health care. An issue underlined by the fact that patients repeatedly described their seclusion experience as harmful, traumatic and inhuman [1, 2, 3]. We argued that there is a need for a significant change of professionals given their continuous use of seclusion in mental health care. International as well as national, the call to reduce seclusion increased, fitting in the concept of improving mental health care [4, 5]. However, the necessary needs to obtain and sustain such improvements in mental health care were not further explained, defined, operationalized nor investigated. Therefore, we introduced the concept of deep change, which was adapted from educational research (deep change of teachers). Deep change was defined as 'a change that goes beyond the surface structures and procedures and that expresses itself in explicit as well as in implicit beliefs, norms of social interaction and values' [6]. These norms are enacted in the mental models and in the care delivered by mental health care professionals. Deep change is thus about (invisible) changes in the minds of professionals, giving rise to often implicit care processes in institutions. According to the 'iceberg' of Schaveling and Goodman (adapted from organizational science), deep change implies transformations in these processes as well as a change in the mental models of attitude and culture within the organization [7].

To realize a deep change, a tailored SRP (seclusion reduction program) was developed and implemented on several impatient wards, directed both on professionals and patients on the inpatient ward. The origins of the SRP go back to the early XXI century, with a first national pilot project in Tiel. After this proved to be successful, it was extended to the other inpatient wards of The Gelderse Roos Mental Health Institute. In this thesis

we investigate explicitly professionals' change and implicitly patients' improvement of mental health care.

The SRP [8, 9, 10] contained a number of interventions directed on professionals, such as:

- Vision development and professionalization
- Training and coaching on the job
- Working conferences
- Pro-active working
- Collaboration with the family (system) of the patient
- Support by the management team
- HIC (high intensive care unit)
- Monitoring of seclusion rates
- Implementation of the pilot study within the whole institute

In 2007 it was decided to connect the implementation of the SRP to this PhD project. Our main research question was: Is it possible to realize a deep change in Mental Health care by implementing the SRP on several inpatient wards in a Mental Health Institute? During that time, I worked as a Nurse on several wards and was in training for Clinical Nurse Specialist. I combined this with work as a researcher in the SRP. Chapters 2 to 4 in this dissertation presents the results of this work. Due to personal circumstances I decided to quit the project in 2016. Two years later I resumed my work as researcher. It provided me the opportunity to finish this dissertation by performing a follow-up study on long term trends and patterns of seclusion use (chapter 5), within the mental health institute and Neighboring Institutes, even five years after the SRP.

Our first study (**chapter 2**), focused on the decision-making process of professionals. We investigated the heuristics (factors/ conditions) that professionals use to decide whether or not seclusion is necessary (on a scale from 1: not necessary at all to 9: highly necessary) [11]. By using a vignette study, we investigated underlying factors responsible for professionals' decision to need seclusion. In total, 64 vignettes were judged by 82 multidisciplinary professionals from four different mental health institutes. By using this method, we were able to quantify the main factors that influence professionals' decision to use seclusion. The six *vignette variables* with the highest weight were: approachability of a patient, seriousness of danger, availability of rooms and space, primary diagnosis, perceived trust in colleagues and the staff-patient ratio during the shift. In addition, the five most important *professional factors* were successively: type of care they delivered, frequency of seclusion participation, institute they worked for, experience with the use of seclusion and being in training as a psychiatrist or nurse. Overall, we found that rater

characteristics of professionals themselves were at least as important as the vignettes that they judged (31,7% versus 27,9%).

In our second vignette study (**chapter 3)** we explored decisions of seclusion by psychiatric nurses (monodisciplinary) [12]. We asked nurses from four different mental health institutes to distinguish their judgement of the need for seclusion by asking them to rate the necessity and appropriateness separately (on two Likert scales from 1-9). In total 69 psychiatric nurses participated and judged 64 vignettes. We found that the need to use seclusion was based more on necessity (i.e., there is no alternative) than on appropriateness (therapeutic). By analyzing the underlying trends and patterns however, we found that judgements of necessity and appropriateness were strongly associated with each other, implying that the underpinning patterns were largely the same. Thus overall, when nurses thought that the use of seclusion was necessary, they also thought it was appropriate for the patient. There was no clear distinction between both kind of decisions.

In our third study (**chapter 4)**, we investigated professionals' attitudes before and after the seclusion reduction program (SRP) [13]. We investigated whether the SRP resulted in a fundamental change of attitude by using the PATS-Q. This scale distinguishes three main domains covering function, reasons and alternatives for the use of seclusion (see Appendix I). The assessments were performed in 2004 (prior to the SRP) and again in 2008 (during and at the end of the SRP). Results showed that in 2008, the teams working on the acute admission ward scored significantly higher on the sub-scale ethics (part of the scale function) and on the sub-scale more care (part of the main scale of alternatives). Overall, we observed a change in the direction of the type "transformers". This characterization was identified by van Doeselaar at al. (2008) [14]. It describes how confidence in seclusion decreases and more ethical questions concerning the use of seclusion are being raised. Our findings suggested that professionals had become more critical toward seclusion and were more willing to change their seclusion practice, after the implementation of the SRP. Thus, the first signs of a deep change were found.

In the fourth study (**chapter 5)** we studied the impact of the SRP on seclusion use. For this, we monitored the seclusion rates before (2004-2007), during (2008-2010) and shortly after the SRP (2011-2013) in the five participating inpatient wards [6]. We found that the use of seclusion was significantly reduced during the project phase, both in number (-73%) and in duration

(-80%). Moreover, seclusion was not substituted by enforced medication use, another coercive measure. Patient compilation seemed not to confound the findings, according

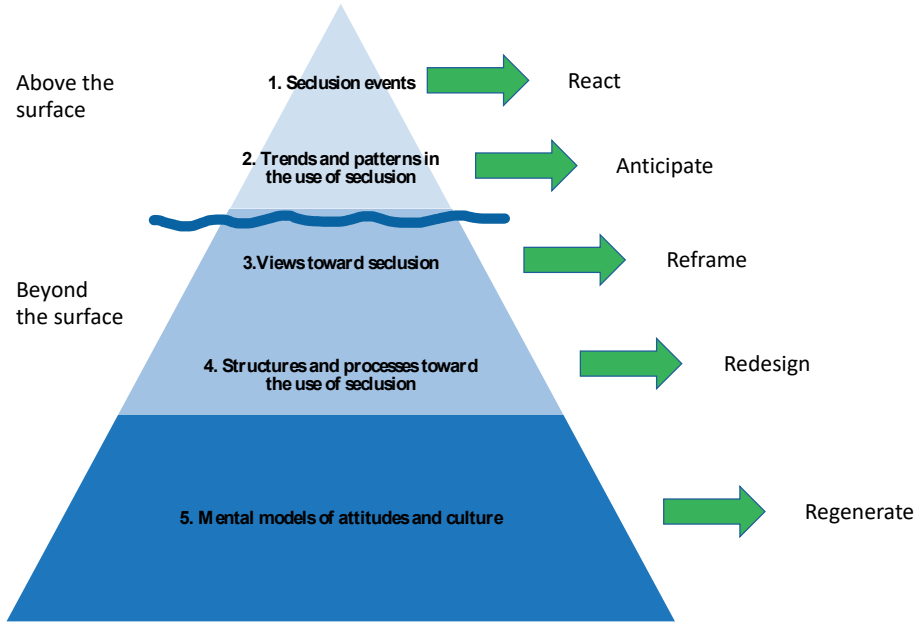
to the outcome of a multi-level regression analysis. In summary, findings showed that during the last years of the SRP project, the number of seclusions were low and stable.

Our last study (**chapter 6)** was conducted several years later, after our SRP interventions as well as the national seclusion reduction program had ended (2013-2017) [13]. We investigated whether the obtained changes (reduction in number of 73% and in duration of 80%) remained sustainable over the years in three different Mental Health Institutes. We found that the low seclusion rates of around 150 times a year within the 5 inpatient wards remained stable until 2017, five years after the governmental funding ended. However, during the same period the number of days patients spent in seclusion rooms raised considerably. Which means that although patients remained more often outside the seclusion room, once they were secluded, their seclusion took much more time (a longer period). By exploring the differences in the policy of three institutes we concluded that factors such as 'a loss of clear organizational vision aimed at reducing or preventing seclusion', 'a continuous awareness and focus on seclusion' as well as 'a shift of policy towards deinstitutionalization' appeared to be important factors that negatively influenced a further reduction of seclusion rates.

