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Civil and Forensic Patients: Comparing Demographics, Risk Factors, and Negative Life Events

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Abstract

OBJECTIVES: This investigation centres on how the mentally ill with a forensic admission compare to the mentally ill with a civil admission, and investigates who inpatients with a forensic and civil admission are, and how the risk factors and negative historical events they have experienced compare or differ. **THEORETICAL BASE:** Using a risk and resilience framework, risk factors that are deleterious to healthy development are used as variables. **METHODS:** The records of all adult inpatients both forensic and civil, aged 18 to 89 at admission in two U.S. mountain region public psychiatric hospitals were included in the sample (n=1768). All patients are assessed using the Colorado Clinical Assessment Record (CCAR) which, measures a diverse set of variables including Current Issues, History of Issues, Demographics, and Disabilities. **OUTCOMES:** Civil and forensic patients have more in common than differences. Both samples compare more closely to risk factors and negative historical events than they do to the general population. However, this begins to break down once the sample is separated by gender. **SOCIAL WORK IMPLICATIONS:** Social Workers who work in prison systems need to become more familiar with mental illness interventions. Additionally, social workers should both educate law enforcement about de-escalation tactics with the mentally ill and intervene on mental health related police calls. On the macro level, social workers should advocate for the mentally ill to be housed in psychiatric hospitals rather than be imprisoned where they will often not receive inpatient psychiatric care.

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civil, forensic, inpatient psychiatric hospitals, gender, risk factors

INTRODUCTION

In the United States, it has been suggested that there are greater numbers of mentally ill persons in the prison system than in psychiatric hospitals (Ditton, 1999; Lamberti, Weisman, Faden, 2004; Schnell, Leipold, 2006; James, Glaze, 2006; Daniel, 2007; Torrey et al., 2010). Prisoners serving short term sentences or those awaiting trial have the highest rate of mental health disorders (60%), followed by State inmates (49%), and Federal prisoners (40%) (James, Glaze, 2006) with very few receiving mental health services while incarcerated. Additionally, cost cutting measures at private prisons have further eroded psychiatric care for forensic patients including being prescribed current psychiatric drugs for mental illnesses (Daniel, 2007). There is such a dearth of mental health services in prisons that it has been found that suicide is the 3rd leading cause of death in prisons (#1 natural causes, #2 AIDS; Daniel, 2007).

Prisoners with a mental illness in the U.S. were more likely than other inmates to be imprisoned for violent offenses and much less likely to receive a prison sentence for drug-related offenses (Ditton, 1999; James, Glaze, 2006; Schnell, Leipold, 2006; Torrey et al., 2010). However, mentally ill prisoners were often under the influence of drugs or alcohol when they committed the offense that brought them into the criminal system (Ditton, 1999; James, Glaze, 2006). Thus drug and alcohol dependency contributed to or exacerbated their mental health needs (Torrey et al., 2010). However, mental health treatment, including substance abuse treatment, in the prison system does not occur for most prisoners with mental health needs; only 33.8% of state prisoners with mental health needs received treatment, 24% of those in federal prisons, and 17.5% of those in local prisons (James, Glaze, 2006).

Throughout the U.S. prison system, female prisoners had higher rates of mental illness than their male counterparts (James, Glaze, 2006; Schnell, Leipold, 2006). Additionally, mentally ill inmates were disproportionately affected by a trauma history. Nearly 8 in 10 female forensic patients reported physical or sexual abuse (Ditton, 1999; James, Glaze, 2006). Male prisoners with mental health needs were more than twice as likely in comparison to other male inmates to report an abuse history (Ditton, 1999; James, Glaze, 2006). Thus, both female and male prisoners with mental illnesses had trauma and abuse histories that were vastly different than inmates without mental illness.

