

## Chapter 12

# AGGRESSION CONTROL THERAPY FOR FORENSIC PSYCHIATRIC PATIENTS: DEVELOPMENT AND PRELIMINARY RESULTS

**RUUD H. J. HORNSVELD**

*La Rijswijk, The Netherlands*

## INTRODUCTION

In The Netherlands, treatment of forensic psychiatric patients was for a long time dominated by a psychoanalytic and client-centered approach. However, in the past five years more and more behavioral treatment programs have been implemented, especially for sexual offenders. But until a few years ago, a treatment program focusing directly on aggressive or violent behavior was lacking. As a result of the workshop given by Arnold P. Goldstein in May 2000, a Dutch version of Aggression Replacement Training (ART), called Aggression Control Therapy (ACT) (Hornsveld, Van Dam-Baggen, Leenaars, & Jonkers, 2004) has now been implemented in a number of Dutch institutions for forensic psychiatric in- and outpatients.

In this chapter, the development and first evaluation of ACT for forensic psychiatric patients is described. To begin with, brief information about the Dutch forensic psychiatric population is provided, together with the problem behaviors of this population in relation to their use of violence. After that, the focus moves to the method of evaluation with a description of the measurement instruments and the framework of the therapy. Finally, preliminary results are discussed.

## FORENSIC PSYCHIATRY IN THE NETHERLANDS

### **Inpatients Placed at the Disposal of the Government**

The Dutch TBS law states that “a person is not punishable if he commits an act for which he cannot be responsible.” Placed at the disposal of the government means,

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briefly, that following the advice of a psychiatrist and a psychologist, a person is placed in a specialized hospital until their risk of recidivism has been reduced to an acceptable level. Every one or two years a judge decides about the prolongation or termination of the TBS sentence. The average duration of TBS sentences is currently 65 months. For such a sentence it is necessary that:

- (a) there is a psychiatric disorder or an insufficient development of the mental faculties which makes the perpetrator less responsible for the committed acts;
- (b) there is an offence committed for which the offender can be sentenced for at least four years' unconditional imprisonment;
- (c) the existing disorder and the committed offense are associated with each other; and
- (d) on the ground of the disorder there is a real risk of reoffending. To be placed at the disposal of the government is first of all a security measure; the offender is not forced to cooperate with the proposed treatment.

Van Emmerik and Diks (1999) investigated the population of TBS hospitals during the period 1995–1997. The amount of (sexual) violence of the TBS offence could be described as follows (on January 1, 1998): material damage (5%), threat (20%), injury (50%), and mortal termination (25%). The most important DSM categories found in the population on Axis I were substance abuse related disorders (31%) and psychotic disorders (26%); and on Axis II personality disorder not elsewhere described (33%), and antisocial personality disorder (19%). Most of the TBS offenders (95% males, 5% females) had a disorder on both Axis I and Axis II, 16% had only an Axis I disorder and 24% had only a personality disorder (Axis II).

### **Outpatients with Conditional and Alternative Punishments**

In The Netherlands, the court can require juvenile and adult forensic psychiatric outpatients to undergo treatment as:

- (a) an added conditional punishment for offenses to which imprisonment for three years or less applies;
- (b) an alternative punishment for offenses to which imprisonment for six months or less applies;
- (c) a condition of suspension of detention while awaiting trial;
- (d) part of a penal programme; and
- (e) a supervision element for a youth protection agency.

In most cases, the court has determined a link between “insufficient development or pathological disorder of mental faculties” and their offenses, based on examination by a psychiatrist and a psychologist.

### **PROBLEM BEHAVIORS OF FORENSIC PSYCHIATRIC PATIENTS**

From research and clinical experience there are numerous indications that violent forensic psychiatric patients have a range of problem behaviors. First of all,

generally speaking, they do not observe social situations adequately, partly because of attention deficits (Lochman, White, & Wayland, 1991). Second, like most aggressive people, forensic patients are more likely than non-aggressive people to perceive the behavior of others as provocative (Dodge, Price, & Bachorowski, 1990), probably because of biased cognitive schemas (Beck, 1990). False interpretations of the behavior of others may result in a drastic increase of arousal, which is experienced as an extreme emotion such as anger or rage. Most of the time, aggressive persons cannot regulate their level of arousal when they are angry. They do not have sufficient capacity to place themselves in other positions and they have few problem-solving skills (Feindler & Ecton, 1986) and social skills (Hollin & Palmer, 2001) at their disposal. Above all, aggressive people pay attention to the short-term positive consequences of aggressive behavior, such as terminating provocation, acquiring the desired goods, and gaining a higher status among peers (Bandura, 1973). Negative long-term consequences have little effect, perhaps because of the insensitivity to punishment (Lykken, 1995) and a restricted awareness of current norms and values (Raine, 1993).