7.2. Discussion

Do we observe a deep change?

The goal of the SRP (seclusion reduction program) was to sustainably reduce or perhaps even eliminate seclusion over time. We hypothesized that this goal could be reached by a deep change of professionals resulting from the SRP program as described in the introduction of this thesis. The mental health institute partly realized the goal. First, we observed a significant reduction in seclusion rates over a long-term period (from 2005 till 2012) [6]. Second, we found a deep change at some other levels of our model (a change in attitudes toward seclusion use and a change in seclusion paradigm from appropriateness to necessity) [10, 11]. However, we did not find an unambiguous deep change at all levels of the model when extending the measurement time frame [13]. In order to fully understand what happened we expanded our analysis step by step focusing on the different levels of our theoretical model of deep change, adapting Schaveling & Goodman (2012) [7]. The iceberg of Schaveling and Goodman distinguishes five different levels of change (see Fig 1).



Above the surface

The first two levels are above the surface – and thus directly measurable - whereas the other three are beyond the surface and can only be probed in studies as presented in this thesis. According to the iceberg of Schaveling & Goodman, the first level *above the surface* is the level of events (i.e., seclusion incidents), in which an organization learns from seclusion incidents. Eventual change is thus a superficial reaction on the seclusion incidents. Outcomes of this level are mainly used to evaluate the impact of several (national and international) SRP's in literature [16, 17, 18, 19, 20]. Nevertheless, this is a level of trial and error. It is a level of single loop learning.

A level deeper, but still above the surface, is the level of *trends and patterns* in seclusion, changes on this level are not directly visible. The organization is anticipating *when* an increase in trends or patterns becomes visible only after data on seclusion incidents are collected and analyzed. This is a level deeper, in terms of Argyris, this is a form of double loop learning [21]. Schaveling, Bryan and Goodman argue in their theory that these levels of change only present a solution by solving the symptoms without changing the cause [7].

Beyond the surface

Besides investigating the two visible levels above the surface, we have also investigated changes on the three levels beyond the surface, i.e., whether a deep change has occurred. Beyond the surface, three levels are recognized: the level of views toward seclusion, the level of process and structures in the use of seclusion and the deepest level of mental models. By the use of several research methods in this thesis (by using the PATS-Q twice, and by performing two kind of vignette studies), we are able to gain some insights in the deep change of professionals beyond the surface.

The third level of deep change describes changes in organizational and professional views toward seclusion. In this level an organization tries to learn deeper, by changing its own organizational patterns. It requires reflection of the organization and of individual professionals on their own functioning. By identifying the main patient factors influencing the decision to use seclusion, we have shown that characteristics of the professionals themselves are at least as important in their own decision to use seclusion [11], which implies that these characteristics need to be changed to reduce seclusion. This result is in line with the study of Boumans et al, who also found that the effect of 'pure' patient factors was small in comparison with the effect of (inter)personal and contextual factors [32, 23]. We investigated professionals' attitudes (partly views toward seclusion) in 2004 and 2008 by using the Professionals' Attitude toward Seclusion questionnaire (PATS-Q) developed by van Doeselaar et al, 2008) twice [9]. In 2008, after the SRP, we observed significantly more critical professionals, who moved in the desired direction towards the type described as 'transformer' (more ethical questions, less confidence in seclusion and suggesting more care as alternative) [13]. We can thus conclude that the SRP has resulted in a change of the views of professionals.

The fourth level of deep change describes changes in structures and processes toward seclusion. Although the SRP was also aimed at changing structures and processes in the use of seclusion, we did not perform an exclusive investigation on this level.

On the fifth and deepest level of mental models, change requires regeneration; professionals need to learn to see the same problem (in this case, the use of seclusion) in a different way. This implies the organization and professionals learn to think in alternatives, instead of more of the same (more care; care as usual). From the organizational theory of learning, this is a way of triple loop learning [24]. To assess whether there was a change at this level, we need to analyze the attitude of professionals toward the use of seclusion. As discussed in the introduction of this thesis, it is important to realize that a change in attitudes reflects a deeper change then a change in behavior,

as the latter can be enforced without a change in underlying norms and values. This is different from the psychological perspective in which an attitude change is specifically used as an intention to change behavior [25]. The scales of the PATS-Q, in which the function (ethics and confidence), the reasons (culture, treatment and threat) to use seclusion and professionals' alternatives (better, other and more care) are evaluated, enabled us to investigate these attitudes. By comparing the PATS-Q results before and after the implementation of the SRP we have been able to identify significant changes in the norms and values of professionals toward the use of seclusion. Professionals are significantly more critical about the use of seclusion and they think in terms of more care as suitable alternative for its use. For example, they have become more convinced about the need of more and intensive care to observe and to manage stress, tension and anxiety of patients during an acute admission. We have thus indeed observed a significant change beyond the surface on the deepest level of change (mental models) of professionals toward seclusion, due to the SRP. However, we also found that attitudes changed only partly. We observed no change in professional's views on causes for use of seclusion, with 'threat' remaining the most important reason.

Although we are aware of the fact that the decision to use seclusion is not only a result of several individual professionals, but that the decision is a result of a much more complex process that depends on a broader cultural frame [26, 27], we think that a change of several individuals also will lead to a change in culture on a ward. Changing the culture on the ward and even within the organization is seen as an important condition to reduce the use of seclusion [28]. We did observe changes in individual attitudes, but we cannot make conclusions about the change in decisions of professionals, since we did not perform our vignette studies twice over time.

What does our research imply?

The outcome of this thesis provides scientific evidence for the presence of deep change towards the use of seclusion in mental health care on several layers of depth. By using different research methods (like a questionnaire, a vignette study and the Argus dataset for monitoring), we have been able to investigate changes above as well as beyond the surface.

Above the surface, we observed a significant change in the number of seclusions during the SRP. Five years after the end of the program these results proved to sustain. Consequently, during the SRP we found signs for a deep change. However, again five years later, this was no longer the case and duration of seclusion use had increased,

instead of decreased. Therefore, we have to question whether the deep change really took place.

7.3 No sustainable reduction of seclusion hours in the seclusion room

Beside the levels of depth within the concept of deep change, we also investigated the sustainability of change in seclusion rates over time. Our hypothesis was that once a deep change is achieved, the change will be sustainable over time, even when the SRP and the governmental funding comes to an end. After a successful start in the years 2004-2013, we found that in the long run the seclusion figures increased again. Although less patients were secluded, those secluded spent more time in seclusion. Even though we expected sustainable change, this proved not to be the case in the long run. The new practice did not become part of the implicit collective sense of the professionals, nor entered within the fibers of the organization. It only became part of the culture at the inpatient wards.

How can we explain this phenomenon? A first reason could be the rotation of several key persons of the project, in combination with a decrease of awareness for the continuous need for reduction of seclusion use. Leadership is one of the core strategies described by Huckshorn (2006) [26] and confirmed by several reviews about the effectiveness of SRP's [16, 17, 18, 29] in the reduction of seclusion and restraint. Defining and articulating a mission, a philosophy of care, guiding values in treatment and assuring the development and implementation of the SRP was encouraged by several professionals who eventually left the organization. If the argument is correct, it leads us to the conclusion that the SRP was too dependent of too few persons who were willing to change actual practice. The seclusion practice was changed and reduced by these professionals but did not result in a culture change for the institute as a whole. This is in line with van Doeselaar et al (2008), who found that the professionals who already wanted to change seclusion practice were the most willing to participate in the SRP [14]. After the program, they were only more convinced of their wish to change actual practice toward the use of seclusion [13]. It might be that there are simply too few professionals of this kind left on inpatient wards, to change the existing culture.

Another reason might be found in the policy and awareness within the organization itself. The goal of reduction in seclusion use has become implicit and attention has been shifted to a 30% reduction of inpatient beds to ambulatory mental health care as long as possible [30]. This also may result in another, more severely ill patient population, perhaps also showing alcohol or drug abuse. Time spent in seclusion might therefore be necessary for a longer period.

A third explanation could be found in the monitoring process of the use of seclusion. Seclusion rates are still obligatory registered by the Argus set, but the monitoring process and the feedback loop regarding the seclusion rates within the organization came to an end in 2011. Numbers of seclusion use were not given back to the wards anymore, regular feedback was missing, and individual cases were not used anymore for intervision or supervision purposes. While routinely monitoring seclusion rates is one of the most effective interventions to continuously improve actual practice, perhaps the practice was not upheld [16, 18, 19, 20, 28, 31].

