#### **REVIEW Open Access**



# Linkages between incarceration and health for older adults

Meghan A. Novisky<sup>1\*</sup>, Stephanie Grace Prost<sup>2</sup>, Benjamin Fleury-Steiner<sup>3</sup> and Alexander Testa<sup>4</sup>

## **Abstract**

The aging population in United States (US) correctional facilities has grown dramatically over the last several decades. At present, roughly one in four adults incarcerated in US prisons are at least 50 years of age. Research over the last ten years has likewise expanded to catalog the impacts of incarceration on older adults, and the myriad ways incarceration is unique for this population. In this paper, we summarize the state of the literature at the intersection of incarceration, health, and aging. We begin by outlining the impacts of incarceration on a range of individual health outcomes for older adults. Next, we offer targeted policy implications to address the health consequences of incarceration for older adults. Finally, we conclude by offering a research agenda that emphasizes theory building, jail-based approaches, and expansion of what is known about older women, cognitive impairment, correctional staff perspectives, and interventions to enhance the health of older persons who are incarcerated.

Keywords Incarceration, Older adults, Geriatrics, Elderly inmates, Prison, Jail, Health

#### Introduction

The mass incarceration movement is characterized not only by wide-scale, inequitable distributions of confinement across the United States (US), but disparate rates of disease and other poor health outcomes. At present, 1.8 million individuals are confined within prisons or jails in the US (Buehler & Kluckow, 2024). And while these facilities still disproportionately incarcerate younger adults, the average age of the incarcerated population has been rising steadily. In fact, older adults are now the fastestgrowing age group in US prisons (Skarupski et al., 2018). Twenty-four percent of individuals confined in prisons today - some 286,926 people - are at least 50 years old

(Carson & Kluckow, 2023). Just ten years earlier, 15.6% of the state prison population (n=239,836) was 50 years or older (Carson & Sabol, 2012).

While these estimates offer some context about the aging incarcerated population, what is meant by "old" varies in existing literature. Ranges from age 45 to 55 have been used as the minimum threshold standard. However, age 50 is the cut-off most often used by scholars to define "older adults" in these settings (Loeb & AbuDagga, 2006; Merkt et al., 2020). The use of this lower minimum age standard is recognized because adults with a history of incarceration are more apt to experience accelerated physiological aging relative to their peers who have not experienced incarceration (Berg et al., 2021). Indeed, incarcerated individuals are approximately 10 to 15 years older physiologically than their community dwelling peers (Falter, 2006), and they face higher risks for developing geriatric conditions earlier in the life course. For example, Greene et al. (2018) compared older adults incarcerated in jail to older adults in the national Health and Retirement Study (HRS). The authors found that jail-based participants - who reported a mean age of 59 years – experienced multiple geriatric conditions at rates

noviskma@ucmail.uc.edu

<sup>&</sup>lt;sup>4</sup>The University of Texas Health Science Center at Houston, Houston, United States



© The Author(s) 2025. Open Access This article is licensed under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License, which permits any non-commercial use, sharing, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if you modified the licensed material. You do not have permission under this licence to share adapted material derived from this article or parts of it. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit http://creativecommons.org/licenses/by-nc-nd/4.0/.

<sup>\*</sup>Correspondence: Meghan A. Novisky

Corrections Institute, University of Cincinnati, Cincinnati, United States

<sup>&</sup>lt;sup>2</sup> Raymond A. Kent School of Social Work & Family Science, University of Louisville, Louisville, United States

Department of Sociology and Criminal Justice, University of Delaware, Newark, United States

Novisky et al. Health & Justice (2025) 13:23 Page 2 of 16

comparable to HRS participants who were 75 or older. Examples included urinary incontinence, hearing impairment, and difficulties with mobility. These findings are important not only because they represent reduced quality of life, but because accelerated aging is a "predominant risk factor for most diseases and conditions that limit health span" (Kennedy et al., 2014: 709). Indeed, multiple studies find that incarceration is associated with an elevated risk of premature mortality (Borschmann et al., 2024; Daza et al., 2020). One study found that for each year spent incarcerated, a 2-year reduction in total life span was expected (Patterson, 2013).

Continued research on the growing population of older adults in prison and jail settings is important for at least four reasons. First, there is a sizable and rising lifer population in the US to consider. Of the individuals imprisoned today, over 200,000 are serving court ordered life sentences (Nellis, 2021). Another 44,000 are serving virtual life sentences of 50 years or more. Thousands of others are also serving virtual life when considering probable years remaining to live at the time of sentencing. Thirty percent of those serving life are people aged 55 and older (Nellis, 2021). The lifer population will undoubtedly contribute to aging in place and eventual end of life policy concerns for growing numbers of incarcerated adults and their loved ones.

Second, incarceration costs are significantly higher for older adults compared to younger adults. This is due in large part to the higher disease burdens relative to their younger peers. In a report authored by the Office of the Inspector General (2015), Federal Bureau of Prisons' institutions with the highest percentages of older adults in their population spent five times more per person on medical care than institutions with the lowest percentage of older adults. Third, jails and prisons are generally poorly designed settings for meeting the health-related needs of older adults. For example, there have been multiple lawsuits addressing the failure of prisons to provide proper Americans with Disabilities Act (ADA) accommodations for incarcerated individuals with chronic musculoskeletal diseases such as arthritis (Greenwood, 2024, p.148–151). Finally, while research regarding older adults with incarceration experiences has increased in recent years, important questions remain, making expanded access to data surrounding older adults' experiences (Kheirbek & Latham-Mintus, 2024a, 2024b) and related inquiry a desperate need.

The aims of this article are to (1) provide an overview of the state of the science at the intersection of incarceration and health for older adults; (2) offer targeted policy implications to address the health consequences of incarceration for older adults; and (3) set an agenda to motivate additional research in this important area.

### The incarceration-health relationship

A large body of scholarship relates the overarching burden of incarceration on physical, mental, and community health (for reviews see Kinner & Young, 2018; Link et al., 2025; Massoglia & Pridemore, 2015; Massoglia & Remster, 2019; Uggen et al., 2023). A growing line of work has compared health measures between older adults and their younger peers while incarcerated (Chiclana et al., 2019; Vogel & Porter, 2016; Wangmo et al., 2016), and their age-matched community counterparts (Baidawi, 2016; Fazel et al., 2001; Munday et al., 2019). Older adults who are incarcerated are subject to the same factors driving poor health among all persons who are incarcerated. These manifold determinants are inclusive of all ecological systems. Pre-incarceration experiences at the individual-, familial-, and community-level such as trauma, substance misuse, poverty, food deserts, community violence, and limited access to preventative health work independently and in tandem with correctional setting factors to initiate and exacerbate poor health (Kinner & Young, 2018; Massoglia & Remster, 2019). Yet, older adults are uniquely vulnerable to the physical and social environments of jails and prisons.

# Health, incarceration, and the older adult

Older incarcerated adults are more likely to report both infectious diseases and chronic health conditions than their younger incarcerated peers (Maruschak & Berzofsky, 2015). Based on data from the 2016 Survey of Inmates, 82% of 55-64 year olds incarcerated in state prisons and 75% of 55-64 year olds incarcerated in federal prisons reported having at least one chronic health condition, respectively. Moreover, 32% of incarcerated individuals in state prisons and 19.5% incarcerated in federal prisons in the same age group reported having at least one infectious disease (Maruschak, Bronson, & Alper, 2021). Older adults also often report multimorbidity. On average, older incarcerated adults report two to three chronic health conditions at any given time, with nearly 8% reporting two or more chronic diseases and at least one mental illness (Han et al., 2020).

Neurocognitive functioning is another area of concern for older adults who experience incarceration. Although some decline in neurocognitive functioning is a normal part of aging (Deary et al., 2009), more severe cognitive decline leading to mild cognitive impairment (MCI) or Alzheimer's Disease and Related Dementias (ADRD) has significant consequences for individuals, families, and society. Cognitive health in later life can be influenced by multiple factors, including stressful life events that alter life course trajectories, such as incarceration (Testa et al., 2023). Correctional facilities are fundamentally stressful environments characterized by restricted autonomy,

Novisky et al. Health & Justice (2025) 13:23 Page 3 of 16

exposure to violence, and social isolation, which can exacerbate and trigger chronic stress responses that are detrimental to health (Massoglia & Pridemore, 2015). Prolonged exposure to such stress is associated with neuroinflammation and accelerated biological aging, increasing the risk of cognitive impairment (Bisht et al., 2018; Lyons & Bartolomucci, 2020).

Additionally, and as addressed above, individuals who are incarcerated often face a high prevalence of chronic conditions (Testa et al., 2024a) like hypertension, diabetes, and cardiovascular disease (Massoglia & Pridemore, 2015)—each associated with cognitive decline (Taylor et al., 2020)—and may be inadequately managed in correctional settings and the community following release (Wilper et al., 2009; Zhao et al., 2024). Incarceration also disrupts vital facets of social capital, including education (Ewert et al., 2014; Stewart & Uggen, 2020) and employment (Apel & Ramakers, 2018; Pager, 2008), which are critical for building cognitive reserves that help protect against cognitive decline (Clouston et al., 2020; Ihle et al., 2018).

Regarding mental health, scholars have described elevated stress and mental illness among older adults incarcerated in prison (Haugebrook et al., 2010). In their systematic review, Haesen and colleagues (2019) have related a higher prevalence of mental illness among older persons when compared to younger persons incarcerated in prison. In another study, over one-third of older adults reported symptomology associated with moderate depression, and 17% reported symptoms associated with severe depression. Moreover, one-third of older adults reported clinical levels of post-traumatic stress disorder (PTSD), with many indicating they had been assaulted physically, sexually, or with a weapon, survived transportation accidents, or endured life-threatening illness or injury during their lives (Prost et al., 2020a, 2020b, 2020c). Fazel and colleagues (2012) reported depression among 10.2% of male and 14.1% of female adults in prison and roughly 6% of men and 21% of women in prison have clinical levels of PTSD (Baranyi et al., 2018). In contrast, Villarroel and Terlizzi (2020) reported that depression among community-dwelling older adults aged 65 or older hovers near a point-prevalence of 3.8%.

# Unique vulnerabilities of older adults incarcerated in jails and prisons

Beyond poor physical, cognitive, and mental health, older adults are uniquely vulnerable to limitations imposed by the physical environment typical of modern correctional facilities. Many institutions have old construction and lack proper ventilation (Sklar et al., 2023) and temperature regulation (Skarha et al., 2022, 2023). Concrete floors can be painful for walking and standing. Sleeping

arrangements often include bunk beds and thin, unsupportive mattresses. Significant distances may exist between housing units, the pill line, the chow hall, and the medical unit. Given their higher disease burdens and risks for morbidity, such circumstances can be especially troubling for older adults and increase their risk of injury.