Additionally, U.S. mentally ill prisoners are spending more time incarcerated than their non-mentally ill counterparts. Prisoners with a mental illness were sentenced to serve on average a year longer for offenses than non-mentally ill inmates (Ditton, 1999; James, Glaze, 2006; Torrey et al., 2010). They were also more likely to be charged with breaking the rules in prison, often increasing prison time, as compared to other prisoners (Ditton, 1999; James, Glaze, 2006; Schnell, Leipold, 2006; Torrey et al., 2010). Thus prisoners with mental illnesses are spending more time in the prison system because their untreated symptoms cause further barriers to regaining their freedom. Prison staff often lack knowledge and are ill-equipped in how to intervene with mentally ill prisoners (Torrey et al., 2010). Generally, U.S. prison and jail staff have not been trained on how to safely intervene with a triggered, psychotic or delusional inmate and thus mentally ill inmates are more likely to be abused in jail or prison (Torrey et al., 2010) and more likely to spend time in solitary confinement (ACLU, 2013). Thus, the mentally ill are being further traumatized and victimized in the prison system. Additionally, prisoners with a mental-illness have a recidivism rate reported from nearly 90% (Torrey et al., 2010) to 58% (Schnell, Leipold, 2006). Thereby, U.S. jails and prisons are becoming a revolving door for the mentally ill.

The U.S. state in which the research was conducted showed the odds are four times more likely that a mentally ill person would be imprisoned rather than placed in a psychiatric hospital (Torrey



et al., 2010). Additionally, in the state the research was conducted less than 1% of forensic patients were transferred to a psychiatric hospital (Schnell, Leipold, 2006). Thus the mentally ill who commit crimes will less likely receive any sort of psychological or psychiatric intervention to reduce the likelihood that they will commit future crimes and thus are more likely to return to the prison system upon release.

The high rates of mental illness within the prison system is largely a consequence of the deinstitutionalisation of the mentally ill and the debacle of the state psychiatric hospital system in the United States (Daniel, 2007; Torrey et al., 2010). In 2004, in the United States, there were 100,439 psychiatric beds available in public and private psychiatric hospitals and in the psychiatric units of general hospitals, which made approximately one psychiatric bed available for every 3,000 people (Torrey et al., 2010). In comparison in 1955, there was one public psychiatric bed available for every 300 people (not considering private psychiatric hospitals; Torrey et al., 2010). Thus doing the math, an individual with a severe mental illness was ten times more likely to receive treatment in 1955 than in 2004 (Torrey et al., 2010). Sadly, this scenario continues today.

It can not be more succinctly stated that the U.S. prison system is overrun and ill-equipped to deal with the mentally ill in their midst. In response, many states are beginning to use Mental Health Courts that give offenders a choice between following a treatment plan often in a psychiatric hospital or being imprisoned (Torrey et al., 2010). Thus, most recently, there has been an increase in beds allocated for forensic patients in psychiatric hospitals, for example California has an increase of 80%. In Colorado, from July 1, 2010 to June 30, 2015 the forensic legal status of discharged patients has gone from 26.2% to 51.9% having had a forensic legal status during their visit, with increases each fiscal year. But the creation of forensic beds in psychiatric hospitals does not begin to stem the tide, due to the fact that forensic patients generally have longer stays (Davoren et al., 2015). However, it improves the likelihood that people with a mental illness who commit a crime will receive mental health treatment and not simply be punished for wrongdoings.

Furthermore, the rates of recidivism for forensic patients returning to psychiatric hospital care are far lower (28.2%; Green et al., 2014) than mentally ill criminals returning to the prison system (90%–58%; Schnell, Leipold, 2006; Torrey et al., 2010). Therefore, creating a system where criminals with a mental illness receive care in a psychiatric hospital seems to be a preferred method from a cost-benefit analysis (Torrey et al., 2010), as well as being more effective and more humane. Thus, there needs to be a change in how we understand people with mental illness who commit crimes in that the common denominator should not be their criminal activity, where thereby they are punished by imprisonment for wrongdoings, but rather their mental illness, and as such they receive treatment in psychiatric hospitals.

As the pendulum begins to move towards a greater number of forensic patients in psychiatric hospitals, we wanted to investigate how the mentally ill with a forensic admission compare to the mentally ill with a civil admission. It is clear that psychiatric hospitals are a better inpatient treatment option for mentally ill individuals who commit crimes than prisons. However, how do these two populations housed in psychiatric hospitals resemble each other or differ? Are they distinct populations or is it simply that mental illness is expressed in criminal or non-criminal outcomes in these populations? There is very little research comparing the two groups. The literature primarily has focused on demographic differences of forensic patients with particular commitment statuses (e.g. sexual offenders tend to be older and Caucasian; Vess, Murphy, Arkowitz, 2004). Specifically, we wish to learn who the patients with a forensic and civil admission are, how they compare demographically and how the risk factors and negative historical events they have experienced compare or differ.