Professionals on the ward or institute level were not aware of seclusion use. There was no possibility to systematically discuss the difficulties in the prevention of its use. Consequently, opportunities to reflect on prevention strategies decreased.

The last and fourth reason could be the development of high intensive care units. A placement in these units might be experienced by patients as less traumatic. Such a placement is in a completely different context, leading to an unknown change in seclusion figures. Professionals may be reluctant to force patients to leave this high-quality environment, perhaps leading to an increase in duration of seclusion figures [32].

7.4 Recommendations for future research

In considering our results, we must rethink our hypothesis. Apparently, a deep change still is desirable and possible, but is not easy to realize and also not easy to detect. Even if it would occur, it does not automatically lead to a sustainable change. We think that our definition of deep change is too static. Wat is needed is a continuous process within several layers in which clinical practice can improve. We suggest that if a SRP will start again, it should have a long project time. The use of seclusion is a longstanding tradition, and it is not easy to change the culture on wards and institutions. It requires time, patience and routinely outcome measuring. It requires feedback and reflection on own data, leadership and regular discussions on patient – professional interaction as well as therapy effect [28]. It might be that we should seek for a continuous change instead of a deep change. A continuous circle of learning on the different layers of deep change is necessary [24]. Outcome measures such as the PATS-Q or the Vignette set could be used to measure these difficultly to identify factors beyond the surface. Monitoring of seclusion events on the Argus data set are important as well, while the seclusion data could be used as feedback in supervision, intervision or case deliberations.

Besides monitoring the use of seclusion, it is also important to investigate the attitudes of professionals regularly and to provide feedback to of findings. We suggest over

time frames of five years. Investigation of attitude in such time frames provide insight whether professionals really learn and think different about the same problem, in this case the use of seclusion. Regular investigation of attitude may facilitate continuous improvement and to learn from reflection of own behavior. Besides, it (re) opens the discussion about good care.

7.5 Recommendation for clinical practice

How can we improve clinical practice concerning the use of seclusion?

It might be useful to regularly update the education carousel and to build on professional's own competences and skills required in the work on admission wards that include an intensive care unit. Similar to general intensive care this requires specialized education and thus expertise. Routine education of professionals and leaders about ethics and coercion prevention in mental healthcare should be part of the obligatory accredited education. There must be education and discussion about the significance of mental illness and mental health care, in terms of own responsibility, self-management and coercive treatment, if possible, in collaboration with the patients themselves.

On the level of the organization, we strongly recommend starting an open discussion on the use of coercive measures in mental health care. Not only for the care professionals working in inpatient care, but also addressing professionals working in ambulatory care services; to discuss the need and to explore education options of professionals working on an inpatient ward; to collaborate with the universities and to discuss about the need of education directed on de-escalation techniques, treatment of patients diagnosed with psychotic disorders, and about addiction treatment. It may be relevant to discuss the expertise of the addiction professionals and general health care doctors. This would lead to a situation in which the change is not only evaluated within one institute but becomes a shared professional responsibility. Furthermore, this discussion must be extended in a broader context within the society, through patient and family organizations, but also through experience workers and family participation at the wards in the care of patients. If indeed an association exists between the shift to ambulatory care and the use of seclusion, it might be relevant to reconsider policy on admission indications.

Next, a project could be developed to organize a focus on ethical debates within Mental health care. These debates should consider the quality of care and treatment concerning use of coercion: what may be valued as high quality inpatient mental healthcare, what do we expect from the professionals and when is a treatment successful, evaluated by who? Moreover, we think it is really helpful to invite politicians to collaborate with

mental health care in order to formulate an agenda on coercive measures used in mental health care.

The increased use of ambulatory services leads to a shift of focus on the admission wards from diagnostic observation and taking time to start of treatment to an environment in which primarily crises are solved, after which the patient is discharged to society as soon as possible. Inpatient crisis care is seen as a temporally limited break from ambulatory treatment. In line with this general perspective, we must rethink the goal of an admission ward, and even the goal of a mental health care institute. Against the background of preventing dangerous confused persons we should rethink concepts of safety of the society in juxtaposition against the desired treatment of mentally ill patients. These debates are about responsibility of the patient, and the use of coercive measures. In the mission of the organization anno 2020 one counts on the responsibility of the patient, but it remains questionable if we always can really count on their responsibility?

Are professionals not responsible for those who cannot make their own decisions, who cannot oversee the consequences of their behavior as well? What is for example the goal within a coercive treatment? What is the treatment request as identified by the patient? What if patients do not have any treatment request at all? These themes are relevant in mental health care but also relevant for the individual patient. Continuous discussion from different (multi-disciplinary) perspectives is necessary to achieve the best possible result.

Taking into account the history of the perspective of mentally ill patients, it might be that their goal is recovery and to live in society, more than getting a treatment perse, i.e. getting their symptoms of their mental illness solved [36]. For example, when patients lost their job, their (intimate) relationship, their friends or relatives due to his or her depression, it is too simple to only focus on the symptoms of the depression. One must provide support for their social, personal and functional recovery as well [5]. This is more than solely a cure of mentally patients, it is about recovery and must be expressed in the goal of the treatment and eventually in the goal of the organization as well.

First, this thesis shows, that it is possible to treat mentally ill patients on an inpatient ward with a minimum or even absence of seclusion use. Different SRP's nationally and internationally showed very good results, but there are hardly outcomes about the sustainability of these results. The findings of this thesis on sustainability underscore the necessity of continuous reflection and awareness of the reduction of its use (see figure 2 of chapter 6 of this thesis). Although the multidisciplinary guidelines of coercion and compulsion are updated and further developed [33, 34], there is still a need for embedded

multiple interventions introduced in practice to prevent the actual use of seclusion. The SRP has proven to be successful but needs to be continued until the mental models, attitudes and the culture have changed completely, and the seclusion use is not an option anymore.

7.6 Conclusion

This thesis firstly focused on the reduction of seclusion use. We thought, that with a deep change in psychiatry, this could be possible. Deep change as operationalized in this thesis, was partly observed, both above the surface (in terms of seclusion events) and also at the deepest level, in the mental models of the organization. The SRP with its tailored interventions was shown to be an effective program to decrease the use of seclusion. Even five years after the implementation of the SRP, the numbers of seclusion rates remained low, but unfortunately did not decrease anymore.

However, duration (hours in seclusion) had increased five years after the end of the program. Patients were less often placed in the seclusion room, but if so, for a longer period. This leads us to the conclusion that not only a deep change of professionals and the organization is needed, but that also a more structural and continuous circle of reflection is required to reduce the use of seclusion and to improve the inpatient care for mentally ill patients in the long run. Deep change in the use of seclusion in mental health care is thus still an ongoing process and needs continuous awareness and feedback, to eventually come to a system in which the use of seclusion is eliminated.

