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Assertive community treatment and associations with delinquency

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ABSTRACT

This article draws on a prospective longitudinal study in which Assertive Community Treatment (ACT) model fidelity and patient outcomes were assessed in twenty outpatient treatment teams. 530 severely mentally ill patients participated in the study. Delinquency outcomes were assessed three times during a two-year follow-up period.

At baseline, 49% of the patients had a recent criminal history, meaning that they had at least one reported contact with the police and/or the justice system in the past year. Patients with a recent criminal history had more serious psychosocial problems at baseline compared to those without a recent criminal history. Delinquency outcomes showed improvement over time, but this was not associated with ACT model fidelity. The study shows an association for homelessness and criminal activity. The persistent criminal activities of some of the patients showed that for this group extra interventions are needed that specifically target reduction of criminal behavior.

1. Introduction

Patients with severe mental illness (SMI) frequently have contact with the justice system (Morrisey, Meyer, & Cuddeback, 2007). There may be several reasons for this association. First, a large proportion of people with severe mental illness have besides their psychiatric problems, additional problems including substance abuse or dependence, social and behavioral problems (Wilson, Tien, & Eaves, 1995). Second, people with SMI belong to the poorest citizens of a country (Frank & Glied, 2006), which forces them to live in depleted neighborhoods, housing projects or homeless shelters. These are environments where the concentration of other marginalized citizens, unemployment, crime, victimization and family breakdown are widespread (Draine, Salzer, Culhane, & Hadley, 2002; Fisher, Simon, & Roy-Bujnowski, 2011). US-statistics show that as a group, persons with severe mental illness are jailed more often than hospitalized (Morrisey et al., 2007). In a large US-study, persons displaying symptoms characteristic of mental illness were found to have a 67% higher probability of being arrested than persons without mental problems (Teplin, 1994, 2000).

1.1. Long term outcomes of patients with a criminal history

Previous studies have shown that SMI patients with a criminal history have poorer baseline and long term outcomes than SMI patients without a criminal history (Fakhoury, Priebe, & PLAO Study Group, 2006; McGuire & Rosenheck, 2004; Morrisey et al., 2007). McGuire and Rosenheck (2004) found that among homeless patients with SMI, patients with a long term history of incarceration had more serious psychiatric and substance abuse problems than those with a short term incarceration history or those without a history of incarceration. Patients with an incarceration history showed poorer psychiatric 12-month outcomes than those with no history of incarceration. Fakhoury, Priebe, and PLAO Study Group (2006) found that among SMI patients with substance abuse, those who suffer from social exclusion and forensic problems had poorer outcomes than the rest of the patients in terms of (compulsory) hospitalization. In the study of Morrisey et al. (2007) higher rates of substance abuse and homelessness were found for SMI patients with a recent criminal history compared to patients without a recent criminal history.

1.2. Assertive community treatment for patients with severe mental illness

Assertive Community Treatment (ACT) is an evidence-based model for providing services to SMI patients with many hospitalizations and treatment failures. ACT was developed in the 1970s as a community alternative to psychiatric hospitalization (Stein & Test, 1980) and has been disseminated across the US and several other Western countries. A large proportion of the patient population of ACT teams consists of people with psychotic disorders and several other problems, such as substance abuse, homelessness, debts, unemployment, crime and victimization. ACT combines treatment, rehabilitation, and support services in a multidisciplinary team made up of a mix of disciplines

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including psychiatry, nursing, addiction counseling, and vocational rehabilitation. Key principles of ACT are: integration of services, low patient-staff ration, locus of contact in the community, medication management, focus on everyday problems in living, assertive outreach, and time unlimited services.

ACT is a widely studied model and has been found to produce better hospitalization and housing outcomes than other treatments (Bond, Drake, Mueser, & Latimer, 2001). ACT model fidelity can be measured using the 28-item DACTS (Bond & Salyers, 2004; Teague, Bond, & Drake, 1998). Studies have shown that ACT model fidelity is associated with better outcomes for patients (McGrew, Bond, Dietzen, & Saylers, 1994; McHugo, Drake, Teague, & Xie, 1999; van Vugt et al., 2011).