Functional impairment is often assessed based on a person's ability to engage independently in activities of daily living (ADLs). ADLs include tasks such as bathing, dressing, walking up and down stairs, and toileting (Fillenbaum, 2013). Using data from the Health and Retirement Study (HRS), researchers found that participants who report a history of incarceration have a 20 to 80% increased risk of geriatric syndromes, including ADL impairment (Garcia-Grossman et al., 2023). The positive association between incarceration and ADL impairment has also been found using data from the National Longitudinal Study of Adolescent to Adult Health – Parent Study (AHPS; Testa et al., 2024a, 2024b).

So called 'prison activities of daily living' (PADLs) capture impairment in ADLs specific to life in a prison context (e.g., climbing on/off the top bunk, walking while wearing handcuffs or shackles, standing in line for medications, walking to chow, and cleaning the cell) (Williams et al., 2006). Although a newer area of research, scholars thus far indicate that PADL impairment is common among older incarcerated adults. In a sample of people who had spent 20 or more years in prison, 1 in 2 reported PADL disability (Li, Williams, & Barry, 2022). PADL disability means greater dependence and is associated with increased risks for depression and suicidal ideation for older adults (Li, Williams, & Barry, 2022).

In addition to the physical environment and related ADLs/PADLs, older adults are uniquely at risk within the social environment of jails and prisons. While research in this area is more limited, some scholars have related that older persons are subject to abuse and neglect during their incarceration. Scholars have reported that older adults are met with delays in medical care (Novisky, 2018; Novisky et al., 2022). Too, Arias et al., (2023) note that older adults depend on the correctional system in ways that are distinct from community-dwelling older persons, which makes them vulnerable to abuse. For example, older adults may request that other incarcerated persons purchase their commissary due to difficulties with ADLs/PADLs. Individuals may then add items to commissary requests without the older adult's permission (viz. financial abuse). Others who are incarcerated may also threaten older adults or their families to transport contraband using durable medical equipment (viz. emotional/psychological abuse). Similar reports have been offered in the context of peer caregiving, though these events appear infrequent (Prost et al., 2020a, 2020b,

Novisky et al. Health & Justice (2025) 13:23 Page 4 of 16

2020c). Importantly, scholars relate that vulnerability to mistreatment for older adults who are incarcerated are likely elevated as impairment in ADL is a critical risk factor for elder abuse (Daquin et al., 2021).

Driven by these physical, cognitive, mental, and social risks, the need for preventative, accessible, evidenceinformed health care services in prisons and jails cannot be overstated. Given the higher disease burden among older adults specifically, they are more likely than their younger counterparts to require ongoing medical services, specialty referrals, and physical and occupational therapy. Yet, despite the fundamental role of health care in the lives of incarcerated individuals, much remains unknown about correctional health services and associated outcomes (McLeod et al., 2020). Moreover, due to the unique nature of correctional facilities as sites for health care delivery, setting quality indicators and performance measures in these spaces is complicated (Bellass et al., 2022). Research that has addressed this area has found that trust in the correctional health care system among incarcerated patients is generally low (Kramer et al., 2023; Novisky et al., 2022; Vandergrift & Christopher, 2021). People who are incarcerated also report sub-standard care, feelings of dehumanization, and various barriers to accessing care (Calavita & Jenness, 2015; Fluery-Steiner, 2008; Maschi & Morgen, 2020; Novisky, 2018).

The medical co-payment system is itself a significant impediment to care (Sawyer, 2017; Wyand, Harner & Lockwood, 2021), something that is particularly likely to impact older adults who are less able to work a prison job and earn wages to assist with medical costs or do not have access to social support systems essential to cover such expenses. The inability to access quality care may, moreover, erode "the patient provider relationship and trigger avoidance of healthcare services in both correctional and community settings, leading to worsened health outcomes for the individual" (Elumn, et al., 2021, p.8).

Sadly, older adults are also vulnerable to dying in correctional custody. Between 2001 and 2019, 72,153 people died in state or federal prisons, and 87 to 89% of these deaths were due to illness (e.g., heart disease, cancer, liver disease, respiratory disease) (Carson, 2021a). Each year, most deaths in state and federal prisons are of older adults. For example, in 2019 (the most recent year that data are available), 79.7% of state and federal deaths in custody were of individuals who were at last 45 years of age (Carson, 2021a). In jails, 20,413 people died between 2000 and 2019 (Carson, 2021b). Like prisons, illness is the most often cited cause of death. The age distribution of deaths in custody for jails is more diverse relative to prisons, but the numbers are not negligible. In 2019, 529

of the individuals who died in local jails were at least 45 years old, which constitutes 44% of the total number of jail deaths that year (Carson, 2021b). Death by incarceration is a growing concern—in one study, approximately 25% of older adult participants were serving life in prison without the possibility of parole or sentences that exceed the average human lifespan (Prost et al., 2020a, 2020b, 2020c).

# Beyond the bars: Older adults and reentry

Those challenges within correctional settings are not the end for most older adults. In one study, scholars reported that approximately 75% of older adults were re-entry eligible (Prost et al., 2020a, 2020b, 2020c)—thus, most will return to their communities. However, aligning appropriate health, housing, and related supports for older adults upon release proves challenging (Miller et al., 2021). Institutionalization, for one, makes the transition from corrections to the community difficult. Navigating health care systems can seem an insurmountable task for any older adult; this is made even more complicated for those who have been incarcerated for 10 or more years or for those with serious mental illness (Maschi & Morgen, 2021).

Older adults will be required to manage appointments with practitioners, align transportation, and attend office visits along with initiating and maintaining health insurance and prescription drug coverage (Williams & Abraldes, 2007), despite many never having done so or not having had such responsibilities for great lengths of time. The risk of polypharmacy and associated contraindications also increases as the number of chronic health conditions increases. Polypharmacy among older adults increases the risk of falls, morbidity, and adverse drug events and decreases functional capacity, treatment adherence, and intervention outcomes (Mahar et al., 2014), which can affect reentry negatively (e.g., maintaining employment, paying fees and fines, attending report dates).

Given the high turnover of correctional medical staff and lack of access to updated medical records, this problem can lead to adverse health outcomes and preventable deaths (Oscanoa et al., 2017). While there are few empirical studies of this problem, a focus group study of 20 correctional health professionals in the United Kingdom is instructive. Specifically, researchers related how medical professionals mistrust incarcerated individuals to misuse medications, which can impact prescription decisions, prescription protocols within institutions, and how medical professionals are challenged by an inconsistent supply of medications in prison pharmacies (Magola-Makina et al., 2022).

Novisky et al. Health & Justice (2025) 13:23 Page 5 of 16

The heavy health burden of older adults preparing for reentry relates directly to housing, as well. Broadly, post-incarceration housing has been described as a 'crisis' (Wiltz, 2019) and those returning to communities from prison are roughly 10 times as likely to be homeless than their non-incarcerated peers (Couloute, 2018). Parole restrictions, policy barriers, and stigma limit housing options for all persons facing reentry from US prisons, but atop these universal challenges, older adults leaving prison may be at particular risk. In fact, rates of homelessness among formerly incarcerated persons increase with age. Housing insecurity rates for persons ages 24 to 44 range from 274 to 551 per 10,000 persons; in contrast, the housing insecurity rate for persons aged 45 or older is 865 per 10,000 persons (Couloute, 2018).

While some older adults who are incarcerated will reenter into the homes of family and friends, many more will not, increasing the need for additional formal supports such as long-term care. However, aligning longterm or personal care homes for older adults who are reentering emerges as a particular challenge, one driven no doubt by criminal record discrimination. This is echoed by Redmond and colleagues (2020) in terms of health care: over 25% of older adults recently released from prison reported perceived health provider discrimination. Worse, those who reported discrimination had a markedly greater likelihood of reporting fair or poor health (Redmond et al., 2020). Because of limited access to care-appropriate housing, Williams and Abraldes (2007) note that older adults returning to communities instead may secure residence in unsafe neighborhoods which may elevate their vulnerability due to frailty. Likewise, Maschi and Morgen (2021) find that older adults may be subject to abuse or neglect upon reentry. The need for safe, affordable, and care-appropriate housing for older adults navigating reentry is of critical importance (Maschi & Morgen, 2021).

Alongside a heavy health burden and limited access to care-appropriate housing, older adults who are incarcerated are understood to have limited social capital requisite to mobilizing resources. Social capital reflects the pooled resources—instrumental, informational, material, and emotional—that individuals can tap when in need through durable social relationships (Bourdieu, 1986; Portes, 1998). Post-reentry, older adults fear they will have no one to which they can turn for aid (Crawley & Sparks, 2006). Older adults voice concerns associated with establishing relationships, broadly (Smoyer, Elumn, & Blankenship, 2019), and with children and grandchildren (Wyse, 2018), narrowly. These findings echo those put forth by other scholars regarding the pitiful visitation experiences had by older adults while incarcerated (Prost, 2023; Prost & Novisky, 2022; Rich & Brancale,

2024). And even when supportive relationships were in place, economic constraints among their families translate to limited financial support for older adults leaving prison (Wyse, 2018). The reentry experiences of older men have thus been described as punctuated by a "pervasive disconnection" from social networks.

# Policies to address the linkages between incarceration and health for older adults

Several policies can be leveraged to alleviate the deleterious health consequences of incarceration for older adults. We note that the policies suggested here are by no means comprehensive. Rather, we argue that meaningful reform must minimally include attention to the following three areas: (1) policies to help reduce the size of the carceral populations; (2) policies to help enhance conditions of confinement; and (3) policies to help with transitions home. We provide an overview of each category below.

#### Policies to help reduce the size of the carceral population

Strategies aimed at reducing the volume of people who are sent to periods of confinement, alongside shortening the lengths for which people are incarcerated, have the greatest potential for impact (Clear & Frost, 2013; Cloud et al., 2023). As such, one goal should be to divert as many people as possible from entry into jail and prison systems. Doing so will require the expansion of diversion programs and community-based supervision. Drug, family, and other problem-solving courts are already used to help reduce exposure to incarceration (Kearley & Gottfredson, 2020; Sevigny et al., 2013). Specialty probation programs for people with mental illness have also been implemented (Lurigio et al., 2012) and Veterans' courts have demonstrated meaningful outcomes (Atkin-Plunk et al., 2021; Hartley & Baldwin, 2019). The spirit of such programs is to de-clog the criminal legal system, reduce costs, and target resources on opportunities for rehabilitation and programming. Problem solving court and specialty probation models designed to meet the unique needs of older adults may be worth developing and piloting. We encourage the pursuit of these possibilities, particularly for adults with dementia (Kodama et al., 2023).

