Profiling TBS-treatment: a structured cases analysis

Summary

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Introduction
After several serious incidents with patients with a criminal justice order of enforced care by the state (TBS\(^1\)) during unsupervised leave, the Lower House decided in 2006 to start a parliamentary inquiry into the functioning of the TBS system (the Visser commission). The commission reached the conclusion that the TBS system in general meets the tasks set to it, yet that it is necessary to adapt its execution to modern standards. One of the commission’s recommendations was to carry out more scientific research on the effectiveness of treatment in forensic psychiatry. To this end, the Scientific Research and Documentation Centre (WODC) drew up a TBS research programme, in cooperation with the TBS field and relevant actors. For the purpose of this TBS research programme a study was needed that would take stock of and describe the current execution of the TBS sentence.

This report is the reflection of this stock-taking and descriptive study and of a quantitative analysis of a representative sample of prisoners sentenced to TBS. The study consists of two parts. The first part presented a description of the characteristics of the research population, the execution of the TBS sentence, the design of this execution, the formal legal framework, the bottlenecks and the question in which ways the execution – and more specifically the treatment - is in keeping with the scientific research. In the second part, the profiles of the group of studied prisoners sentenced to TBS were drawn up.

Research method
In this study, we have used four research methods to answer the research questions: a synthesis of the literature, file research, interviews and focus groups. The aim of the literature synthesis was to answer the research questions from a theoretical point of view and to provide insight into the evidence-based treatment methods within the forensic domain. The objective of the file research was, among other things, to gain an understanding of different aspects regarding patients and their treatment. The semi-structured interviews were conducted to gain insight into the execution of the TBS sentence and in questions that could not be answered by means of the file research. Finally, we established three focus groups to provide an opportunity to key figures (treatment directors, therapists and researchers) to reflect on the most important research results. The focus groups also gave input regarding aspects of the research that were insufficiently illuminated by means of the file research.

The sample size of the file research had been fixed by the WODC at 180 cases. In the thirteen Forensic Psychiatric Centres (FPCs), the cases were randomly sampled from the population present at the hospital at that moment. The number of selected cases for each hospital was determined with a weighting factor. Included in the sample were patients who had entered the hospitals after 1 February 2000. Excluded from the sample were detainees sentenced to TBS who were indicated for long-stay forensic care and detainees sentenced to TBS who were living in the Netherlands illegally. We checked the representativeness for six characteristics: sex, age, offence category, primary disorder,

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\(^1\) In Dutch: ‘terbeschikkingstelling’, abbreviated from here on to ‘TBS’; we will use the untranslated term because of the uniqueness of the Dutch TBS-system)
nationality and IQ. Data regarding five of the six characteristics could be provided by the FPCs, except for those regarding IQ; for this reason, the representativeness of the IQ was checked on the basis of the scored file data.

Answers to the research questions
This study focuses on eleven research questions in total. The first six questions (questions 1 to 6) relate to the first part of the research. The next five questions (questions 7 to 11) pertain to the second part of the research: the quantitative analysis of the scored cases.

Research question 1: What are the characteristics of the selected cases, starting from existing data?
The results show that a large majority of patients in the sample was male and had the Dutch nationality. Almost 29% of the population had a migrant background. The average age at the moment of the TBS sentencing was 32. A major part of the research population had received a higher education (74.4%). At the time of the offence, 80% did not have any daily occupation (such as a job or schooling). At the moment of sentencing, about 15% of the research population was involved in a relationship; 9 of these 28 patients were married. Fifty patients (28%) had one or more children.

The study shows that a large group of patients had experienced negative life events such as addiction, divorce, the death of parents and placement in a juvenile home before the age of 18. In addition, the majority of the patients had been in contact with one or more caregiving agencies prior to the TBS sentence, while more than 80% already had a criminal record. With regard to civil sentences, (temporary) placements in custody (in Dutch: (V)OTS)) were most frequent (19%), while the condition of juvenile probation (in Dutch: voorwaarden jeugdreclassering) was most frequent among the criminal sentences (19%). Furthermore, more than 60% of the patients had been detained before and 35% had been sentenced to community service in the past.

