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Patrick J. McCabe University of Massachusetts Medical School

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Association of Demographic Factors and Comorbid Diagnoses with Crime Type in an Arrest Cohort with Schizophrenia and/or Related Psychosis



BACKGROUND

The implications of the interface between the criminal justice system and individuals with schizophrenia persist despite decades of research on criminalization and risk of arrest. Research exploring the broader construct of criminality has predominantly focused on individuals with severe mental illness as a collective. This study diverges from others by examining diagnoses comorbid with schizophrenia and related psychoses and their relationships with risk of arrest across a spectrum of criminal categories ranging in severity.

METHODS

Demographic factors and comorbid diagnoses were collected from a 10-year arrest cohort of 1,538 clients of a public mental health system who had received an inpatient diagnosis of schizophrenia or related psychosis. The likelihood of arrest across six broadly defined criminal charge categories were assessed cross-sectionally using demographics and comorbid diagnoses in separate logistic regression models.

RESULTS

Across our cohort, 63% experienced arrest for nuisance or low-level offenses, 50% were arrested for serious violent crimes, and 45% were charged with property crimes over the 10-year period. Comorbid antisocial personality disorder produced the strongest relationships with arrest; comorbid substance use or alcohol use disorders, prevalent among 46% of our cohort, elevated risk of arrest across all criminal categories.

FOR ADDITIONAL INFORMATION EMAIL PATRICK MCCABE: Patrick.McCabe@umassmed.edu

Patrick J. McCabe MPH, Nicholas Druhn Psy.D., William H. Fisher Ph.D., Kristen M. Roy-Bujnowski M.A., Lorna Simon M.A., Albert J. Grudzinskas, Jr., J.D

	Schizophrenia or related psychoses	Schizophrenic disorders	Other nonorganic psychoses	Delusional disorders
	n (%)	n (%) (row %)	n (%) (row %)	n (%) (row %)
Schizophrenia or related psychoses	1538 (100.0)			
Schizophrenic disorders ^a	1417 (92.1)			
Other nonorganic psychoses ^b	212 (13.8)	129 (8.4) (60.8)		
Delusional disorders ^c	56 (3.6)	29 (1.9) (51.8)	9 (0.6) (16.1)	
Transient organic psychotic conditions ^d	32 (2.1)	18 (1.2) (56.3)	9 (0.6) (28.1)	2 (0.1) (6.3)

	Al	1	Males		Female	
			Schizop	ohrenia	Schizoj	ohrenia
	(N=1:	538)	(N=1	184)	(N=	354)
	N (%)		N (%)		N (%)	
Male gender	1184 (77.0)					
Age:						
18-25	165 (10.7)		139 (11.7)		26 (7.3)	
26-35	540 (35.1)		406 (34.3)		134 (37.9)	
36-45	525 (34.1)		412 (34.8)		113 (31.9)	
46-85	308 (20.0)		227 (19.2)		81 (22.9)	
Age, mean yrs (SD)		37.4 (9.9)		37.3 (10.0)		38.0 (9.7)
Race: white=1, non-white=0	1162 (75.6)		882 (74.5)		280 (79.1)	
Crime type:						
Serious Violent Crime	767 (49.9)		616 (52.0)		151 (42.7)	
Less Serious Violent Crime	518 (33.7)		434 (36.7)		84 (23.7)	
Property Crime	695 (45.2)		541 (45.7)		154 (43.5)	
Crimes Against Public Order	969 (63.0)		740 (62.5)		229 (64.7)	
Crimes Against Public Decency	470 (30.6)		394 (33.3)		76 (21.5)	
Motor Vehicle Crime	301 (19.6)		247 (20.9)		54 (15.3)	
Comorbid diagnoses:						
Antisocial Personality Disorder	42 (2.7)		39 (3.3)		3 (0.9)	
Alcohol Use Disorders	398 (25.9)		330 (27.9)		68 (19.2)	
Substance Use Disorders	478 (31.1)		369 (31.2)		109 (30.8)	
Misc. Personality Disorders	150 (9.8)		112 (9.5)		38 (10.7)	
Impulse Control Disorders	31 (2.0)		29 (2.5)		2 (0.6)	
Depressive Disorders	136 (8.8)		90 (7.6)		46 (13.0)	
Anxiety Disorders	79 (5.1)		39 (3.3)		40 (11.3)	
Borderline Personality Disorder	85 (5.5)		28 (2.4)		57 (16.1)	
Bipolar Disorder	349 (22.7)		246 (20.8)		103 (29.1)	