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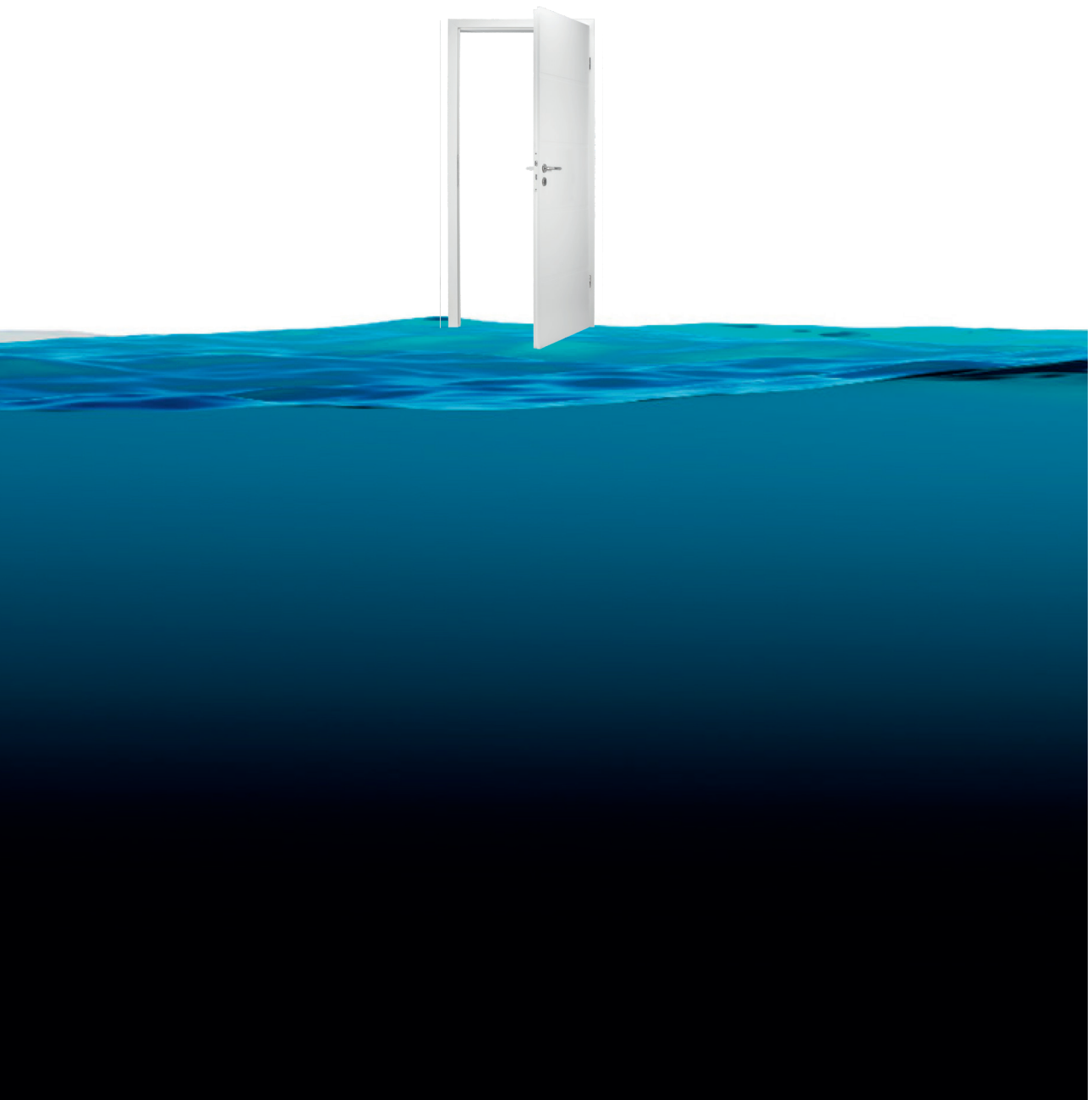
Samenvatting en algemene discussie



8

8 SAMENVATTING EN ALGEMENE DISCUSSIE

Het continue separeergebruik binnen de geestelijke gezondheidszorg is een groot probleem. In hoofdstuk één beschreven we de nadelige gevolgen ervan voor patiënten; zij beschrijven gevoelens van vernedering, inhumaniteit en er werd zelfs van gesproken van traumatische belevingen. De roep tot reductie van separatie was begin deze eeuw dan ook op zowel internationaal als op nationaal niveau te horen. Niet alleen zouden de patiënten er wel bij varen, maar het zou tevens de kwaliteit van de geestelijke gezondheidszorg (GGZ) doen toenemen.

Om de reductie van het separeergebruik in de GGZ te laten slagen (zo was onze overtuiging bij de start van dit project) was er een significante verandering van professionals nodig. Daarvoor moesten de belangrijkste elementen noodzakelijk voor separeerreductie beschreven, gedefinieerd, geoperationaliseerd en onderzocht worden. Wij introduceerden het begrip 'deep change' in de GGZ. Dit begrip vindt zijn oorsprong in de onderwijswetenschappen (deep change van leraren). Deep change definieerden wij als 'een verandering die verder gaat dan die van de oppervlakkige structuren en procedures en zowel in impliciete als in expliciete normen, waarden en in sociale interacties wordt uitgedrukt'. Deze normen en waarden komen tevens tot uitdrukking in de zorg die geleverd wordt door GGZ professionals binnen de geestelijke gezondheidszorg.

Deep change gaat dus over (onzichtbare) veranderingen in de hoofden van professionals, die aanleiding geven tot impliciete zorgprocessen. Volgens de ijsberg van Schaveling en Goodman (die wij hebben aangepast voor ons onderzoek), leidt deep change zowel tot een reductie in de aantallen separaties (boven de oppervlakte) als een transformatie van de mentale modellen (onder de oppervlakte) waarin de attitude en de cultuur binnen de organisatie gekenmerkt worden.

In dit proefschrift onderzocht ik de verandering van professionals ten aanzien van separeren op verschillende niveaus van deze ijsberg van deep change. Middels dit onderzoek wilde ik een bijdrage leveren aan de verbetering van de geestelijke gezondheidszorg voor mensen die ongewild moeten worden gesepareerd op een gesloten psychiatrische afdeling.

Om een 'deep change' te realiseren, werd een op maat gemaakte separatie reductie programma (SRP) ontwikkeld en geïmplementeerd op verschillende intramurale afdelingen binnen de Gelderse Roos (een voormalige organisatie binnen Pro Persona). Dit programma was enerzijds gericht op professionals en anderzijds op de patiënten

binnen de afdeling. Het SRP startte in 2002 met een pilot op de acute opname afdeling in Tiel. Dit project was erg succesvol en leidde tot een vrijwel volledige reductie van separatie. Vanaf 2005 werd dit project als een olievlek verspreid over de instelling en verder geïmplementeerd binnen de andere klinische afdelingen.

Het SRP bestond uit verschillende interventies met als doel om het aantal separaties te reduceren. Interventies gericht op de professionals bestonden bijvoorbeeld uit visieontwikkeling op het gebied van separeren en het zoeken naar betere methoden voor samenwerking met familie/ het systeem van de patiënt. In 2007 besloten we om de effecten van dit programma met wetenschappelijk onderzoek te onderbouwen. De belangrijkste onderzoeksvraag was: Is het mogelijk om een 'deep change' in de geestelijke gezondheidszorg te realiseren middels het implementeren van dit SRP op verschillende intramurale afdelingen, en kunnen we hiermee een blijvende reductie van separatie bewerkstelligen?

Hoofdstuk twee had als onderwerp de besluitvorming van professionals ten aanzien van separeren. We onderzochten de factoren/condities die van belang waren om te komen tot het besluit om wel of juist niet over te gaan op separeren. Met behulp van theoretische vignetten werden onderliggende beoordelingscriteria en onderliggende denkschema's in kaart gebracht. Er werden 64 vignetten door 82 professionals uit verschillende disciplines beoordeeld op noodzaak tot separatie. De deelnemende professionals kwamen uit vier verschillende GGZ- instellingen. De zes belangrijkste beoordelingscriteria waren: benaderbaarheid van de patiënt; ernst van het gevaar, beschikbaarheid van ruimtes en kamers, de hoofddiagnose, het ervaren vertrouwen in collega's en de hulpverlener-patiënt ratio gedurende de dienst. Ter aanvulling koppelden we de oordelen aan de kenmerken van de professionals zelf, zoals bijvoorbeeld het type zorg dat zij leverden (acuut of langdurend), de instelling waar zij werkten, de ervaring met het gebruik van de separeer en het al dan niet in opleiding zijn. De kenmerken van de professional waren minstens zo voorspellend voor het oordeel over separatie als de kenmerken van de patiënt- en omgevingsfactoren die zij beoordeelden (31,7% versus 27,9%). Opvallend genoeg leidt ervaring met separeren eerder tot een oordeel om separatie nodig te achten.

In hoofdstuk drie namen we de besluitvorming van enkel de verpleegkundigen onder de loep, omdat zij bij uitstek diegenen zijn die daadwerkelijk separaties uitvoeren. Vervolgens analyseerden we het onderscheid tussen het noodzakelijk dan wel geschikt (therapeutisch) achten van separeren. In het totaal beoordeelden 69 verpleegkundigen uit vier grote GGZ-instellingen 64 vignetten. We vonden dat verpleegkundigen eerder tot het oordeel kwamen dat separeren noodzakelijk was, dan dat zij het een geschikte interventie vonden.

