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The Impact of Housing First on Criminal Justice Outcomes among Homeless People with Mental Illness: A Systematic Review

L'effet de « Logement d'abord » sur les résultats de justice pénale chez les personnes en situation d'itinérance vivant avec une maladie mentale : une revue systématique La Revue Canadienne de Psychiatrie

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Abstract

Objective: Housing First is increasingly put forward as an important component of a pragmatic plan to end homelessness. The literature evaluating the impact of Housing First on criminal justice involvement has not yet been systematically examined. The objective of this systematic review is to examine the impact of Housing First on criminal justice outcomes among homeless people with mental illness.

Method: Five electronic databases (PsycINFO, MEDLINE, Embase, CINAHL, Web of Science) were searched up until July 2018 for randomised and nonrandomised studies of Housing First among homeless people with a serious mental disorder.

Results: Five studies were included for a total of 7128 participants. Two studies from a randomised controlled trial found no effect of Housing First on arrests compared to treatment as usual. Other studies compared Housing First to other programs or compared configurations of HF and found reductions in criminal justice involvement among Housing First participants.

Conclusions: This systematic review suggests that Housing First, on average, has little impact on criminal justice involvement. Community services such as Housing First are potentially an important setting to put in place strategies to reduce criminal justice involvement. However, forensic mental health approaches such as risk assessment and management strategies and interventions may need to be integrated into existing services to better address potential underlying individual criminogenic risk factors. Further outcome assessment studies would be necessary.

Abrégé

Objectif : Le programme Logement d'abord est de plus en plus mis de l'avant à titre de composante essentielle d'un plan pragmatique en vue de mettre fin à l'itinérance. La littérature qui évalue l'effet de Logement d'abord sur la judiciarisation n'a pas encore été examinée systématiquement. L'objectif de cette revue systématique est d'examiner l'effet de Logement

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d'abord sur les résultats de justice pénale chez les personnes en situation d'itinérance vivant avec une maladie mentale.

Méthode: Cinq bases de données électroniques (PsycINFO, MEDLINE, Embase, CINAHL, Web of Science) ont fait l'objet, jusqu'en juillet 2018, d'une recherche d'études randomisées et non randomisées de Logement d'abord chez les personnes en situation d'itinérance ayant un trouble mental grave.

Résultats : Cinq études ont été incluses, totalisant 7128 participants. Deux études d'un essai randomisé contrôlé n'ont observé aucun effet de Logement d'abord sur les arrestations comparativement au traitement habituel. D'autres études ont comparé Logement d'abord avec d'autres programmes ou ont comparé les configurations de Logement d'abord et constaté des réductions de l'utilisation des services judiciaires chez les participants à Logement d'abord.

Conclusions: Cette revue systématique suggère que Logement d'abord, en moyenne, a peu d'effet sur l'utilisation des services judiciaires. Les services communautaires comme Logement d'abord sont potentiellement un contexte important où instaurer des stratégies visant à réduire la judiciarisation. Cependant, les approches psycho-légales comme l'évaluation et la gestion des risques doivent peut-être être intégrées aux services existants afin de mieux cibler les facteurs de risque criminogènes potentiellement sous-jacents. Des études d'évaluation des résultats seraient nécessaires.

Keywords

homeless persons, housing, mentally ill persons, criminal behaviour, justice involvement

Housing First (HF) provides immediate access to subsidised housing along with support services to homeless people, including those with mental illness. Because it increases residential stability¹⁻⁶ and results in significant cost offsets,⁷ it is put forward by policy makers as an important component of a pragmatic plan to end homelessness.⁸

It has been hypothesized that the benefits of HF include a reduction in criminal justice involvement (CJI). CJI is especially prevalent among homeless people with mental illness, with lifetime arrest rates between 63% and 90%, ¹⁰ and engenders great costs and consequences. 10-15 The expectation that HF will reduce CJI reflects the assumption that mental illness and residential instability are main risk factors for CJI among homeless people with mental illness, while other factors may play a more prominent role. These additional risk factors may be understood from a societal perspective, according to which social disadvantage and greater surveillance result in social profiling, 16 and from a clinical perspective, according to which CJI results from individual factors such as substance abuse or antisociality. Although these perspectives are noncompeting, this article focuses on the second.

