The Role of Mental Health Courts in Mitigating Family Violence Journal of Interpersonal Violence 1–22 © The Author(s) 2020 Article reuse guidelines: sagepub.com/journals-permissions DOI: 10.1177/0886260520951316 journals.sagepub.com/home/jiv



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Abstract

Mental health courts are one potential means to mitigate violence against family members by people with mental illness. This study identified the rate at which cases of family violence come before a mental health court and the success of defendants charged with assaulting family members. In a sample of 1,456 defendants eligible to participate in a mental health court, descriptive statistics were used to report rates of admission of defendants charged with assaulting family members and their characteristics; a static group design was used to compare post-program rearrests among defendants who assaulted family members who successfully completed the program, who did not complete the program, and who did not participate despite being eligible; and logistic regression was used to determine the effect of participation on rearrest when controlling for demographic and clinical factors. The study found that family violence occurred in 24.7% of admitted cases. Most eligible defendants who assaulted family members (75.8%) participated in the court program, and among those who did, 72.2% successfully completed

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the program. Defendants who assaulted family members and had a positive program termination had a much lower rate of rearrest post-program completion compared with those who did not complete the program or did not participate despite being eligible, a finding that held when controlling for other factors. This study suggests that mental health courts can be an effective option for mitigating family violence committed by people with mental illness.

Keywords

mental health courts, victims, assault, mental illness and violence, family violence, recidivism

Studies have shown that having a mental illness does not independently predict future violence when comparing people with and without a mental illness (Elbogen & Johnson, 2009; Steadman et al., 1998). When people commit violent acts, regardless of whether they have a mental illness, victims often are family members (Steadman et al., 1998). Approximately half of victims of assault committed by people with mental illness are family members (Binder & McNiel, 1986; Estroff et al., 1998; Steadman et al., 1998; Straznickas et al., 1993). Given this prevalence of violence, Copeland (2007) considers family members of people with mental illness who are violent to be a vulnerable population.

One potential means to address family violence by people with mental illness is through mental health courts. Mental health courts are a type of problem-solving court. Examples of others include drug courts, family courts, domestic violence courts, and veterans courts (Strong et al., 2016). Problemsolving courts, in general, seek to address the underlying problems that can result in criminal behavior. The most recent national survey of problem-solving courts identified 337 mental health courts in 2012 (Strong et al., 2016). Redlich et al. (2006) summarized the characteristics of mental health courts. These include a separate docket for people with mental illness, voluntary participation, a goal to divert defendants from the criminal justice system, required mental health treatment tailored to participants' unique needs, courtordered supervision in the community, incentives for compliance with court conditions, and sanctions for noncompliance. Mental health courts typically do not offer mental health services. Rather, participants rely on mental health services available to anyone in the community. Given these characteristics, mental health courts are considered an intervention apart from and in addition to the mental health services defendants receive outside of courts. Mental

health courts initially focused on misdemeanor offenses, but they increasingly have accepted defendants with felonies, including violent offenses (Redlich et al., 2005).

Evidence suggests that mental health courts have mostly positive outcomes. Mental health court defendants have increased access to mental health treatment (Boothroyd et al., 2003; Herinckx et al., 2005; Luskin, 2013; McNiel & Binder, 2010). In addition, meta-analyses have found that mental health courts have a small-to-moderate effect on reducing criminal recidivism (Lowder et al., 2018; Sarteschi et al., 2011). Other studies have found that recidivism is significantly affected by program status. Defendants who successfully complete mental health court programs have significantly lower rates of recidivism post-program than defendants who did not complete mental health court programs (Burns et al., 2013; Dirks-Linhorst & Linhorst, 2012; Herinckx et al., 2005; Hiday & Ray, 2010; Ray, 2014). Another study assessed clinical outcomes of mental health courts (Boothroyd et al., 2005). It reported that psychiatric symptoms of mental health court participants were no different than defendants with mental illness participating in a regular court. It attributed this to the type and quality of psychiatric services that are available to defendants.