## METHOD

### Patients

Essentially, nearly all forensic psychiatric patients are indicated for ACT, since they are sentenced for violent crimes. However, there are contraindications for treatment which include acute psychosis, acute substance abuse (only for the outpatient and day treatment centers), insufficient knowledge of the Dutch language/very low IQ, and inability to participate adequately in a group of eight patients.

### Measurement Instruments

Self-report questionnaires, risk assessment, and observation scales for personality traits and various elements of aggressive and competent social behavior are used in the evaluation. The NEO-FFI and the PCL-R are scored at the start of the therapy. All other instruments are used at the start, at the end, and at the last follow-up session.

#### (1) *Self-report questionnaires*

- NEO Five Factor Inventory (NEO-FFI: Hoekstra, Ormel, & De Fruyt, 1996), for assessing personality traits according to the Big Five: Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness.
- Self-Analysis Questionnaire (ZAV: Van der Ploeg, Defares, & Spielberger, 1982), Dutch version of the Spielberger State-Trait Anger Scale (Spielberger, 1980) for assessing anger as a trait (ZAV-D).
- Attribution Questionnaire (ATV: Hornsveld, Nijman, Lammers, Van Dam-Baggen, & Kraaimaat, 2002), an experimental questionnaire for assessing hostility using 17 pictures from the Rosenzweig Picture-Frustration Study (RPFS: Hörmann & Moog, 1957).

- Agressie Vragenlijst (AVL: Meesters, Muris, Bosma, Schouten, & Beuving, 1996), the Dutch version of the Aggression Questionnaire (AQ: Buss & Perry, 1992) for assessing various types of aggressive behavior.
  - Novaco Anger Scale (NAS: Novaco, 1994), for assessing anger and rage. The psychometric properties of the Dutch version are still being evaluated.
  - Inventory of Interpersonal Situations (IOA: Van Dam-Baggen & Kraaimaat, 2000b), an inventory for assessing social anxiety and social skills.
  - Alexithymia Questionnaire (BVAQ: Bermond & Vorst, 1996), for assessing the ability to cope with emotions. A lower score is supposed to indicate a more adequate ability to cope with emotions than a higher score.
- (2) *Risk assessment*
- Psychopathy Checklist—Revised (Vertommen, Verheul, De Ruiter, & Hildebrand, 2002), the Dutch version of the PCL—R (Hare, 1991) for identifying psychopathy with the following two factors: “egotistic, insensitive and remorseless use of others” (factor 1) and “chronically unstable and antisocial behaviour” (factor 2).
- (3) *Observation scales*
- Observation Scale for Behavior in Conflict Situations (OGC; Hornsveld, Lammers, Kraaimaat, & Van Dam-Baggen, 2001), an experimental scale for measuring aggressive and socially competent behavior on the ward.

In one hospital (FPI De Kijvelanden, Rotterdam) two observation scales are also completed every nine months for all patients:

- Rehabilitation Evaluation (REHAB; Baker & Hall, 1988; Van der Gaag & Wilken, 1994), for measuring the general functioning level of chronic psychiatric patients. Van der Gaag and Wilken (1994) translated and revised this instrument for the Dutch situation.
- MI Observation scale (Brand, Diks, & Van Emmerik, 1999). This scale was developed by the Dr F. S. Meijers Institute to determine the number of behaviors on a unit and has the following subscales: cooperative behavior, social skills, domestic skills, antisocial behavior, positive coping skills, and negative coping.

## Procedure

The evaluation has an explorative character as no control conditions could be included. Since most forensic institutions in the Netherlands only recently started with behavior-oriented treatment plans, indications for ACT are usually done in the course of the treatment. Therefore, is also not possible to use patients as their own control.

All hospitals and the outpatient treatment centers use both the same study design and measurement instruments. Generally TBS hospitals are small (about 100 beds), with a long average duration of treatment (last year 65 months), and typically part of the population is contraindicated (e.g. acute psychosis) or refuses to participate in treatment. The number of patients in the outpatient centers who are sentenced

to an alternative punishment is also relatively small. By combining the data from the hospitals and the outpatient centers, the sample size will possibly allow more reliable conclusions to be drawn from the study.

The ACT assumes specific skills deficits in the population of forensic psychiatric patients, since prison inmates have received no psychiatric treatment in The Netherlands until now. However, the question is whether there are there differences in problem behaviors between forensic psychiatric inpatients and delinquents with long imprisonment. Therefore both groups were compared with each other in regard to aggressive and socially competent behavior.