According to the risk-need-responsivity model, ¹⁷ services provided to a justice-involved individual should target specifically criminogenic factors to reduce offending. The dynamic factors that most strongly predict recidivism are the following: antisocial patterns, procriminal associations and attitudes, substance abuse, poor satisfaction in relationships/family and at work/school, and lack of positive involvement in leisure activities. ¹⁷⁻²⁰ Changes in factors related to antisocial attitudes, satisfaction at school, relationships (including prosocial peers), use of leisure time, and substance abuse are most likely to reduce recidivism. ²¹

The literature evaluating the impact of HF on CJI among homeless persons with mental illness has not yet been systematically examined. This knowledge gap is an obstacle to the development and implementation of evidence-informed practices to reduce CJI in this population. The objective of this systematic review was to examine the impact of HF on CJI outcomes among this population.

Methods

This systematic review followed the PRISMA guidelines²² and was registered on Prospero (CRD42018100729).

Eligibility Criteria

We included randomised and nonrandomised studies of interventions that followed the HF model, with any comparison group. We included studies published after 2000 that relied on a sample composed of homeless individuals or precariously housed individuals, of whom at least half had a diagnosis of a 'serious mental disorder' (e.g., mood disorder, psychotic disorder). The other inclusion criterion was reporting of at least one outcome related to CJI, including but not limited to arrests, charges, and incarceration. When a particular outcome was reported in several publications of the same study (e.g., subgroup analyses), we selected the paper with the most comprehensive sample.

Search Strategy, Selection, and Data Collection

We identified studies through PsycINFO, MEDLINE, Embase, CINAHL, Web of Science, and manual scan until July 2018. As advised by a librarian, we used a combination of subject headings and keywords around homelessness, CJI, and mental disorders—but not around HF to include interventions that followed the model without labelling it as such.

Two reviewers independently assessed the eligibility and the methodological quality of the studies and extracted the data, resolving disagreements through discussion and consulting protocols, referenced articles, or tool kits, if necessary. We used the Cochrane Collaboration's tool for assessing risk of bias in randomised trials and the

Table 1. Studies Reporting on the Impact of Housing First on Criminal Justice Outcomes.

Study and Country	Intervention and Comparison	Criminogenic Factors Targeted	Design and Sample Size	Follow-up and Outcome Measures	Findings	Risk of Bias
Randomised stud	ies					
Aubry et al., ⁶ Canada (AHCS) ^a	Scattered-site HF + ACT (vs. TAU)	Substance abuse (harm reduction approach)	RCT HF: <i>n</i> = 469 TAU: <i>n</i> = 481	24 months— number of arrests	Similar decrease: 60%, pooled	Low
Stergiopoulos et al., ⁵ Canada (AHCS) ^a	,	Substance abuse (harm reduction approach)	RCT HF: <i>n</i> = 689 TAU: <i>n</i> = 509	24 months— number of arrests	Difference in mean changes at 24 months from baseline with 95% CI: 1.05 (0.62 to 1.80)	Low
Nonrandomised s	, c c. c					
Kriegel et al., ²⁶ United States	Forensic HF vs. nonforensic HF (scattered site or congregate site)	Substance abuse (treatment sometimes mandatory), relationships (focus on family reunification) ^b	n = 750	12 months —days in justice system setting	Adjusted: -2 days (SE = 4) for forensic HF, -12 days for HF (SE = 3) (P < 0.01)	Moderate
Tsai et al., ²⁵ United States	Scattered-site HF (vs. residential treatment first)	Substance abuse (facilitated access to treatment)	Comparison HF: $n = 570$ RTF: $n = 121$	24 months —days incarcerated	Unadjusted annualized: -3.5 days for HF, +1.9 days for RTF; adjusted: Cohen's d = 0.2	Serious
Whittaker et al., ²⁷ Australia	Scattered-site HF + case management vs. congregate-site HF + case management	None or unknown	Comparison SS: $n = 37$ CS: $n = 21$	12 months— score of engagement with the criminal justice system ^c	Adjusted effect with 95% CI: -0.3 (-1.1 to -0.1); -0.5 for SS and +0.4 for CS	Serious