As stated above, reducing the lengths of incarceration stays is also critical. To do this, leverage of early release mechanisms is indicated. While older adults are subject to write-ups during incarceration (McShane & Williams, 1990; Prost & Srivastava, 2025), older persons have lower rates of misconduct while incarcerated when compared to younger persons (Valentine et al., 2015) and lower rates of recidivism than their younger peers (Durose & Antenangeli, 2021; Hunt & Easley, 2017; Kuanliang & Sorensen, 2008; Rakes, Prost, & Tripodi, 2018). This makes them particularly well-suited for early release

Novisky et al. Health & Justice (2025) 13:23 Page 6 of 16

mechanisms such as compassionate and geriatric release. Compassionate release is the practice of releasing someone from confinement prior to the end of their sentence due to "extraordinary and compelling reasons" (U.S. Sentencing Commission, 2024, p. 2). Most often, these reasons include a combination of sentence requirements, advanced age and/or serious health conditions. The District of Columbia and 49 states have some form of compassionate release (Price, 2018), though wide variation in the eligibility criteria, application processes, and post-release requirements has been documented.

Compassionate release programs remain sorely underutilized at both the state and federal level. For example, Holland and colleagues (2021) recount that 5,932 persons were eligible for compassionate release between 2013 and 2015 in responding state departments of correction, and only 802 were discharged. Between 2019 and 2023, a total of 31,069 motions for compassionate release were submitted to federal courts across the US. Of these, 84% (n=26,117) were denied (U.S. Sentencing Commission, 2024). Even when looking at arguably the most extreme health crisis that has occurred in modern history - the COVID-19 pandemic – reliance on this mechanism was negligible (James et al., 2022). We call for jurisdictions to meaningfully expand their use of compassionate release mechanisms. This includes relying more on options such as geriatric release, which automatically triggers release for individuals who reach a certain age (e.g., age 60). The benefits of doing so are high-cost savings, reductions in carceral population sizes, a more humane correctional environment, and less trauma inflicted on the families of incarcerated individuals. Given the low likelihood for older adults to recidivate, the public safety risks are also low.

# Policies to help enhance conditions of confinement

Even with an expansion of diversion and early release mechanisms, many will remain in prisons and jails. Accordingly, it is also important to implement policies that will help enhance conditions of confinement. Given the critical role of staff on influencing institutional climate, one option is to increase geriatric training requirements for correctional officers. In a report by the Office of the Inspector General (2015), it was determined that federal prisons have neither the staffing capacity nor the training opportunities necessary to accommodate the needs of the aging population. All correctional staff should receive specialized training on the unique needs of older adults, and how policies may need to be adapted to address those needs. As awareness of mental illness in criminal-legal settings increased, crisis intervention team (CIT) trainings were introduced to help law enforcement (and more recently correctional officers) be more aware of and responsive to mental health conditions (Bratina et al., 2018; McNeeley & Donley, 2021). A similar model that focuses instead on geriatric care could assist with increasing awareness of the older adult population and increase expectations of responsivity. One such model evaluated by Brown and colleagues (2017) was found to shape empathy for and awareness of geriatric concerns among law enforcement officers (n=143). Too, researchers relayed that police officers reported an increased ability to provide older adults with tailored referrals post-training.

Another priority to help enhance conditions of confinement is to ensure proper infrastructure within adult facilities. At a minimum, all prisons and jails should be ADA-compliant retrospectively. This will likely require updates and changes to many buildings, installation of ramps and elevators, maintenance of sidewalks, and installation of railings in bathrooms. The US is unique in its lack of external oversight bodies to gather data and monitor conditions of confinement (Cloud et al., 2023). In Canada, operational funds are set aside for an Office of the Correctional Investigator (OCI), an independent ombuds and oversight body of federal institutions in the country. The OCI gathers information and issues reports on food quality, sanitation, use of restrictive housing, and climate control, to name a few. In 2019, a report was released by OCI that focused on investigating the experiences of older adults in federal custody. One of the findings of the report was that during site visits to institutions, many of the cells listed as 'wheelchair accessible' in fact lacked proper accessibility. Other concerns such as cells without emergency call buttons, uneven and broken walkways around the buildings, steep inclines into housing units, and showers without seats, slip mats, or handled mechanisms were also noted (OCI, 2019). Funding an external oversight body that could investigate these and other issues central to conditions of confinement would help to hold facilities accountable and make this information more publicly accessible.

Finally, and as discussed above, we know that older adults are vulnerable to dying in correctional institutions, particularly in prisons. Expanding the use of diversion and early release mechanisms can help to prevent deaths in custody. Increasing access to efficacious medical interventions can also help prevent deaths in custody, as incarcerated individuals with curable chronic diseases such as hepatitis C virus (HCV) often have limited access to life-saving treatment. Consider a study of 2,053 individuals hospitalized in an outpatient hospital used by Massachusetts prisons and jails (Wurcel, Guardado, & Beckwith, 2021). Researchers showed how high HCV-mortality rates were linked to pre-hospitalization experiences while incarcerated. A shortage

Novisky et al. Health & Justice (2025) 13:23 Page 7 of 16

of testing and access to expensive medications that can cure HCV remains a major impediment to reducing the number of preventable deaths.

Other studies point to especially problematic HCV treatment protocols in jails. Given that individuals often have shorter periods of incarceration in jail, medication regiments for HCV are often interrupted. A study of the New York City (NYC) jail system conducted over a three-year period (2014-2017) documents challenges to scaling up HCV treatment after release. Of the 269 incarcerated patients included in the study, 88% who completed treatment in jail were cured. Consistent with previous research (Aspinall et al., 2016) those released from custody prior to completing HCV therapy had far lower cure rates. One promising response to the challenges of sustained care is the opening of New York City's Point of Transition and Reentry (PORT) clinics (Wurcel, Guardado, & Beckwith, 2021). These community health sites are specifically designed to provide HCV treatment to those recently released from jail.

While such interventions can help to reduce preventable deaths, facilities must be prepared for those who remain. A growing number of institutions have thus adopted on site palliative and hospice care models (Prost et al., 2020a, 2020b, 2020c). Many leverage peer caregivers, persons who are incarcerated who support their older and infirm peers with ADL. These models have identified many strengths, perhaps exemplified by the Gold Coats in the California Department of Corrections and Rehabilitation (Taylor, 2016). Program representatives have described peer caregivers as the greatest asset to the hospice program, and many carers have emphasized that those for whom they care become family behind bars (Prost et al., 2020a, 2020b, 2020c) and that the experience contributes to a personal transformation (Cloyes et al., 2014).

Peer caregivers are adept at meeting the needs of their fellows (Stewart, 2021), with some scholars relating a unique capacity to match patient self-reports of health and life quality measures (Prost & Lee, 2022; Prost et al., 2020a, 2020b, 2020c). However, some limits do exist—notably, the potential for caregiver burden and psychological distress faced by peer caregivers with inadequate support to navigate the often-stressful setting and circumstances of illness and death behind bars (Depner et al., 2018; Prost et al., 2025a, 2025b, 2020a, 2020b, 2020c; Stewart & Prost, 2024). While the training and caregiving experiences of these carers have been well documented (Loeb et al., 2013; Stewart & Edmond, 2017), little is known regarding the influence of peer caregiving on patient outcomes, though many scholars hypothesize that with enhanced care, patient pain and suffering is reduced and institutional costs, likewise, decrease (Prost et al., 2020a, 2020b, 2020c).

# Policies to help with transitions home

Upon returning to the community, older adults face numerous challenges, and policies to establish and fund specialized re-entry coordinators (RCs) with gerontological insights are needed. RCs, no doubt, offer extensive supports to those preparing for and having returned to communities. RCs are critical collaborators with both correctional and community partners (Duran et al., 2013), making them an integral asset for older adults leaving prison. Yet, successful reentry is also contingent upon access to population-specific information to adequately address recidivism risk and improve reintegration. However, we have highlighted that older adults face problems that are distinct from those of their younger counterparts, and reentry services are rarely tailored to the unique problems faced by this population (Maschi & Morgen, 2021). Therefore, a greater understanding of older adulthood in the context of human biopsychosocial-spiritual development is warranted. Requiring continuing education surrounding older adults' experiences during incarceration may equip a new cohort of RCs with tailored insights necessary to assuring a smoother transition for older adults.

Likewise, local policymakers are encouraged strongly to buttress existing formal supports such as community-based service providers. For example, increasing knowledge and skills regarding criminal legal system experiences among community providers such as Area Agencies on Aging representatives, senior centers, and long-term care providers would likely prove an important supplement to the formalized re-entry process (Prost et al., 2023). Increased awareness of older adults' experiences'—and their incredibly low risk of recidivism—will also be essential to reducing housing-related barriers for this vulnerable population.

And strategies parallel to those used in health care settings could likewise be codified via agency policy. For example, the transfer of electronic health records to new primary care physician (PCP) offices, discharge with at least 90 days of medications for chronic diseases, and alignment of PCP and specialty appointments along with transportation should take place prior to release. This requires meaningful revisions to health insurance policy at the state and federal level, however, as few states allow application for Medicaid prior to release to allow for coverage immediately upon re-entry (Frank et al., 2014). One exception is a policy response to improve Medicaid coverage for justice-involved individuals in Indiana. By requiring interagency coordination between the Indiana Department of Corrections and the state's Office of

Novisky et al. Health & Justice (2025) 13:23 Page 8 of 16

Medicaid Policy and Planning (OMPP), "approximately 5,000 more adults received coverage over the course of three years than may have otherwise" (Blackburn et al., 2020).

# Setting an agenda for future research

Additional carceral health research is critical moving forward. A research study evaluating the state of research funding from the National Institutes of Health (NIH) found that only 1.5% of its \$2.7 million health disparities budget for the reference year (2012) was spent on criminal justice health research (Ahalt et al., 2015). More broadly, among projects funded across three federal agencies between 1985 and 2022 (NIH, NSH, and DOJ), only .11% of projects directly addressed incarceration (Boch et al., 2023). Strikingly few publicly accessible health data sets can be used to address research questions on the links between incarceration and health (Ahalt et al., 2012; Kheirbek et al., 2024), and measurement in correctional health research remains challenging (Prost et al., 2019). Much remains to be learned about the connections between incarceration and health for older adults explicitly. As the number of older adults in jails and prisons continues to grow, the urgency of expanding research on this population will become greater. An important contributor to the state of research at the intersection of aging and criminal legal systems in recent years is the Aging Research in Criminal Justice Health (ARCH) Network. Funded by the National Institute on Aging (NIA), the ARCH Network offers pilot funding, mentorship, and regular gatherings of key constituents conducting and applying research regarding older adults throughout the criminal legal system.