	Serious Violent Crime	Less Serious Violent Crime	Property Crime	Crimes Against Public Order	Crimes Against Public Decency	Motor Vehicle Crime
Covariates	OR (95% CI) ^b (all n=1538)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Gender (male=1, female=0)	1.43 (1.10-1.85)	1.88 (1.40-2.52) ^c	1.00 (0.77-1.30)	0.88 (0.68-1.15)	1.67 (1.24-2.27) ^c	1.38 (0.98-1.95)
Age in 1992	0.99 (0.98-1.00)	0.99 (0.98-1.00)	0.98 (0.97-0.99) °	1.00 (0.99-1.02)	0.98 (0.97-1.00)	0.96 (0.94-0.97) °
Race (white=1, other=0)	0.55 (0.43-0.71) °	0.79 (0.61-1.02)	0.67 (0.52-0.85)	0.63 (0.48-0.81)	0.57 (0.44-0.73) [°]	1.25 (0.91-1.70)
Antisocial Personality Disorder	2.50 (1.16-5.40)	5.22 (2.42-11.25) [°]	3.48 (1.60-7.59)	2.89 (1.18-7.09)	1.77 (0.91-3.43)	0.99 (0.46-2.12)
Alcohol Use Disorders	1.21 (0.95-1.54)	1.26 (1.00-1.65)	1.30 (1.02-1.66)	1.19 (0.92-1.53)	1.11 (0.86-1.44)	1.68 (1.26-2.23) ^c
Substance Use Disorders	1.37 (1.08-1.73)	1.32 (1.04-1.68)	1.71 (1.36-2.16) °	1.72 (1.34-2.21) ^c	2.27 (1.78-2.90) °	0.92 (0.69-1.22)
Misc. Personality Disorders	1.41 (0.99-2.02)	1.35 (0.94-1.94)	1.56 (1.09-2.24)	1.31 (0.90-1.92)	0.78 (0.53-1.16)	0.78 (0.49-1.22)
Impulse Control Disorders	1.55 (0.70-3.46)	1.24 (0.57-2.68)	0.56 (0.25-1.21)	0.62 (0.29-1.33)	1.37 (0.64-2.96)	0.90 (0.37-2.16)
Depressive Disorders	0.83 (0.57-1.22)	0.96 (0.65-1.44)	1.37 (0.93-2.01)	1.07 (0.72-1.60)	1.05 (0.6 <mark>9-1.5</mark> 8)	1.53 (1.00-2.35)
Anxiety Disorders	1.87 (1.12-3.13)	1.41 (0.84-2.38)	1.03 (0.62-1.71)	0.99 (0.59-1.66)	0.82 (0.46-1.46)	0.72 (0.38-1.36)
Borderline Personality Disorder	1.02 (0.62-1.69)	1.05 (0.62-1.79)	0.71 (0.43-1.18)	0.92 (0.55-1.54)	0.81 (0.46-1.45)	0.83 (0.45-1.56)
Bipolar Disorders	0.92 (0.72-1.19)	1.46 (1.12-1.89)	1.04 (0.80-1.34)	1.34 (1.03-1.75)	0.91 (0.69-1.20)	1.39 (1.03-1.88)