ACT, assertive community treatment; AHCS, At Home/Chez Soi; HF, Housing First; CI, confidence interval; CS, congregate site; ICM, intensive case management; RCT, randomised controlled trial; RTF, residential treatment first; SE, standard error; SS, scattered site; TAU, treatment as usual.

ROBINS-I (Risk of Bias in Non-randomised Studies-of Interventions)²⁷ to rate randomised and nonrandomised studies on the same scale. Descriptions of the interventions were examined to identify criminogenic factors that they aimed to address.

The online supplement details the complete search strategy, the variables extracted, and the methodological assessment.

Results

Table 1 presents the 5 studies $^{5,6,28-30}$ included (N=7128 participants; see Suppl. Figure S1 for the selection process). Two studies from a randomised trial of HF compared to treatment as usual (TAU) reported no effect on arrests, with both groups experiencing similar decreases (e.g., 2-year difference in mean change for HF is 95% CI: 1.05 [0.62 to 1.80]). 5,6 Other studies (2 of which were judged to be at serious risk of bias) compared HF to other programs or

compared configurations of HF and generally found a reduction in CJI among HF participants. ²⁸⁻³⁰

Discussion

This systematic review suggests that HF does not, on average, have much, if any, impact on CJI. The decrease in CJI observed in HF participants of studies comparing configurations is consistent with the phenomenon of regression to the mean.³¹ The At Home/*Chez Soi* randomised trial found no differences between the HF and TAU groups. A review of the cost offsets of HF for individuals with mental illness and/ or substance use disorder found that nonrandomised studies reported decreases in justice costs, but not randomised trials.⁷ The fact that both reviews yield similar findings suggests that, on average, HF has little impact on CJI.

It also suggests, based on published descriptions, that HF does not systematically address criminogenic factors. HF programs that follow the *Pathways* model, however, are intended

^aAHCS was a single study, consisting of 9 concurrent trials of Housing First carried out in 5 cities. Participants were first stratified based on their level of need and then randomised to TAU or HF (delivered with ACT for high-need participants, ICM for moderate-need participants). Findings were disseminated by level of need

^bCriminogenic factors targeted by the forensic Housing First intervention.

^cScore between 0 and 5 derived from the number of criminal justice channels (stopped by police, held overnight, court attendance, incarceration, parole) in contact with.

to be recovery oriented and thus support clients in the accomplishments of their own objectives. ³² Case managers may thus indirectly, on a case-by-case basis, address criminogenic factors related to relationships, work/school, or leisure, ³³ as highlighted in logic models ³⁴ without conceptualizing them as potential protective factors toward reduction of CJI.

Not recognizing the importance of criminogenic factors among justice-involved individuals with mental illness results in failures to provide them with evidence-based practices. 35,36 Indeed, the policy response to offenders with mental illness has been to use the criminal justice system to divert the individual to mental health services (e.g., forensic mental health services, mental health courts, jail diversion based on case management)36-38 with the expectation that recidivism would be reduced. These interventions may successfully improve clinical measures, but they do not improve CJI outcomes. 36,39 While residential stability and symptoms reduction have value in themselves, independent of any reduction in arrests or incarceration they may achieve, integration of forensic knowledge into HF may be needed for it to reduce CJI. Components of forensic assertive community treatment^{40,41} could be integrated into regular teams by including professionals trained in risk assessment/management and offender rehabilitation strategies. For example, in addition to addressing use of leisure time and substance abuse, HF could implement voluntary adjunctive interventions such as victim impact intervention to develop empathy⁴² and cognitive behavioural therapy to enhance anger management. 43 From a societal perspective, other interventions may be required to address social disadvantage beyond residential instability, as many recently housed participants still live on very low incomes and in disadvantaged neighbourhoods, which increases the odds of CJI. 35,44,45