In anticipation of this need, more emphasis must be placed on longitudinal, in-depth, accurate, timely, and publicly accessible data collection efforts - both during and post-release. Relatedly, integration of standardized outcome measures such as those within the Patient-Reported Outcomes Measurement Information System (PROMIS®) or NIH Toolbox® is encouraged. Too, evaluative efforts that target best practices in geriatrics such as the application of Vitamin D for fall prevention (American Geriatrics Society [AGS], 2014), a team approach to care delivery (Hickman et al., 2007), and physical activity for cardiovascular disease (Ashworth et al., 2005) are needed. And critically, more researchers in general "need to get into prisons and jails and get their hands dirty," as there is not near enough attention towards original data collection efforts in these facilities, despite the large volume of people processed through them every year (Wildeman et al., 2018, p. 43). But given the particular lack of research on theory specific to older adults, the unique barriers and consequences of jail experiences, experiences of older women, mounting concern over cognitive impairment, and staff perspectives on the deficiencies and strengths of medical care for older adults, we call for prioritization of those areas.

# Theory building

The construction and application of theoretical models specific to older adults in carceral settings is limited, but some scholars have posited the roles of varying theories in older adults' experiences of incarceration. Prost and Novisky (2022) relate that visitation may be instrumental to the sense of generativity among older adults incarcerated in jail (viz. psychosocial developmental theory), though specific constructs surrounding this stage were not assessed in the study. Additionally, the sociological framework of cultural health capital has been applied to help understand older adults' varied successes with accessing prison health care (Novisky, 2018), while social capital has been used to understand variations in depressive symptomology (Archuleta et al., 2020). General strain theory has also been leveraged to contextualize older adults' perceptions of death and dying in correctional spaces (Novisky et al., 2022). More recently, Oswald and colleagues (2024) relate the lens of environmental gerontology as an important consideration; in short, theorists center the interaction between the older adult and the home environment. Scholars have long related the role of penal architecture and the prison social environment on persons' experiences while incarcerated (Hancock & Jewkes, 2011; Jewkes, 2016). It is thus anticipated that revisions to the prison ecology, reflective of older adults' capability and capacity, could support aging in place and the affirmation of dignity. These applications provide a sampling of examples of the importance of inter and multidisciplinary work in enhancing what is known about the linkages between incarceration and health for older adults. We encourage further concentrated theoretical work in sociology, criminology, gerontology, social work, public health, nursing, and adjacent disciplines to help strengthen theoretical applications in this area.

Likewise, efforts need to be made surrounding the concept of successful aging for older adults who are or were previously incarcerated. One study sought to build a related theory using semi-structured interviews with 15 older Filipino women incarcerated in prison (Lucas et al., 2018), revealing a five stage "Road to Success" model inclusive of struggling, sense-making, reforming, reintegrating, and sustaining phases. Importantly, scholars noted that maintaining contact with loved ones (e.g., visitation, calls, mail) was a critical factor in older women aging successfully in this setting (Lucas et al., 2018). Similarly, a study of 10 older Filipino men incarcerated in prison revealed that barriers to successful aging included

Novisky et al. Health & Justice (2025) 13:23 Page 9 of 16

physical decline, emotional stressors, and limited connection with loved ones outside of prison; in contrast, facilitators included prison programming and personal learning (Geneciran et al., 2018).

#### **Jails**

Jails remain the uncharted territory of the criminal legal system despite their enormous footprint on individuals and communities. Jail incarceration is chaotic, marked by short-term stays, rapid turnover, instability, and confusion (Martin et al., 2023). Jails host a larger number of US carceral admissions than state and federal prisons each year, accounting for 7.3 million admissions from July 2021 to June 2022 alone (Zeng, 2023). While there was initial optimism about declines in jail populations following the COVID-19 pandemic, those declines have largely reversed course, already returning to 90 percent of their pre-pandemic population size (Zeng, 2023).

The most recent estimates available show that jails confine a total of 146,600 adults aged 45 or older, making up 22% of the jail population (Zeng, 2023). These population estimates are also meaningful in that they represent sizable increases from the two most recent reference points (2021 to 2022). Specifically, the number of adults in jails 45–54 years of age, 55–64 years of age, and 65 years of age and up increased by 8.5%, 8.9%, and 17.9% between 2021 and 2022, respectively (Zeng, 2023). However, despite the growing prevalence of older adults in jails, the bulk of the research on the linkages between incarceration and health for older adults is still focused on prisons.

We encourage more research on incarceration-health links and experiences of older adults in jails. For example, how might access to medical care vary in jails relative to prisons? What perceptions do older adults have about medical providers in these settings? What types of medical staff work in jails and are they able to meet the diverse medical needs of aging incarcerated individuals? Relatedly, why do some jails have high mortality rates as compared to others?

## Women

Today one in 15 women in prison are serving life sentences, a rate that has far outpaced increases of life sentencing among men over the last decade (Nellis, 2021). While some studies have examined older women's experiences during incarceration, including grief (Aday & Krabill, 2016), life quality and post-traumatic stress (Prost et al., 2022), and the perspectives of health care professionals who provide them services (Barry et al., 2020), scholars emphasize the need for further research with older women explicitly (Haesen et al., 2019; Wilkinson, & Caulfield, 2020). Between 1993 and 2013, about 40% of the increase in incarceration rates among

women is owed to a growing number of women aged 55 and older (Carson & Sabol, 2016). Older women with incarceration histories — especially older women of color — may be at elevated risk for physical limitations and depressive symptoms relative to their peers (Latham-Mintus, Deck, & Nelson, 2022). A qualitative study of mostly Black women (mean age=51) in Louisiana found that participants reported delayed care, punitive responses to requests for care, and disrespect from providers as barriers to their receipt of health care while in prison (Wennerstrom et al., 2021).

Moreover, little is known about the access older women have to preventative screenings during incarceration. One study that assessed breast cancer risk among women in jail found that of women 50 years of age or older, only 39% had received a mammogram in the prior two years (Pickett et al., 2018). However, the sample was small (n=261) and only included participants from three jails. More research on preventable screenings and risk factors for older women in correctional facilities and evidence-based interventions to improve the quality of life of older women in these spaces is imperative (Van Hout et al., 2022).

It is further worth mention that the antecedents and consequences of incarceration for women are understood as distinct from that of men. Seminal work by Salisbury and Van Voorhis (2009) relates that women's arrests, experiences during a correctional stay, and consequences of time behind bars are marked by unique difficulties. Two of the three pathways are linked closely to adverse childhood experiences and later intimate partner violence. And while men do experience both childhood adversity and violence in the course of domestic relationships, the mental and behavioral health sequelae of these experiences among women manifest more negatively across the life course (e.g., employment opportunities, earnings lost).

Relatedly, women who enter prison with histories of poly-victimization often experience compounding health consequences that persist well beyond incarceration (Ervin et al., 2020; Kennedy, 2016). Exposure to emotional, physical, and sexual violence prior to imprisonment has been strongly linked to poorer mental health, higher likelihood of substance misuse, and greater suicidal ideation among incarcerated women (Arévalo & Zhao, 2024; Kennedy et al., 2021; Radatz & Wright, 2017), with the carceral environment often exacerbating these conditions rather than addressing them. Due to these findings and gaps, researchers are encouraged strongly to center efforts on older women during and post-incarceration, with a key area in need of further research being to address how trauma exposures before, during, and after incarceration impact the Novisky et al. Health & Justice (2025) 13:23 Page 10 of 16

health and well-being of older incarcerated and formerly incarcerated women.

#### **Cognitive Impairment**

Despite the elevated risk factors for cognitive impairment associated with incarceration, there is still limited understanding of how incarceration affects cognitive decline and impairment in those who experience it. To date, a few studies with small samples from prisons or jails have documented elevated levels of cognitive impairment among currently incarcerated individuals (Ahalt et al., 2018; Baillargeon et al., 2023; Perez et al., 2021; Umbach et al., 2018). Additionally, cross-sectional studies have found associations between prior incarceration and cognitive impairment among formerly older adults, as well as at midlife (Garcia-Grossman et al., 2023; Kuffel et al., 2022a, 2022b; Testa et al., 2023, 2024b). However, fewer studies have examined longitudinal patterns among formerly incarcerated older adults over time. To date, only three studies using data have tracked patterns of cognitive impairment over time among formerly incarcerated older adults, finding that prior incarceration is associated with a higher risk of cognitive impairment, including an increased overall risk, earlier onset (Cox & Wallace, 2022; Tanksley et al., 2023), and steeper declines in cognition over time (Testa, Mijares, & Jackson, 2025).

Building on these foundational findings, future research is needed to further examine the relationship between incarceration and cognitive impairment among older adults. First, more comprehensive data collection is necessary, particularly longitudinal studies with detailed measures of incarceration history and cognitive health across the life course. Such data could overcome the limitations of the few existing sources that include incarceration and cognitive functioning measures, like the HRS, by providing greater insight into whether and how the features of incarceration (e.g., frequency, total duration, and timing in the life course) impact cognitive functioning over time. Second, research should focus on testing specific mechanisms through which incarceration might contribute to cognitive impairment, such as chronic stress, trauma, comorbid health conditions, and the role of social capital over the life course. Doing so is critical for identifying pathways and potential intervention points that can reduce the likelihood of cognitive decline among currently and formerly incarcerated populations. Third, it is crucial to develop and test programs and interventions aimed at supporting cognitive health among individuals with a history of incarceration. These should include preventive measures for middleaged individuals at risk of cognitive decline (Gandy et al., 2017; Reuben et al., 2022), as well as tailored support and care for older currently and formerly incarcerated adults experiencing cognitive impairment. Finally, it is important to consider the reverse relationship—how cognitive decline itself might increase the risk of criminal behavior and incarceration (Arias et al., 2023; Kuffel et al., 2022a, 2022b; Wapner, 2023)—and evaluate diversion efforts and specialized court programs that address the needs of aging individuals at risk of incarceration due to cognitive decline (Kodama et al., 2023; Novak, 2022).

#### Staff perspectives

The perspectives of correctional staff and administrators are also largely absent from extant literature. Researchers in Canada offer an exception and find that among the 34 correctional mental health staff interviewed, respondents iterated that the complex and unique needs of older adults in prison are often inadequately addressed (Mussie et al., 2021). Yet, human development is shaped by a multitude of systems and system interactions in which the individual exists (Bronfenbrenner, 1992; Bronfenbrenner & Morris, 2007). Thus, adopting an ecological systems lens recognizes that older adults are nested within multiple systems. In this way, older adults may offer a microlevel perspective inclusive of intra- and inter-individual processes. Family and friends supplement this microlevel system, encircling older adults. Further, correctional staff represent a meso-level perspective, as these individuals are charged with the day-to-day operations of facilities. Finally, administrators offer 'bird's-eye view' or macro-level insights regarding older adults' incarceration and reentry experiences. This is an important gap to rectify, as this missing research stalls data-informed policymaking for programs and procedures that could alleviate burdens experienced by older adults and thereby, increase reentry successes.