METHODOLOGY

Sample

The records of all adult inpatients both forensic and civil, aged 18 to 89 at admission, with discharges from July 1, 2014 to June 30, 2016 in two U.S. mountain region public psychiatric hospitals were included in the sample (n=1768). The sampling timeframe was chosen to maintain consistency between the two hospitals in terms of data collection methods. These two hospitals were selected as they are generally considered to be the last line of inpatient treatment for individuals with the most severe mental health needs within the state they are located, with no other equivalent options available to the general public. We are cognizant that other treatment options for patients with less severe mental health needs exist, but suggest this sample gives the greatest parity between civil and forensic entries.

If a patient had multiple visits during this time period the last visit was used to prevent those who had repeat visits from skewing the data. The mean number of visits by patients in the sample was 1.19 ($SD = .48$).

Sample demographics

The sample was 27.1% female (56.8% civil, 43.2% forensic) and 72.9% male (39.4% civil, 60.6% forensic), as compared to the state, 49.8% female and 50.2% male (United States Census Bureau, state quick facts, 2016). In Colorado from July 1, 2010 to June 30, 2015 the forensic legal status of discharged patients has gone from 26.2% to 51.9% having had a forensic legal status during their visit, with increases each fiscal year.

In comparison to the rest of the inpatient population individuals who identified as Asian/Pacific Islander ((1, $N = 1997$) = 8.06, $p < .05$) or Latino/Hispanic ((1, $N = 1997$) = 13.00, $p < .001$) were less likely to have had a forensic legal status while those who identified as African American/Black ((1, $N = 1997$) = 8.81, $p < .05$) were more likely to have had a forensic legal status.

Table 1: Ethnicity/race of sample in comparison to state

Ethnicity/Race	In Hospital Civil ($N=780$)	In Hospital Forensic ($N=988$)	In State+
American Indian/Native Alaskan	0.6%	0.9%	1.6%
Asian/Pacific Islander	2.3%*	0.9%*	3.1%
African American/Black	11.6%**	17.0%**	4.5%
Latino/Hispanic	16.1%***	9.6%***	21.2%
Caucasian/White	43.0%	57.0%	69.0%
Other	0.9%	0.3%	0.6%

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$

+Source: United States Census Bureau, state quick facts, 2016

Generally, the level of education within the hospital patient population was low, with 70.5% of the civil patients and 72.9% of forensic patients having a 12th grade (equivalent to the British GCE advanced level) education or less ((1, $N = 1997$) = 1.20, $p = .294$) as compared to the state where only 36.3% had a 12th grade education or less (Census 2000 Profile, State Census Profile, 2002). Additionally, the income of the patient sample was low with 98.8% of civil patients and



99.0% of forensic patients ((1, N = 1627) = 1.20, p = .815) earning less than \$25,000 (£17,500) per year as compared to 23.1% of the state population that earn less than \$25,000 (Census 2000 Profile, State Census Profile, 2002). Most inpatients (76.9% of civil patients and 89.9% of forensic patients ((1, N = 1997) = 54.59, p < .001)) had never been married. Both forensic and civil patient’s primary diagnoses fell mostly into three categories; Schizophrenia/Psychotic, Bipolar, and Substance Abuse/Addictive, with no other category making up five percent or more of the primary diagnoses (see table 2).

