

**Restoration to Competency of Forensic Patients in California with Dementia/Alzheimer's
Disease**

Corresponding Author: Bradley J. Bartos

*Department of Criminology, Law & Society, University of California – Irvine,
Social Ecology II 3358, Irvine, CA, 92697-7080, USA.*

Email: bbartos@uci.edu Phone: (708) 250-2795

Author: Matthew Renner

*Department of Criminology, Law & Society, University of California – Irvine,
Social Ecology II 3358, Irvine, CA, 92697-7080, USA.*

Email: mlrenner@uci.edu Phone: (617) 448-8762

Author: Carol Newark

*Department of Criminology, Law & Society, University of California – Irvine,
Social Ecology II 3358, Irvine, CA, 92697-7080, USA.*

Email: cnewark@uci.edu Phone: (724) 344-3884

Author: Dr. Richard McCleary

*Department of Criminology, Law & Society, University of California – Irvine,
Social Ecology II 3315, Irvine, CA, 92697-7080, USA.*

Email: mcclary@uci.edu Phone: (949) 824-7280

Author: Dr. Nicholas Scurich

*Criminology, Law & Society and Psychology & Social Behavior Departments,
University of California – Irvine,*

Social and Behavioral Sciences Gateway 4312, Irvine, CA, 92697-7080, USA.

Email: nscurich@uci.edu Phone: (949) 824-4046

Abstract

Criminal defendants found incompetent to stand trial (IST) are sent to state hospitals for treatment to be restored to competency. IST patients diagnosed with dementia and related disorders present a particular challenge to clinicians, since they must be restored successfully within a statutorily mandated timeframe (e.g., 3 years in California for defendants charged with a felony offense). This study examined a comprehensive dataset that included all forensic patients served by California's Department of State Hospitals from September 2003-February 2016. The findings revealed that although most IST patients with a dementia diagnosis were restored to competency within the statutory timeframes, they spent, on average, over twice as long confined that IST patients without a dementia diagnosis and were less likely that the latter group to be successfully restored. One implication of these findings is that forensic clinicians ought to assess whether IST patients diagnosed with dementia are likely to be restored or not as early as possible in the evaluation and triage process, and report to the court any IST patients with a dementia diagnosis who are unlikely to be restored successfully. This would both prevent such patients from gratuitous confinement as well as free up treatment resources for other patients.

Keywords: incompetent to stand trial, restoration to competency, forensic patients, commitment length, dementia

Introduction

California's Department of State Hospitals (DSH) is tasked with the evaluation and treatment of a variety of forensic populations, including those found Incompetent to Stand Trial (IST), Not Guilty by Reason of Insanity (NGRI), Mentally Disordered Offenders (MDO), Sexually Violent Predators (SVP), and Lanterman-Petris-Short Commitments/Conservatorships (LPS). ISTs constitute the largest forensic population, comprising 53.9% of the total patients served by DSH from September 2003-March 2016. This short report compares the demographics of DSH patients diagnosed with Alzheimer's, Dementia (or a Major Neurocognitive disorder) to the remaining patients serviced by DSH. Additionally, we examine whether these groups differ in terms of length of confinement when committed as IST.

A bedrock principle of criminal law is that a defendant cannot be "tried or adjudged to punishment while such person is mentally incompetent (Pate v. Robinson, 1966)." In California, a criminal defendant is incompetent when "as a result of mental disorder or developmental disability, [she] is unable to understand the nature of the criminal proceedings or to assist counsel in the conduct of a defense in a rational manner (Penal Code (§ 1367(a))." If deemed IST, the individual is committed to DSH and provided treatment in order to be restored to competency. California limits IST commitments to 3 years for felonies, 1 year for misdemeanors, or the maximum sentence for the defendant's alleged crime, whichever is shorter (Cal. Penal Code §§1370(c)(1), 1370.01(c)(1)). If not restored to competency by the statutory limit, the individual must be either released or committed under another legal classification (Welf. & Inst. Code §5008(h)(1)(B); Penal Code §1370(c)(2)).