### **Framework of the Aggression Control Therapy**

For the development of treatment scenarios for ACT, Aggression Replacement Training (Goldstein, Glick, & Gibbs, 1998) was a starting point. The following objectives were added:

- (a) more focus on the specific problem behaviors of forensic psychiatric patients;
- (b) learning self-regulation skills for maximal generalization;
- (c) part of a total treatment program in a forensic psychiatric hospital; and
- (d) to be applicable in day treatment or outpatient settings. ACT consists of 15 weekly sessions and 3 follow-up sessions of 1½ hours. The follow-up sessions take place at 5, 10, and 15 weeks after the end of the therapy.

The main goal of the therapy is that patients learn to deal better with conflict situations via the following behavior changes:

- Sessions 1–5: dealing adequately with feelings of irritation, anger, rage, and aggression (anger control).
- Sessions 6–10: improving or extending related social skills (social skills).
- Sessions 11–15: becoming more knowledgeable of current Dutch norms and values and learning to resolve moral problems better (moral reasoning).
- Sessions 6–15: making programs for practicing new behaviors (self-regulation skills).
- Sessions 16–18: follow-up and evaluation.

The modules for social skills and for self-regulation skills are largely based on the social skills therapy of Van Dam-Baggen and Kraaimaat (2000a). For therapists a detailed treatment scenario (Hornsveld, 2004a) has been developed and participants in the therapy receive a portfolio in which they can make homework assignments. The forms in the portfolio for making reports of the homework assignments are easy to complete; therefore patients with a low IQ can participate in ACT too. For the inpatients, special weekly interim sessions take place at the Education Department, so that they can carry out the homework assignments under supervision of this department.

## PRELIMINARY RESULTS

First of all, we compared pre-treatment measurements of 13 outpatients with the pre-treatment measurements of 39 inpatients and with the measurements of 20 delinquents with long imprisonment who did not receive treatment. No significant differences were found on the self-report questionnaires, with the exception of the AVL (Aggression Questionnaire). Remarkably, outpatients scored significantly higher on this questionnaire than the other two groups. Second, of the three therapy groups, we compared the pre-treatment measurements with the post-treatment measurements and with the follow-up measurements. The three groups consisted of two groups of 10 inpatients (3 drop-outs not included) and one group of 5 outpatients (3 drop-outs not included). For the two-inpatient groups, ward observation ratings were available. Although no significant differences were found, most trends were in the predicted direction. We also calculated correlations between scores on self-report questionnaires and the ratings from the observation scales, finding low to negative correlations.

## DISCUSSION

Although the sample size during this first evaluation in 2001 was small, and differences between pre-, post-, and follow-up measurements were not significant, we did find a positive trend in the data which suggests that the likelihood of significant results will increase when more treated patients are included in the study.<sup>1</sup> This position is in accordance with the general findings in the literature about treatment programs for adult forensic patients: i.e. treatment effects turn out to be limited, even with larger sample sizes (Quinsey, Harris, Rice, & Cormier, 1998; Cooke & Philip, 2001).

However, we have to realize that what is evaluated for the inpatients is not only the ACT. Since the evaluation concerns *all* interventions in which patients participate during a period of 30 weeks, the essential contribution of the therapy to a possible effect of all those interventions still needs to be demonstrated.

The low correlations between scores and ratings on identical questionnaires and observation scales affirmed us in the choice of developing a more specific observation scale (OGC) for forensic psychiatric patients. By means of this observation scale, not only can different forms of aggressive behavior be registered, but also socially competent behavior. After all, the aim of the therapy is to reduce aggressive behavior by increasing prosocial behavior.

We shall investigate if it is possible to combine inpatient groups with outpatient groups. The fact that we found a significant difference between the groups on an aggression measurement may suggest that this combination is not allowed. However, with a larger sample size we may be able to determine which personality characteristics predict treatment outcome. In this way we hope to find criteria for differentiating between positive and negative indications for ACT (e.g. the score on the PCL-R). More delinquents with long imprisonment will be asked to

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<sup>1</sup> At the end of the evaluation, in 2003, these significant results were for the most part confirmed (Hornsveld, 2004b).

complete the self-report questionnaires in order to allow more reliable comparisons between measurements of forensic psychiatric patients and delinquents with long imprisonment. If we find few or no significant differences again, the conclusion may be that the two groups do not differ in aggressive and socially incompetent behavior after a long stay in hospital or prison. The critical question for the future is whether a different treatment policy for forensic psychiatric patients and delinquents with long imprisonment is warranted.

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