Table 2: Primary diagnosis of sample

Diagnosis Category	Civil Patients (N=780)	Forensic Patients (N=988)
Schizophrenia/Psychotic	50.7%	54.0%
Bipolar***	16.2%	20.3%
Substance Abuse/Addictive***	23.2%	7.8%
Other***	0.9%	19.9%

*p<.05., **p<01., ***p<001

INSTRUMENTATION

At admittance or at discharge from the hospital, all patients are assessed using the Colorado Clinical Assessment Record (CCAR) (Colorado Department of Human Resources, 2014). The CCAR was developed in 1976 and implemented in 1978 by the Colorado Division of Mental Health. It is commonly used in a handful of U.S. states and Canada. The most recent version of the CCAR is seven pages long and measures a diverse set of variables including Current Issues, History of Issues, Demographics, and Disabilities. The assigned social worker completes the CCAR using a combination of patient records, interviews with patient’s family and friends, and discussions with the patient. The majority of variables are measured dichotomously. The results are maintained in a secure database. The last completed CCAR was used for the purposes of this study under the assumption that the last CCAR would be more complete and accurate than previous ones. In addition to the CCAR, databases maintained by the hospitals were also used to collect data. These databases contain information commonly accessed during treatment such as primary diagnosis and demographics. The legal status of an inpatient was considered to be *forensic* if at any time during an inpatient stay they had a forensic legal status, which required reporting the progress of the patient to a court and/or permission from a court to release the patient. A lack of a forensic legal status at any time during an inpatient stay resulted in the patient being classified as a *civil* patient.

Information was aggregated from all sources. If any source indicated the presence of a risk factor or historical event it was considered to be present. For example, if it was indicated that a patient has a diagnosis related to a learning disability in the hospital databases, but it was not recorded on the CCAR it was considered to be present.

RESULTS

The results first presented are the risk factors and negative historical events experienced by both civil and forensic patients, then separated by gender and then compared to the general population. As indicated in Table 3, many historical experiences of the sample differ from the general population. In regard to risk factors and negative historical events, civil and forensic inpatients



are very similar to each other and different from the general population. However, there are some instances where they differ from each other.

Table 3: Historical risk factors and negative events by legal status

Risk Factor/Event	Civil Patients (N=914)	Forensic Patients (N = 1083)	Total Hospital Population (N=1997)	General Population
History of Trauma				
Yes	80.2%***	63.8%***	71.3%	
No	19.8%	36.2%	28.7%	96.0%
Suicide Attempts				
Yes	31.9%	30.4%	31.1%	
No	68.1%	69.6%	68.9%	95.4%
History of Sexual Misconduct				
Yes	1.8%***	4.7%***	3.3%	
No	98.2%	95.3%	96.7%	99.8%
Property Destruction				
Yes	11.7%***	5.1%***	8.2%	
No	88.3%	94.9%	91.8%	99.9%
Fire Setting				
Yes	2.5%	1.9%	2.2%	
No	97.5%	98.1%	97.8%	99.0%
Animal Cruelty				
Yes	1.2%	0.8%	1.0%	
No	98.8%	99.2%	99.0%	95.0%
Danger to Self				
Yes	35.0%*	30.2%*	32.5%	
No	65.0%	69.8%	67.5%	96.0%
Danger to Others				
Yes	10.8%***	17.2%***	14.1%	
No	89.2%	82.8%	85.9%	90%
Mental Illness in Family				
Yes	48.6%***	30.6%***	39.2%	
No	51.4%	69.4%	60.8%	80.0%
History of Neglect				
Yes	19.2%	15.8%	17.4%	
No	80.8%	84.2%	82.6%	92.9%
History of Physical Abuse				
Yes	41.4%*	36.7%*	41.4%	
No	58.6%	63.3%	58.6%	83%
Developmental Disability				
Yes	9.2%	9.0%	9.2%	
No	90.8%	91.0%	90.8%	85%
Traumatic Brain Injury				
Yes	8.9%	8.1%	8.9%	
No	91.1%	91.9%	91.1%	91.5%
Learning Disability				



Yes	6.3%***	14.3%***	10.7%	
No	93.7%	85.7%	89.3%	90.0%
History of Sexual Abuse				
Yes	31.3%***	24.2%***	27.6%	
No	68.7%	75.8%	72.4%	92.0%
*p≤.05., **p≤01., ***p≤001				

Sources: ^a (Briere, Dietrich, & Agee, 2015), ^b (Kessler, Borges, Walters, 1999), ^c (<http://www.worldatlas.com/articles/state-by-state-numbers-of-registered-sex-offenders-in-the-us.html>, 2016), used number of registered sex offenders/ US population

There was a significant difference ((1, N = 1997) = 47.75, p <.001) in the legal status of males and females with male patients having higher rates of forensic status. As a result it was considered worthwhile to explore the differences in risk factors and negative historical events within legal statuses as characteristics associated with gender. As can be seen in Table 4, female inpatients are more homogeneous than male inpatients in Table 5.