Our particular interest in patients diagnosed with Dementia, Alzheimer's, or a Major Neurocognitive Disorder is due to the largely intractable course of these disorders and the statutory limits on IST commitment times. A recent study examined the impact of age at admission and a Dementia diagnosis on the likelihood of successful restoration to competency (Morris & Parker, 2009). The study found that both a Dementia diagnosis and increased age-at-admission were associated with lower likelihoods of being restored, however it also found that a significant number of patients diagnosed with Dementia (63.8%) were successfully restored to competency within one year. In other words, these findings suggest that although patients with a Dementia diagnosis are less likely to be restored within statutory maximum timeframes, nevertheless a significant number of these patients are successfully restored.

Thus, we expect ISTs diagnosed with some form of dementia to take longer to be restored to competency than other ISTs. Further, we expect a greater proportion of ISTs diagnosed with Dementia to reach the three-year statutory maximum for restorability than other ISTs. Finally, we expect patients diagnosed with some form of dementia to exhibit longer lengths of stay than non-dementia patients regardless of commitment type.

Data & Methods

This report utilizes individual-level operational data made available to UCI's Simulation Modeling Lab through an ongoing collaboration with California's Department of State Hospitals (DSH). The de-identified dataset contains 46,798 individual records covering all admissions and discharges to DSH from September 2003 through March 2016. The records contain demographics (e.g., gender, ethnicity, county of commitment), primary diagnoses, admission

dates and discharge dates. Patients with diagnoses texts that include Neurocognitive Disorder (DSM-V), Dementia, or Alzheimer's (DSM-IV and earlier) comprise our "Dementia" subpopulation. A total of 495 patients (1.06% of the total DSH population) were diagnosed with some form of Dementia, of which 301 were IST commitments, 108 were LPS commitments, 23 were NGRIs, and the remaining 63 were MDOs.

Results

[Insert table 1 about here]

Table 1 displays the characteristics of the forensic patients in California diagnosed with and without dementia. Wilcoxon Two-sample Rank Sum Tests will be utilized to evaluate the differences in length of stay between the Dementia population and all other DSH patients. Several differences between these groups are noteworthy: first, the average dementia patient is substantially older (median=57 years old) than the average non-dementia patient (median=38). Second, patients with dementia are much more likely to be male than patients without dementia. Third, patients with dementia are significantly more likely to be white and significantly less likely to be black than patients without dementia. Finally, patients with dementia are significantly more likely to be legally committed as an IST or LSP than patients without dementia.

Perhaps the most striking results concern the length of time patients with dementia spend confined compared to patients without dementia. The mean length of stay for ISTs with some form of Dementia diagnosis (n=301) is 426.2 days (median 300 days), compared to a mean of

194.9 days (median 112 days) for all other ISTs (n=24,910). (Z-value of 13.64 ($P > Z$; $p < .0001$; $P > |Z|$; $p < .0001$). This result suggests that ISTs diagnosed with some form of Dementia exhibit significantly longer lengths of stay than ISTs not diagnosed with some form of Dementia. Similar to the Morris and Parker (2009) finding, our results suggest that a Dementia diagnosis is associated with longer lengths of stay and a decreased likelihood of restorability within one (dementia=58.12% restored; no dementia= 86.36% restored) and three years (dementia=94.35% restored; no dementia= 99.53% restored).

Regardless of the specific type of commitment (e.g., LPS commitment; NGRI), patients with dementia spend longer periods of time confined, sometimes substantially longer periods. For instance, the average dementia patient committed under LPS spends nearly double the amount of time confined (median 1,086 days) than a non-dementia patient (median=544 days). Similarly, the average dementia patient committed as an IST spends over 2.5 longer confined than a non-dementia patient (median 300 days vs 112 days, respectively). It is important to bear in mind that these figures do not factor in the patients who are currently confined (these data only include patients who were admitted and discharged within the relevant time frame); to the extent that patients with dementia are less likely to be released than patients without dementia, these findings probably understate the disparities in the length of confinement.