С	FFENSE CATEGORIES
Serious Violent Crime	Murder; non-negligent manslaughter; forcible rap armed robbery); aggravated assault and battery with against a person over age 65, against a disabled p debt
Less Serious Violent Crime	Domestic violence (not resulting in a charge of so simple assault, simple assault and battery, assault a officer, threatening behavior or intimidation, indece rising to the legal definition of forcible rape), and vio order
Property Crime	Burglary, larceny of an item worth more than \$500, w stolen property, uttering (passing bad checks), bu arson, and motor vehicle theft. Theft or shoplifting than \$500; malicious destruction of property
Crimes Against Public Order	Being a disorderly person, disturbing the peace, Instigating a bomb hoax, trespassing, and consumin place in violation of open-container law. Misdemea occurrence not easily classified in any of the above
Crimes Against Public Decency	Offenses related to sex for hire (soliciting prostitution street walker), indecent exposure, and lewd and Possession of a controlled substance, possession with distribution or manufacture of or trafficking in a con- conspiracy to violate the Controlled Substance Act. weapon, illegally discharging a firearm, and possess a license or permit
Motor Vehicle Crime	Operating a vehicle without a license or without con so as to endanger, attaching license plates illegally, l accident, or driving while intoxicated

LOGISTIC REGRESSION TABLES

	Serious Violent Crime	Less Serious Violent Crime	Property Crime	Crimes Against Public Order	Crimes Against Public Decency	Motor Vehicle Crin
– Covariates	OR (95% CI) ^b (all n=1184)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
Age in 1992	0.99 (0.98-1.00)	0.99 (0.974-0.999)	0.98 (0.96-0.99)°	1.00 (0.98-1.01)	0.99 (0.97-1.00)	0.96 (0.94-0.98) °
Race (white=1, other=0)	0.50 (0.38-0.66)°	0.81 (0.61-1.07)	0.74 (0.56-0.97)	0.66 (0.50-0.89)	0.61 (0.46-0.80) [°]	1.03 (0.74-1.44)
Antisocial Personality Disorder	2.78 (1.23-6.29)	5.23 (2.32-11.78) [°]	2.98 (1.35-6.60)	2.33 (0.93-5.82)	1.79 (0.90-3.56)	0.99 (0.44-2.19)
Alcohol Use Disorders	1.16 (0.89-1.52)	1.23 (0.93-1.62)	1.42 (1.08-1.86)	1.30 (0.98-1.73)	1.05 (0.79-1.39)	1.56 (1.14-2.13)
Substance Use Disorders	1.24 (0.95-1.62)	1.30 (0.99-1.70)	1.75 (1.34-2.28)°	1.79 (1.35-2.38)°	1.92 (1.46-2.51) [°]	0.85 (0.62-1.18)
Misc. Personality Disorders	1.38 (0.91-2.09)	1.51 (1.00-2.29)	1.65 (1.08-2.51)	1.18 (0.76-1.83)	0.75 (0.48-1.17)	0.77 (0.46-1.29)
Impulse Control Disorders	1.47 (0.66-3.30)	1.24 (0.55-2.76)	0.55 (0.25-1.24)	0.56 (0.25-1.25)	1.52 (0.70-3.30)	0.78 (0.31-1.99)
Depressive Disorders	1.08 (0.69-1.71)	0.91 (0.57-1.46)	1.19 (0.75-1.90)	1.29 (0.77-2.15)	1.46 (0.92-2.32)	1.37 (0.82-2.28)
Anxiety Disorders	1.43 (0.72-2.84)	1.71 (0.86-3.39)	1.14 (0.57-2.28)	2.46 (1.04-5.79)	0.82 (0.40-1.71)	0.92 (0.41-2.04)
Borderline Personality Disorder	0.76 (0.34-1.72)	1.05 (0.46-2.40)	0.75 (0.33-1.72)	1.74 (0.63-4.85)	0.63 (0.26-1.56)	0.45 (0.15-1.37)
Bipolar Disorders	0.88 (0.66-1.19)	1.50 (1.11-2.03)	1.10 (0.82-1.49)	1.52 (1.10-2.10)	0.89 (0.65-1.23)	1.52 (1.08-2.15)