Table 4: Comparing risk factors and negative historical events between legal statuses in females

Event/Risk Factor	Civil Patients (N=272)	Forensic Patients (N=207)
History of Trauma		
Yes	88.5%	83.3%
No	11.5%	16.7%
Suicide Attempts		
Yes	34.9%	35.2%
No	65.1%	64.8%
History of Sexual Misconduct		
Yes	2.3%	1.0%
No	94.3%	95.9%
Property Destruction		
Yes	7.6%	4.3%
No	92.4%	95.7%
Fire Setting		
Yes	1.6%	2.9%
No	98.4%	97.1%
Animal Cruelty		
Yes	0.7%	1.0%
No	99.3%	99.0%
Danger to Self		
Yes	33.9%	33.3%
No	66.1%	66.7%
Danger to Others		
Yes	10.9%	7.6%
No	89.1%	92.4%
Mental Illness in Family***		
Yes	52.6%	64.8%
No	47.4%	35.2%
History of Neglect		



Yes	25.0%	23.3%
No	75.0%	76.7%
History of Physical Abuse		
Yes	56.6%	56.7%
No	43.4%	42.3%
Developmental Disability		
Yes	10.3%	10.0%
No	89.7%	90.0%
Traumatic Brain Injury		
Yes	9.0%	7.2%
No	91.0%	92.8%
Learning Disability ***		
Yes	5.4%	14.5%
No	94.6%	85.5%
History of Sexual Abuse		
Yes	52.3%	48.1%
No	47.7%	51.9%

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

Table 5: Comparing risk factors and negative historical events between legal statuses in males

Event/Risk Factor	Civil Patients (N=508)	Forensic Patients (N=781)
History of Trauma***		
Yes	75.9%	58.8%
No	24.1%	42.1%
Suicide Attempts		
Yes	30.3%	29.1%
No	69.7%	70.8%
History of Sexual Misconduct***		
Yes	1.6%	5.7%
No	98.4%	94.3%
Property Destruction***		
Yes	13.9%	5.3%
No	86.1%	94.7%
Fire Setting		
Yes	2.9%	1.6%
No	97.1%	98.4%
Animal Cruelty		
Yes	98.4%	0.8%
No	1.6%	99.2%
Danger to Self*		
Yes	35.5%	29.4%
No	64.5%	70.6%
Danger to Others***		
Yes	10.7%	26.4%
No	89.3%	70.6%
Mental Illness in Family***		
Yes	46.4%	19.8%



No	53.6%	80.2%
History of Neglect		
Yes	16.1%	29.3%
No	83.9%	70.7%
History of Physical Abuse		
Yes	33.4%	13.6%
No	66.6%	86.4%
Developmental Disability		
Yes	8.6%	31.2%
No	91.4%	68.8%
Traumatic Brain Injury		
Yes	8.8%	8.8%
No	91.2%	91.2%
Learning Disability ***		
Yes	6.8%	8.4%
No	93.9%	91.6%
History of Sexual Abuse		
Yes	20.3%	14.3%
No	79.7%	86.6%

* $p \leq .05$, ** $p \leq .01$, *** $p \leq .001$.

DISCUSSION

First of all, forensic patients vary significantly by race and gender from civil patients. Forensic patients were more likely to be male, and African American. Civil patients were more likely to be female, Asian/Pacific Islander or Latino/Hispanic. There was not a significant difference between Caucasian/white admissions. Some of these results were not surprising as historically, both in the state this study was conducted and the United States as a whole, those imprisoned have been disproportionately male and African-American (U.S. Department of Justice, 2018a, 2018b). However, the lower rates of Latino/Hispanic forensic patients, both in comparison to the rate of this population in civil patients and in the general population of the state, was unexpected by the researchers as it is contrary to incarceration rates. No simple explanation for this finding was available to the researchers of this study, although it was speculated that cultural differences in how this population addresses mental health and mental health care may be responsible for this finding. Further research is warranted in this area.

