Clinical Outcomes of Defendants in Mental Health Court

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Objective: **Mental health courts successfully divert defendants into treatment. However, few studies have examined whether this increased access to services positively affects client outcomes. This study compared changes in symptoms in a sample of defendants in Broward County mental health court with such changes in a comparison sample of defendants in a regular court.** ***Methods:*** **Participants included 116 defendants from mental health court and 101 defendants from a magistrate court who were assessed one, four, and eight months after an initial court appearance by using the Brief Psychiatric Rating Scale (BPRS). Both administrative and self-report data were used to identify defendants who received treatment after their initial court appearance. Participants were included in our analysis if they had at least one follow-up interview.** ***Results:*** **A total of 97 defendants from mental health court and 77 from the regular court were included in our analysis. Analyses of covariance performed on changes in BPRS scores revealed no significant main effects by type of court, receipt of treatment, or the interaction between type of court and receipt of treatment.** ***Conclusions:*** **Although mental health courts have been found to increase defendants' access to mental health services, they have little control over the type and quality of services that defendants receive. The fact that reductions in symptoms were not observed among defendants who received treatment in either court setting more likely reflects the chronic nature of their disorders and concerns about the adequacy of our public mental health system, rather than a failure of the mental health court. (*Psychiatric Services* 56:829–834, 2005)**

Mental health court is one type of special jurisdiction court that has proliferated during the past decade (1). Although no prototypical mental health court exists (2,3), one characteristic shared by this type of court is the goal of diverting defendants from the criminal justice system into treatment (4).

Little evidence exists that supports the effectiveness of these treatment-oriented courts (2–5). Comparison of one-year outcomes of defendants who received mandated court-monitored treatment with the outcomes of those who did not showed that a significantly higher percentage of defendants who received this treatment had positive outcomes (59 percent compared with 28 percent), as defined by fewer arrests and psychiatric hospitalizations and less homelessness and violence (6).

Findings from the evaluation of Kings County, Washington, and Seattle municipal mental health courts showed that the courts in both areas were effective in reducing crime and increasing treatment referrals and engagement for persons with mental illness (5). It was further noted that the effect sizes associated with these outcomes were in the medium to medium-large range and thus have practical consequences for defendants.

A study examined 121 defendants from Broward County mental health court and 101 defendants from a regular court in Hillsborough County to determine the impact of the mental health court on defendants' access to behavioral health services and concluded that the mental health court had a meaningful role in enhancing defendants' access to care (7). The study showed that the percentage of defendants from the mental health court who received behavioral health services significantly increased, from 36 percent during the eight months before their initial court appearance to 53 percent during the eight months after their initial appearance. In contrast, the likelihood of receiving treatment among defendants in the regular court remained virtually unchanged during this time frame (29 to 28 percent). Also, a study of a mental health court in Santa Barbara, California, reported improvements in quality of life for individuals who participated in the court (8).

Despite the promising findings of these studies, it remains unknown whether increased access to services results in measurable clinical im-

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provement—for example, reduced symptoms. Hence the goal of our study was to examine changes in symptoms of defendants whose cases were processed in a mental health court in Broward County or a regular court in Hillsborough County. This study specifically addressed three questions: Did changes occur in defendants' symptoms over time? Were changes in symptoms associated with receipt of treatment? Was there a change in symptoms by type of court?

Background

The mental health court in Broward County began in June 1997 to "provide for the expeditious evaluation and treatment of defendants with mental disability" (9). Access to the court is limited to individuals charged with nonviolent misdemeanors, ordinance violations, or criminal traffic charges (excluding charges for domestic violence and driving under the influence). Because the court was designed to permit broad access to defendants in need of treatment, no formal diagnostic criteria are used (10). Instead, defendants are typically referred to the court by magistrates who conduct initial hearings that include a mental health screening by students who are earning their doctoral degree in clinical psychology (11). However, multiple stakeholders—including judges, mental health staff of the jail, mental health advocates, and family members—may refer cases to the mental health court.