Despite the potential of mental health courts to address family violence, little has been written about this topic. A document that provides 10 essential elements for developing and implementing mental health courts referenced crime victims only when listing the parties that ideally should be included in the development of new mental health courts (Thompson et al., 2007). It did not include service provision to victims or restorative justice activities that could benefit both defendants and their victims. We identified only two documents addressing crime victims in mental health courts, both developed by the Council of State Governments Justice Center. One focused solely on the role of victims in mental health courts (Glassberg & Dodd, 2008). It provided justification for inclusion of victims in mental health courts and guidance on how victims' rights can be incorporated into mental health court processes. The second document provided information on designing and implementing mental health courts (Council of State Governments, 2005). It strongly recommended that mental health courts work closely with community-based victim service organizations to ensure that victims have access to any services they may need.

In addition, we could not locate any published studies on mental health courts that included empirical data on crime victims, although a limited number of studies stated that victim consent is required for the admission of defendants charged with assault (Fisler, 2005; Luskin, 2001; Munetz et al., 2014; Stafford & Wygant, 2005; Wolff et al., 2011). In addition to not providing victim information, most studies do not list assault as a crime category when reporting the

crimes for which defendants are referred to the mental health court. Rather, studies typically group crimes in categories such as misdemeanors and felonies, violent and nonviolent crimes, or broad categories of crimes (e.g., Burns et al., 2013; Callahan et al., 2013; Comartin et al., 2015; Palermo, 2010). We identified seven published studies that included assault as one of the crimes for which defendants were referred to the mental health court. Rates of assault ranged from 16% to 51.4% (Anestis & Carbonell, 2014; Burke et al., 2012; Campbell et al., 2015; Canada, 2013; Hiday & Ray, 2010; Lim & Day, 2016; Reich et al., 2015). When studies do not identify cases of assault, types of vic-tims, and the roles of crime victims in mental health courts, we cannot identify the extent to which mental health courts are addressing family violence.

Study Setting

This study seeks to address the void of knowledge on the use of mental health courts to address family violence. The setting for this study is the St. Louis County Municipal Mental Health Court (MMHC). This court held its first docket in October 2001, and by the end of 2017, the court had received 2,545 referrals. The MMHC hears violations of local ordinances, which are similar to state misdemeanors. Its jurisdiction is unincorporated St. Louis County, Missouri, plus all cities within the county that sign contracts to transfer selected cases to the MMHC. The MMHC includes four judges, who are responsible for three separate geographic areas within the county, with the largest area having two judges. Court sessions are held weekly, with each judge appearing monthly. The same county counselors (i.e., prosecuting attorneys) and case managers work all MMHC cases. Case managers complete an initial assessment on all referred defendants to determine eligibility and to provide them with information about the MMHC. Participation in the program is voluntary. Referred defendants can choose not to participate prior to the first court session or during any time in the court process. If referred defendants do not participate, their case is transferred to the regular municipal court docket. If defendants participate, they appear before the MMHC judge monthly, although the frequency of appearances can increase or decrease depending on each unique situation. Case conferences are held prior to weekly court sessions and typically include the county counselors, cases managers, service providers, and defense attorneys if defendants have legal representation. Because the court hears ordinance violations and not state or federal crimes, defendants do not have a right to an attorney. Case managers assist defendants to secure mental health treatment and other identified services that may be needed. The court itself does not provide any assessment, treatment, or support services. At court sessions, case managers report defendants' compliance with treatment activities and any other requirements stipulated by the court. Defendants who successfully complete MMHC supervision typically have their criminal charges dropped. Defendants who are out of compliance with conditions of supervision may be terminated from the MMHC, wherein the case is transferred back to the regular court for disposition. Representatives of the St. Louis Chapter of the National Alliance on Mental Illness attend many of the court sessions to provide information and support to defendants and their family and friends.

Research Questions

This study addresses four research questions.

Research Question 1 (RQ1): What are the crimes for which defendants are admitted to the MMHC?

Research Question 1a: What is the rate at which defendants are admitted to the MMHC for the crime of assault?

Research Question 1b: For what other crimes, in addition to assault, are defendants admitted to the MMHC?

Research Question 1c: For defendants admitted for assault, who are the victims?