### Intervention

Findings from a recent systematic review reveal that few studies have been published surrounding interventions with older adults incarcerated in jails and prisons (Canada et al., 2020). Upon review of 24 articles, authors detail five interventions with quality scores ranging from 3.5 to 25 (possible range 0-28). Several interventions used art and music-based approaches (e.g., Art Expression, BE-ACTIV, Good Vibrations) whereas True Grit is a structured living setting. The highest quality intervention was the "Older prisoner Health and Social Care Assessment and Plan [OHSCAP]. Briefly, the experimental study used a standardized assessment approach with the treatment group and examined unmet needs, functional health, depression, and life quality. Findings revealed no statistically significant differences across outcomes between those older adults who were in the experimental condition and those in the control group (n=497). More

Novisky et al. Health & Justice (2025) 13:23 Page 11 of 16

recently, authors of the OHSCAP effort completed a randomized controlled trial comparing the health and social care assessment and treatment plan approach with treatment as usual with adults aged 50 or older across 10 prisons in England (n=202; Forsyth et al., 2021). The authors related, however, that unmet needs did not emerge as statistically significantly different between the two groups.

While these and other non-experimental efforts are important advancements in our understanding of older adults' experiences during incarceration, further research surrounding the application and efficacy of interventions within jails and prisons is essential. As Canada et al., (2020) offer, "there is great need for more research and dissemination of knowledge regarding interventions for the aging population within jails and prisons" (2020, p. 1026). Too, intervention studies have not yet taken place in post-incarceration settings (viz. parole). These are critical areas of exploration for the next cohort of scholars at the intersection of incarceration, health, and aging.

#### **Conclusion**

The aging of the carceral population in the US is a public health crisis. As demonstrated throughout this article, there are tremendous health-related costs to incarcerating older adults, particularly at current volumes. While research and policy efforts have expanded in recent years to address this crisis, much is still unknown and jails and prisons remain underequipped to meet the complex, multifaceted needs of older adults. We join the call by others to "issue in a caring justice consciousness to guide criminal justice reform" in this area (Maschi & Morgen, 2020, p. 3). This endeavor includes humanizing older adults, acknowledging the spillover effects that link correctional facilities to communities, and recognizing the inherent limitations of prisons and jails to ethically house and care for this vulnerable population.

We would be remiss if we did not consider the immediate consequences of community inaction. Between 2021 and 2022, the US prison population experienced a growth of 2.1%, its first increase in ten years (Buehler & Kluckow, 2024). By 2030, it is predicted that a staggering 400,000 prisoners 50 years of age or older will be incarcerated in US jails and prisons (Moore & Gamel, 2024, p. 3). The need for accelerated compassionate release is critical. In New Jersey, a recent proposal is being considered to "allow inmates aged 60 years or older who have served 20 years in prison to petition a Superior Court judge for early release, and a judge would be required to grant early release absent a finding the inmate is a danger to others, or their release does not serve the interests of justice" (Biryukov, 2025). Obviously, we support such reforms and ones that further lower both the age and years served requirements. Indeed, research shows that "those exiting prison from a former life sentence exhibit very low rates of reoffending" (Nellis & Bishop, 2021).

Yet the challenges are formidable even in an age of reform and second chances. While most of the American public supports redemption for individuals convicted of a crime, far fewer would extend such support for violent offenses (Berryessa, 2022). There is also the matter of a broader health care crisis facing an increasingly graying American population. The possibility of historic cuts to Medicaid could impact millions of older Americans who need home and nursing care (Sanger-Katz & Parlapiano, 2025). Given this daunting reality, it is likely that discretionary dollars for aging incarcerated adults will continue to shrink. Increasing correctional staff shortages and cost cutting already threaten nutrition, health care, and specialized hospice or dementia units. The challenges are many and will require coordinated efforts by policy makers, corrections officials, public health advocates, advocacy groups, and social scientists.

#### Acknowledgements

The authors would like to thank the Aging Research in Criminal Justice Health (ARCH) Network for motivating this research.

#### Authors' contributions

All four of the authors meaningfully contributed to writing this paper. MN constructed the outline for the paper. MN and SGP worked together to draft the first version of the paper. BFS and AT added substantively to the original draft. All four authors subsequently took turns reading, editing, and approving the manuscript until it was ready for submission.

# Funding

Research reported in this publication was supported in part by the National Institute on Aging of the National Institutes of Health under Award Number [R24AG065175].

#### Data availability

No datasets were generated or analysed during the current study.

# **Declarations**

#### Competing interests

The authors declare no competing interests.

Received: 28 October 2024 Accepted: 18 March 2025 Published online: 17 April 2025

#### References

Aday RH, Krabill JJ. (2016). The silenced emotion: Older women and grief in prison. In *Handbook of social justice in loss and grief* (pp. 138-153). Routledge.

Ahalt, C., Binswanger, I. A., Steinman, M., Tulsky, J., & Williams, B. A. (2012). Confined to ignorance: The absence of prisoner information from nationally representative health data sets. *Journal of General Internal Medicine*, 27, 160–166.

Ahalt, C., Bolano, M., Wang, E. A., & Williams, B. (2015). The state of research funding from the National Institutes of Health for criminal justice health research. *Annals of Internal Medicine*, 162, 345–352.

Ahalt, C., Stijacic-Cenzer, I., Miller, B. L., Rosen, H. J., Barnes, D. E., & Williams, B. A. (2018). Cognition and incarceration: Cognitive impairment and

its associated outcomes in older adults in jail. *Journal of the American Geriatrics Society, 66*(11), 2065–2071.

(2025) 13:23

- American geriatrics society workgroup on vitamin D supplementation for older adults. (2014). Recommendations abstracted from the American Geriatrics Society consensus statement on vitamin D for prevention of falls and their consequences. *Journal of the American Geriatrics Society*, 62(1), 147–52.
- Apel R, Ramakers A. (2018). Impact of incarceration on employment prospects. In *Handbook on the Consequences of Sentencing and Punishment Decisions* (pp. 85-104). Routledge.
- Archuleta, A. J., Prost, S. G., & Golder, S. (2020). The light and dark sides of social capital: Depressive symptoms among incarcerated older adults. *International Journal of Social Psychiatry*, 66(1), 23–33.
- Arévalo, SP, Zhao Q. (2024). Lifetime polyvictimization and mental health outcomes in women with vs without incarceration histories: a population-based latent class analysis. Violence against women, 10778012241252018.
- Arias, J. J., Morgado, L., & Tyler, A. (2023). Crime, Incarceration, and Dementia: An Aging Criminal System. *American Journal of Law & Medicine*, 53(6):17–24
- Arias, J. J., Morgado, L., & Prost, S. G. (2023). Forgotten and without protections: older adults in prison settings. Hastings Center Report, 53(6), 17–24.
- Ashworth NL, Chad KE, Harrison EL, Reeder BA, Marshall SC. (2005). Home versus center based physical activity programs in older adults. *Cochrane Database of Systematic Reviews*. *CD004017*(1)
- Aspinall, E. J., Mitchell, W., Schofield, J., Cairns, A., Lamond, S., Bramley, P., & Hutchinson, S. J. (2016). A matched comparison study of hepatitis C treatment outcomes in the prison and community setting, and an analysis of the impact of prison release or transfer during therapy. *Journal of Viral Hepatitis*, 23(12), 1009–1016.
- Atkin-Plunk, C. A., Armstrong, G. S., & Dalbir, N. (2021). Veteran Treatment Court Clients' Perceptions of Procedural Justice and Recidivism. *Criminal Justice Policy Review, 32*(5), 501–522.
- Baidawi, S. (2016). Older prisoners: Psychological distress and associations with mental health history, cognitive functioning, socio-demographic, and criminal justice factors. *International Psychogeriatrics*, 28(3), 385–395.
- Baillargeon, J., Linthicum, L. C., Murray, O. J., Raji, M. A., Kuo, Y. F., Pulvino, J. S., & Penn, J. V. (2023). The prevalence of cognitive impairment and dementia in incarcerated older adults. *Gerontology: Series B*, 78(12), 2141–2146.
- Baranyi, G., Cassidy, M., Fazel, S., Priebe, S., & Mundt, A. P. (2018). Prevalence of posttraumatic stress disorder in prisoners. *Epidemiologic Reviews*, 40(1), 134–145.
- Barry, L. C., Adams, K. B., Zaugg, D., & Noujaim, D. (2020). Health-care needs of older women prisoners: Perspectives of the health-care workers who care for them. *Journal of Women & Aging*, 32(2), 183–202.
- Bellass, S., Canvin, K., McLintock, K., et al. (2022). Quality indicators and performance measures for prison healthcare: A scoping review. Health Justice, 10, 13
- Berg, M. T., Rogers, E. M., Lei, M.-K., & Simons, R. L. (2021). Losing Years Doing Time: Incarceration Exposure and Accelerated Biological Aging among African American Adults. *Journal of Health and Social Behavior, 62*(4),
- Berryessa, C. M. (2022). A tale of "second chances": An experimental examination of popular support for early release mechanisms that reconsider long-term prison sentences. *Journal of Experimental Criminology, 18*(4), 783–824.
- Biryukov N. (2025). Criminal justice reform advocates propose early release for elderly inmates. New Jersey Monitor. Retrieved from https://newje rseymonitor.com/2025/01/07/criminal-justice-reform-advocates-propo se-early-release-for-elderly-inmates/#:~:text=The%20proposed%20ger iatric%20release%20program,does%20not%20serve%20the%20int
- Bisht, K., Sharma, K., & Tremblay, M. È. (2018). Chronic stress as a risk factor for Alzheimer's disease: roles of microglia-mediated synaptic remodeling, inflammation, and oxidative stress. *Neurobiology of Stress*, *9*, 9–21.
- Blackburn, J., Norwood, C., Rusyniak, D., Gilbert, A. L., Sullivan, J., & Menachemi, N. (2020). Indiana's Section 1115 Medicaid Waiver and Interagency Coordination Improve Enrollment For Justice-Involved Adults: Study examines Indiana's Medicaid waiver and enrollment for justice-involved adults. *Health Affairs*, 39(11), 1891–1899.

