Summary

New methods for researching reconviction during a criminal sentence

A test case examining reconvictions during forensic psychiatric care

Since the 1980s, the WODC has regularly published on the reconviction rates for ex-tbs patients (*terbeschikkstelling*: disposal to be treated in a forensic hospital on behalf of the state). With the development of the Recidivism Monitor, reconviction rates amongst other offender groups, such as ex-prisoners and ex-probationers, are now also calculated in a standardised manner. For most offender groups, reconvictions are measured from the date an intervention is completed or a criminal order has been terminated. This is because, particularly in the case of sanctions that involve detention, it is assumed that the risk of reconviction during an intervention is small and that the actual time at risk for reconviction starts once an intervention or criminal order has been completed. In practice, however, this sharp distinction between a period not at risk during and a period at risk following completion of an order or intervention, is false. Offender groups can be reconvicted for offences committed during an intervention or whilst a criminal order is in place. This is particularly the case when restrictions are reduced during a criminal justice intervention and freedoms are granted in the name of a gradual resocialisation of offenders. It is, therefore, more realistic to consider a criminal justice intervention as a period of managed risk.

Research into reconvictions during a criminal justice intervention is not possible using the analysis method with which the WODC traditionally measures reconvictions following completion of an intervention. Survival analysis is the method typically used to research reconviction. Ex-offenders are followed-up in time until either they commit an offence that leads to a conviction or the follow-period ends, for example two years following release from an intervention. However, this analysis method is not suitable for a period of managed risk. The reason for this is that the research period, the period of managed risk, has a predetermined end date, whereby the duration of the risk period is not the same for all offenders. This is in contrast to the period following termination of a criminal justice intervention, which in principle has an open end. The aim of this feasibility study is, therefore, to develop a method with which reconvictions during a criminal justice intervention can be measured.

The first step in this process involved identifying eligible methods for measuring reconvictions. We consider time-to-event analysis methods, such as survival analysis, competing risks analysis, and multistate analysis. The conclusion is that multistate analysis (MSA) is the most suitable method, with limitations. In cases where it cannot be applied a standardised counting method (SC) can be used. MSA can be used to examine the prevalence and timing of reconvictions during a criminal justice intervention, as well as during various phases within an intervention. In addition, the way in which the risk of reconviction develops throughout an intervention and the predictors of reconviction can be investigated. A limitation of MSA is that the events of interest, in our case reconvictions, must occur in sufficient numbers. This is often not the case, particularly if we consider reconvictions for very serious offences. Even for reconvictions for any offences, it may often be

necessary to merge several yearly offender cohorts together in order to have a sufficient number of reconvictions to carry out MSA.
The SC method works by adding up the number of reconvictions and standardising these counts, for example, by calculating the number of reconvictions per 100 occupied tbs places. SC does not provide information on the risk of reconviction at various points during an criminal justice intervention, nor on possible risk factors associated with reconviction. It does, however, provide information on the number of reconvictions committed by a group of a given size within a given time frame. Unlike MSA, SC can be used regardless of the number of reconvictions. For this reason, the scarcity of reconvictions for very serious offences poses no problem. Furthermore, for this reason, there is no need to merge yearly offender cohorts. Consequently, SC lends itself particularly well to revealing reconviction trends over time.

Using a combination of SC and MSA, therefore, appears a suitable approach to measuring reconvictions during criminal justice interventions. In this feasibility study, these two methods are tested out on the tbs offender group. The reasons for choosing this offender group are two-fold. First, we know from experience that the quality of the data is very high. Second, this group has a highly standardised phasing of restriction levels in the form of authorised leave and conditional termination of the tbs order. This makes it possible to properly test the potential of MSA for mapping reconviction during successive phases of an intervention. This is of importance as, in many criminal justice interventions, distinct phases can be distinguished whereby offenders are subjected to restrictions with varying degrees of risk management. The tbs order begins, for example, with inpatient treatment, whereby the patient stays within the forensic care clinic. This is followed by a period of outpatient treatment and or trial leave, whereby the patient stays outside the walls of the clinic. Finally, a period of conditional discharge can be imposed, whereby the probation service is responsible for supervision.

In this study we test whether and how SC and MSA can be used to examine reconvictions during each of these phases of the tbs measure.

Research questions

In this study we use the tbs measure as a test case to address the following questions:

1 Can SC and MSA be used to answer question such as:
   a To what extent do reconvictions occur during a criminal justice intervention?
   b To what extent do reconvictions occur during the different phases of a criminal justice intervention?
   c Which individual characteristics and or characteristics of the criminal justice intervention are related to the probability of reconviction?
2 Are SC and MSA practically feasible and useful?
   a What data are needed to carry out these methods?
   b Do these methods produce to any unexpected findings?
   c What unanticipated problems are encountered?
   d Do these methods provide interpretable results for policy makers and practitioners?