Echter, bij bestudering van de onderliggende trends en patronen bleek dat beide oordelen sterk met elkaar samenhingen: hoe noodzakelijker zij het separeergebruik vonden, des te geschikter werd ook het separeergebruik bevonden. Kortom, er was geen ander patroon met andere criteria wanneer beide typen oordelen met elkaar werden vergeleken.

In hoofdstuk vier stond de attitude van professionals ten aanzien van separeren centraal. Wij onderzochten hun attituden voorafgaand aan het SRP en erna. Onze vraagstelling was of het SRP daadwerkelijk leidde tot een significante attitudeverandering. Wij maakten gebruik van de PATS-Q (professionals' attitude towards seclusion-questionnaire). Deze vragenlijst bestaat uit drie verschillende hoofdschalen met de belangrijkste domeinen: functie van separeren, reden om over te gaan op separeren en alternatieven voor separeren. De vragenlijst werd in 2004 (voorafgaand aan de SRP) en in 2008 (gedurende en aan het eind van de implementatie) afgenomen. Ten eerste zagen we dat in 2008, de score voor ethiek significant verhoogd was (onderdeel van de hoofdschaal functie). Ten tweede was de sub schaal meer zorg significant verhoogd (gedeelte van de hoofdschaal Alternatieven). We analyseerden of het type professional, zoals eerder geïdentificeerd door Van Doeselaar et al., gepubliceerd in 2008, als gevolg van het SRP was veranderd. We zagen een duidelijke beweging (doch niet significant) richting het type 'transformers'. Bij dit type professional neemt het vertrouwen in de separeer af en stellen professionals zichzelf steeds meer ethische vragen ten aanzien van het separeergebruik. Dit type is welwillend om de separeerpraktijk te veranderen. We interpreteerden deze bevinding als een eerste signaal van een mogelijke 'deep change'.

In hoofdstuk vijf bestudeerden we de impact van het SRP op de daadwerkelijke toepassing van de separeer binnen de klinische afdelingen. Voor deze studie gebruikten we de separeercijfers (aantallen separaties en duur van gebruik) van de vijf klinische afdelingen op drie momenten: voorafgaand aan het SRP (2004-2007) gedurende (2008-2010) en kort na de implementatie van het SRP (2011-2013).

We vonden een significante afname in het gebruik van de separeer gedurende de projectfase, zowel in aantal als in duur (- 73% versus - 80%). Het gebruik van de separeer werd ook niet vervangen door een ander dwangmiddel zoals dwangmedicatie. Ook bleken de cijfers niet het gevolg van verschuivingen in patiënten samenstelling. Tenslotte bleef het aantal separaties onverminderd laag gedurende de laatste periode (2008-2010) van het SRP.

Onze laatste studie, hoofdstuk zes werd een aantal jaren later uitgevoerd, nadat de focus zowel internationaal als nationaal op separeerreductie was verslapt en het SRP binnen deze instelling al een aantal jaren was beëindigd (2013-2017).

We vroegen ons af of de reductie van separatie behouden was. Tevens vergeleken we de trends en patronen in separeergebruik met twee andere GGZ instellingen in Oost-Nederland. We vonden dat het lage aantal separaties (van 150 keer per jaar verdeeld over vijf afdelingen) stabiel bleef tot 2017, dus zelfs vijf jaar na het beëindigen van de overheidssubsidies voor separeerreductie. Echter de separatieduur (het aantal dagen in de separeer) was sterk gestegen. Dit betekent dat patiënten weliswaar minder vaak met separatie in aanraking kwamen, maar als zij er desondanks in kwamen, werden zij er langduriger toe verplicht. Vergelijking van deze cijfers met die van andere instellingen leidde tot het vermoeden dat 'een verlies van organisatievisie omtrent de reductie/ preventie van separatie' en 'een gebrek aan continue aandacht en focus op het separeergebruik' en 'de beweging naar ambulantisering en beddenreductie' de belangrijkste factoren waren die de aanvankelijke separeerreductie negatief hadden beïnvloed.

In hoofdstuk zeven vatten wij de belangrijkste bevindingen samen en formuleerden wij een aantal conclusies. Het doel van het SRP was om het separeergebruik blijvend te verlagen, of zelfs om het gebruik ervan volledig te elimineren. Onze hypothese was dat dit doel bereikt kon worden door middel van een op maat toegesneden SRP die een 'deep change' van professionals zou bewerkstelligen. We constateerden vervolgens dat de onderzochte GGZ instelling dit doel gedeeltelijk bereikte: een significante verlaging in aantal en duur van separaties over de periode (2005-2012); deep change in attitudes ten aanzien van separeren en een verschuiving van het oordeel naar meer noodzakelijk dan geschikt. Misschien mogen we deze resultaten voorzichtig interpreteren als de eerste signalen van een diepgaande verandering.

Echter vijf jaren na het SRP, moesten we ook constateren dat de duur van separaties sterk ging toenemen en enkel het aantal separaties stabiel bleef. Er was geen sprake meer van reductie in het separeergebruik en het werd tenslotte ook niet volledig uitgebannen. Dit in tegenstelling tot onze hypothese van deep change, waarin de verandering zou moeten persisteren. Helaas moeten we dus concluderen dat een echte deep change niet volledig is bereikt.

Wat zijn mogelijke verklaringen voor het ontbreken van een volledige deep change?
Een eerste reden zou kunnen zijn dat een aantal sleutelfiguren ergens anders zijn gaan werken. Hierdoor is mogelijk de aandacht voor separeerreductie te snel verflauwd. Met het vertrek van deze sleutelfiguren is het leiderschap, één van de 'core strategies' van Huckshorn (2006), mogelijk te vroeg verdwenen. Het ontwikkelen, uitdragen en neerzetten van een duidelijke missie, ten aanzien van het reduceren van het separeergebruik is hiermee mogelijk te vroegtijdig gestaakt. Een tweede verklaring

kan de verschuiving van focus op de beddenreductie en de ambulantisering zijn (doel: beddenreductie van 30%). Deze verschuiving heeft ertoe geleid dat opgenomen patiënten vaker meer en ernstigere problematiek met zich meebrengen, vaak ook nog gecombineerd met drugs- en of alcoholmisbruik. Een derde verklaring kan het gebrek aan monitoring zijn. De feedback cyclus van het separeergebruik is binnen de organisatie stopgezet in 2011. Aantallen separaties worden niet meer teruggekoppeld aan de afdelingen en moeilijke casussen worden niet meer apart besproken. Ten slotte willen we nog als laatste ontwikkeling ten aanzien van het separeergebruik apart benoemen: binnen de klinische afdelingen zijn gedurende het SRP high intensive care units (H) ICU 's gebouwd. Wanneer patiënten afzondering behoeven is de (H)ICU een minder traumatiserend alternatief. Daarmee zijn binnen de klinieken meer humane vormen voor afzondering tot ontwikkeling gebracht, die beter aansluiten bij de normen en waarden van professionals.

Hoe kunnen we op basis van onze onderzoeksresultaten de kwaliteit van de klinische praktijk van separeren verder verbeteren?

Ten eerste hebben wij aanbevolen om regelmatig het opleidingsaanbod te updaten, om professionals' eigen competenties en vaardigheden, noodzakelijk voor het werken op een intensive care unit, te versterken.

Ten tweede hebben wij op organisatieniveau aanbevolen een open en brede discussie te starten op het gebied van toepassing van dwang en drang interventies in de GGZ. Een discussie niet enkel onder professionals op de klinische afdelingen maar juist ook met ambulante professionals binnen en buiten de organisatie, zodat er meer transparantie ontstaat over wenselijke en realistische opties in de behandeling. Deze discussie zou vervolgens moeten uitmonden in een publiek debat over de functies en taken van de GGZ ten aanzien van ernstig zieke patiënten, die een gevaar vormen voor zichzelf of voor anderen. De verregaande ambulantisering zou ertoe kunnen leiden dat patiënten simpelweg te laat worden opgenomen waardoor separatie de enige oplossing blijkt. Voor individuele patiënten kan de prijs van deze verschuiving van de taken van de GGZ dus heel hoog zijn.

DANKWOORD

Verminderen van dwang en drang in de psychiatrie, het onderwerp droeg ik al vanuit de praktijk een warm hart toe. Ik werkte als verpleegkundige op vele plekken. In de vrouwengevangenis moedigde ik een beleid aan waarin een scherpere lijn werd getrokken tussen straffen en behandelen. Indien het om een behandeling ging vanuit de isoleer kwamen we vanuit de medische dienst langs. Moest er een hartig woordje gesproken worden over gedrag dat niet door de beugel kon, dan kwam de gevangenisdirecteur. Dit onderscheid was helder.