1.3. Assertive community treatment and criminal outcomes

Unfortunately, ACT has not proven to be more effective than other treatments in reducing criminal justice contacts (Bond et al., 2001; Calsyn, Yonker, Lemming, Morse, & Klinkenberg, 2005). A review of Bond et al. (2001) in which twenty-five randomized controlled trials (RCTs) were included, examined the evidence regarding the effectiveness and cost effectiveness of ACT. Ten of these RCTs included delinquency outcomes, such as the number of arrests and detention time. Seven studies found no difference in effects on delinquency outcomes between ACT and the control group, two studies were in favor of ACT and one in favor of the control group. Calsyn et al. (2005) described a randomized controlled trial of homeless patients with dual disorders who were assigned to ACT, care as usual (CAU) or integrated treatment (IT). ACT was not more effective in reducing criminal behavior than CAU or IT. Patients in ACT and IT did show better outcomes on hospitalization, housing, mental health and drug use than CAU. These positive outcomes showed no correlation with the delinquency outcomes. Earlier criminal behavior was the strongest indicator for several delinquency outcomes, such as arrests and indictments. Calsyn and colleagues therefore concluded that the benefits of ACT do not automatically transfer to criminal behavior. A small study (Staring, Blaauw, & Mulder, 2012) showed that Assertive Community Treatment (ACT) combined with Integrated Dual Diagnosis Treatment (IDDT) was associated with a decrease in nuisance acts and crime convictions in dual-diagnosis repeated offenders. The decrease in nuisance acts was associated with a decrease in substance abuse. Beach et al. (2013) found in a large study among ACT programs that patients with a recent forensic history had more frequently a recent history of homelessness. Further, the study showed that substance abuse and homelessness were associated with increased recidivism and homelessness at follow-up.

1.4. Research questions

The results of the previous studies indicate a difficult interplay between mental illness, substance abuse, social exclusion, homelessness and delinquency. In the present study the following questions were examined:

1.) Can we confirm differences in the level of psychosocial problems between SMI patients with and without a recent criminal history?
2.) Is there an improvement of delinquency outcomes over time?
3.) Is ACT model fidelity associated with improvements on delinquency outcomes?
4.) Is the level of psychosocial problems associated with improvements on delinquency outcomes?

2. Methods

2.1. Design

This study was part of a Dutch national study on the association between ACT fidelity and outcomes, conducted from 2005 to 2008 (van Vugt et al., 2011). In this study twenty outpatient teams serving SMI patients participated, located in different regions of the Netherlands. The teams in this study made different choices for the implementation of outreaching care for patients with severe mental illness. Adherence to ACT fidelity criteria was not always the aim (van Vugt et al., 2011). All teams can be characterized as regular outpatient teams for SMI patients, which means that no special attention was paid to forensic issues.

Patients included in this study had to meet two of the following criteria: a period of homelessness during the past year; an average of six outpatient contacts per month during the past year; a Global Assessment of Functioning score of forty or less at time of study entry; two admissions or fifty hospital days in the past year. With these research inclusion criteria, we were able to analyze the most severely mentally ill patients.

2.2. Measures

2.2.1. Patient outcomes

The outcome measures were the following delinquency outcomes: contact with the police and/or justice system (yes coded as 1, no coded as 0), and the number of days in detention. Contact with the police and/or justice system was determined by one (or more) reported contact(s) with the police or/and the justice system, including patients who are serving a sentence.

Data were collected on: demographics (including age, gender, living area, marital status, educational history and ethnicity), diagnosis (Diagnostic and Statistical Manual of Mental Disorders IV, DSM IV, as assessed by the psychiatrist of the team) (American Psychiatric Association, 1994), mental and social functioning (Health of the Nation Outcome Scales, HoNOS) (Wing, Beevor, & Curtis, 1998), needs for care (Camberwell Assessments of Need Short Assessment Schedule, CANSAS) (Slade, Thornicroft, Loftus, Phelan, & Wykes, 1999), employment status, use of mental health care (including hospitalization for psychiatric problems and hospitalization for substance abuse problems), reported contacts with police or/and the justice system, and the number of days in detention.

The HoNOS is a widely used and valid 12-item observer-rated measure intended to map a patient's mental state and functioning. In our analysis we used the mean total score of the 12 items, which expresses the total level of functioning and HoNOS item 3, which measures the presence and severity of addiction problems. The CANSAS is a measure assessing the health and social needs of people with mental health problems. We used the rater-perspective version. For this study we added 3 items on the 22-item CANSAS, including personal recovery, paid employment and side effects of medication (Drukker et al., 2010). In the analysis we included the total unmet needs and the total met needs with respect to the 25 items.

Patients were followed up to twenty-four months, with data collection at baseline (T0), twelve months (T1) and twenty-four months (T2). All outcome data were collected by trained mental health care workers. To optimize reliable measures a central training was given before the T0 assessments; booster sessions were given one year later (before the T1) and after two years (before the T2). We used the train-the-trainers method: the centrally trained care workers trained their teammembers at the sites.

2.2.2. Team outcome: ACT model fidelity

In this study, fidelity to the ACT-model was assessed at baseline and after two years by independent raters with the Dartmouth Assertive Community Scale (DACTS), which was translated into Dutch (van Dijk, Mulder, & Roosenschoon, 2004). The process of measuring ACT fidelity has been reported in more detail elsewhere (van Vugt et al., 2011). The DACTS consists of 28 items, each rated on a 5-point scale (1 means not implemented, 5 means fully implemented).