Although mental health courts provide an important gateway to treatment, it is important to note that these courts have little influence or control over the type and quality of services that defendants receive. This finding is consistent with the explicit objectives in creating the Broward County mental health court, which included to "efficiently move people from an overcrowded jail system into the mental health system" (12). Thus the Broward County mental health court was created without any new funding or staff resources that were dedicated specifically for purchasing or monitoring clinical services, and it relies almost exclusively on the system of community providers to determine, prescribe, and monitor the appropriate clinical services.

Our observations show that the Broward County mental health court facilitates positive features of procedural justice (13). We have observed, as have others, that this mental health court is informal and involves interaction and dialogue between the judge and the participant about problems and treatment options (4,13). This mental health court is respectful of participants and has adopted a supportive, instructive, and problem-solving style designed to improve the mental health of its participants. The speedy disposition of cases is not a high priority of the court. Instead the court places greater emphasis on ensuring that defendants comprehend and understand the proceedings in which they are engaged. These issues are important insofar as theorists have argued that enhancing procedural justice features may lead to improved therapeutic outcomes for persons with mental illness who are directed into mental health treatment by way of the legal system (14,15). In contrast, observations of the regular court (13) used for comparison in this study suggest that such features are largely absent. Hearings are conducted by remote video, the judge and attorneys do most of the talking, and the implicit, if not explicit, agenda appears to be quick resolution of the charges. A plea agreement is often offered by the judge and agreed to by counsel, and defendants usually are not encouraged to speak except in response to plea offerings.

Methods

Participants

Our study's evaluation used a nonequivalent comparison group design (16) to compare the clinical outcomes of defendants who were involved in the Broward County mental health court with those of a matched sample of defendants from a misdemeanor court in another county. The regular court was selected from Hillsborough County because it closely represented the site of the mental health court on various demographic and census variables. Delayed enrollment was used in the comparison sample to ensure that defendants in both courts had similar demographic and clinical characteristics. Although diagnoses were not obtained as part of this evaluation, progress reports from the mental health court indicated that 17 percent of the defendants were given a diagnosis of schizophrenia; 25 percent, major depression; 24 percent, bipolar disorder; and 34 percent, other diagnoses (17). No information on diagnoses was available for defendants in the regular court.

Measures

Clinical status. The Brief Psychiatric Rating Scale–Anchored Version (BPRS) was used to assess and monitor the clinical status of defendants in the two courts (18). This version of the BPRS consists of 18 symptoms (for example, suspiciousness, disorientation, and anxiety) that are rated for frequency and severity on a 7-point scale. The scale ranges from "not present" to "extremely severe" and includes anchors in the form of behavior examples for each item rating option. The BPRS yields a global index of the severity of current psychopathology and four subscores associated with psychoticism, emotional withdrawal, hostility, and depression. Scoring is based on self-report and behavioral observations during a clinical interview. Possible scores of the global index range from 18 to 126, with higher scores indicating greater severity (18). The BPRS was designed to measure change across groups of individuals to evaluate outcomes and assess change resulting from treatment (19). The reliability and validity of the BPRS have been well documented across studies (20). The BPRS was administered by highly trained research assistants who, to the extent possible, clinically assessed and interviewed the same defendants for the duration of the study. The anchored version of the BPRS used in this study has been shown to produce acceptable interrater reliability (18).

Service use. Two data sources were used to determine whether participants received treatment during the eight months after their initial court appearance. First, data were obtained from administrative records on all mental health and substance abuse services that were paid for by either

Medicaid or state general revenue dollars. Second, self-reported service use was obtained directly from participants during face-to-face interviews (10), involving procedures detailed elsewhere (21). Defendants were considered to have received treatment if they either had an administrative service record or reported using services during the follow-up interviews. The rationale for the decision to use both methods to denote service was based on the fact that the administrative data sources were limited to specific payer sources (that is, Medicaid and state general revenue) and did not include other potential sources of service (for example, federal and county). Stiles and colleagues (22) have described issues related to operationalizing service.