There was no difference between forensic and civil inpatients in obtaining education over the 12th grade level. While the literature indicates that education reduces crime (Hernandez, 1998; Steurer, Smith, 2003; Malkin, 2010), research (Mojtabai et al., 2015) suggests that those with mental disorders have less educational attainment than those without, which may be a more dominant factor in the education level of this study's sample. There was no difference between the two groups on income, with neither earning more than 25,000 per year, which is not surprising since it is estimated that only 10-20% of persons with severe mental illness are employed (McGurk, Mueser, Pascaris, 2005). Forensic patients were statistically less likely to have ever been married. It is generally understood that the status of being married improves psychological functioning (Holt-Lunstad, Birmingham, Jones, 2008). Thus forensic patients had fewer academic or emotional resources than civil patients.

Most (95%) forensic and civil patients' primary diagnoses were one of three categories: Schizophrenia/Psychotic, Bipolar, and Substance Abuse/Addictive. Forensic patients were



significantly more likely to have been diagnosed bipolar than civil patients. In addition, a link was found between bi-polar diagnosis and criminality, especially when there is comorbid substance abuse/use (Quanbeck et al., 2004; Fazel, Lichenstein, Grann, 2010). Civil patients were significantly more likely to have been diagnosed with Substance Abuse/Addictive than forensic patients. With the majority of both groups (50.7% civil and 54% forensic) diagnosed with Schizophrenia/Psychotic disorder. Thus the majority of both inpatient samples were grappling with the same mental illness.

With regard to risk factors and negative historical events, civil and forensic inpatients were often very similar to each other and very different from the general population. History of trauma, suicide attempts, history of sexual misconduct, property destruction, fire setting, danger to self, family mental illness, history of neglect, history of physical abuse, and history of sexual abuse occurred much more frequently in both forensic and civil samples than in the general population. It has been found that individuals with a severe mental illness were 11 times more likely to experience a trauma or violent crime than the general population (Teplin, McClelland, Abram, 2005). However, animal cruelty and developmental disabilities happened more frequently in the general population than in the inpatient samples. Interestingly, there were some instances where the forensic and civil differed from each other. Forensic patients had significantly greater histories of sexual misconduct than civil patients, and both had much greater histories than the general population, which concurs with the literature on sexual misconduct and mental illness (Belluardo-Crosby, 2011). Civil patients had significantly greater histories of property destruction and danger to self than forensic patients and both had much greater histories than the general population. Forensic patients had significantly greater histories of danger to others and learning disabilities than civil patients or the general population. Traumatic brain injuries were similar across both samples and the general population. In general, forensic and civil patients looked more like each other than the general population.

By separating both samples by gender, some differences were found. In general, female civil and forensic patients were very homogenous, differing only in that female forensic patients had higher levels of mental illness in the family and learning disabilities.

However, there were more differences between male forensic and civil patients. Male civil patients had significantly higher levels of trauma, property destruction, danger to self, and mental illness in the family. Male forensic patients had significantly higher levels of sexual misconduct, danger to others, and learning disability. Thus male civil patients can be seen as exhibiting greater internalising behaviour and male forensic patients exhibiting greater externalising behaviour.

Interestingly, both female and male forensic patients had significantly higher levels of learning disability. It has been suggested that learning disability exerts a major influence on externalising behaviours since it is learned at a young age that it is better to be the “troublemaker” than to be considered “stupid” (Hernandez, 1999). Thus many externalising behaviours act as a coping mechanism to cover feelings of intellectual inadequacy. This may be a core difference between why the mentally ill become either civil or forensic patients, though more research is warranted.

In general, civil and forensic patients have more in common than differences. Both samples compare more closely to risk factors and negative historical events than they do to the general population. However, this begins to break down once the sample is separated by gender. Female inpatients have two differences in risk factors and negative historical events associated with legal status, but males have six differences (history of trauma, history of sexual misconduct, property destruction, danger to others, mental illness in the family, and learning disability) associated with legal status. Interestingly, in females the presence of a risk factor or negative historical event is a predictor of a forensic legal status while this is not necessarily true in males. In males the presence of four of the six risk factor or negative historical events that are associated with legal status predict a civil legal status including one, a history of trauma, that is a predictor of forensic legal status in females. This would suggest that males and females may have very different paths to mental health inpatient



placements in regards to how they interact, or not, with the legal system. Further study regarding this may be warranted.