Conclusion

This report is, to the best of our knowledge, the first to examine the characteristics of forensic patients with dementia in the State of California. Forensic patients committed to DSH have an interesting legal status: they have not been convicted of a crime yet they are being

confined involuntarily. The explicit purpose of such confinement is to provide treatment that could reinstate the patient's liberty. The data reported here suggest that patients with dementia spend significantly longer periods of time confined in DSH. This is particularly true for ISTs, who must be restored within a statutorily mandated time-frame or be recommitted under a different legal classification. Although the present analysis suggests that patients with Dementia take longer to restore to competency and are commonly not restored within the statutory time-frame (5.65%), most ISTs diagnosed with some form of Dementia are in fact restored to competency and released.

Perhaps this is unsurprising, given the difficulty – and even intractability – of treating dementia and related disorders. Still, lawyers and judges should be cognizant of the fact that committing an individual with this disorder is likely to lead to a period of confinement that is much greater than it would be for individuals not suffering from dementia.

References

Cal. Penal Code § 1367(a) , 1980. Amended 2014.

Cal. Penal Code § 1370(c)(1-2), 1980. Amended 2015.

Cal. Penal Code § 1370.01(c)(1), 1980. Amended 2014.

Cal. Welfare & Institutions Code §§5008(h)(1)(B), 1967. Amended 2013.

Morris, D. R., & Parker, G. F. (2009). Effects of advanced age and dementia on restoration of competence to stand trial. *International Journal of Law and Psychiatry*, 32(3), 156–160.

Pate v. Robinson, 383 U.S. 375 (1966).

Table 1

Characteristics of the DSH population by patients diagnosed with Dementia/Alzheimer's/NCD and those who have not (N=46,798)

Characteristic	Dementia (N=495)		Remaining DSH Patients (N=46,303)		Test Statistic ^a	P
	N	%	N	%		
Age at Admission (mean± SD years)	56.4 ± 16.7		38.9 ± 12.2		t=-23.32 ⁱ	<.0001
Age at Discharge (mean± SD years)	58.4 ± 16.6		39.6 ± 12.4		t=-24.97 ⁱ	<.0001
Male	466	94.14%	39545	85.40%	χ ² =30.15 ⁱⁱ	<.0001
Race or ethnicity					χ ² =22.74 ⁱⁱ	<.0001
Black	111	22.42%	13672	29.53%	χ ² =11.89 ⁱⁱ	≈.0006
Hispanic	127	25.66%	10953	23.66%	χ ² =1.089 ⁱⁱ	≈.2974
White	238	48.08%	18594	40.16%	χ ² =12.787 ⁱⁱ	≈.0003
Other	19	3.84%	3084	6.66%	χ ² =6.3 ⁱⁱ	≈.0121
Commitment Type					χ ² =198.5 ⁱⁱ	<.0001
Incompetent to Stand Trial	301	61%	24910	53.23%	χ ² =9.686 ⁱⁱ	≈.0019
Not Guilty by Reason of Insanity	23	5%	3411	7.29%	χ ² =5.33 ⁱⁱ	≈.0210
Conservatorship	108	22%	3011	6.43%	χ ² =170.18 ⁱⁱ	<.0001
Commitment Length (day)					Z=10.98 ⁱⁱⁱ	<.0001
IST Commitment Length (mean± SD days)	426.1 ± 408.8		194.9 ± 339.9		Z=13.64 ⁱⁱⁱ	<.0001
NGRI Commitment Length (mean± SD days)	2925.4 ± 2444.1		2403.5 ± 2513.6		Z=1.344 ⁱⁱⁱ	≈.2567
CONS Commitment Length (mean± SD days)	1477.0 ± 1363.9		1092.9 ± 1495.9		Z=4.72 ⁱⁱⁱ	<.0001

^a df=46796 for t-tests, df=1 for all chi square analysis except for ethnicity for which df=3, df=1 for all Wilcoxon Rank Sum Tests.

ⁱ two sided t-test, unequal variances, satterthwaite method.

ⁱⁱ Chi square analysis

ⁱⁱⁱ Wilcoxon two-sample rank sum test