Method

Standardised counting (SC)

With SC, all criminal cases resulting from reoffending committed by the tbs population during the various phases of the tbs measure are counted. In order to be able to compare the number of reconvictions from year to year and to recognise any trends, counts are standarised per one hundred fully occupied tbs places per calendar year. Occupied tbs places are referred to, rather than tbs patients, because the metric used for standardisation is the total time spent in (a phase of) the tbs measure. The 100 tbs places can, therefore, be occupied by more than 100 individual tbs patients throughout the course of a calendar year.
Because SC does not rely on making estimates, rather just counting and standardising, there is no threshold for a minimum number of events. Consequently, this method can be used to investigate rare events, such as reconvictions for very serious offences.

Multistate analysis (MSA)

MSA is a variant of survival analysis, which can be used to map the time until events of interest occur in successive phases of a process. Within demography, for example, it is used to examine the occurrence and timing of different roles within the life course, such as cohabitation, having children, and getting married. In the context of studying reconviction during the tbs measure, MSA can be used to examine the time to the first offence for which a patient is reconvicted. Using MSA conclusions can be drawn about the percentages of reconvicted tbs patients during each phase of the measure, i.e., the inpatient phase, the outpatient phase, and the conditional termination phase. Furthermore, the development of reconviction risk can be charted for each phase, In this way we can highlight, for example, whether the risk of reconviction is highest at the beginning of a phase or at a later moment during the phase. In addition, MSA can be used to test whether the risk of reconviction is related to individual characteristics of the tbs offenders and or the way in which the measure is implemented.

Data

Data from the Information Monitoring System for the tbs group (MITS) are used for this study. MITS contains information on the tbs with compulsory care measure, which can be used to split the tbs intervention into three distinct phases: The inpatient treatment phase, whereby the tbs patient remains within the secure clinic, with or without authorisation for supervised or unaccompanied leave; the outpatient treatment phase, whereby the tbs patient stays outside the clinic either on transmural or provisional leave; and the conditional termination phase, whereby the tbs measure has been terminated by the court, under certain conditions, and during which the probation service is responsible for the patient. All tbs patients who entered a tbs clinic up to the end of 2016 were included in the study. SC and MSA can be applied regardless of which phase of the tbs intervention an individual is in at the point of measurement. Tbs patients who have been treated under the conditional tbs order are not included in this study, in order to employ a simpler multistate model in this feasibility study.

Reconviction data come from the WODC's Research and Policy Database for Judicial Documentation (OBJD) and is handled according to fixed procedures developed within the WODC's Recidivism Monitor. The OBJD is a pseudonymised version of the Judicial Documentation System (JDS). The use of the OBJD implies that this study only examines offences that come to the attention of the Public Prosecution Service and are consequently prosecuted. The SC method includes all reconvictions committed between 2000 and 2016. The MSA results only concern the first reconviction during the tbs measure. We differentiate the tbs phase in which this first reconviction took place. Consequently, reconviction during the outpatient phase refers to the first reconviction committed during this phase by an individual who has not previously been reconvicted during the inpatient phase. Tbs patients' demographic and criminal history characteristics are also extracted from the OBJD.
The SC analyses are carried out for reconvictions that occurred in the period 2000 to 2016, with each calendar year forming a separate timeframe. For the MSA analyses, we have split the tbs population into three necessarily large cohorts based on entry year into tbs measure. This is in order to have sufficient reoffenders in each cohort to achieve reliable estimates. Cohort 1 consists of all tbs patients who entered the measure before 1997 (*N*=1,275); cohort 2 consists of those who entered the measure between 1997 and 2004 (*N*=1,454); and cohort 3 consists of those who entered between 2005 and 2016 (*N*=1,423). By carrying out the analyses on different cohorts we can investigate whether and how MSA can be used to map changes in reconvictions during a criminal justice intervention over time.

Key findings on reconviction during the tbs with compulsory care measure based on SC and MSA

Below is a review and interpretation of the main findings based on SC and MSA, as applied to reconviction during the tbs with compulsory care measure.

Most reconvictions during the tbs measure occur during the conditional discharge phase

- The SC results indicate that, per fully occupied calendar year, most reconvictions are for offences committed during the conditional termination phase, whether considering all offences or very serious offences. The number of reconvictions for very serious offences is, however, small at less than 1 per year per 100 occupied tbs places.
- The MSA results show that the risk of reconviction is highest in the first two years following transition into the conditional discharge phase. One explanation for this is that, since 2013, a mandatory phase of conditional discharge precedes unconditional termination of the tbs measure. Crimes that are now committed during this phase may have previously taken place following termination of the tbs measure.