Research Question 2 (RQ2): What are the demographic and clinical characteristics of defendants admitted to the MMHC?

Research Question 2a: How do the demographic and clinical characteristics of defendants admitted to the MMHC for assaulting family members compare with those admitted for assaulting people other than family members?

Research Question 2b: How do the characteristics compare with non-assault crimes?

Research Question 3 (RQ3): What is the performance of defendants charged with assaulting family members during the MMHC program?

Research Question 3a: Among defendants charged with assaulting family members, what is the rate of participation in the MMHC?

Research Question 3b: Among defendants charged with assaulting family members who participated in the MMHC, what is the rate of successful completion of the program?

Research Question 3c: How do these rates compare with defendants who committed other crime types?

Research Question 4 (RQ4): What is the performance of defendants charged with assaulting family members after completing the MMHC program?

Research Question 4a: Among the subset of defendants admitted to the MMHC for assaulting family members, what is the rate of rearrest within the first year after being released from the MMHC?

Research Question 4b: How does the rate of rearrest vary for defendants who successfully completed the court program compare with those who were negatively terminated from the program?

Research Question 4c: How does the rate of rearrest vary for defendants who successfully completed the court program compare with defendants eligible to participate in the MMHC but did not?

Research Question 4d: Among defendants who are rearrested, what is rate at which they are charged with assault again?

Method

Data Sources

Data for this study were derived from the administrative databases of the St. Louis County Department of Justice Services, which oversees the MMHC. Included are all defendants who were eligible to participate in the court when the court held its first docket in October 2001 and were discharged by the court by the end of September 2015, with three exceptions. First, 65 defendants were excluded who had their criminal charges resolved without any court appearances or supervision. These are unusual and highly individualized cases, constituting only 3.1% of total referrals during the study period. An additional 36 cases were excluded for defendants referred to the MMHC after being charged with assault but for whom victim information was missing. These 36 cases were 1.7% of referrals during the study period, and 3.7% of all defendants charged with assault. Third, we included only the first admission to the MMHC. A limited number of defendants in the study group had multiple admissions to the MMHC (N = 286; 15.9%). These exclusions resulted in a total of 1,456 defendants for this study. As described below, some analyses used a subset of these defendants.

Variables

The study included information on demographics, clinical disorders, crimes for which defendants were referred to the MMHC, the victims of assaults, program status, and criminal recidivism. Demographic variables included age in years at

time of referral to the MMHC, sex, race, marital status, and living arrangement at the time of admission. Clinical variables included substance abuse history, coded as a dichotomous variable and incorporating a diagnosis of a substance abuse disorder or a history of substance abuse treatment. The other set of clinical variables were psychiatric diagnoses. These were provided in writing by a mental health professional at or near the first MMHC court date. The MMHC does not employ mental health professionals, so defendants must get a mental health evaluation on their own. Diagnoses were categorized into dichotomous variables and included bipolar disorder, depression, and schizophrenia, the three most prevalent disorders found in the MMHC. The most serious crime for which defendants were referred to the MMHC was available for each defendant. For the purposes of this study, crimes were categorized into assault with family victims, assault with other victims, and non-assault crimes, with the initial presentation of crime types. For defendants admitted for assault, victim information is provided as seven dichotomous variables. The variable family victim includes parents, other family members, and spouses or partners. Program status refers to the status at the time of discharge from the MMHC and includes three variable attributes: eligible but did not participate, supervised by the court with a negative termination, and supervised by the court with a positive termination. Finally, the study included one measure of recidivism, rearrests. Rearrests were defined as arrests for ordinance violations, or state or federal crimes within 1 year from the date of discharged from the MMHC, with the exception of minor traffic violations. The variable was coded as a dichotomous variable, rearrest (yes/no). For those defendants who were rearrested, the type of rearrest crime was coded as a dichotomous variable, assault (yes/no). Victim information was not available for rearrest crimes. Staff from the St. Louis County Department of Justice Services identified rearrests from local, state, and national crime databases.

