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Author manuscript *Hosp Community Psychiatry*. Author manuscript; available in PMC 2020 July 06.

Published in final edited form as:

Hosp Community Psychiatry. 1993 November ; 44(11): 1085–1090. doi:10.1176/ps.44.11.1085.

### Police Referral to Psychiatric Emergency Services and Its Effect on Disposition Decisions

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#### Abstract

**Objective:** Some clinicians and researchers have questioned the appropriateness of police referrals to psychiatric emergency services and have suggested that police exercise undue influence on hospital admission decisions. The purpose of this study was to test these assertions.

**Methods:** Research clinicians in nine emergency services in California observed staff evaluations of 112 cases and rated patients' symptom severity, danger to self or others, and grave disability. They also reviewed the criminal justice records of these patients both before and for 18 months after the index evaluation. A total of 186 patients referred by police were compared with 577 patients not referred by police.

**Results:** Patients brought by police were more likely to be subsequently hospitalized, but they were also more psychiatrically disturbed. They were more dangerous to others and more gravely disabled. They were no more likely to have a criminal record than patients not referred by police.

**Conclusions:** Police did not exercise undue influence on dispositions nor were the patients they brought in more "criminal" than others.

Police officers have been called the primary referral source for psychiatric assistance in the community (1,2) and are among the most important providers of front-line crisis intervention, particularly for poor and underprivileged persons (3,4). To understand how emergency room personnel make decisions to hospitalize persons with psychiatric disorders, several authors have investigated referrals by police officers and have reported that a large proportion of such admissions are police referrals (5,6). Some authors have even suggested that police exercise undue influence over admission decisions (7).

Psychiatric emergency service staff often view patients referred by police as "their most undesirable cases: hostile, aggressive young males" (8). Some authors have assumed that police referrals to emergency rooms represent an effort to hospitalize people who are really criminals (9,10). Steadman and associates (8,11) questioned the appropriateness of some police referrals to one university hospital in New York City. They found, however, that

psychiatric emergency clinicians tended to overestimate the number and dangerousness of police cases.

In many public hospital emergency rooms, a large percentage of visits are indeed initiated by police. Friedman and colleagues (6) reported that 31 percent of patients in their study were brought by police alone; in some cases, police accompanied patients and families. Patients who were brought by police alone were more likely to be admitted. Teplin and associates (12) found that patients referred by police were perceived by emergency room staff as seriously disturbed and in need of treatment; however, these authors recommended further research to determine whether this perception was accurate.

In an analysis of referral for involuntary commitment in two counties in Washington State, Durham and associates (7) found that cases involving the police were more likely to end in commitment than cases with no police involvement. Although these authors also found that police were more likely to be involved in cases of violent behavior than in less threatening cases, they concluded that the higher proportion of police referrals among hospital admissions resulted from "undue" police influence in the process. These findings should be viewed cautiously because Durham and colleagues did not control statistically for the effect of patients' behavior or severity of mental illness on case disposition.

A major weakness in many attempts to understand emergency room decision making has been exclusive reliance on univariate and bivariate statistical techniques, which fail to reflect what Marson and associates (13) have described as the increasing complexity of emergency room decision making. These authors specifically recommended that researchers continue to test the influence of police referrals on admission decisions.

In this study we compared police-referred patients with other patients who were evaluated in county psychiatric emergency services in California. Using clinical information obtained by researchers who observed patients' evaluations and data from the criminal justice system about these patients, we sought to identify similarities and differences between the two groups and to examine several assertions made by previous researchers about the nature and disposition of police referrals to the psychiatric emergency room.

#### Methods

Our sample of 772 cases was obtained between 1981 and 1986 from nine psychiatric emergency services in California. These facilities were located in seven California public hospitals, one walk-in crisis clinic in a county with no general hospital, and one county service on the grounds of a mental hospital. Seven facilities were in the San Francisco Bay Area (three in major urban centers and four in suburban towns), one was in the Central Valley, and one was in Los Angeles.

Data were gathered by independent observation of each assessment and from patient records. Patients were included in the sample if a researcher and a staff clinician were both available for the evaluation. The researcher accompanied the emergency service staff clinician and the patient through the emergency evaluation from the time the patient arrived

in the emergency service until a disposition decision was made. Evaluations were observed on all days of the week, during day and evening hours and, in one facility, around the clock.