An analysis of the index offences shows that (attempted) murder or manslaughter occur most frequently, followed by sexual offences, offences in the category of ‘threat, extortion and deprivation of liberty’, and violent crimes. A small group had arson or theft (with or without violence) as their index offence. Substance use disorder (70%) and schizophrenia or another psychotic disorder (39%) constitute the most frequently occurring classifications on Axis I. Occurring with decreasing frequency are developmental disorders, sexual and gender identity disorders, mood disorders and anxiety disorders. On Axis II, 40% of the patients had been classified with a cluster B personality disorder and 35% with a personality disorder NOS (Not Otherwise Specified). Mental retardation or mental defectiveness occurs in 23% of the cases. The most frequently occurring double diagnosis is a cluster B personality disorder combined with a substance use disorder.

Research question 2: In which phase of the execution of the TBS sentence were the selected cases?
It is difficult to answer this research question because four hospitals do not explicitly use treatment phases. Hospitals that do use these phases, distinguish three of them: the intake phase (diagnostics and observation), the transfer phase (treatment) and the departure phase
(rehabilitation). In majority, the patients are in the transfer or treatment phase. Most of the studied patients do not go on leave or supervised leave.

**Research question 3: How did the execution of the TBS-measure took place during the full-time period in the present hospital?**

The execution of the TBS sentence consists of different parts. In most hospitals, the patients are committed to a separate intake- and diagnostics ward. During this first phase, information is gathered about the patient, clinical interviews take place and diagnostic research is conducted. More than 70% of the patients has been subjected to diagnostic research in the hospital in which they stayed at the time of the research. Seven of the thirteen hospitals make use of a standard battery of tests during the intake, supplemented or not with deepening diagnostics. Based on the most recent risk assessment, 58% of the patients proved to have been subjected to several instruments. In accordance with the guidelines, in eleven hospitals, the first risk assessment takes place between the second and twelfth month while a majority of the hospitals observes a maximum period of three months.

Only 22 files explicitly make mention of the design of the sociotherapeutic ambiance. The approach mainly pertains to providing structure, supporting the patients during their treatment and searching for suitable activities that match the individual patients’ abilities. The files do contain a lot of information on treatment goals regarding sociotherapy.

With regard to labour, schooling and leisure activities: more than 75% of the patients did paid or unpaid work during the study, approximately 46% received education and more than 70% engaged in leisure activities. Patients suffering from schizophrenia or other psychotic disorders, mental retardation or mental defectiveness received education less often.

All hospitals make use of care programmes: four hospitals use the national care programmes, while the other hospitals use their own. The programmes give an indication of the frameworks that provide the context for the work. The treatment facilities are diverse but can be grouped into five categories: treatment in the context of the offence, psychoeducation and psychotherapies, skills training, non-verbal therapies and social work. It turns out that patients suffering from sexual disorders or gender identity disorders who have committed a sexual offence are more often getting an offence treatment than patients suffering from other disorders do. It is notable that migrant patients are treated more frequently through social work and non-verbal therapies than autochthonous patients. Psychoeducation and other therapies are usually given individually. Skills training mostly takes place in groups, and non-verbal therapies and offence treatment roughly constitute an equal share. Little information is available on the duration and intensity of treatment. The files show that one third of the treatments was completed (or broken off prematurely) and one third was still ongoing during the study. We did not have information on the remainder of the treatments. Approximately half of the patients received pharmacotherapy for psychotic decompensation and somatic complaints while mood stabilizers were administered to about a third of the patients. Pharmacotherapy was applied less often for substance use or abuse, impulse control, hyperactivity, aggression, instability or the sexual component. Almost 95% of the patients suffering from schizophrenia and other psychotic
disorders received antipsychotic drugs and about 32% of the patients suffering from sexual disorders and gender identity disorders were prescribed libido-reducing medication.

Extensive information on treatment goals can be found in the most recent treatment plans. It primarily relates to sociotherapy, treatment by psychologists, psychiatrists and psychotherapists, daily occupations, drug- and alcohol policy, risk factors, non-verbal and pharmacological treatments and system therapy. These treatment goals are drawn up, adapted and assessed regularly during treatment plan meetings. In ten of the thirteen hospitals, such treatment plan discussions take place twice a year, in two hospitals three or four times a year, and in one hospital once a year. During the past half year, there was one case of absence without leave and two patients from the research population recidivated while serving their TBS sentence. About 13% of the patients had used drugs or alcohol during the past half year and 26% had not stuck to individual agreements about their treatment. The use of means of coercion and control occurs as described in the Hospital Orders Framework Act (especially seclusion, solitary confinement or the suspension of leave and privileges). Forced medication and the censoring of letters and telephone conversations seldom occur.