CONCLUSIONS

This research advances the understanding of who civil and forensic patients are. It also underscores that though there are some differences between civil and forensic patients, there are many more similarities. Thus mental health interventions should take place for these two populations in psychiatric hospitals and not subject forensic patients to the prison system where they are less likely to receive treatment. Most recently, social workers have begun to take the lead in creating psycho-education programs for law enforcement officers (Arvesen, 2018). These programs educate the police about mental illness, strategies for intervening with individuals that may be psychotic, under the influence of substances, or severely triggered and behavioural interventions to help the individual de-escalate. Additionally, a co-responder model of criminal justice diversion has just begun to be implemented in California and Colorado (Arvesen, 2018). The co-responder model has a social worker embedded with a law enforcement officer to respond to calls when there is a suspected mental health issue. The social worker has the authority to divert the mentally ill individual to an immediate behavioural health assessment if it seems warranted or can intervene with the individual to de-escalate the situation. Having the social worker alongside a police officer will hopefully help the mentally ill individual get the mental health care they need instead of entering the prison system. On the macro level, social workers should advocate for the mentally ill to be housed in psychiatric hospitals rather than be incarcerated where they will often not receive treatment. We believe that social workers have a major role that they can fill to improve the lives of the mentally ill, so that they receive the services that they need instead of languishing in the prison system.

REFERENCES

- AMERICAN CIVIL LIBERTIES UNION (ACLU). 2013. *Out of Sight Out of Mind: Colorado's Continued Warehousing of Mentally Ill Prisoners in Solitary Confinement* [online]. [1. 6. 2018]. Available from: <http://aclu-co.org/wp-content/uploads/files/imce/Solitary%20Report.pdf>
- ARVESEN, A. 2018. Longmont Police Receive Colorado Grants to Build Behavior Health Programs [online]. [1. 6. 2018]. Available from: http://www.timescall.com/longmont-local-news/ci_31583975/longmont-police-colorado-grants-behavioral-health
- BELLUARDO-CROSBY, M. 2011. Mental Illness and Problematic Sexual Behaviors. *Journal of Psychosocial Nursing & Mental Health Services*, 49(2), 24–28. DOI: <http://dx.doi.org/10.3928/02793695-20110106-01>.
- COLORADO DEPARTMENT OF HUMAN RESOURCES. 2014. *Colorado Client Assessment Record* [online]. [1. 6. 2018]. Available from: <http://www.bhicares.org/wp-content/uploads/2016/12/2014-CCAR-Form.pdf>
- DANIEL, A. E. 2007. Care of the Mentally Ill in Prisons: Challenges and Solutions. *Journal of the American Academy of Psychiatry and the Law*, 35, 406–410.
- DAVOREN, M., BYRNE, O., O'CONNELL, P. et al. 2015. Factors Affecting Length of Stay in Forensic Hospital Setting: Need for Therapeutic Security and Course of Admission. *BMC Psychiatry*, 15, 301. DOI 10.1186/s12888-015-0686-4.
- DITTON, P. M. 1999. *Mental Health and Treatment of Inmates and Probationers Bureau of Justice Statistics Special Report* [online]. U.S. Department of Justice. [1. 6. 2018]. Available from <http://www.bjs.gov/content/pub/pdf/mhtip.pdf>