Research clinicians were social workers and psychologists with experience in assessing severely mentally ill adults. Training procedures included didactic instruction on coding the research instruments with the aid of a 150-page manual, as well as practice coding of case vignettes, joint field observations with senior staff, and ongoing supervision. Tests were performed to ensure interrater reliability before researchers were permitted to observe independently.

To measure perceived dangerousness, we used Three Ratings of Involuntary Admissibility (TRIAD), a reliable index of indicators used to assess danger to self, danger to others, and grave disability (14–18). These criteria represent the legal "dangerousness standard" for civil commitment (19) and are the grounds for emergency retention specified in California statutes (20).

In 1981 Segal and associates (17) developed and tested TRIAD at psychiatric emergency rooms in two urban county hospitals in the San Francisco Bay Area. They obtained interrater reliability coefficients (Pearson r) equal to .89 for danger-to-self score, .94 for danger-to-others score, .77 for grave-disability score, and .89 for the total TRIAD score. TRIAD scores correctly predicted disposition, a concurrent measure of perceived dangerousness, in 82 percent of 89 cases. This study established that TRIAD is a reliable and valid index of aspects of a case to which clinicians respond, correctly assigning weights to the constellations of aspects that clinicians associate with dangerousness.

These findings were replicated successfully in 1983 in a study including one new facility and one of the original settings, with a total of 101 cases (18). TRIAD correctly predicted disposition in 78 percent of the cases. When patient load was taken into account, correct predictions of case disposition increased to 81 percent at the new facility and 86 percent at the original facility.

The TRIAD danger-to-self and danger-to-others scores range from 0, not dangerous, to 4, clearly dangerous at this time. The grave disability score ranges from 0 to 3 in the same direction. The overall perceived dangerousness score ranges from 1 to 4, with 4 assigned to patients receiving either 3 or 4 on any of the TRIAD scales.

Two operational definitions of mental disorder were used. The first was the *DSM-III* psychiatric diagnosis (21) assigned by the evaluating clinician. To facilitate analysis, *DSM-III* axis I diagnoses were collapsed into two broad categories. The first category was major mental disorders, which included the *DSM-III* axis I diagnosis of organic mental disorder, major affective disorder, schizophrenia, and other psychotic disorder. The second category included all other *DSM-III* axis I disorders, such as substance abuse and adjustment disorder.

The second measure used was the Indicators of Mental Disorder Scale (IMDS) (15), a measure of discrete manifestations of mental disorder, which was completed by the research clinician observing the evaluation. The IMDS reflects the dimensions of mental disorder

specified in several state statutes (22). According to that definition, mental illness is "a substantial disorder of thought, mood, perception, orientation, or memory which grossly impairs judgment, behavior, [or] capacity to recognize reality or to meet the ordinary demands of life." In addition, the IMDS includes items measuring impulse control and affect.

The severity of the patient's disorder on each dimension (thought form, thought content, perception, depression, and so forth) was rated on a scale of 0, none or mild, to 2, severe, using a manual describing criteria for each point. The internal-consistency of the IMDS—excluding the scores for depression and anxiety, the items least related to the other symptom dimensions—was high, with an alpha of .81 (N=251)(15). The interrater-reliability (Pearson r) coefficient for the total score was .73 (N=60).

Finally, California criminal justice records were requested for all patients in the sample to determine which patients had been charged with crimes anywhere in the state before and after the index visit to the emergency service.

The scores of patients referred to the emergency service by police were compared with those of other patients evaluated in the emergency service using chi square analysis and the phi measure of association for categorical measures. Scores on the ordinal measures derived from TRIAD and the IMDS were treated as interval data and compared using the t test for the difference in means.

To evaluate the relative contributions of dangerousness and the various indicators of mental disorder to the disposition decision, we used discriminant function analysis. This procedure is used to create a model in which each variable is given a weight, and the equation derived is then used to predict which group each patient belongs to—in this case, the group subsequently hospitalized or the group released. The accuracy of the model is thus evaluated on the basis of the proportion of patients it correctly classifies and the theoretic relevance of the information used in making these correct classifications.

#### Results

Information about who brought the patient to the psychiatric emergency service was available for 763 of our 772 cases. Of these patients, 186 (24 percent) were brought by police, including some who were accompanied both by police and by family members or others. Most of these patients (58.1 percent) were male. Sixty-six percent were non-Hispanic whites, 20 percent were African American, and 13.6 percent were from other racial or ethnic groups. The gender and racial or ethnic proportions were almost identical for the group of patients who were not referred by police.