- Boch, S. J., Murnan, A. W., Pollard, J. F., Nidey, N. L., Hardy, R. Y., & Iruka, I. U. (2023). Assessment of US federal funding of incarceration-related research, 1985 to 2022. *JAMA Network Open, 6*(2), e230803–e230803.
- Borschmann, R., Keen, C., Spittal, M. J., Preen, D., Pirkis, J., Larney, S., & Kinner, S. A. (2024). Rates and causes of death after release from incarceration among 1 471 526 people in eight high-income and middle-income countries: An individual participant data meta-analysis. *The Lancet*, 403(10438), 1779–1788.
- Bourdieu, P. (1986). The forms of capital. In J. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). Greenwood.
- Bratina, M. P., Carrero, K. M., Kim, B., & Merlo, A. V. (2018). Crisis Intervention Team training: When police encounter persons with mental illness. *Police Practice and Research*, 21(3), 279–296.
- Bronfenbrenner, U., & Morris, P. A. (2007). *The bioecological model of human development*. NYU Press.
- Bronfenbrenner U. (1992). *Ecological systems theory*. Jessica Kingsley Publishers, London
- Brown, R. T., Ahalt, C., Rivera, J., Stijacic Cenzer, I., Wilhelm, A., & Williams, B. A. (2017). Good cop, better cop: Evaluation of a geriatrics training program for police. *Journal of the American Geriatrics Society, 65*(8), 1842–1847.
- Buehler E, Kluckow R. (2024). Correctional populations in the United States, 2022 statistical tables. U.S. Department of Justice, Bureau of Justice Statistics. NCJ 308699.
- Calavita, K., & Jenness, V. (2015). Appealing to justice: Prisoner grievances, rights, and carceral logic. University of California Press.
- Canada, K. E., Barrenger, S. L., Robinson, E. L., Washington, K. T., & Mills, T. (2020).
  A systematic review of interventions for older adults living in jails and prisons. *Aging & Mental Health*, 24(7), 1019–1027.
- Carson AE, Kluckow R. (2023). Prisoners in 2022 Statistical tables. U.S. Department of Justice, Bureau of Justice Statistics. NCJ 307149.
- Carson AE, Sabol WJ. (2012). Prisoners in 2011. U.S. Department of Justice, Bureau of Justice Statistics. NCJ239808.
- Carson, E. A., & Sabol, W. J. (2016). Aging of the state prison population, 1993-2013. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. NCJ 248766. Retrieved from https://bjs.ojp.gov/content/pub/pdf/aspp9313.pdf.
- Carson, A. (2021a). Mortality in state and federal prisons, 2001-2019. U.S. Department of Justice, Bureau of Justice Statistics. NCJ 300953.
- Carson A. (2021b). Mortality in local jails, 2000-2019. U.S. Department of Justice, Bureau of Justice Statistics. NCJ 301368.
- Chiclana, S., Castillo-Gualda, R., Paniagua, D., & Rodríguez-Carvajal, R. (2019). Mental health, positive affectivity and wellbeing in prison: A comparative study between young and older prisoners. *Revista Espanola De Sanidad Penitenciaria*, 21(3), 138.
- Clear, T. R., & Frost, N. (2013). The punishment imperative. NYU Press.
- Cloud, D. H., Garcia-Grossman, I., Armstrong, A., & Williams, B. (2023). Public health and prisons: Priorities in the age of mass incarceration. *Annual Review of Public Health*, 44, 407–428.
- Clouston, S. A. P., Smith, D. M., Mukherjee, S., et al. (2020). Education and Cognitive Decline: An Integrative Analysis of Global Longitudinal Studies of Cognitive Aging. *Gerontology, Series B, 75*(7), e151–e160.
- Cloyes, K. G., Rosenkranz, S. J., Wold, D., Berry, P. H., & Supiano, K. P. (2014). To be truly alive: Motivation among prison inmate hospice volunteers and the transformative process of end-of-life peer care service. *American Journal of Hospice and Palliative Medicine*<sup>®</sup>, 31(7), 735–748.
- Couloute L. (2018). Nowhere to Go: Homelessness among formerly incarcerated people. Prison Policy Initiative. Nowhere to Go: Homelessness among formerly incarcerated people. Retrieved from https://www.prisonpolicy.org/reports/housing.html
- Cox, R. J., & Wallace, R. B. (2022). The role of incarceration as a risk factor for cognitive impairment. *Gerontology: Series B, 77*(12), e247–e262.
- Crawley, E., & Sparks, R. (2006). Is there life after imprisonment? How elderly men talk about imprisonment and release. *Criminology & Criminal Justice*, 6(1), 63–82.
- Daquin JC, Helmly V, Daigle LE. (2021). The Victimization of Older Adults in Prison. In Invisible Victims and the Pursuit of Justice: Analyzing Frequently Victimized Yet Rarely Discussed Populations (pp. 300-325). IGI Global.

- Daza, S., Palloni, A., & Jones, J. (2020). The consequences of incarceration for mortality in the United States. *Demography*, 57(2), 577–598.
- Deary, I. J., Corley, J., Gow, A. J., et al. (2009). Age-associated cognitive decline. *British Medical Bulletin*, *92*, 135–152.
- Depner, R. M., Grant, P. C., Byrwa, D. J., Breier, J. M., Lodi-Smith, J., Luczkiewicz, D. L., & Kerr, C. W. (2018). "People don't understand what goes on in here": A consensual qualitative research analysis of inmate-caregiver perspectives on prison-based end-of-life care. *Palliative Medicine*, 32(5), 969–979
- Durose MR, Antenangeli L. (2021). Recidivism of prisoners released in 34 states in 2012: A 5 year follow-up period (2012-2017). U.S. Department of Justice, Bureau of Justice Statistics. NCJ 255947.
- Duran, L., Plotkin, M., Potter, P., & Rosen, H. (2013). Integrated reentry and employment strategies: Reducing recidivism and promoting job readiness. US department of justice, office of justice programs, Bureau of justice statistics. NCJ 243628. Retrieved from https://bja.ojp.gov/sites/g/files/xyckuh186/files/Publications/CSG-Reentry-and-Employment.pdf.
- Elumn, J. E., et al. (2021). Healthcare-induced trauma in correctional facilities: A qualitative exploration. *Health & Justice*, *9*, 1–12.
- Ervin S, Jagannath J, Zweig JM, Willison JB, Agha C. (2020). Addressing trauma and victimization in women's prisons: Trauma-informed victim services and programs for incarcerated women. Research report: Urban Institute. https://www.urban.org/research/publication/addressing-trauma-and-victimization-womens-prisons.
- Ewert, S., Sykes, B. L., & Pettit, B. (2014). The degree of disadvantage: Incarceration and inequality in education. *The ANNALS of the American Academy of Political and Social Science*, *651*(1), 24–43.
- Falter, R. G. (2006). Elderly inmates: An emerging correctional population. *Correctional Health Journal*, 1, 52–69.
- Fazel, S., & Seewald, K. (2012). Severe mental illness in 33 588 prisoners worldwide: Systematic review and meta-regression analysis. *The British Journal of Psychiatry*, 200(5), 364–373.
- Fazel, S., Hope, T., O'Donnell, I., Piper, M., & Jacoby, R. (2001). Health of elderly male prisoners: Worse than the general population, worse than younger prisoners. Age and Ageing, 30(5), 403–407.
- Fillenbaum GG. (2013). Multidimensional functional assessment of older adults: The Duke Older Americans Resources and Services procedures. Psychology Press.
- Fluery-Steiner, B. (2008). *Dying Inside: The HIV/AIDS Ward at Limestone Prison*. University of Michigan Press.
- Forsyth, K., Webb, R. T., Power, L. A., Emsley, R., Senior, J., Burns, A., & Shaw, J. (2021). The older prisoner health and social care assessment and plan (OHSCAP) versus treatment as usual: A randomised controlled trial. *BMC Public Health*. 21. 1–9.
- Frank, J. W., Wang, E. A., Nunez-Smith, M., et al. (2014). Discrimination based on criminal record and healthcare utilization among men recently released from prison: A descriptive study. *Health & Justice*, *2*, 6.
- Gandy, S., Bartfai, T., Lees, G. V., & Sano, M. (2017). Midlife interventions are critical in prevention, delay, or improvement of Alzheimer's disease and vascular cognitive impairment and dementia. F1000 Research., 3(6), 413.
- Garcia-Grossman, I. R., Cenzer, I., & Steinman, M. A. (2023). History of incarceration and its association with geriatric and chronic health outcomes in older adulthood. *JAMA Open*, 6(1), e2249785.
- Geneciran, K. M. O., Merida, I. B. S., & Monasterial, A. C. B. (2018). *Muñoz ART*. Bilibid lolos.
- Greene, M., Ahalt, C., Stijacic-Cenzer, I., Metzger, L., & Williams, B. (2018). Older adults in jail: High rates and early onset of geriatric conditions. *Health lustice* 6, 3
- Greenwood, B. (2024). Arches and pains of the ADA in prisons with arthritis accommodations in the wake of aging prison populations. *Journal of Health & Biomedical Law, 20*(3), 127–157.
- Haesen, S., Merkt, H., Imber, A., Elger, B., & Wangmo, T. (2019). Substance use and other mental health disorders among older prisoners. *International Journal of Law and Psychiatry*, 62, 20–31.
- Hancock, P., & Jewkes, Y. (2011). Architectures of incarceration: The spatial pains of imprisonment. *Punishment & Society*, *13*(5), 611–629.
- Han, B. H., Williams, B. A., & Palamar, J. J. (2020). Medical multimorbidity, mental illness, and substance use disorder among middle-aged and older justice-involved adults in the USA, 2015–2018. *Journal of General Internal Medicine*, *36*, 1258–1263.