- FAZEL, S., LICHENSTEIN, M., GRANN, M. 2010. Bipolar Disorder and Violent Crime New Evidence from Population-Based Longitudinal Studies and Systematic Review. *Archives of General Psychiatry*, 67(9), 931–938. DOI:10.1001/archgenpsychiatry.2010.97.
- GREEN, D., BELFI, B., GRISWOLD, H. et al. 2014. Factors Associated with Recommitment of NGRI Acquittes to a Forensic Hospital. *Behavioral Sciences and the Law*, 32, 608–626. DOI: 10.1002/bsl.2132.
- HERNANDEZ, A. 1998. *Peace in the Streets: Breaking the Cycle of Gang Violence*. Washington, DC: Child Welfare League of America.
- HOLT-LUNSTAD, J., BIRMINGHAM, W., JONES, B. Q. 2008. Is There Something Unique about Marriage? The Relative Impact of Marital Status, Relationship Quality, and Network Social Support on Ambulatory Blood Pressure and Mental Health. *Annals of Behavioral Medicine*, 35, 239. DOI: 10.1007/s12160-0089018-y.
- JAMES, D. J., GLAZE, L. E. 2006. Mental Health Problems of Prison and Jail Inmates. *Bureau of Justice Statistics Special Report*.
- LAMBERTI, J. S., WEISMAN, R., FADEN, D. I. 2004. Forensic Assertive Community Treatment: Preventing Incarceration of Adults with Severe Mental Illness. *Psychiatric Services*, 55(11), 1285–1293. DOI: 10.1176/appi.ps.55.11.1285.
- MALKIN, D. 2010. Social and Clinical Characteristics Convicted Mentally Ill Males and Females, which Are Needed Inpatient Treatment. *European Psychiatry*, 25, 689–689. DOI: 10.1016/S0924-9338(10)70683-0.
- McGURK, S., MUESER, K., PASCARIS, A. 2005. Cognitive Training and Supported Employment for Persons with Severe Mental Illness: One-Year Results from a Randomized Controlled Trial. *Schizophrenia Bulletin*, 31(4), 898–909. DOI: <https://doi.org/10.1093/schbul/sbi037>.
- MOJTABAI, R., STUART, E. A., HWANG, I. et al. 2015. Long-Term Effects of Mental Disorders on Educational Attainment in the National Comorbidity Survey Ten-Year Follow-Up. *Social Psychiatry and Psychiatric Epidemiology*, 50(10), 1577–1591.
- QUANBECK, C., STONE, D., SCOTT, C. et al. 2004. Clinical and Legal Correlates of Inmates with Bipolar Disorder at Time of Criminal Arrest. *Journal of Clinical Psychiatry*, 65(2), 198–203.
- SCHNELL, M. J., LEIPOLD, M. O. 2006. *Offenders with Mental Illness in Colorado* [online]. Colorado: Department of Corrections, Office of Planning and Analysis. [1. 6. 2018]. Available from: <http://hermes.cde.state.co.us/drupal/islandora/object/co%3A7586>
- STEURER, S., SMITH, L. 2003. *Education Reduces Crime: Three-State Recidivism Study. Executive Summary* [online]. Lanham: Correctional Education Association. [1. 6. 2018]. Available from: <http://www.mtctrains.com/wp-content/uploads/2017/06/Education-Reduced-Crime-Three-State-Recidivism-Study.pdf>
- TEPLIN, L., McCELLAND, G., ABRAM, K. 2005. Crime Victimization in Adults with Severe Mental Illness Comparison with the National Crime Victimization Survey. *Archives of General Psychiatry*, 62(8), 911–921. DOI:10.1001/archpsyc.62.8.911.
- TORREY, E. F., KENNARD, A. D., ESLINGER, D. et al. 2010. *More Mentally Ill Persons Are in Jails and Prisons Than Hospitals: A Survey of the States* [online]. Virginia: National Sheriffs Association, Treatment Advocacy Center. [1. 6. 2018]. Available from: http://www.treatmentadvocacycenter.org/storage/documents/final_jails_v_hospitals_study.pdf
- U.S. DEPARTMENT OF JUSTICE. 2018a. *Jail Inmates in 2016* [online]. [1. 6. 2018]. Available from: <https://www.bjs.gov/content/pub/pdf/ji16.pdf>
- U.S. DEPARTMENT OF JUSTICE. 2018b. *Prisoners in 2016* [online]. [1. 6. 2018]. Available from: <https://www.bjs.gov/content/pub/pdf/p16.pdf>
- VESS, J., MURPHY, C., ARKOWITZ, S. 2004. Clinical and Demographic Differences between Sexually Violent Predators and other Commitment Types in a State Forensic Hospital. *The Journal of Forensic Psychiatry & Psychology*, 15(4), 669–681. DOI: 10.1080/14789940410001731795.