In de psychiatrie lag het moeilijker; de separeer werd voor beide doeleinden gebruikt: zowel om gedrag te corrigeren als om een prikkelvrije ruimte aan te bieden. Ik vond het, toen ik 20 jaar geleden in de psychiatrie kwam werken, een heel ingewikkeld verschijnsel. Hier kon de psychiatrie toch niet voor bedoeld zijn? Het gaf me een heel naar gevoel.

In 2007 begon dit traject. In samenwerking met Loes van Dusseldorp (mijn toenmalige VS-opleider) Giel Hutschemaekers, toenmalig directeur van GRIP (Gelderse Roos Instituut voor professionalisering) en professor aan de Radboud Universiteit en Rob Bakker en Amar Voogt (directie vanuit de stichting opleidingsinstelling voor de GGZ VS) ben ik begonnen aan dit avontuur. Zij hebben het mogelijk gemaakt dat ik aan dit onderzoek kon beginnen en dat ik me verder kon ontwikkelen als verpleegkundig specialist binnen de GGZ.

Professor Hutschemaekers, beste Giel. Vanaf het begin van het hele traject heb je vertrouwen uitgestraald en gehouden. Je hebt me gewezen op de mogelijkheid om verder te groeien als verpleegkundig specialist. Maar je hebt me ook geholpen om kritisch te kijken naar de praktijk en me te laten groeien in de wetenschap. Je legde alvast contact met andere partijen, waardoor ik ook als onderzoeker door de instelling ging. Je stelde me kritische vragen, vaak vanuit een psychologische invalshoek, we hebben vele discussies gehad en soms leek je een andere taal te spreken. Maar uiteindelijk kwamen we er steeds weer uit en werd het resultaat een mooi en interessant onderzoek vanuit verschillende invalshoeken. Je bent een uitdager, in vele opzichten. Dank voor de samenwerking.

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Dr C. Boumans, beste Christien. Ook jij hebt je verdiept in het onderwerp separeren en we hebben hierin kort samengewerkt. Bij GGZ Oost Brabant kwam ik je naam weer tegen, grappig om te zien hoe klein deze wereld is.

Dhr. H. Hesta, beste Hans. Helaas ben je niet meer onder ons. Wat was jij een inspirerende psychiater met een duidelijke visie en koers die je wilde varen. Je hebt ook mij aangemoedigd in het begin van het onderzoek, je hielp het mogelijk te maken om alle vignetten te laten beoordelen. Maar ik kwam je ook tegen in de praktijk bij een IBS-beoordeling van een patiënt. Hoe gedreven je was om de praktijk te veranderen, zo rustig zat je op een stoel naast een patiënt te praten die ik op dat moment bijstond.

Gedurende dit traject heb ik in verschillende groepen geparticipeerd. De Argus club onder voorzitterschap van Eddy Faber. Onder bezieling van Bert Lendemijer die met zijn proefschrift liet zien dat de separeerdata verzameld door de Inspectie behoorlijk afweek van de cijfers die de instellingen aandroegen. Als aanjager van de Argusdata is deze groep ontstaan en verdergegaan in het definiëren van de huidige Argus data set (voorheen middelen en maatregelen) die een realistischer beeld van de praktijk weergeven. De vele discussies op dit gebied, hielpen mij in het maken van onderscheid tussen separeren met de deur open of gesloten, met dwang, zonder dwang en de afzondering en ten slotte kwam daar de (H)ICU bij. De leden kwamen zowel uit de praktijk als uit het onderzoeksveld en ook de juridische kant werd vertegenwoordigd. Dank voor de samenwerking!

Op het GRIP hadden we regelmatig promovendi-besprekingen. Waarin artikelen of presentaties werden ingebracht en bekritiseerd. We kregen feedback van de senior-onderzoekers: Bea Tiemens, Annet Smit en Giel Hutschemakers. Met de medepromovendi kon ik praten over de hobbelige weg die je begaat in het uitvoeren van praktijkgericht onderzoek. Sommige promovendi zag ik komen en sommigen helaas ook weer gaan.

Maar met Wiede Vissers, (inmiddels dr. Vissers) Margot Kloos, Maartje van Sonsbeek (je bent er bijna), Wubbo Scholte (inmiddels dr. Scholte), Judith Rutjes, Gerrit de Niet (inmiddels dr de Niet) en Bauke Koekkoek (inmiddels dr. Koekkoek) wil ik bedanken voor de beginperiode bij het GRIP. Inmiddels is iedereen zijn eigen weg gegaan, maar ik vond het een fijne en leerzame periode met jullie.

Tieu Verhagen, ook jij hebt een aantal jaren meegelopen in dit traject vanuit ProCES (Pro Persona centre for science and education). Nora Caerteling (opleidingsadviseur), gedurende twee jaar werd ik jouw kamergenoot. Dank voor jullie gastvrijheid en interesse.

Het bestuur van de VS: Irma, Agnes, Martina, Roy, Jaap, Ronald, Nathalie, Sanne, Bart, Inge en Bas, vanuit het bestuur zetten we ons in voor de Verpleegkundig Specialistenberoepsgroep en nog steeds gaan jullie onverschrokken door. Blij dat ook ik hierin vanuit het bestuur heb mogen participeren en een bijdrage heb mogen leveren aan de verdergaande ontwikkeling van het (relatief jonge) vak van de Verpleegkundig Specialist AGZ en GGZ!

Mijn toenmalige intervisieclubje met Alde, Frances en Raymond en mijn huidige intervisiegroepje met Sanne (inmiddels dr. Wassink-Vossen), Angelique en Frank (die binnenkort ook weer mijn collega in de praktijk wordt). Dank voor jullie inbreng!

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Ten slotte wil ik mijn directe en dierbare omgeving bedanken. Lieve pap, mam, wat ben ik blij met jullie en dankbaar voor jullie steun in goede en slechte tijden. Want die hebben we ook gekend. Jullie waardeerden mijn doorzettingsvermogen en inzet, maar relativeerden mijn werk ook in tijden dat dat nodig was. Het blijft maar een proefschrift. Maar ik weet ook dat jullie nu heel erg trots zijn! Mijn broers en zussen, Hans, Jimmy, Karin en Margriet, ik zie jullie veel te weinig, hopelijk komt daar nu verandering in. En Eveline, mijn oudste zus, tijdelijk woonde je in Schaijk, wat ben jij een steun voor mij en ons geweest. Je ving de kinderen op waar nodig, we hebben heel wat afgewandeld en als hoogtepunt de Nijmeegse Vierdaagse gelopen. Je hebt mijn teksten gelezen van het onderzoek. Dank voor je veelzijdige bijdrage!

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Ook mijn biologische familie; Reina, Tessa en Hans, ik ken jullie nu zo'n 20 jaar. Mooi dat we nu 'gewoon' met elkaar om kunnen gaan.

Tenslotte mijn vrienden Korine, Lex, Frances en Tessa ik wil jullie bedanken voor jullie blijvende interesse in het verloop van het onderzoek. Jullie hebben me regelmatig aangemoedigd! Ik kijk ernaar uit om weer gezellige dingen met jullie te ondernemen.

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CURRICULUM VITAE

Patricia was born in Arnhem and grew up in Drenthe as youngest child of Auke and Loes Poll. She has three sisters (Eveline, Karin en Margriet) and two brothers (Hans en Jimmy).

She attended primary and secondary school in Emmen. After the secondary school, she moved to Utrecht to study the HBO nursing, were she also followed the ENI (European Nursing Initiative) and did an internship in Spain on a gynaecology department in a general hospital in Vitoria. After this study, she worked as a registered nurse on several departments in a general hospital and later on she made the choice for mental healthcare at Altrecht (mental health care) in Utrecht. In 2001, after one year she worked as a nurse in a mental health hospital and in the meanwhile she studied Employment, Management and Organizational Science at the USBO (Utrecht School of Business and organizations). She did her master in a police institute in Dordrecht and investigated the implementation of competence management in the police organization South Holland South. After graduation, she worked again as a registered nurse, but than in jail for the medical service. After a year working in jail and by the interest in research, she began to work for the Trimbos institute in Utrecht and wrote an article about the possibilities for caregivers of elderly and e-mental health with dr. J. de Lange and prof. dr. A.M Pot.