Analytic Strategy

Descriptive statistics were used to address the RQ1, RQ2, and RQ3 and part of RQ4. Chi-square and *t* tests were used to calculate statistical differences in bivariate analyses using $\alpha < .05$. To calculate effect size, Cramer's *V* was used for categorical covariates and Cohen's *d* for continuous covariates. Effect sizes are reported when bivariate analyses are statistically significant. We used two additional analyses to address RQ4 that dealt with rearrests, both among admitted defendants who assaulted family members. First, we used a static group design in which defendants who successfully completed court supervision served as the experimental group and defendants who chose not to participate and defendants who had a negative termination from supervision served as comparison groups, with rearrests serving as the dependent variable. Second, to control for other factors, we estimated a logistic regression equation that included program status as the independent variable; age, gender, race, marital status, living arrangement, history of substance abuse, and psychiatric diagnoses as control variables; and rearrest as the dependent variable. We created two dummy variables for program status: did not participate despite being eligible and negative termination, with positive termination serving as the comparison.

Missing Data

While the data for these analyses were mostly complete, some data were missing. Missing data can be a source of measurement error and can bias the results of analyses (Roth, 1994). In this study, missingness ranged from 0% to 18.8%. Acceptable levels of missingness range up to 40% (Fox-Wasylyshyn & El-Masri, 2005). Preliminary analyses, based on the recommendations of Allison (2002), suggested that the missing data were tentatively missing at random. To account for the missing data and to reduce the resulting bias, we used multiple imputation. STATA 16 (StataCorp, 2019) was used to conduct the multiple imputation and to run the multivariate analyses. We imputed 10 data sets using the multiple imputation chained equations specifier. Data were combined to create final models.

Participant Characteristics

The mean age of the 1,456 study participants was 34.4 years (SD = 14) and ranged from 16.3 to 88.6 years. About two thirds of defendants were male (62.6%) and White (67.7%), with others being African American (30.2%) or other races (2.1%). Most defendants were single (73.7%), with others being married (12.6%), divorced (8.8%), separated (2.7%), or widowed (2.2%). Almost half of defendants lived with parents (40.6%), followed by living alone or with roommates (29%), other family members (12.1%), spouse or partners (10.9%), congregate living settings such as group homes (4.2%), and other residences (3.1%). The majority of defendants had a history of substance abuse (53.4%). Defendants were diagnosed with bipolar disorder (37.5%), depression (26.5%), and schizophrenia (23.7%).

Results

Crimes for Which Defendants Are Admitted to the MMHC?

The MMHC admitted 44.4% of defendants during the study period for the crime of assault. Other crimes that occurred at a rate of 4% or more included

stealing (9.7%), peace disturbance (9.7%), traffic offenses (7.6%), property damage (6.8%), trespassing (4.6%), and alcohol and drug offenses (4.3%). Family members were victims in 54.9% of assault cases or 24.7% of all admissions. As a percentage of all assaults, other victims included police officers (19.3%), social service or mental health providers (10.8%), neighbors (5.3%), coworkers or fellow students if in school (3.9%), persons known to victim but not in the above categories (6.2%), and victims unknown to the defendant (7.4%). In a limited number of instances, defendants assaulted multiple victim types.

Demographic and Clinical Characteristics of Defendants Admitted to the MMHC

We determined whether any demographic or clinical differences existed between defendants admitted to the MMHC for assaulting a family member, assaulting some other person, or committing a crime other than assault. Three differences existed. Defendants who assaulted family members were younger than the other two groups by 3 to 4 years, were more likely to be male, and were more likely to have lived with family members. Table 1 includes complete information.

The Performance of Defendants Charged With Assaulting Family Members

We next considered the subset of defendants charged with assaulting a family member to determine the rate of participation in the MMHC and the rate at which they successfully completed the MMHC program. Among the 360 defendants in this subgroup, 75.8% of defendants who assaulted family members participated in the MMHC, while 24.2% did not and had their cases referred back to the regular municipal court. This rate was consistent with the rate of 28.7% among defendants charged with assaulting other victims and of 27.8% among defendants charged with other crimes, χ^2 (2, 1,456) = 2.12, p = .347. Among the defendants who assaulted family members who participated, 72.2% had a positive termination and 27.8% had a negative termination from MMHC supervision. The rate of negative termination was slightly higher among those who assault family members compared with the rate of 18.1% among defendants charged with assaulting other victims and of 25.1% among defendants charged with other crimes, $\chi^2(2, 1,062) = 6.24$, p = .044, although the effect size was small (Cramer's V = .077).