Community services such as HF are potentially an important setting to put in place strategies to reduce CJI, given the growing number of people receiving HF. However, knowledge about risk assessment/management and crime desistance strategies may need to be integrated into existing services to better address criminogenic factors. Stakeholders at the intersection of mental health and justice in Canada have identified this knowledge transfer as a key priority. Partnerships between forensic and community mental health services must be strengthened to promote the dialogue on and use of evidence-based risk management strategies among those at risk of criminal behaviour.

This systematic review has some limitations. First, the randomised trials identified were conducted in Canada and report only self-reported arrests. Although self-reported outcomes are fairly reliable, ⁴⁷ future studies may want to validate the findings with a range of outcomes identified from administrative data. Furthermore, participants in the TAU arm may also have received existing services (although not HF, given that it was not otherwise available in Canada at the time of the study). Second, there may be other explanations for the lack of effect of HF on CJI. Increased monitoring of criminal activity or substance use in the HF arm or a heterogenous treatment

effect based on subgroups of participants (e.g., chronically homeless or periodically homeless) and/or types of crime could in part account for the lack of effect and should be the subject of future research. Finally, to our knowledge, no studies have examined the specific criminogenic factors of people who are homeless. Because they have been validated in several subpopulations, we expect them to also be important among justice-involved homeless people. However, other factors could also be a criminogenic risk factor for some. Future studies should aim to increase our understanding of criminogenic factors of homeless people with mental illness and the best practices to address them.

Conclusion

This systematic review suggests that HF has little impact on CJI and does not systematically target criminogenic factors beyond substance abuse, although case managers may do so in individual cases. HF could be an important setting to put in place strategies to reduce CJI. However, forensic mental health approaches such as risk assessment and management strategies and interventions may need to be integrated into existing services to better address potential underlying individual criminogenic factors. Further outcome assessment studies would be necessary.

Data Access

The data collected in the context of this systematic review may be obtained from the first author upon request.

Declaration of Conflicting Interests

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Supplemental Material

Supplemental material for this article is available online.

References

1. Beaudoin I. Efficacité de l'approche « logement d'abord » : une revue systématique. Drog santé société. 2016;14(2):43.