Table 1

Comparison of defendants in the mental health court and in the regular court[a]

Characteristic	Mental health court (N=116)		Regular court (N=101)	
	N	%	N	%
Gender				
Male	79	68	61	60
Female	37	32	40	40
Race or ethnicity				
White	71	61	58	57
Black	28	24	26	26
Hispanic	10	9	16	16
Other	7	6	13	13
Age (mean±SD years)[b]	36.4±10.4		37.7±9.6	
BPRS score (mean±SD)[c]	34.6±9.8		34.1±7.8	

[a] All differences between groups were nonsignificant.

[b] Age ranged from 18 to 63 years for defendants in the mental health court and from 20 to 57 years for those in the regular court.

[c] Brief Psychiatric Rating Scale. Possible scores range from 18 to 126, with higher scores indicating greater severity. Scores ranged from 18 to 65 for defendants in the mental health court and from 18 to 55 for those in the regular court.

Procedures

Each day, project staff monitored the mental health court and attempted to contact each new defendant after the hearing to solicit his or her participation in the study. To ensure that the two samples were closely matched on demographic and clinical variables, recruitment of defendants in the regular court was lagged two months behind that of defendants in the mental health court and involved multiple strategies. To recruit defendants for the regular court sample, project staff obtained a list of defendants who were referred for psychiatric care while in jail or who were housed in the jail's mental health units. Staff also attended the magistrate court to observe whether defendants' behaviors were suggestive of possible mental disorder. These processes produced a list of defendants from the magistrate court who could be potentially recruited for our study. Demographic features of defendants from the mental health court were continually monitored, and defendants in the comparison group were recruited to mirror the characteristics of the sample from the mental health court.

Before the start of the study, all procedures were reviewed and approved by the institutional review board of the University of South Florida. Informed consent was obtained on enrollment, and trained research assistants contacted participants one, four, and eight months after enrollment for subsequent administrations of the protocol. Participants were paid $20 for each completed interview. Data collection occurred between December 1999 and August 2003. More complete details of this evaluation are provided elsewhere (10,21).

Analyses

An analytic approach was used that examined the average change from baseline to follow-up. This approach determined whether significant changes occurred in defendants' clinical status during the eight months after their initial court appearance. First, each defendant's total BPRS score at intake was subtracted from the total BPRS score at each of the follow-up interviews (one, four, and eight months). Then all the changes in scores were averaged. These same procedures were used for each of the four subscales of the BPRS. This approach permitted the inclusion of participants even when fewer than all three follow-up interviews had been completed. Participants were included in our analysis if they had at least one follow-up interview. A total of 68 participants (39 percent) had one follow-up interview, 54 (31 percent) had two follow-up interviews, and 52 (30 percent) had three follow-up interviews. A total of 121, or 70 percent, were interviewed at eight months. The use of summary measures to compare program outcomes is well documented in the literature (23,24). However, to ensure that the use of the average change did not mask initial changes in one direction with subsequent changes in the opposite direction, the average deviations from baseline at each period were examined. These results indicated that all effects sizes were small (that is, less than .15) and nonsignificant (25).

After the average change in score from baseline was calculated, changes in scores were analyzed by whether the defendant received treatment, by the type of court, and by the interaction between type of court and receipt of treatment. Analysis of covariance (ANCOVA) procedures were used in which the intake BPRS scores were included as a covariate. Because previous studies have found client outcomes to be associated with treatment dosage (26), defendants were reclassified into multiple treatment categories based on varying levels of treatment and the data were reanalyzed.

Results

Sample

Table 1 shows that the matching process was successful; no significant differences were found between de-

Table 2

Comparisons of defendants retained during follow-up and those who dropped out of the study[a]

Characteristic	Completed the study (N=174)		Dropped out (N=53)	
	N	%	N	%
Gender				
Male	108	62	30	57
Female	66	38	23	43
Race or ethnicity				
White	99	57	32	60
Black	39	22	12	23
Hispanic	17	10	4	8
Other	19	11	5	9
Age (mean±SD years)[b]	38.5±10.2		37.3±9.9	
BPRS score (mean±SD)[c]	33.7±8.9		36.5±8.7	

[a] All differences between groups were nonsignificant.