**Research question 4: What is the formal framework applied to the selected case during the execution?**

The formal framework applied most is the Hospital Orders Framework Act or a combination of that Act with the Psychiatric Hospitals Compulsory Admission Act (in Dutch: BOPZ). Only once was the application mentioned of the Hospital Orders Framework Act combined with the Medical Treatment Contracts Act (in Dutch: WGBO), and again only once the combination was mentioned of the Hospital Orders Framework Act with both WGBO and BOPZ. For all hospitals, the formal framework also constitutes a guideline regarding the use of means of coercion and control, as well as for their policy regarding absence without leave.

**Research question 5: With which bottlenecks are those involved in the case confronted? Which consequences does this have for the execution (treatment, treatment trajectory)?**

In this study, we did not find any bottlenecks in the files. During the interviews, we have specifically asked whether there were bottlenecks during the execution of the TBS sentence. The bottlenecks mentioned most often are the lengthy trajectory preceding a patient’s leave, due to the changed external procedures, the difficulty with which patients move on to follow-up institutions, and the negative image of TBS. Other bottlenecks that were mentioned several times are the decline in the number of patients, the strong emphasis on security instead of treatment, and the increased pressure of work. In all hospitals the effect is felt of the stricter legislation caused by political sensitivity, societal unrest and media sensitivity. According to the interviewees, this results in less tailored work regarding treatment and privileges, which may lead to frustration and a lack of motivation among patients. This will have negative consequences for treatment as well as the duration of treatment.
Research question 6: To what extent does the treatment of detainees sentenced to TBS correspond with insights regarding this treatment in recent (scientific) publications and care programmes of the Expertise Centre for Forensic Psychiatry?
To answer this question, we need to take into account the fact that not all the necessary information about the treatments could be found in the files. Bearing this remark in mind, we may cautiously conclude that the care programme for patients with a psychotic vulnerability are in practice used most often. Forms of treatment we have found during this study in the files are: behaviour therapy, psychoeducation, skills training related to psychoeducation, psychomotor therapy and pharmacotherapy. The recommended interventions from this care programme correspond well with the treatments administered to the research population.

Cognitive behaviour therapy and pharmacotherapy are the interventions recommended for patients suffering from sexually deviant behaviour. We have found these recommended interventions somewhat less often in the files. The best evidence intervention methods used most frequently were skills training focused on social skills, sexual and relational behaviour, and pharmacotherapy in the form of hormonal libido inhibitors.

The only evidence-based interventions described in the care programme personality disorders are cognitive behaviour therapy and schema-oriented therapy (for patients in regular health care). Types of skills training that have proven their effectiveness are: aggression management training, stress inoculation training and Goldstein training. Based on the information from the files, we have observed that the evidence-based and best evidence interventions are applied less frequently to this target group. Offered most often are social work, psychomotor therapy and therapy provided by a psychologist, psychiatrist or psychotherapist. Medication is mainly prescribed for somatic complaints and mood and anxiety problems.

Research question 7: Is it possible to draw up distinctive profiles of detainees sentenced to TBS, based on their psychopathology, offence characteristics, risk factors and background characteristics?
Based on a latent class analysis, we have distinguished five profiles: ‘the psychotic patient with multiple problems’ (Class 1); ‘the typically psychotic patient’ (Class 3); ‘the antisocial patient’ (Class 2); ‘the patient under the influence’ (Class 5); and ‘the patient suffering from sexual problems and delinquent behaviour’ (Class 4). These profiles may be interpreted as follows.

The ‘psychotic patient with multiple problems’ suffers from schizophrenia or another psychotic disorder, a cluster B personality disorder and, to a lesser extent, from a personality disorder NOS. The types of committed offences are diverse, which makes these patients more generalists than specialists. Patients in this class have often been admitted in the past or have received ambulatory care. The time spent in detention prior to their admission in a TBS hospital is the shortest for patients in this class. Most of them use antipsychotic drugs and on average score the lowest on the most recent GAF scale of the DSM-IV.

The ‘typically psychotic patient’ primarily suffers from schizophrenia or another psychotic disorder. If a personality disorder plays any role at all, it is less pronounced than
with detainees sentenced to TBS in other classes. This type of patient has committed a very serious offence, possibly as the result of a psychotic delusion or hallucinations. In this class, patients are on average higher educated and have often been involuntarily admitted to a psychiatric hospital in the past, under the authority (in Dutch: IBS) of either the mayor or by court order (in Dutch: RM). Most of the patients get antipsychotic drugs and in their treatment plan medication is often included as an explicit treatment goal. These patients frequently take part in a skills training focused on psychoeducation.