	Assaulted		Assa	Assaulted				
	Family N	1ember	Ot	her	Non-a	assault		
Characteristic	N	%	N	%	N	%	Þ	d/V ^a
Mean age (SD)	360	32.3 (12.9)	286	35.7 (14.2)	810	36.7 (14.1)	<.001	.185
Sex							.010	.080
Female	111	30.8	108	37.8	325	40.I		
Male	249	69.2	178	62.2	485	59.9		
Race							.092	
White	252	70.0	177	61.9	556	68.6		
African American	100	27.8	99	34.6	241	29.8		
Other	8	2.2	10	3.5	13	1.6		
Single, never married ^a	252	71.0	203	75.2	567	74.5	.384	
Lived with family ^b	245	76.8	128	54.7	398	60.4	<.001	.170
Substance abuse history ^b	176	57.3	107	46.9	352	53.8	.055	.070
Psychiatric diagnoses								
Bipolar disorder ^b	112	39.0	81	37.5	226	36.9	.824	
Depression ^b	82	28.6	47	21.8	167	27.2	.192	
Schizophrenia ^b	65	22.6	57	26.4	143	23.3	.582	

Table I. Characteristics of Admitted MMHC Defendants by Crime Type (N = 1,456).

Note. MMHC = Municipal Mental Health Court.

 $^a\!E\!f\!f\!ect$ size is measured by Cramer's V or Cohen's d. $^b\!R\!e\!f\!lects$ the number and percentage of defendants with the referenced condition.

The Performance of Defendants After Completing the MMHC Program

We conducted a static group design to determine the role of the MMHC in reducing rearrests after discharge among defendants admitted for assaulting family members. The overall rearrest rate of defendants charged with assaulting a family member was 32.5%. However, there were substantial differences across program status. Defendants who had a positive termination from MMHC supervision had a lower rate of rearrest (15%) versus the two comparison groups, those being defendants who had a negative termination (53.7%) and eligible defendants who did not participate (55.9%). Among defendants rearrested, 32.5% were rearrested for assault. This result, too, varied by program status, although the results were marginally significant (p = .064). The percentage of defendants who were rearrested and charged with assault among defendants who had a negative termination and 60.5% among eligible defendants who did not participate. Table 2 includes additional information.

	Positive Termination		Negative Termination		Did Not Participate			
Rearrest Status	N	%	N	%	N	%	Þ	V
Rearrested ($N = 308^{a}$)							<.001	.422
Yes	26	15.0	36	53.7	38	55.9		
No	147	85.0	31	46.3	30	44.I		
Rearrest crime $(N = 100^{\rm b})$.064	
Assault	8	30.8	17	47.2	23	60.5		
Other crime	18	69.2	19	52.8	15	39.5		

Table 2. Rearrests Within I Year Post Discharge by Program Status Am	ong
Admitted MMHC Defendants Who Assaulted Family Members.	_

Note. MMHC = Municipal Mental Health Court.

^aThe *n* decreased from 360 to 308 because rearrested data were not available for defendants who had not yet been discharged from the MMHC for 1 year. ^bPercentages are based on the 100 of 308 defendants who were arrested.

We also conducted a logistic regression analysis using rearrest as the dependent variable. Two program status dummy variables served as independent variables, and control variables included demographic and clinical variables. Dummy variables were created for negative termination and did not participate, with the comparison being to positive termination. This model was significant, F(11, 5,900.9) = 4.98, p < .01, and explained 24% of the variance in rearrests. Both program status variables were significantly related to rearrest. Having a negative termination, compared with having a positive termination, increased the odds of rearrest by over four times. Likewise, not participating in the MMHC although eligible, compared with having a positive termination, increased the odds of rearrest by almost seven times. One demographic variable and one psychiatric variable were also associated with rearrest. Being White decreased the odds of rearrest compared with defendants who were other races, most of whom were African American. In addition, having a history of substance abuse increased the odds of rearrest. Table 3 contains complete logistic regression information.