[b] Age ranged from 18 to 63 years for defendants who completed the study and from 18 to 57 years for those who dropped out of the study.

[c] Brief Psychiatric Rating Scale. Possible scores range from 18 to 126, with higher scores indicating greater severity. Scores ranged from 18 to 65 for defendants who completed the study and from 19 to 64 for those who dropped out of the study.

Table 3

Average change in Brief Psychiatric Rating Scale (BPRS) scores from the initial court appearance to each follow-up visit and effect size estimates among defendants in a mental health court and a regular court who did not receive treatment

Group	Mean±SD change from baseline score		Effect size[a]
	Mean	SD	
All participants (N=174)			
Subscales			
Psychoticism[b]	–.1	2.4	–.04
Depression[b]	–.2	4.2	–.05
Hostility[b]	–.1	2.5	–.04
Emotional withdrawal[b]	.8	3.1	.35
Total BPRS score[c]	.7	10.4	.08
Received treatment (N=135)			
Subscales			
Psychoticism[b]	–.2	2.5	–.08
Depression[b]	–.1	3.9	–.02
Hostility[b]	–.1	2.5	–.04
Emotional withdrawal[b]	1.0	2.9	.52
Total BPRS score[c]	.8	9.9	.09
Did not receive treatment (N=39)			
Subscales			
Psychoticism[b]	.1	1.8	.05
Depression[b]	–.4	5.1	–.08
Hostility[b]	–.3	2.6	–.14
Emotional withdrawal[b]	.3	3.9	.19
Total BPRS score[c]	.6	12.1	.07

[a] The respective intake BPRS standard deviations were used to estimate effect sizes. Negative effect sizes reflect an improvement in symptoms.

[b] Possible scores range from 3 to 21, with higher scores indicating greater severity.

[c] Possible scores range from 18 to 126, with higher scores indicating greater severity.

fendants in the two courts in terms of gender, race or ethnicity, age, or overall level of psychopathology, as measured by the BPRS.

A total of 116 defendants from mental health court and 101 defendants from the regular court originally agreed to participate in our study. Some defendants from both sites were lost to attrition, requested to be disenrolled from the study, or had follow-up data collection conducted by telephone, which precluded administration of the BPRS, leaving 97 defendants from mental health court and 77 from the regular court who were included in our analysis. As shown in Table 2, defendants who were excluded from our analyses did not differ significantly from those who were included in terms of gender, race or ethnicity, age, or overall level of psychopathology.

Symptom change over time

Mean±SD BPRS total scores for all participants were 34.3±9.0 at the time of the enrollment interview. As shown in Table 3, all defendants showed greater severity of psychopathology over time. During the eight-month follow-up period defendants' total BRPS scores increased an average of .7±10.4, representing a nonsignificant effect size of .08. Although defendants' scores on the psychoticism, depression, and hostility subscales dropped during the eight-month follow-up period, these decreases were also not significant and the effect sizes were small. On the emotional withdrawal subscale, defendants' scores increased an average of .8±3.1, representing a small to moderate effect size (24).

Symptom change and receipt of treatment

Defendants with either a behavioral health service claim or self-reported use of behavioral health services were classified as having received treatment. Table 3 reveals that defendants who were treated experienced an average .8±9.9 point increase in total BPRS scores over the eight month follow-up period, and defendants who did not receive any services averaged a .6±12.1 point increase. The effect size associated with this differ-

ence between the treatment groups was only .02, a nonsignificant effect (25). In addition to this nonsignificance, the direction of the effect was contrary to what would be expected—that is, defendants who received treatment actually exhibited a greater increase in symptoms than those who were not in treatment. Examination of the effect sizes associated with changes in clinical status on the four subscales of the BPRS also showed extremely small nonsignificant differences, with the exception of the hostility subscale in which a small to moderate effect of .43 was noted favoring the group that did not receive treatment (25). Analyses based on varying levels of treatment or dosage also resulted in a nonsignificant difference among groups of varying treatment levels.