The mean $\pm$ SD age of the police-referred patients was 38 $\pm$ 14 years, compared with 35 $\pm$ 15 years for the other group (t = 2.58, df=756, p .01). Patients ranged in age from 13 to 95, but only 5 percent were under age 18. Fourteen percent of those brought by police (N=26) entered the emergency service as legally voluntary patients.

Staff clinicians assigned *DSM-III* diagnostic codes in 718 of the 763 cases. As shown in Table 1, about 73 percent of the police-referred patients were diagnosed as suffering from a major mental disorder, compared with 63 percent of the patients not referred by police  $\chi^2 = 5.9$ , df= 1, p\_.01).

Judging from the diagnoses, police-referred patients were appropriate for the psychiatric emergency service. However, police use of the civil commitment criteria may differ markedly from that of clinicians. In 68 percent of the police-referred cases (N=126), police initiated an emergency civil commitment hold with documentation. In these cases police most often designated patients as being dangerous to self or others rather than gravely disabled. However, designation of a particular criterion by police was completely unrelated to TRIAD scores on any of *the three dangerousness criteria*.

As shown in Table 2, patients brought by police had significantly higher TRIAD scores on overall dangerousness than those not referred by police; the police-referred group also scored significantly higher on both danger to others and grave disability. Police-referred patients were also rated significantly higher by the researcher-observers on severity of formal thought disorder and disorders of thought content, memory, judgment, behavior, and affect. The police-referred patients were also judged to be significantly more irritable, expansive, and impulsive.

Despite these dramatic differences in patients brought by police officers, the effect of police involvement on whether a patient was retained in the hospital was weak (phi=.13), although significant. Seventy-five percent (N= 140) of police-referred patients and 61 percent of other patients (N=351) were retained after assessment ( $\chi^2$ = 12.78, df=l, p=.004). When the sample was divided into patients who were voluntary or involuntary at entry to the psychiatric service, police-referred patients were no more likely than other patients to be retained after assessment.

As shown in Table 3, discriminant function analysis designed to distinguish persons who were admitted from those who were released revealed that the TRIAD overall score on perceived dangerousness was the most important predictor of retention for both police-referred patients and those not referred by police. The relative importance of specific indicators of mental illness to the disposition decision differed only slightly for the two groups of patients. Following dangerousness, the top-ranking discriminators for police-referred patients were impulsivity, irritability, thought content disorder, formal thought disorder, "other" diagnosis (nonmajor mental disorder, which was negatively related to retention), and bizarre behavior. These top-ranking discriminators were the same for the patients not referred by police, except that impaired judgment replaced irritability.

Diagnostic categories were influential for both sets of patients but were more important in the decision to admit patients not referred by police. The discriminant functions successfully classified dispositions for 73.6 percent of the police-referred patients and 79.5 of the others.

As shown in Table 4, compared with patients not referred by the police who were retained after evaluation, police-referred patients who were retained scored higher on overall perceived dangerousness (that is, they were more likely to have a high TRIAD scale score on

at least one of the three involuntary admission criteria), formal thought disorder, and disorders of thought content, judgment, behavior, and affect; they were also judged as more irritable, expansive, and impulsive.

Police-referred patients who were retained were significantly less depressed than other retained patients and had slightly lower anxiety levels. Diagnostically, however, the two groups were similar: 78.7 percent of patients retained after being brought by police were given a diagnosis of major mental disorder, compared with 78.2 percent of the retained patients who were not referred by police. Police-referred patients who were retained scored significantly higher than other retained patients on grave disability, but no significant differences were observed in danger-to-self or danger-to-others scores.

Although at the time they were brought to the emergency service, the police-referred patients were more dangerous to others, they were not significantly more dangerous to others over the long term as measured by data obtained from state criminal justice records. Of the 763 patients in our sample, 301 had records of being charged with crimes before, on, or after the date of their emergency room evaluation. Of the 301 patients with such records, only 68 (23 percent) were police-referred patients. Thus police-referred patients were not overrepresented among those with histories of being charged with crimes.

Thirty-seven percent of the police-referred patients had records of criminal charges, compared with 47 percent (N=233) of the patients not referred by police. Details of the police records of the two patient groups before and after the emergency room evaluation were compared to determine whether differences existed in the number of criminal investigations or convictions and in the types of investigations or convictions, including those for violent crimes or sex crimes. The only significant difference was that patients not referred by police had more convictions before coming to the emergency service than did police-referred patients.