Since 2013 there has been a slight increase in the number of reconvictions for all offences and for reconvictions for very serious offences

- From the results of the SC we can see that between 2000 and 2016 the number of reconvictions as a result of any offence increased from less than 3 to approximately 5 per 100 occupied tbs places per year.
- Between 2013 and 2016, the number of reconvictions for very serious offences increased from 0.3 to 0.7 per 100 occupied tbs places per year.

In 2013 a manual for reporting criminal offences during the tbs measure was issued to support the previously introduced mandatory reporting of offences in the tbs. The increase in the number of reconvictions could be as a result of the introduction of this manual on reporting practice.

Risk of reconviction remains constant or decreases slightly during both the inpatient and outpatient phases; Risk of reconviction increases slightly during the conditional discharge phase of the tbs measure

- The MSA results show that, during the inpatient and outpatient phases, the risk of reconviction remains more or less unchanged or decreases slightly, as a tbs patient progresses through the phase.
- During the conditional discharge phase, on the other hand, the risk of reconviction increases slightly during the first 1 to 2 years after conditional discharge has been granted.

These findings indicate that the granting of additional freedoms during the tbs measure does not substantially increase the risk of reconviction in any of the phases of the measure. One area which could be focussed on is the first year of conditional discharge. The slight increase in risk of reconviction at the start of this phase indicates that the level of security and supervision is more likely to be too low than too high. On the other hand, this is a relatively slight increase in the risk of reconviction for all offences, including relatively minor offences. The question is whether the effect of an increase in the level of supervision and restrictiveness, in order to decrease the risk at the beginning of the conditional discharge, would outweigh any undesirable side effects.

The younger a tbs patient was when they received their first conviction, the greater the risk of reconviction during the tbs; An index conviction that includes a violent property offence, vandalism or a public order offence, increases the risk of reconviction during the tbs

- There is a relationship between age at the time of first criminal conviction and reconviction during each of the tbs phases (inpatient, outpatient and conditional discharge), whereby a younger age is related to a higher risk of reconviction.
- We also find that when the index conviction for which the tbs was imposed includes a violent property offence, the risk of being reconvicted during the conditional discharge phase is higher than when the index conviction includes a violent offence. In addition, a vandalism offence or a public order offence, rather than a violent offence, in the index conviction, is associated with a higher risk of reconviction during both the inpatient and outpatient phases.

These results are in line with previous findings on reconvictions following release from a criminal justice intervention.

Discussion

The aim of this study was to determine whether it is feasible to carry out research on reconviction during a criminal justice intervention, using reliable methods that provide interpretable results.

To what extent were we successful in researching reconvictions during the tbs with compulsory care measure?

Using two methods, SC and MSA, we have reported the extent of reconviction for all offences and for very serious offences. With SC, we have been able to describe annual trends in reconvictions for all offences and for very serious offences for every 100 tbs places occupied per calendar year. With this method all reconvictions are included in the analyses, giving a complete overview of reconvictions committed during the various phases of the tbs measure. With MSA, we were able to investigate how the risk of reconviction develops throughout each phase of the tbs, that is, we were able to determine at what point in time the risk of reconviction is highest. We also identified characteristics associated with reconviction. However, we were not able to apply MSA to reconviction for very serious offences, due to their scarcity. Furthermore, for reconvictions for all offences, we were compelled to work with cohorts containing a large number of entry years. As a result, we can only draw limited conclusions on trends in the risk of reconviction development during the tbs phases or the characteristics associated with reconviction. In addition, with the multistate model we used in this study we were only able to identify the risk of the first offence that lead to a reconviction. Due to the long duration of the tbs measure, there is a real chance of repeat reconvictions. As yet, we do not know how the risk of subsequent reconvictions develops.

In the future the method developed in this study will be applied to other criminal justice interventions. What possibilities and problems do we anticipate?

For criminal justice interventions that are imposed on large groups of offenders, it will likely be possible to use MSA. This will provide insight into how the risk of very serious offending develops, as well as which characteristics are related to reconvictions for very serious offences, during the different phases of a criminal justice intervention. In addition, with large offender groups, cohorts consisting of one, or a small number of entry years, could be used. On the other hand, some problems that we have encountered for the tbs measure are likely to apply to other criminal justice interventions. For example, if MSA can only be used to examine the first reconviction during an intervention, this will be a limitation for offender groups with a high risk of reconviction. This limitation will be less severe for groups with a low reconviction risk or for short criminal justice interventions.

Finally, an important but not insurmountable limitation of this and future studies is the complexity of the MSA method, in particular. The interpretability of the results is of great importance, as the findings must be accessible to policymakers and those working in the field. Time will tell whether we have succeeded in mapping reconvictions during a criminal justice intervention in a reliable and interpretable manner. Nevertheless, an important first step has been taken to develop a method with which a reliable estimate can be made of reconviction during a criminal justice intervention.