In 2007, she moved to Nijmegen and started with a combination of an internship to Nurse Specialist in mental health care with a PhD traject at the Radboud University. Her research was performed at Pro Persona (mental health care) in collaboration with the Radboud University (department of clinical psychology) by prof. G.J.M. Hutschemaekers. In 2011 she graduated as a Nurse Specialist in mental healthcare. She had to decide to end her PhD traject in 2017 and worked clinically as a Nurse Specialist on several departments in mental health care. In 2017 till 2021 she was on the board of the professional association of Clinical Nurse Specialists. In 2018, she restarted her PhD traject again.

At the moment Patricia is working as a clinical nurse specialist (CNS) in mental health care for GGZ Oost Brabant on a specialized department of anxiety, compulsion and (bipolar) mood disorders.

Patricia Mann-Poll and Ritse Mann are married since 2006 and the proud parents of Tycho Matthijs (2009) and Jelle Bauke (2012) Mann.

APPENDIX 1: PATS-Q

Research number:

Professional Attitudes Toward Seclusion - Questionnaire (PATS-Q)

Opinions of mental health professionals on seclusion

Original in Dutch (2004) by van Doeselaar M, Sleegers P & Hutschemaekers GJM.

English version (2011) by Mann-Poll P & Smit A.

Pro Persona Mental Health Care & Radboud University, Nijmegen, the Netherlands

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Instruction

By means of the following questions, we aim at getting insight in your opinions on the use of restraint and especially seclusion. If you have never been involved in the use of seclusion yourself, we still ask you to complete the questionnaire.

Please answer each question by ticking the appropriate answer box. When you feel that your answer is not available, please choose the answer that approaches it the most.

Do not think about the answer too long: your first reaction is generally the best!

Thank you for your cooperation!

1. To which professional group do you belong?
(fill in one box)
- ☐ Nurses and Carers
- ☐ Medical Doctors and Psychiatrists
- ☐ Clinical psychologists or psychotherapists
- ☐ Art therapists
- ☐ Social work Professions
- ☐ Other, namely.. ……

2. What type of function do you have?
(main task, one box)
- ☐ Caring/ treatment
- ☐ Care Coordination
- ☐ Management
- ☐ Policy
- ☐ Research
- ☐ Other, namely. ……

3. What is your age?
- ☐ younger than 20 years
- ☐ 20 - 29 years
- ☐ 30 - 39 years
- ☐ 40 - 49 years
- ☐ 50 years and older

4. Are you in training at the moment?
- ☐ Yes
- ☐ No

5. How many hours do you work during a week?
____ hours

6. Since when have you been working in psychiatry ?
____ years

7. What is your gender?
- ☐ Male
- ☐ Female

8. In your work, do (or did) you have any experience with seclusion ?
- ☐ No (continue with question 11)
- ☐ Yes, less than 1 year
- ☐ Yes, 1 till 2 years
- ☐ Yes, 2 till 5 years
- ☐ Yes, 5 till 10 years
- ☐ Yes, more than 10 years

9. How often do you participate in the seclusion of a patient?
- ☐ Never
- ☐ Less than once a month
- ☐ 1 till 4 times a month
- ☐ 2 till 7 times a week
- ☐ More than once a day

10. To what extent are you involved in the following aspects of care in the practice surrounding seclusion?

	Not at all	A bit	Pretty much	A lot
Prevention	☐	☐	☐	☐
Decision making	☐	☐	☐	☐
Preparation	☐	☐	☐	☐
Care during seclusion	☐	☐	☐	☐
Care after seclusion	☐	☐	☐	☐
Reporting	☐	☐	☐	☐
Evaluation	☐	☐	☐	☐
Communication with the patient	☐	☐	☐	☐
Communication with family / friends of patient	☐	☐	☐	☐

11. The following questions concern your view on possible causes for seclusion. In your opinion, to what extent do the following factors play a role in seclusion in general?

	Not at all	A bit	Pretty much	A lot
Behavior towards the patient	☐	☐	☐	☐
Ward rules	☐	☐	☐	☐
Medical diagnosis	☐	☐	☐	☐
Treatment plan	☐	☐	☐	☐
Restrictions laid upon the patient	☐	☐	☐	☐
Future prospect of the patient	☐	☐	☐	☐
Confidence in colleague	☐	☐	☐	☐
Reactions of other patients	☐	☐	☐	☐
Nurse(s) feelings of unsafety	☐	☐	☐	☐
Threatening behavior of the patient	☐	☐	☐	☐
Physical violence of the patient	☐	☐	☐	☐
Communication with the patient	☐	☐	☐	☐
Expertise of nurses	☐	☐	☐	☐
Containment and control of the situation	☐	☐	☐	☐
Earlier experiences with the patient	☐	☐	☐	☐
Number of nurses present	☐	☐	☐	☐
Daytime activities of the patient	☐	☐	☐	☐
Other, namely . ….	☐	☐	☐	☐

12. The following questions concern your opinion on seclusion. Please mark the extent to which you agree with each statement by filling in the box of your choice.
(fill in 1 box)

a. Seclusion is the most radical form of coercion in psychiatry
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

b. Seclusion has a therapeutic effect
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

c. The seclusion room serves as a low-stimulus environment
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

d. Protocols will not lead to a decreased use of seclusion
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

e. Patients who are afraid of seclusion should not be secluded
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

f. Seclusions lasting longer than 24 hours exceed every purpose
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

g. The care surrounding seclusion will improve if nurses share their experiences
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

h. Seclusion is used the least during a shift of female nurses
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

i. Evaluating each seclusion with the patient will result in a reduction in the number and duration of seclusions
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

j. Seclusion disrupts the confidence of patients in nurses
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

k. The higher the number of nurses that are involved in a seclusion, the more threatened the patient will feel
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

l. Registration of seclusion does not affect the amount of seclusions
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

m. In our country, seclusion is used too much and too often
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

n. Psychiatry will never be able to function without seclusion
☐ Totally disagree ☐ Mostly disagree ☐ Mostly agree ☐ Totally agree

13. According to you, to what extent are the activities described below alternatives for the use of seclusion?

	Not at all	A bit	Pretty much	A lot
More medication	☐	☐	☐	☐
Early risk taxation	☐	☐	☐	☐
More nurses	☐	☐	☐	☐
More dialogue with the patient	☐	☐	☐	☐
Improving protocols	☐	☐	☐	☐
Postgraduate training of nurses	☐	☐	☐	☐
Accentuate treatment plans	☐	☐	☐	☐
Paying more attention to the patient	☐	☐	☐	☐
Meaningful daytime activities	☐	☐	☐	☐
More dialogue with family/ friends of the patient	☐	☐	☐	☐
Closing seclusion rooms	☐	☐	☐	☐
Making ward rules more flexible	☐	☐	☐	☐
Other, namely……	☐	☐	☐	☐

APPENDIX 2: VIGNETTES

Originele vignettenset (Dutch)

Toelichting

We leggen u 64 vignetten voor. Elk vignet geeft een beschrijving van een *gesloten* afdeling voor *volwassen* patienten. De vignetten kennen dezelfde opbouw, namelijk:

a. Een beschrijving van de patientkenmerken
b. Het problematisch gedrag dat de patient vertoont
c. De achtergrond en afdelingsgegevens van de patient
d. Een beschrijving van het team.

Bij elk vignet maakt u een inschatting van wat u in een dergelijke situatie zou doen en u beslist in welke mate u separeren noodzakelijk dan wel geschikt vindt (informatie die niet in het vignet vermeld staat beschouwd u als onbekend).

Ter verduidelijking volgen onderstaand een aantal definities van de gebruikte begrippen. Wij willen u vragen om dit vooraf goed door te nemen en raden u aan de omschrijvingen bij het invullen van de vignet bij de hand te houden.