Discussion

This study provides evidence that mental health courts are hearing cases involving family violence. Almost half of the cases (44.4%) admitted to the MMHC included the charge of assault, with 24.7% of all admissions being family assault cases. Consequently, we can reasonably assume that some of

Variable	Model OR (95% CI)
Constant	0.20 [0.03, 1.23]
Age	0.98 [0.96, 1.01]
Gender	
Male compared with female	0.88 [0.46, 1.72]
Race	
White compared with other races	0.45 [0.23, 0.87]*
Marital status	
Single never married, compared with other	1.35 [0.62, 2.93]
History of illicit drug use and alcohol abuse	3.13 [1.57, 6.25]**
Mental illness	
Bipolar	0.90 [0.36, 2.22]
Depression	0.42 [0.12, 1.39]
Schizophrenia	1.19 [0.44, 3.18]
Living arrangement	
Family compared with other living arrangements	1.57 [0.67, 3.69]
Program status	
Negative termination	4.67 [2.31, 9.43]**
Eligible but did not participate	6.98 [3.35, 14.51]**
Pseudo-R ²	.24

Table 3. Logistic Regression of Program Status on Rearrest Among Admitted MMHC Defendants Who Assaulted Family Members (N = 308).

Note. MMHC = Municipal Mental Health Court; OR = odds ratio; CI = confidence interval. *p < .05. **p < .01.

the cases of assault reported in the limited number of mental health court studies included family victims. The overall rate of assault cases reported in this study (44.4%) was higher than six of seven rates reported in other studies. Among the seven studies, one was a misdemeanor-only court, comparable with the current study, and it reported a lower rate of assault cases (26.3%). The study with the highest rate of assault was from a subsample of mental health court cases that included only defendants with intellectual and developmental disabilities (Burke et al., 2012). That study did not indicate whether the crimes were felonies or misdemeanors, although most, if not all, appeared to be misdemeanors. One of the seven studies categorized crimes by misdemeanors and felonies, and reported that all assault cases were misdemeanors (Hiday & Ray, 2010). This implies that felony mental health courts may be unwilling to accept felony assault cases because of the more serious nature of the offense compared with assaults coming before misdemeanor courts. Contrary to this, in another of the seven studies, 82% of crimes were felonies, of which 23% were assaults, while 18% of misdemeanor crimes were assaults (Reich et al., 2015). This variability is consistent with individual mental health court courts having the autonomy to set their own admission criteria, including the types of crimes each court accepts. As such, mental health and victims rights advocacy groups may be able to lobby mental health courts to accept a greater range of cases, including those related to family violence cases. These advocacy groups are more likely to be successful when they are able to provide or arrange support services to work in tandem with those courts.

The study found some demographic differences between the three crime categories, with defendants entering the MMHC for assaulting family members more likely to be younger and male. This finding is consistent with previous research that being younger and male are predictive of general and violent recidivism among offenders with mental illness (Bonta et al., 1998). Consequently, mental health courts may want to provide additional supervision and services to younger males who have assaulted family members. In addition, defendants charged with assaulting family members were more likely to be living with family members. It is not unexpected that living with family members increased the risk of entering the mental health court for assaulting family members because of the closer proximity to them. In these situations, mental health courts may need to explore alternative living situations for this group. At a minimum, mental health courts should work with mental health case managers to ensure they are providing close supervision of living situations and working with family members on how to best cope with the mental health court defendants living in their homes (Copeland, 2007; Hyde, 1997; Katz et al., 2015; Kontio et al., 2017; Murray-Swank et al., 2007). Race and marital status were not associated with differences in mental health court defendants by type of crime. In contrast to some demographic variables, differences between crime types were small and not statistically significant for psychiatric diagnoses and substance abuse history.