Before the evaluation in the emergency service, 25 percent of the patients who were not referred by police and 18 percent of police-referred patients had been convicted of some kind of crime ( $\chi^2$ =4.11, df=l, p = .04). The groups did not differ in number of investigations or convictions for violent crimes. Although no differences were found in the proportion of patients in each group who had been investigated or convicted for a sex crime, the total number of sex crime investigations differed. Interestingly, compared with police-referred patients, those not referred by police had significantly more investigations for sex crimes before the index emergency service visit (t = 2.17, df= 244, p=.03).

A total of 175 patients were investigated for crimes within 18 months after the index visit to the emergency service. Police-referred patients were not disproportionately represented (23 percent, N=41). No significant differences were found between police-referred patients and other patients in the overall number of investigations or convictions or the type of crime after the index visit.

#### Discussion

Patients in our study who were brought by police to the psychiatric emergency service were not always coerced; in fact, occasionally they were voluntary patients who had simply asked the police for help to get to a hospital. Judging from the severity of pathology, patients brought by police were at least as much in need of acute psychiatric services as other patients.

Patients brought by police were not only more dangerous to others than the other patients we evaluated but also more gravely disabled. The finding of such a high level of disability among police-referred patients was contrary to expectation and belies the assumption that police are responsible for "dumping criminals" on psychiatric emergency rooms (9,10).

Despite the apparent appropriateness of police referrals, a puzzling divergence was found between police officers' attributions of dangerousness and clinical measures of the three civil commitment criteria. Nothing in our data, however, indicated that the different application of criteria by police represents an effort to force admission.

A single set of symptoms discriminated between patients who were retained in the hospital and those who were released regardless of whether patients were brought in by the police or by others. The only exceptions were irritability, which was more important in decisions regarding disposition of police-referred patients who were retained, and impaired judgment, which was more important in decisions regarding patients not referred by police.

Although diagnosis contributed more to the decision to hospitalize patients who were not brought in by police, police-referred patients who were retained were not inappropriately hospitalized, and they were just as likely to be psychotic as the other patients who were retained. If police exercised undue influence on the decision to admit patients, we would expect police-referred patients to score lower than other patients on the key variables that discriminated between patients who were retained and those who were released. However, our findings showed that patients brought by police scored higher than the other patients on the variables that contributed most to the decision to retain. Although at the index emergency service visit police-referred patients scored higher on dangerousness to others, they were not more "criminal" or more dangerous over the long term.

Our data were drawn from nine diverse facilities over a five-year period in communities of various sizes and types, but most communities were located in the San Francisco Bay Area. Generalization beyond the five-year period and to other large metropolitan regions should be done with caution. Relationships between the police and the mental health systems in less heavily populated regions of the country may require separate study. We have demonstrated a methodology for such studies that we think is most likely to minimize bias in the results.

#### Conclusions

In this study we tested some common assumptions about police referrals and decision making in psychiatric emergency services. Some researchers have argued that police are contributing to the "psychiatrization" of criminal behavior and that they may exercise undue

Furthermore, we found evidence that contradicts the assumption that police-referred patients are more "criminal" than patients referred from other sources. In summary, police did not exercise undue influence on dispositions, nor did they bring more criminal elements into the acute psychiatric services we studied.

#### Acknowledgments

This research was supported by National Institute of Mental Health grant MH37310 and the University of California, Berkeley, campus committee on research.

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Page 9

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Primary DSM-III axis I diagnoses <sup>1</sup> of patients referred to psychiatric emergency services by police and patients not referred by police

	(N=180)	•	(N=538)	
Disorder	z	%	z	%
Major mental disorder				
Organic mental disorder	11	6.1	38	7.1
Schizophrenia	75	41.7	193	35.8
Major affective disorder	29	16.1	LL	14.3
Other psychotic disorder	16	8.9	32	6.0
Total	131	72.8	340	63.2
Other disorders				
Substance use	13	7.2	39	7.3
Adjustment disorder	28	15.6	103	19.1
Other	9	3.3	45	8.4
No diagnosis or deferred diagnosis	2	1.1	11	2.0