- Tsemberis S, Gulcur L, Nakae M. Housing first, consumer choice, and harm reduction for homeless individuals with a dual diagnosis. Am J Public Health. 2004;94(4):651-656.
- Hwang SW, Burns T. Health interventions for people who are homeless. Lancet. 2014;384(9953):1541-1547.
- Rosenheck RA, Kasprow W, Frisman LBK, et al. Costeffectiveness of supported housing for homeless persons with mental illness. Arch Gen Psychiatry. 2003;60(9):940-951.
- Stergiopoulos V, Hwang SW, Gozdzik A, et al. Effect of scattered-site housing using rent supplements and intensive case management on housing stability among homeless adults with mental illness: a randomized trial. JAMA. 2015;313(9): 905-915.
- Aubry T, Goering PN, Veldhuizen S, et al. A multiple-city RCT of housing first with assertive community treatment for homeless Canadians with serious mental illness. Psychiatr Serv. 2016;67(3):275-281.
- Ly A, Latimer EA. Housing first impact on costs and associated cost offsets: a review of the literature. Can J Psychiatry. 2015;60(11):475-487.
- 8. Katz AS, Zerger S, Hwang SW. Housing First the conversation: discourse, policy and the limits of the possible. Crit Public Health. 2017;27(1):139-147.
- Gaetz S, Scott F, Gulliver T. Housing First in Canada: Supporting Communities to End Homelessness. Toronto: Canadian Homelessness Research Network Press; 2013:148.
- Roy L, Crocker AG, Nicholls TL, et al. Criminal behavior and victimization among homeless individuals with severe mental illness: a systematic review. Psychiatr Serv. 2014;65(6):739-750.
- Caton CLM, Dominguez B, Schanzer B, et al. Risk factors for long-term homelessness: findings from a longitudinal study of first-time homeless single adults. Am J Public Health. 2005; 95(10):1753-1759.
- 12. McGuire JF, Rosenheck RA. Criminal history as a prognostic indicator in the treatment of homeless people with severe mental illness. Psychiatr Serv. 2004;55(1):42-48.
- Frounfelker RL, Glover CM, Teachout A, et al. Access to supported employment for consumers with criminal justice involvement. Psychiatr Rehabil J. 2010;34(1):49-56.
- 14. Poremski D, Whitley R, Latimer E. Barriers to obtaining employment for people with severe mental illness experiencing homelessness. J Ment Health. 2014;23(4):181.
- Latimer EA, Rabouin D, Cao Z, et al. Costs of services for homeless people with mental illness in 5 Canadian cities: a large prospective follow-up study. CMAJ Open. 2017;5(3): E576-E585.
- Sylvestre M-È, Bellot C. Challenging Discriminatory and Punitive Responses to Homelessness in Canada. In: Jackman M, Porter B, eds. Advancing Social Rights in Canada. Toronto (ON): Irwin Law; 2014. p. 155-185.
- Bonta J, Andrews DA. Risk-Need-Responsitivity Model for Offender Assessment and Rehabilitation 2007-06. Ottawa: Public Safety Canada; 2007.
- 18. Andrews DA, Guzzo L, Raynor P, et al. Are the major risk/ need factors predictive of both female and male reoffending? A test with the eight domains of the Level of Service/Case

- Management Inventory. Int J Offender Ther Comp Criminol. 2012;56(1):113-133.
- 19. Skeem JL, Winter E, Kennealy PJ, et al. Offenders with mental illness have criminogenic needs, too: toward recidivism reduction. Law Hum Behav. 2014;38(3):212-224.
- Bonta J, Blais J, Wilson HA. A theoretically informed metaanalysis of the risk for general and violent recidivism for mentally disordered offenders. Aggress Violent Behav. 2014;19: 278-287.
- 21. Baglivio MT, Wolff KT, Jackowski K, et al. A multilevel examination of risk/need change scores, community context, and successful reentry of committed juvenile offenders. Youth Violence Juv Justice. 2017;15(1):38-61.
- 22. Liberati A, Altman DG, Tetzlaff J, et al. The PRISMA statement for reporting systematic reviews and meta-analyses of studies that evaluate health care interventions: explanation and elaboration. PLoS Med. 2009;6(7):e1000100.
- 23. Whittaker E, Swift W, Flatau PR, et al. A place to call home: study protocol for a longitudinal, mixed methods evaluation of two housing first adaptations in Sydney, Australia Health behavior, health promotion and society. BMC Public Health. 2015; 15(1):342.
- 24. Goering PN, Veldhuizen S, Watson A, et al. National At Home/Chez Soi Final Report. Calgary, AB: Mental Health Commission of Canada; 2014:48.
- 25. Goering PN, Streiner DL, Adair CE, et al. The At Home/Chez Soi trial protocol: a pragmatic, multi-site, randomised controlled trial of a Housing First intervention for homeless individuals with mental illness in five Canadian cities. BMJ. 2011; 1(2):e000323.
- 26. Higgins JPT, Altman DG, Gøtzsche PC, et al. The Cochrane Collaboration's tool for assessing risk of bias in randomised trials. BMJ. 2011;343(7829):1-9.
- Sterne JA, Hernán MA, Reeves BC, et al. ROBINS-I: a tool for assessing risk of bias in non-randomised studies of interventions. BMJ. 2016;355:i4919.
- 28. Tsai J, Mares AS, Rosenheck RA. A multisite comparison of supported housing for chronically homeless adults: housing first versus residential treatment first. Psychol Serv. 2010; 7(4):219-232.
- 29. Kriegel LS, Henwood BF, Gilmer TP. Implementation and outcomes of forensic housing first programs. Community Ment Health J. 2016;52(1):46-55.
- Whittaker E, Flatau PR, Swift W, et al. Associations of housing first configuration and crime and social connectedness among persons with chronic homelessness histories. Psychiatr Serv. 2016;67(10):1090-1096.
- 31. Linden A. Assessing regression to the mean effects in health care initiatives. BMC Med Res Methodol. 2013;13(1):1.
- 32. Tsemberis S.Housing First: The Pathways Model to End Homelessness for People with Mental Illness and Addiction. Center City, MN: Hazelden; 2010:244.
- 33. Nelson G, Patterson ML, Kirst M, et al. Life changes among homeless persons with mental illness: a longitudinal study of Housing First and usual treatment. Psychiatr Serv. 2015;66(6): 592-597.