The ‘antisocial patient’ has a clear signature. He primarily suffers from a cluster B personality disorder. The antisocial behaviour displayed by these patients seems to be related to serious substance abuse. In the majority of cases, they have committed (attempted) murder/manslaughter. Patients in this class more often have children. Treatment goals are often related to education and many times the patients are in a skills training focused on aggression management.

It is harder to typify the ‘patient under the influence’. He suffers from a substance-related disorder and a personality disorder NOS. The types of committed offences are diverse. Half of the patients have committed a very serious offence: (attempted) murder/manslaughter. These patients seem to be generalists more than specialists, and the offences can be seen as drug-related crimes. There are no women in this class. The psychological, social and professional functioning of these patients is the best, compared to the other classes. With some regularity, these patients do not stick to individual agreements made about drug use.

The ‘patient suffering from sexual problems and delinquent behaviour’ shows congruence between the Axis I disorder and the type of offence. This type of detainee sentenced to TBS suffers from a sexual disorder or gender identity disorder and has displayed sexually deviant behaviour towards minors and, to a lesser extent, towards adults. These patients are mostly specialists, although a small number among them is also guilty of arson and violent behaviour. This class contains relatively more autochthons, and during the study the average age was higher as well. These patients have often been bullied and sexually abused in the past, but experienced problems with substance use relatively less often. In the past, they had gotten into contact with assistance agencies less frequently and more frequently held a job at the moment of the index offence. As their index offence they have often committed several offences from one category penalized with a sentence of more than four years.

**Research questions 8 and 9: Are the treatment and formal framework dependent on the drawn-up profiles? Does what happens during treatment depend on the profile of the detainees sentenced to TBS?**

The formal framework does not seem to depend on the profile of the detainees sentenced to TBS. Psychotic patients with multiple problems do, however, on average stay in detention for a shorter period of time before they are transferred to a TBS hospital. In addition, it turns out that goals relating to medication and education differ significantly from class to class. Goals regarding education, for instance, are set more often with antisocial patients (Class 2) than they are with psychotic patients (Classes 1 and 3) and with patients suffering from sexual problems and delinquent behaviour (Class 4). Goals relating to medication, on the other hand, are set more often with typically psychotic patients (Class 3) and less often
with antisocial patients and patients under the influence (Classes 2 and 5). Furthermore, there are significant differences between several treatment interventions. Patients under the influence (Class 5) undergo schema-oriented therapy much more frequently than patients from one of the other classes do. According to the files, offender groups are set up more often among patients with sexual problems and delinquent behaviour (Class 4) than they are among patients under the influence (Class 5). The main category regarding offence treatment also applies more often to patients with sexual problems and delinquent behaviour (Class 4) than it does to patients with psychotic, multiple problems (Class 1). Antisocial patients (Class 2) are trained more frequently to manage their aggression, while typically psychotic patients (Class 3) more frequently receive psychoeducation. With regard to the use of medication there are several, quite obvious, differences. Psychotic patients with multiple problems and typically psychotic patients (Classes 1 and 3) use antipsychotic drugs much more often than patients from the other classes do. Hormonal libido inhibitors are primarily used by patients with sexual problems and delinquent behaviour (Class 4).

**Research questions 10 and 11: Are these profiles (better) suited to treatment indication and are the profiles replicable?**

Based on the data in this study, this question is difficult to answer. This study has made clear, however, that (a) with respect to content, the five profiles are recognized by participants in two of the three focus groups; (b) there are differences between the FPCs regarding the incidence of the profiles; and (c) similar profiles have been found in a study by Bogaerts & Spreen (2011). It seems however that that patients with different profiles now fall within one care programme, which will make it difficult to provide an individualised treatment programme. In this respect, the division into profiles we have found may be of help. With regard to the replicability: in a recent study by Bogaerts and Spreen (2011), strong similarities were found with three of the five classes in the present study. These classes are the typically psychotic patient, the psychotic patient with multiple problems, and the antisocial patient.

**Discussion**

The research in this report meets the need for a stock-taking and descriptive study on the present execution of the TBS sentence. Beside a detailed and structured description of a representative sample of detainees sentenced to TBS, we have carried out both a quantitative and a qualitative analysis of the data. In our view, the quantitative analysis, based on file information, provides the possibility to look on the diagnostics, risk assessment and treatment of prisoners sentenced to TBS in another light. The qualitative analysis, carried out by means of semi-structured interviews and focus groups, provides a deepening and a further supplement to the information on diagnostics, risk assessment and treatment.