- Hartley, R. D., & Baldwin, J. M. (2019). Waging War on Recidivism Among Justice-Involved Veterans: An Impact Evaluation of a Large Urban Veterans Treatment Court. *Criminal Justice Policy Review*, 30(1), 52–78.
- Haugebrook, S., Zgoba, K. M., Maschi, T., Morgen, K., & Brown, D. (2010). Trauma, stress, health, and mental health issues among ethnically diverse older adult prisoners. *Journal of Correctional Health Care*, 16(3), 220–229.
- Hickman, L., Newton, P., Halcomb, E. J., Chang, E., & Davidson, P. (2007). Best practice interventions to improve the management of older people in acute care settings: A literature review. *Journal of Advanced Nursing*, 60(2), 113–126.
- Holland, M., Prost, S. G., Hoffmann, H., & Dickinson, G. (2021). Access and utilization of compassionate release in state departments of corrections. *Mortality*, 26(1), 49–65.
- Hunt KS, Easley BII. (2017). The effects of aging and recidivism among federal offenders. United States Sentencing Commission. https://www.ussc.gov/sites/default/files/pdf/research-and-publications/research-publications/2017/20171207\_Recidivism-Age.pdf
- Ihle, A., Oris, M., Sauter, J., Rimmele, U., & Kliegel, M. (2018). Cognitive reserve and social capital accrued in early and midlife moderate the relation of psychological stress to cognitive performance in old age. *Dementia and Geriatric Cognitive Disorders*, 45(3–4), 190–197.
- James, J. E., Foe, M., Desai, R., Rangan, A., & Price, M. (2022). COVID-19 and the reimaging of compassionate release. *International Journal of Prison Health*, 19(1), 20–34.
- Jewkes Y. (2016). The aesthetics and anaesthetics of prison architecture. In *Architecture and Justice* (pp. 33-46). Routledge.
- Kearley, B., & Gottfredson, D. (2020). Long term effects of drug court participation: Evidence from a 15-year follow-up of a randomized controlled trial. *Journal of Experimental Criminology*, 16, 27–47.
- Kennedy, B. K., Berger, S. L., Anne, B., Judith, C., Maria, C. A., Epel, E. S., Claudio, F., et al. (2014). Geroscience: Linking Aging to Chronic Disease. *Cell*, *159*(4), 709–713
- Kennedy, S. C., Mennicke, A., & Paul, R. (2021). Childhood polyvictimization and mental health issues among incarcerated women. *Journal of Aggression, Maltreatment & Trauma*, 30(3), 410–427.
- Kennedy SC. (2016). The relationship between childhood polyvictimization and subsequent mental health and substance misuse outcomes for incarcerated women (Doctoral dissertation, The Florida State University).
- Kheirbek, R. E., & Latham-Mintus, K. (2024a). Addressing enduring health impacts of incarceration for older adults: A call for academic and policy reform. *Gerontology: Series A*, 79(8), glae127.
- Kheirbek, R. E., & Latham-Mintus, K. (2024b). Addressing enduring health impacts of incarceration on older adults: A call for academic and policy reform. *The Journals of Gerontology: Series A, 79*(8), glae127.
- Kinner, S. A., & Young, J.T. (2018). Understanding and improving the health of people who experience incarceration: An overview and synthesis. *Epidemiologic Reviews*, 40(1), 4–11.
- Kodama, L., Williams, B., & Morris, N. P. (2023). Prioritizing diversion and decarceration of people with dementia. AMA Journal of Ethics, 25(10), F783-790
- Kramer, C., Song, M., Sufrin, C., Eber, B., G. B., et al. (2023). COVID-19 vaccination hesitancy and uptake: Perspectives from people released from the Federal Bureau of Prisons. *Vaccine*, 41(7), 1408–1417.
- Kuanliang, A., & Sorensen, J. (2008). Predictors of self-reported prison misconduct. Criminal Justice Studies, 21(1), 27–35.
- Kuffel, R. L., Byers, A. L., Williams, B., Fortinsky, R., Li, Y., et al. (2022a). Prevalence of dementia and mild cognitive impairment before incarceration. *Journal of the American Geriatrics Society*, 70(6), 1792–1799.
- Kuffel, R. L., Byers, A. L., Williams, B., Fortinsky, R., Li, Y., Ruderman, M. A., & Barry, L. C. (2022b). Prevalence of dementia and mild cognitive impairment before incarceration. *Journal of the American Geriatrics Society*, 70(6), 1702, 1709.
- Latham-Mintus, K., Deck, M. M., & Nelson, E. (2022). Aging with incarceration histories: An intersectional examination of incarceration and health outcomes among older adults. *Gerontology: Series b., 78*(5), 853–865.
- Link, N. W., Novisky, M. A., & Fahmy, C. (Eds.). (2025). *Handbook on contemporary issues in health, crime, and punishment*. Routledge.
- Li, A., Williams, B., & Barry, L. C. (2022). Mental and physical health of older incarcerated persons who have aged in place in prison. *Journal of Applied Gerontology*, 41(4), 1101–1110.

- Loeb, S. J., & AbuDagga, A. (2006). Health-related research on older inmates: An integrative review. *Research in Nursing & Health*, *29*, 556–565.
- Loeb, S. J., Hollenbeak, C. S., Penrod, J., Smith, C. A., et al. (2013). Care and compansionship in an isolating environment: Inmates attending to dying peers. *Journal of Forensic Nursing*, *9*(1), 35–44.
- Lucas, H. M., Lozano, C. J., Valdez, L. P., Manzarate, R., & Lumawag, F. A. J. (2018). A grounded theory of successful aging among select incarcerated older Filipino women. *Archives of Gerontology and Geriatrics*, 77, 96–102.
- Lurigio, A. J., Epperson, M. W., Canada, K. E., & Babchuk, L. C. (2012). Specialized probation programs for people with mental illnesses: A review of practices and research. *Journal of Crime and Justice*, 35(2), 317–326.
- Lyons, C. E., & Bartolomucci, A. (2020). Stress and Alzheimer's disease: A senescence link? *Neuroscience & Biobehavioral Reviews, 115*, 285–298.
- Magola-Makina, E., Abuzour, A. S., Ashcroft, D. M., Dunlop, J., Brown, P., & Keers, R. N. (2022). Exploring the challenges to safer prescribing and medication monitoring in prisons: A qualitative study with health care staff. *PLoS ONE*, 17(11), e0275907.
- Maher, R. L., Hanlon, J., & Hajjar, E. R. (2014). Clinical consequences of polypharmacy in elderly. *Expert Opinion on Drug Safety*, 13(1), 57–65.
- Martin, E., Chapman B, Morgan L. (2023). The overlooked role of jails in the discussion of legitimacy: Implications for trust and procedural Justice. National Institute of Justice. Retrieved from https://nij.ojp.gov/topics/articles/overlooked-role-jails-discussion-legitimacy-implications-trust-and-procedural-justice
- Maruschak LM, Marcus B. (2015). Medical problems of state and federal prisoners and jail Inmates, 2011–12. U.S. Department of Justice, Bureau of Justice Statistics. NCJ 248491.
- Marushak LM, Bronson J, Alper M. (2021). Medical problems reported by prisoners. U.S. Department of Justice, Bureau of Justice Statistics, NCJ 257644
- Maschi, T., & Morgen, K. (2020). *Aging Behind Prison Walls: Studies in Trauma and Resilience*. Columbia University Press.
- Maschi, T., & Morgen, K. (2021). Aging behind prison walls: studies in trauma and resilience. Columbia University Press.
- Massoglia, M., & Pridemore, A. (2015). Incarceration and health. *Annual Review of Sociology*, 41, 291–310.
- Massoglia, M., & Remster, B. (2019). Linkages Between Incarceration and Health. *Public Health Reports.*, 134(1\_suppl), 8S-14S.
- McLeod, K. E., Butler, A., Young, J. T., Southalan, L., et al. (2020). Global prison health care governance and health equity: A critical lack of evidence. *American Journal of Public Health*, 110(3), 303–308.
- McNeeley, S., & Donley, C. (2021). Crisis Intervention Team Training in a Correctional Setting: Examining Compliance, Mental Health Referrals, and Use of Force. *Criminal Justice and Behavior*, 48(2), 195–214.
- McShane, M. D., & Williams, F. P., III. (1990). Old and ornery: The disciplinary experiences of elderly prisoners. *International Journal of Offender Therapy and Comparative Criminology*, 34(3), 197–212.
- Merkt, H., Haesen, S., Meyer, L., Kressig, R. W., Elger, B. S., & Wangmo, T. (2020).

  Defining an age cut-off for older offenders: A systematic review of literature. *International Journal of Prisoner Health*, 16(2), 95–116.
- Miller, V. J., Horner, B., Williams, J., Bryant, J., & Burns, J. (2021). Navigating reentry with older adults using ecosystems perspective and the eco-map. *Journal of Offender Rehabilitation*, 60(8), 485–500.
- Moore M, Gammell AW. (2024). The Aging Prison Population and Dementia. Duke Law School Wilson Center for Science and Justice. Retrieved from https://wcsj.law.duke.edu/wp-content/uploads/2024/05/The-Aging-Prison-Population-and-Dementia.pdf.
- Munday, D., Leaman, J., O'Moore, É., & Plugge, E. (2019). The prevalence of noncommunicable disease in older people in prison: A systematic review and meta-analysis. *Age and Ageing*, 48(2), 204–212.
- Mussie, K. M., Pageau, F., Merkt, H., Wangmo, T., & Elger, B. S. (2021). Challenges in providing ethically competent health care to incarcerated older adults with mental illness: A qualitative study exploring mental health professionals' perspectives in Canada. *BMC Geriatrics*, 21(1), 1–15.
- Nellis A, Bishop B. (2021). A New Lease on Life. The sentencing project. Retrieved from https://www.sentencingproject.org/reports/a-new-lease-on-life/#footnote-2.
- Novak S. (2022). Dementia in prison is turning into an epidemic: The US penal system is badly unprepared. Scientific American. https://www.scientific american.com/article/dementia-in-prison-is-turning-into-an-epidemic-the-u-s-penal-system-is-badly-unprepared/.