- Polvere L, MacLeod T, Macnaughton E, et al. Canadian Housing First Toolkit. Calgary: Mental Health Commission of Canada; 2014.
- 35. Draine J, Salzer MS, Culhane DP, et al. Role of social disadvantage in crime, joblessness, and homelessness among persons with serious mental Illness. Psychiatr Serv. 2002;53(5): 565-573.
- Skeem JL, Manchak SM, Peterson JK. Correctional policy for offenders with mental illness: creating a new paradigm for recidivism reduction. Law Hum Behav. 2011;35(2):110-126.
- Crocker AG, Livingston JD, Leclair MC. Forensic mental health systems internationally. In: Roesch R, Cook AN, eds. Handbook of Forensic Mental Health Services. New York: Routledge; 2017:3-76.
- Schneider RD, Crocker AG, Leclair MC. Mental health courts and diversion programs. In: Chandler JA, Flood CM, eds. Law and Mind: Mental Health Law and Policy in Canada. Toronto, ON: Lexis Nexis Canada; 2016:303-323.
- Calsyn RJ, Yonker RD, Lemming MR, et al. Impact of assertive community treatment and client characteristics on criminal justice outcomes in dual disorder homeless individuals. Crim Behav Ment Health. 2005;15(4):236-248.
- 40. Marquant T, Sabbe B, Van Nuffel M, et al. Forensic assertive community treatment in a continuum of care for male internees

- in Belgium: results after 33 months. Community Ment Health J. 2018;54(1):58-65.
- 41. Marquant T, Sabbe B, Van Nuffel M, et al. Forensic assertive community treatment: a review of the literature. Community Ment Health J. 2016;52(8):873-881.
- Baglivio M, Jackowski K. Evaluating the effectiveness of a victim impact intervention through the examination of changes in dynamic risk scores. Crim Justice Policy Rev. 2015;26(1):7-28.
- 43. Henwood KS, Chou S, Browne KD. A systematic review and meta-analysis on the effectiveness of CBT informed anger management. Aggress Violent Behav. 2015;25(2015):280-292.
- Seto MC, Charette Y, Nicholls TL, et al. Individual, service, and neighborhood predictors of aggression among persons with mental disorders. Crim Justice Behav. 2018;45(7):929-948.
- 45. Hiday VA. The social context of mental illness and violence. J Health Soc Behav. 1995;36(2):122-137.
- Crocker AG, Nicholls TL, Seto MC, et al. Research priorities in mental health, justice, and safety: a multidisciplinary stakeholder report. Int J Forensic Ment Health. 2015;14(3): 205-217.
- 47. Lemieux AJ, Roy L, Martin MS, et al. Justice involvement among homeless individuals with mental illnesses: are self-report and administrative measures comparable? Eval Program Plann. 2017;61:86-95.