Change in symptoms by type of court

An ANCOVA was conducted to assess whether change in BPRS total scores over time were associated with type of court, receipt of treatment, or interaction between type of court and receipt of treatment, while the analyses controlled for defendants' intake BPRS scores. The results of this analysis are summarized in Table 4, and Table 5 presents the descriptive statistics associated with this analysis. As can been seen in Table 4, no significant main effects were found for type of court, receipt of treatment, or the interaction between type of court and receipt of treatment. During the eight-month follow-up period, BPRS scores of defendants in the mental health court increased an average of 1.3±11.6, and scores for defendants in the regular court decreased .05± 8.8. Separate ANCOVAs conducted on each of the four BPRS subscales did not indicate any significant main effects or interactions.

Discussion

The results of these analyses did not document any significant change in defendants' clinical status, as measured by the BPRS, associated with receipt of treatment or participation in the mental health court.

Although these results suggest that defendants are not obtaining clinical benefit from receiving mental health services, it should be noted that the classification of defendants into treatment and nontreatment groups was based on the documented or self-reported use of service and units of service provided but not on the type, appropriateness, or quality of the services received. A better understanding of the services that defendants received and the appropriateness and quality of these services might offer more insight into these findings. The fact that positive changes in defendants' clinical outcomes were not detected likely speaks more to the adequacy of the mental health service systems in these counties than to the effectiveness of the mental health court in meeting the court's articulated goals.

Alternatively, it may be that defendants in both courts predominately had chronic illnesses in which, barring recurrent acute psychotic episodes, substantial changes in clinical presentation are infrequent irrespective of treatment. Although more detailed clinical information was not available from our evaluation, this information would have been helpful. Future studies of mental health courts and the examination of other outcome measures should gather this information. This finding also raises questions about whether mental health courts should have greater control over the services to which defendants are referred.

Although this study cannot compare outcomes by the types of services that defendants received, this comparison might be informative. Our findings raise broader policy questions about the creation of courts as a gateway into treatment in the absence

Table 4

Results of an analysis of covariance that analyzed the average change in Brief Psychiatric Rating Scale (BPRS) scores from the initial court appearance to each follow-up (one, four, and eight months after the initial court appearance) among defendants in a mental health court and a regular court (N=174)

Source	Mean square	F	df	p
Intake BPRS score	6,884.24	98.1	1	<.001
Type of court	45.35	.6	1	ns
Receipt of treatment	8.34	.1	1	ns
Type of court × receipt of treatment	5.95	.1	1	ns
Error	70.18		169	

Table 5

Treatment status and average change in Brief Psychiatric Rating Scale (BPRS) scores from the initial court appearance to each follow-up visit among defendants in both mental health court and a regular court (N=174)

Variable	N	%	Mean±SD change in baseline score	Effect size[a]
Mental health court				
Treatment status				
Received treatment	83	48	1.4±10.9	–.01
Did not receive treatment	14	8	1.3±15.6	
Total	97	56	1.3±11.6	
Regular court				
Treatment status				
Received treatment	52	30	–.13±8.2	.11
Did not receive treatment	25	14	.12±10.0	
Total	77	44	–.05±8.8	

[a] Average change in total BPRS standard deviation was used to estimate all effect sizes. Negative effect sizes infer that the non-treatment group had a more positive change (or less regression) compared with the treatment group.

of existing—or the simultaneous creation of—effective community-based services.

Finally, the fact that positive change in defendants' clinical status was not detected within the eight-month follow-up period may suggest that a longer follow-up period (for example, one year) is necessary for positive effects to be realized.

It should be noted that limitations to this study include the nonequivalent comparison-court design and the loss of participants at follow-up. Given these limitations, caution should be exercised when interpreting the results.

Conclusions

This study offers preliminary data on changes in symptoms as a function of receipt of services and involvement with a mental health court. Although previous research has shown that defendants from a mental health court are more likely to be linked to services (7) and to perceive their involvement in the court as less coercive (13), this study found that receipt of treatment alone is not sufficient to effect positive changes in clinical status. Additional studies that examine the quality of care that individuals receive may offer more insight about the impact of treatment on clinical outcomes. ♦

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