erson, or to collect a

rious violent crime) battery on a polic sexual assault (no ation of a restrainin

welfare fraud, receiving breaking and entering, ng of an item worth less

setting a false alarm, ing alcohol in a public anors with low rates of

ion or being a common lascivious behavior. intent to distribute and rolled substance, ar Carrying a dangerous ing a firearm withou

npulsory insurance of leaving the scene of an

PTSD AND SERIOUS VIOLENT CRIME

We dichotomized comorbid anxiety disorders into two variables, those with PTSD and those without. Replacing the anxiety disorder indicator with these two variables in the full cohort Serious Violent Crime model revealed that comorbid PTSD was associated with Serious Violent Crime arrest (OR = 2.35,95% CI: 1.20-4.59, p = 0.013) and non-PTSD anxiety disorders was not (OR = 1.37, 95% CI: 0.64-2.92, p = 0.418). This finding was similar for males and females and consistent with observations made about violent behavior and a history of trauma in similar populations.

CONCLUSION

Diagnoses comorbid with schizophrenia carry implications for risk of arrest across a spectrum of offense categories. Risk assessment and interventions aimed at reducing offending and re-offending should identify and target comorbid psychiatric and substance abuse disorders in their efforts to reduce the likelihood of justice involvement among persons with schizophrenia.

		ion Models of C es with Schizop				
	Serious Violent Crime	Less Serious Violent Crime	Property Crime	Crimes Against Public Order	Crimes Against Public Decency	Motor Vehicle Crime
5	OR (95% CI) ^b (all n=354)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)	OR (95% CI)
2	0.98 (0.96-1.01)	1.02 (0.99-1.05)	1.00 (0.98-1.03)	1.04 (1.01-1.07)	0.97 (0.94-1.01)	0.95 (0.92-0.99)
te=1,	0.85 (0.49-1.48)	0.65 (0.34-1.20)	0.41 (0.23-0.70)	0.44 (0.24-0.83)	0.41 (0.22-0.76)	NAª
y Disorder	NA ^d	NA ^d	NA ^d	NA ^d	NA ^d	NA ^d
se	1.48 (0.84-2.63)	1.77 (0.98-3.22)	0.94 (0.53-1.65)	0.79 (0.44-1.41)	1.57 (0.79-3.10)	2.40 (1.23-4.72)
Use	1.76 (1.06-2.93)	1.59 (0.89-2.84)	1.82 (1.09-3.05)	1.74 (1.002-3.030)	4.42 (2.42-8.07) [°]	1.15 (0.59-2.26)
onality	1.54 (0.73-3.24)	0.92 (0.41-2.06)	1.40 (0.68-2.86)	1.76 (0.79-3.93)	0.66 (0.26-1.67)	removed ^e
ontrol	NAª	NA ^d	NA ^d	NA ^d	NAd	NA ^d
e	0.40 (0.18-0.88)	removed ^e	1.88 (0.94-3.77)	0.87 (0.43-1.75)	0.25 (0.07-0.85)	2.31 (0.97-5.46)
isorders	2.60 (1.14-5.92)	1.11 (0.48-2.59)	0.98 (0.45-2.14)	0.58 (0.27-1.27)	0.91 (0.32-2.54)	0.38 (0.12-1.19)
e y Disorder	1.13 (0.58-2.22)	1.37 (0.66-2.85)	0.80 (0.41-1.56)	1.04 (0.53-2.06)	1.18 (0.51-2.72)	1.18 (0.51-2.73)
sorders	1.12 (0.69-1.82)	1.36 (0.80-2.32)	0.84 (0.51-1.36)	0.85 (0.52-1.41)	removed ^e	removed ^e
with 95% confic 001 iate for modelin	dence intervals ng, low cell count	, 297.0-297.9 and 298.0-298.9 n >=9 events per predictor				
de-					64	