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# Table 2

Mean scores on the Three Ratings of Involuntary Admissibility (TRIAD) scale and the Indicators of Mental Disorder Scale (IMDS) of patients referred to psychiatric emergency services by police and patients not referred by police

Scale and subscale		CIDINO	-	3	d
TRIAD					
Overall perceived dangerousness <sup>1</sup>	3.30	2.80	4.47	761	.001
Danger to self <sup>2</sup>	1.14	1.17	.30	761	.763
Danger to others $^2$	1.65	1.22	3.19	761	.001
Grave disability $^{\mathcal{J}}$	1.36	LL.	5.41	761	.001
IMDS <sup>4</sup>					
Thought form	.70	.45	76.	666	.001
Thought content	.75	.47	4.32	666	.001
Perception	.36	.35	.13	666	.890
Orientation	.28	.19	1.65	666	.101
Memory	.35	.22	2.22	666	.027
Judgment	.93	.62	5.30	666	.001
Behavior	.70	.46	3.65	666	.001
Depression	.47	.60	2.28	666	.023
Anxiety	.33	.41	1.53	666	.126
Irritability	.65	.40	4.05	666	.001
Expansiveness	.25	II.	2.98	666	.001
Impulsivity	1.00	.72	4.25	612	.001
Affect	.36	.20	2.79	613	.001

Hosp Community Psychiatry. Author manuscript; available in PMC 2020 July 06.

<sup>4</sup>For manifestations of mental disorder in the dimension specified, scores range from 0, none or mild, to 2, severe. IMDS scores were not obtained in all cases (N =df+2).

 $\mathcal{F}_{\text{Scores range from 0 to 3.}}$ 

#### Table 3

Relative importance of indicators of mental disorder in disposition of police-referred patients and patients not referred by police, indicated by correlation between symptom scores and the discriminant function predicting retention<sup>I</sup>

Variable	Police referred	Others
Perceived dangerousness	.60	.67
Impulsivity	.50	.41
Irritability	.45	.17
Thought content	.43	.40
Thought form	.40	.42
Other diagnosis <sup>2</sup>	39	50
Behavior	.38	.33
Major mental disorder	.28	.51
Expansiveness	.24	.13
Affect	.23	.20
Judgment	.20	.32
Anxiety	.15	.02
Perception	.14	.30
Orientation	.05	.30
Memory	.04	.20
Depression	.01	.06

 $^{I}$ The model correctly classified 73.6 percent of police-referred patients and 79.5 percent of other patients. Canonical correlation= .53 for police-referred patients, .63 for other patients. Wilks' lambda= .72 (p .002) for police-referred patients, .61 (p .001) for other patients

 $^{2}$ Diagnosis other than organic mental disorder, schizophrenia, other psychotic disorder, or major affective disorder

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## Table 4

Mean scores on the Three Ratings of Involuntary Admissibility (TRIAD) scale and the Indicators of Mental Disorder Scale (IMDS) of patients referred to psychiatric emergency services by police and patients not referred by police who were subsequently retained

Scale and subscale	Police referred		•	df	b
TRIAD					
Overall perceived dangerousness <sup>1</sup>	3.57	3.32	2.35	489	.019
Danger to $\operatorname{self}^2$	1.22	1.38	1.23	489	.218
Danger to others <sup>2</sup>	1.85	1.53	1.90	489	.058
Grave disability $^{\mathcal{3}}$	1.63	1.19	3.15	489	.002
IMDS <sup>4</sup>					
Thought form	.80	.62	2.15	428	.032
Thought content	.86	.63	3.05	428	.002
Perception	.39	.46	96.	428	.338
Orientation	.30	.29	.14	428	.890
Memory	.37	.29	1.13	428	.261
Judgment	.97	.74	3.19	428	.002
Behavior	.79	.59	2.71	428	.007
Depression	.47	.62	2.17	428	.031
Anxiety	.35	.42	1.18	428	.240
Irritability	.75	.48	3.84	428	000.
Expansiveness	.30	.14	2.58	428	.011
Impulsivity	1.13	06.	2.93	392	.004
Affect	.41	.26	2.07	393	.041

Hosp Community Psychiatry. Author manuscript; available in PMC 2020 July 06.

<sup>4</sup>For manifestations of mental disorder in the dimension specified, scores range from 0, none or mild, to 2, severe. IMDS scores were not obtained in all cases (N =df+2).

 $\mathcal{F}_{\text{Scores range from 0 to 3.}}$