This study also found that most defendants who assaulted family members were willing to participate in mental health courts. In addition, the rate of participation was consistent with the other two crime types. Only 24.2% of eligible defendants charged with assaulting family members did not participate in the MMHC. Studies reporting on rates of nonparticipation in mental health courts have found great variation. Three studies reported rates of less than 10% (Hiday & Ray, 2010; McNiel & Binder, 2007; Petrila et al., 2001), while another study reported nonparticipation rates of 55.8% and 59.7% in two mental health courts (Trupin & Richards, 2003). The benefits of participating in mental health courts can be substantial. These include increased access to mental health treatment and other resources, the opportunity to

stabilize one's life, and having criminal charges dropped or receiving a reduced sentence when charged with a more serious crime. It may also be an opportunity for defendants who assaulted family members to obtain services for their family members (Glassberg & Dodd, 2008) and to reconcile with them and grow from the experience, particularly if the mental health court employs restorative justice activities (Dollar & Ray, 2015). For defendants referred to mental health courts for family violence, it is important when considering whether to participate in the court that they understand the expectations and requirements of mental health courts, the benefits and potential drawbacks to participation, and the role that family members will and will not play in the court process.

A fourth finding from this study is that most defendants (72.2%) charged with assaulting family members successfully completed the MMHC program. This rate was less than one of the other crime types, although the effect size was low. The rate of negative termination from the MMHC of 27.8% is significantly lower than the 41% average reported by Ray et al. (2015) in their review of 10 mental health studies as well as the rate of 45.6% in their own study. As previously indicated, successful completion of mental health court is a significant factor in avoiding future arrests after discharge from the program (Burns et al., 2013; Dirks-Linhorst & Linhorst, 2012; Herinckx et al., 2005; Hiday & Ray, 2010; Ray, 2014). Consequently, it is critical that mental health courts employ context-specific, culturally appropriate, and evidence-based interventions, such as motivational interviewing, to enhance defendants' engagement and chances for success (Dirks-Linhorst et al., 2013; Miller & Rollnick, 2002).

A final finding of the study is that defendants who assaulted family members and who successfully completed the MMHC program had low rearrest rates. Among MMHC defendants who assaulted family members and who successfully completed the program, the rate of rearrest within the first year after discharge and successful completion of the program was 15%, compared with 55.9% among defendants who were eligible for the MMHC but did not participate and 53.7% among those with a negative termination. This finding was confirmed in the multivariate analysis when controlling for demographic and clinical variables. Comparing these results with other mental health courts is difficult because of different measurements of recidivism. lengths of follow-up, and groups being compared. Two studies were identified that were similar in methodology to the current study. Hiday et al. (2013) reported 1-year rearrest rates of 17.6% among mental health court participants and 41.2% among those with a negative termination from the court. Likewise, Costopoulos and Wellman (2017) reported 1-year rearrest rates of 29% among mental health court participants and 73% among those with a

negative termination from the court. A rearrest rate of 15% in this study is as good as or better than the results of the two reported studies, particularly when considering that the two comparison studies included all crime types, not just assault.

Two control variables in the multivariate analysis were also associated with rearrest. First, being non-White increased the odds of rearrest among MMHC defendants charged with assaulting family members. This finding is contrary to other studies of race and recidivism in mental health courts. Eight published mental health court studies have included race in multivariate analyses of recidivism, and all eight studies found that race was not associated with recidivism (Burns et al., 2013; Gallagher et al., 2018; Herinckx et al., 2005; Hiday et al., 2013, 2016; Hiday & Ray, 2010; Moore & Hiday, 2006; Ray, 2014). It also is inconsistent with the results of a meta-analysis of recidivism among offenders with a mental illness that found that race did not have a significant effect on recidivism (Gendreau et al., 1996). From another perspective, this study's finding that being non-White was associated with rearrest is consistent with research that has found that non-Whites have a greater probability of being arrested than Whites (Kochel et al., 2011) and with a meta-analysis that found race was associated with recidivism in general offender populations (Bonta et al., 1998). While mental health courts may have little control over issues of racial bias after participants leave the court, included in the essential elements of mental health courts (Thompson et al., 2007) is a provision that mental health courts should be attentive to racial and ethnic minorities and ensure that culturally competent services are available.