Separatie	Separatie is het (on)vrijwillig opsluiten van een patient in een daarvoor bestemde kamer ter bescherming van de patient, zijn of haar omgeving en om verpleging en behandeling mogelijk te maken.
Leeftijd	Er wordt gesproken van ‘oudere’ en ‘jongere’ patienten. De grens is getrokken bij 50 jaar. Het gaat om de vitaliteit van patienten.
Diagnose	Hier wordt een driedeling gehanteerd: 1. Stemmingsstoornissen, waarbij vooral gedacht wordt aan bipolaire stoornissen 2. Schizofrenie, waarbij er sprake is van een acute psychose 3. Persoonlijkheidsstoornissen
Bijkomende problemen	Deze geven een nadere inkleuring van de hoofddiagnose. Soms is er ‘geen’ problemen bij komende problematiek. Soms is er naast de hoofddiagnose ook sprake van ‘verslavingsproblematiek’ of van ‘organische problematiek’.
Clientsysteem	Een clientsysteem is de omgeving van de patient zoals familie, vrienden, buren etc. Dit clientsysteem kan de behandeling “niet of nauwelijks’of juist ‘goed’ondersteunen.Soms is er geen clientsysteem.
Probleemgedrag	Op dit punt worden drie aspecten onderscheiden: 1. Aard 2. Ernst 3. Richting Met betrekking tot de aard van het probleemgedrag worden onderscheiden: ‘grensoverschrijdend’, ‘manipulatief’, of ‘ontwrichtend’ gedrag. Er is daarbij sprake van een toename van het probleemgedrag. Met betrekking tot ernst van het probleemgedrag is onderscheid gemaakt tussen: ‘dreigend gevraarlijk’en ‘acuut gevaarlijk’. Daarbij moet ‘dreigend’ opgevat worden als een voorstadium van ‘acuut’. Met betrekking tot de richting van het probleemgedrag is onderscheid gemaakt tussen: ‘op zichzelf gericht’ en ‘naar buiten gericht’. ‘Naar buiten gericht’ kan betekenen: op andere patienten, op de verpleging, op bezoekers of op de materiele omgeving.
Aanspreekbaarheid	Het gaat hier om de aanspreekbaarheid van de patient *op het moment* dat deze probleemgedrag vertoont.
Groep	Het gaat hier om de aanspreekbaarheid van de patient *op het moment* dat de patient genoemd probleemgedrag vertoont.

Opname	Er wordt onderscheid gemaakt tussen ‘vrijwillige’en ‘gedwongen’ opname.
Eerdere separatie	Het kan gaan om een patient die ‘nog nooit eerder’ of ‘al vaker’ gesepareerd is.
Behandelplan	Hier gaat het om de vraag of er in het behandelplan de optie ‘separeren’ is opgenomen en welke afspraken er *vooraf* met de patient zijn gemaakt over een mogelijke separatie.
Afdeling	Er is een onderscheid gemaakt tussen ‘opname’ en ‘vervolg’- afdelingen. In beide gevallen betreft het om, zoals boven al aangegeven, gesloten afdelingen.
Ruimten	Hier gaat het om de mate waarin patienten kunnen uitwijken naar een eigen kamer of naar andere groepsruimten. In het meest ideale geval heeft ‘elke patient een eigen kamer’. In het slechtste geval moet een patient ‘met meerdere personen een kamer delen’ en is er ‘slechts een gemeenschappelijke ruimte’. Daar tussenin bestaat de situatie waarin een patient weliswaar een kamer moet delen, maar waarbij er wel meerdere groepsruimten zijn.
Cultuur	Hier gaat het om de vraag of er in het team een ‘open’ of een ‘gesloten’ cultuur heerst.In het eertse geval zijn de teamleden naar elkaar en naar buiten toe open over hun ziens- en handelswijzen. In het tweede geval is men daarover meer gesloten.
Team	Twee aspecten zijn samengenomen. Het eerste betreft de mate waarin de teamleden op elkaar ingespeeld zijn (‘goed’en ‘niet goed’); het tweede het onderlinge vertrouwen (‘groot’ en ‘klein’). Factoren die bij beide aspecten een rol kunnen spelen zijn:

- de verdeling van het aantal mannen en vrouwen in het team
- de verdeling van het aantal vaste en het aantal invalkrachten
- de opleiding en de ervaring van de verschillende teamleden
- de vaste kern van het team (hoe lang bestaat het in de huidige samenstelling)

Dienst	We onderscheiden drie soorten diensten: 1. Dagdienst met ‘kleine (is onvolledige) bezetting (3/10) 2. Dagdienst met ‘normale (is volledige) bezetting (4/10) 3. Avond-, nacht- of weekenddienst met ‘zeer kleine’bezetting (2/10) De getallen geven het aantal verpleegkundigen per 10 bedden aan.
Noodzakelijk & Geschikt	Het gaat hier om de vraag in welke mate u, gezien de in het vignet & beschreven kenmerken, separeren noodzakelijk of geschikt acht. Met ‘separatie is noodzakelijk’ doelen we op: u ziet geen andere uitweg of oplossing dan het overgaan tot separatie. Met ‘separatie is geschikt’ doelen we op: u acht separatie geindiceerd en zinvol voor de behandeling van de patient.

INSTRUCTIEVOORBEELD

Oudere, mannelijke patient
Diagnose ‘persoonlijkheidsstoornis’.
Bijkomend: organische problematiek
Het clientsysteem ondersteunt de behandeling

Probleemgedrag: manipulatief, acuut gevaarlijk, op zichzelf gericht.
Patient is voldoende aanspreekbaar.
De groep is rustig.

Vrijwillige opname.
Patient is nooit gesepareerd.
Separatie is optie in het behandelplan.

Het gaat om een gesloten opnameafdeling
Elke patient heeft een eigen kamer.
Het team kent een open cultuur.
De collega’s zijn goed op elkaar ingespeeld en het onderlinge vertrouwen is groot.
Er is sprake van dagdienst met een kleine bezetting.

In hoeverre acht u separeren noodzakelijk?

wel noodzakelijk						niet	noodzakelijk	
0	0	0	0	0	0	0	0	0

In hoeverre acht u separeren geschikt?

wel geschikt							niet geschikt	
0	0	0	0	0	0	0	0	0

<u>Instructie bij het invullen:</u>
Beide vragen dienen beantwoord te worden!
Bij het beantwoorden van dit voorbeeld kunt u kiezen voor:
-Separeren is ‘wel noodzakelijk’ en dan zet u een kruisje in het meest linkse vakje
-Separeren is ‘niet geschikt’en dan zet u een kruisje in het meest rechtse vakje.
NB: Indien u uw keuze wilt corrigeren maakt u het foutieve vakje zwart en zet u een kruisje in het opnieuw door u gekozen vakje.

Oudere, vrouwelijke patient.
Diagnose ‘persoonlijkheidsstoornis’
Bijkomend: verslavingsproblematiek
Het clientsysteem ondersteunt de behandeling niet of nauwelijks

Probleemgedrag: ontwrichtend, dreigend gevaarlijk, naar buiten gericht.
Patient is voldoende aanspreekbaar.
De groep is onrustig

Gedwongen opname
Patient is nooit gesepareerd
Separatie is optie in het behandelplan

Het gaat om een gesloten afdeling voor vervolgbehandeling.
Elke patient heeft een eigen kamer

Het team kent een gesloten cultuur
De collega’s zijn goed op elkaar ingespeeld, maar het onderlinge vertrouwen is klein
Er is sprake van dagdienst met een kleine verpleegkundige bezetting

In hoeverre acht u separeren noodzakelijk?

wel noodzakelijk						niet	noodzakelijk	
0	0	0	0	0	0	0	0	0

In hoeverre acht u separeren geschikt?

wel geschikt							niet	geschikt
0	0	0	0	0	0	0	0	0

Oudere, vrouwelijke patient.
Diagnose ‘stemmingsstoornis’ (manisch-depressief)
Geen bijkomende problematiek.
Er is geen clientsysteem

Probleemgedrag; grensoverschrijdend, acuut gevaarlijk, naar buiten gericht.
Patient is voldoende aanspreekbaar
De groep is onrustig.

Vrijwillige opname
Patient is eerder gesepareerd.
Separatie is geen optie in het behandelplan

Het gaat om een gesloten opnameafdeling.
Elke patient heeft een eigen kamer.

Het team kent een open cultuur.
De collega’s ijn goed op elkaar ingespeeld en het onderlinge vertrouwen is groot.
Er is sprake van dagdienst met een normale verpleegkundige bezetting.

In hoeverre acht u separeren noodzakelijk?

wel noodzakelijk						niet noodzakelijk		
0	0	0	0	0	0	0	0	0

In hoeverre acht u separeren geschikt?

wel geschikt						niet geschikt		
0	0	0	0	0	0	0	0	0