This study shows that the files and other materials to which we were given access did not always yield enough information to score data completely. On the basis of this material and during the interviews and focus groups as well, it turned out that the actions of psychologists, psychiatrists or psychotherapists are not always explicitly recorded in the
files. Although those involved do take notes, these are seen as the personal work notes of these disciplines and as such are included less often in the files. With respect to the DSM classifications, the files did not always make clear which diagnosis was the principal one, to be distinguished from the secondary diagnoses. Another striking finding was the fact that, according to the files, not all the patients had been subjected to an offence analysis, which totally contradicts what has been stated as standard clinical practice and has been explicitly indicated in the interviews.

This study also makes clear that, although working with sociotherapeutic environments is considered as the core business of the treatment of detainees sentenced to TBS, the mode of operation and methods used are stated in the files only very summarily. A clearer image arose from the files concerning employment, schooling and daily occupations. This finding fits in well with the scientific obviousness of the importance of significant leisure activities and valuable contacts on the job for reducing recidivism (Bouman, 2009).

The comparison between the current treatment of detainees sentenced to TBS with insights from the national care programmes and the scientific literature shows that the application of evidence-based interventions differed for each type of psychiatric problem. Patients suffering from schizophrenia were treated on all points conform the interventions recommended for them. This applies to a lesser extent to patients suffering from sexually deviant behaviour and patients suffering from personality disorders. As we have indicated earlier, not all details on treatment interventions could be found in the files. It is possible that more information would show that the recommended interventions actually are being applied after all.

Based on a latent class analysis, we have distinguished five profiles: the psychotic patient with multiple problems (Class 1); the typically psychotic patient (Class 3); the antisocial patient (Class 2); the patient under the influence (Class 5); and the patient suffering from sexual problems and delinquent behaviour (Class 4). With regard to their content, the profiles we found correspond to clinical practice. The differences between the profiles also convey that the resilience and capacity of patients have been taken into account depending on the profile, as can be deducted, for instance, from the tailored offer of education and employment. To conclude, there are indications that the treatment of patients is specifically linked to combinations of problems, as could be observed in the treatment of aggression. The profiles also make clear that assumptions adopted in practice sometimes are in need of differentiation. In other studies among detainees sentenced to TBS, similar profiles were found. Based on these similarities, we can conclude that the profiles we found are replicable in another sample of patients sentenced to TBS; it seems worthwhile to improve the tuning of the treatment offer to patient profiles compiled on the basis of Axis I, Axis II and the index offence. This requires an integrated treatment that takes into account the comorbidity within the population of detainees sentenced to TBS.

Recommendations
From the results of this study four recommendations arise:
1. Based on this study, we recommend the implementation of a (still) more systematic and structured design for the practice of recording the progress and assessments of treatments. This should include an explicit registration of which patient has received
which treatment (and by who), and when this treatment was started and ended. In line with this recommendation, we advise that structured diagnostics for Axis I and Axis II problems should not only be used in the context of an assessment, but to make it a standard part of professional practice. This would serve not only to refine the diagnostic assessment but in particular to apply the information concretely during treatment (cf Kamphuis, 2011).

2. Recent studies by Bartak et al. (2011a, 2011b) have shown that a clinical treatment taking place in a supportive, sociotherapeutic environment on all points offers the best chances of success for patients suffering from both cluster A and cluster B personality disorders. In view of these outcomes, we recommend that the forensic psychiatric centres collectively aim for a concrete and methodical elaboration of sociotherapeutic environments.

3. The application of what is scientifically evident in the treatment of forensic psychiatric patients seems to keep pace with what is known about the effective treatment of a specific group of patients. In view of the prevalence of substance abuse among prisoners sentenced to TBS, we recommend that the scientifically evident is integrated more thoroughly in the current treatment offer. In addition, we also recommend that the developments within the forensic network regarding Routine Outcome Monitoring (ROM), which includes the initiative of the Researchers Task Force, should be supported; sufficient support should be found to examine whether this provides a serious and valuable alternative for measuring effects in clinical practice.

4. The person-centred approach used in this study fits in with the dimensional way of thinking, instead of a strictly categorial way of thinking. In this study, we have given the initial impetus to this by distinguishing different profiles, based on the main diagnoses on Axis I and Axis II and the index offence. Thinking in terms of clusters and profiles means that the right treatment can be determined more specifically as well. In our opinion, a closer look is needed at what the profiles mean for the design and execution of the current care programmes. Furthermore, our finding that the personality disorder NOS exerts a relatively big influence on the profiles emphasizes the need to reflect on the establishment and value of this Axis II classification.