Having a history of substance abuse also increased the odds of rearrest among MMHC defendants charged with assaulting family members. Substance abuse among persons with mental illness has been found to be a risk factor for criminal behavior in large-scale studies of violence among people with mental illness (Elbogen & Johnson, 2009; Steadman et al., 1998) as well as in a meta-analysis of smaller studies (Bonta et al., 1998). Mental health courts should ensure that defendants with a history of substance abuse access substance abuse treatment that is integrated with their mental health treatment and that evidence-based treatment of co-occurring disorders is provided (Mueser et al., 2003; Thompson et al., 2007).

Study Limitations

One limitation of this study is that it was conducted at a mental health court that hears ordinance violations, which are the equivalent to misdemeanors. As such, the findings may not be generalizable to felony courts, which hear cases of more serious assaults. Additional research is needed with both misdemeanor and felony courts to document the frequency of cases of family violence that come before the courts and the effect of mental health courts to mitigate family violence.

A second limitation is that the multivariate analysis of rearrest among defendants admitted to the MMHC omitted some potentially relevant variables. Other variables could include levels of psychiatric symptoms and functioning, secondary diagnoses such as personality disorders, educational and vocational information, criminal history, and the type and quality of mental health and social support services accessed, among others.

A third limitation is that this study used defendants who did not successfully complete the program as one of two comparison groups in the study of rearrest. While studies often use non-completers as a comparison group, it is a biased sample, as defendants who do not complete the program have an increased risk for rearrest, and variables that predict non-completion are similar to those that predict recidivism. This has been confirmed in studies of mental health courts (Burns et al., 2013; Dirks-Linhorst & Linhorst, 2012; Herinckx et al., 2005; Hiday & Ray, 2010; Ray, 2014) and in meta-analyses of drug courts (Latimer et al., 2006), of domestic violence treatment programs (Jewell & Wormith, 2010), and of a range of offender treatment programs (Olver et al., 2011). Ideally, studies of offender treatment programs should use randomized clinical trials. When that is not possible, using offenders who were eligible for the treatment program but chose not to participate as a comparison group, as was done as a second comparison group in this study, is acceptable and considered the best alternative to randomized clinical trials (Latimer et al., 2006).

A fourth limitation is that this study did not incorporate if and how the MMHC worked with defendants and family members around the issue of family violence. The study of mental health courts addressing family violence should incorporate qualitative methods to determine the type and quality of interactions that mental health court staff have with defendants and with family victims of assault, the services offered to both groups to mitigate future violence, and how mental health courts can better meet the need of both defendants and victims.

Conclusion

This study was the first to empirically address the role of mental health courts in mitigating family violence. It provides support that mental health courts are one viable option to address family violence committed by people with mental illness. It found that the MMHC admitted defendants at a high rate who have committed family violence, with 24.7% of all admissions falling into this category. Most defendants who committed family assault wanted to participate in the MMHC at rates equal to other crimes. In addition, they had a high rate of successfully completing the program. Among defendants who assaulted family members, those who successfully completed the program had a low rate of rearrest compared with those who were admitted to the MMHC but did not participate and to those who had a negative termination from the program. To foster success among mental health participants who commit family violence, mental health courts should provide culturally competent practice, employ motivational interviewing to engage defendants in treatment, and ensure that defendants with a substance abuse disorder have access to evidence-based co-occurring treatment.

While this study has focused on the defendants who assault family members, mental health courts also can support the victims of violence. Mental health courts should ensure they are incorporating victims' rights into the mental health court process, establish protocols to guide interactions with victims, obtain specialized training to effectively relate to both defendants and their victims, and be knowledgeable about community resource available to both defendants and victims (Glassberg & Dodd, 2008). A number of programs exist to help family members to improve interactions with their relative with mental health and to reduce violence (Gharavi et al., 2018; Hyde, 1997; Kitchener & Jorm, 2006; Madathumkovilakath et al., 2018; Melamed & Gelkopf, 2013). Mental health courts should provide a program, refer family victims to community-based programs, or work with victims' rights and mental health organizations to develop such programs if they do not exist in the community.

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