- Novisky, M. A. (2018). Avoiding the runaround: The link between cultural health capital and health management among older prisoners. *Criminology*, 56(4), 643–678.
- Novisky, M. A., Narvey, C. S., & Prost, S. G. (2022). Older Adults' perspectives on death and dying in prison. *Journal of Criminal Justice*, 83, 101930.
- Office of the Correctional Investigator (2019). Aging and dying in prison:
  An investigation into the experiences of older individuals in federal custody. https://oci-bec.gc.ca/en/content/aging-and-dying-prison-investigation-experiences-older-individuals-federal-custody-0#\_Toc53 6691324.
- Office of the Inspector General (2015). The impact of an aging inmate population on the Federal Bureau of Prisons. U.S. Department of Justice. https://www.fpd-ohn.org/sites/default/files/Inspector%20General% 20Report%20on%20BOP%20Problems%20with%20Aging%20Population%206May2015.pdf
- Oscanoa, T. J., Lizaraso, F., & Carvajal, A. (2017). Hospital admissions due to adverse drug reactions in the elderly. A meta-analysis. *European Journal of Clinical Pharmacology.*, 73(6), 759–770.
- Oswald F, Wahl HW, Wanka A, Chaudhury H. (2024). Theorizing place and aging: Enduring and novel issues in environmental gerontology. In *Handbook on aging and place* (pp. 37-60). Edward Elgar Publishing.
- Pager, D. (2008). Marked: Race, crime, and finding work in an era of mass incarceration. University of Chicago Press.
- Patterson, E. J. (2013). The dose-response of time served in prison on mortality: New York State, 1989–2003. *American Journal of Public Health, 103*(3), 523–528.
- Perez, A., Manning, K. J., Powell, W., & Barry, L. C. (2021). Cognitive impairment in older incarcerated males: Education and race considerations. *The American Journal of Geriatric Psychiatry*, *29*(10), 1062–1073.
- Pickett ML, Allison M, Twist K, Klemp JR, Ramaswamy M. (2018). Breast cancer risk among women in jail. *Journal of Correctional Health Care* 7(1), 139–144
- Portes, A. (1998). Social capital: Its origins and applications in modern Sociology. *Annual Review of Sociology, 24*, 1–24.
- Price M. (2018), "Everywhere and nowhere: compassionate release in the States", FAMM Litigation Project.
- Prost, S. G. (2023). Racial disparities in visitation and health among older adults incarcerated in prison. *Aging & Mental Health*, *27*(6), 1086–1094.
- Prost, S. G., & Lee, E. (2022). Symptom agreement between patients and their peer caregivers in prison. *Journal of Correctional Health Care*, 28(5), 349–357.
- Prost, S. G., & Novisky, M. A. (2022). Visitation and quality of life among older adults in jail. *International Journal of Prisoner Health*, 18(2), 149–164.
- Prost, S. G., Holland, M. M., Hoffmann, H. C., & Dickinson, G. E. (2020b). Characteristics of hospice and palliative care programs in US prisons: An update and 5-year reflection. *American Journal of Hospice and Palliative Medicine*, 37(7), 514–520.
- Prost, S. G., Tripodi, S. J., & Lacasse, J. R. (2020c). The quality of life perception gap in prison health care settings: Rater disparities among incarcerated patients and peer caregivers. *Applied Research in Quality of Life, 15*(4), 1223–1240.
- Prost, S. G., Zaller, N., & Williams, B. (2023). Guest editorial. *International Journal of Prisoner Health.*, 19(1), 1–3. https://doi.org/10.1108/JPH-03-2023-119
- Prost, S. G., Stewart, W., Novisky, M. A., & Parkkila, M. L. (2025b). Death Anxiety Among Peer Caregivers of Older Persons in Two US Prisons. *Social Sciences*, 14(3), Article 3.
- Prost SG, Kennedy S, Peck J, Bouchaud MT. et al. (2019). Measurement in correctional health research: Unique challenges and strategies for enhanced rigor. *Journal of Correctional Health Care*, 25(3).
- Prost SG, Archuleta AJ, Golder S. (2020). Older Adults in Kentucky State Prisons (OAK) Study: Phase 1 Technical Report Health and Disability among Men and Women age 45 or Older in Adult Institutions.
- Prost, S. G., & Srivastava, A. (2025). The influence of physical and mental health on misconduct among older adults incarcerated in prison. Paper presented at the 2025 Academic and Health Policy Conference on Correctional Health, Austin, Texas (National).
- Radatz, D. L., & Wright, E. M. (2017). Does polyvictimization affect incarcerated and non-incarcerated adult women differently? An exploration into internalizing problems. *Journal of Interpersonal Violence*, 32(9), 1379–1400.

- Rakes S, Prost SG, Tripodi SJ. (2018). Recidivism among Older Adults: Correlates of Prison Re-entry. Justice Policy Journal, 15(1).
- Redmond, N., Aminawung, J. A., Morse, D. S., Zaller, N., Shavit, S., & Wang, E. A. (2020). Perceived discrimination based on criminal record in healthcare settings and self-reported health status among formerly incarcerated individuals. *Journal of Urban Health*, 97(1), 105–111.
- Reuben, A., Moffit, T. E., Abraham, W. C., Ambler, A., et al. (2022). Improving risk indexes for Alzheimer's disease and related dementias for use in midlife. *Brain Communications*, 4(5), fcac223.
- Rich J, Brancale JN. (2024). Behind the gray walls: an examination of prison visitation among older inmates. Journal of Crime and Justice, 1-16.
- Salisbury, E. J., & Van Voorhis, P. (2009). Gendered pathways: A quantitative investigation of women probationers' paths to incarceration. *Criminal Justice and Behavior*, *36*(6), 541–566.
- Sanger-Katz M, Parlapiano A. (2025). What Can House Republicans Cut Instead of Medicaid? Not Much. *New York Times*. Retrieved from https://www.nytimes.com/2025/02/25/upshot/republicans-medic aid-house-budget.html
- Sawyer W. (2017). The steep cost of medical copays in prison puts health at risk.

  Prison Policy Initiative. https://www.prisonpolicy.org/blog/2017/04/
  19/copays/
- Sevigny, E. L., Fuleihan, B. K., & Ferdik, F. V. (2013). Do drug courts reduce the use of incarceration? *A Meta-Analysis. Journal of Criminal Justice*, 41(6), 416–4425.
- Skarha, J., Spangler, K., Dosa, D., Rich, J. D., Savitz, D. A., & Zanobetti, A. (2023). Heat-related mortality in US state and private prisons: A case-crossover analysis. PLoS ONE, 18(3), e0281389.
- Skarha J, Dominick A, Spangler K, et al. Provision of Air Conditioning and Heat-Related Mortality in Texas Prisons. (2022). *JAMA Netw Open*. 5(11):e2239849.
- Skarupski, K. A., Gross, A., Schrack, J. A., Deal, J. A., & Eber, G. B. (2018). The health of America's aging prison population. *Epidemiologic Reviews*, 40, 157–165.
- Sklar, R., Noth, E., Kwan, A., Sear, D., & Bertozzi, S. (2023). Ventilation conditions during COVID-19 outbreaks in six California state carceral institutions. PLoS ONE, 18(11), e0293533.
- Smoyer, A. B., Elumn Madera, J., & Blankenship, K. M. (2019). Older adults' lived experience of incarceration. *Journal of Offender Rehabilitation*, *58*(3), 220–239.
- Stewart W, Edmond N. (2017). Prisoner peer caregiving: a literature review.

  Nursing Standard. 31(32).
- Stewart W, Prost SG. (2024). Supporting Older, Frail, and Vulnerable Adult Prisoners Through Peer Care: Observations, Reflections, and Recommendations Based on a UK/US Researcher Exchange Visit. Journal of Correctional Health Care.
- Stewart, R., & Uggen, C. (2020). Criminal records and college admissions: A modified experimental audit. *Criminology*, 58(1), 156–188.
- Stewart W. (2021). 'Helping Not Hurting': Learning from the Experiences of Prisoner Peer Caregivers and Care Receivers in a UK Prison to Improve Peer Care Practices in Custodial Contexts (Doctoral dissertation, University of Brighton).
- Tanksley, P. T., Logan, M. W., & Barnes, J. C. (2023). History of incarceration and age-related neurodegeneration: Testing models of genetic and environmental risks in a longitudinal panel study of older adults. *PLoS ONE, 18*(12), e0288303.
- Taylor, D. (2016). Between discipline and caregiving: Changing prison population demographics and possibilities for self-transformation. *Active intolerance: Michel Foucault, the Prisons Information Group, and the future of abolition* (pp. 105–121). Palgrave Macmillan US.
- Taylor, C. A., Bouldin, E. D., Greenlund, K. J., & McGuire, L. C. (2020). Comorbid chronic conditions among older adults with subjective cognitive decline, United States, 2015–2017. *Innovation in Aging*, 4(1), igz045.
- Testa, A., Jackson, D. B., Kaufmann, C., Spira, A. P., & Thorpe, R. J., Jr. (2023). Mass incarceration and cognitive impairment in older adults: Setting a research agenda. *Journal of the American Geriatrics Society, 71*(8), 2680.
- Testa, A., Jackson, D. B., Novisky, M., Kaufmann, C., et al. (2024a). Links of previous incarceration with geriatric syndromes and chronic health conditions among older adults in the United States. *Gerontology*, 79(8), glae084.

- Testa, A., Jackson, D. B., Novisky, M., Ganson, K. T., Nagata, J. M., & Tsai, J. (2024b). Prior Incarceration and Performance on Immediate and Delayed Verbal Recall Tests: Results From National Longitudinal Study of Adolescent to Adult Health—Parent Study. *Gerontology: Series B*, 79(6), gbae040.
- Testa, A., Mijares, L., & Jackson, D. B. (2025). The Impact of Prior Incarceration on Cognitive Trajectories Among Older Adults: Evidence From the Health and Retirement Study. *The Journals of Gerontology*, 80(2), 194.
- Uggen, C., Schnitter, J., Shannon, S., & Massoglia, M. (2023). The contingent effect of incarceration on state health outcomes. *SSM Population Health* 21. 101322.
- U.S. Sentencing Commission. (2024). Compassionate release data report, fiscal year 2023. https://www.ussc.gov/sites/default/files/pdf/research-and-publications/federal-sentencing-statistics/compassionate-release/FY23-Compassionate-Release.pdf
- Umbach, R., Raine, A., & Leonard, N. R. (2018). Cognitive decline as a result of incarceration and the effects of a CBT/MT intervention: A cluster-randomized controlled trial. *Criminal Justice and Behavior*, 45(1), 31–55.
- Valentine, C. L., Mears, D. P., & Bales, W. D. (2015). Unpacking the relationship between age and prison misconduct. *Journal of Criminal Justice*, 43(5), 418–427.
- Van Hout, M., Srisuwan, L., & Plugge, E. (2022). A human rights assessment of menopausal women's access to age- and gender-sensitive nondiscriminatory health care in prison. *Menopause*, 29(11), 1338–1348.
- Vandergrift, L. A., & Christopher, P. P. (2021). Do prisoners trust the healthcare system? *Health Justice*, *9*, 15.
- Villarroel, M. A., & Terlizzi, E. P. (2020). Symptoms of Depression Among Adults: United States. (2019). Centers for Disease Control and Prevention: Atlanta. GA.
- Vogel, M., & Porter, L. C. (2016). Toward a demographic understanding of incarceration disparities: Race, ethnicity, and age structure. *Journal of Quantitative Criminology*, 32, 515–530.
- Wangmo, T., Hauri, S., Meyer, A. H., & Elger, B. S. (2016). Patterns of older and younger prisoners' primary healthcare utilization in Switzerland. *International Journal of Prisoner Health*, *12*(3), 173–184.
- Wapner, J. (2023). What happens when people with dementia commit crimes? *Scientific American*. https://www.scientificamerican.com/article/what-happens-when-people-with-dementia-commit-crimes/.
- Wennerstrom, A., Sugarman, M., Martin, D., Lobre, C. B., Haywood, et al. (2021). 'You have to be almost dead before they ever really work on you in prison': A qualitative study of formerly incarcerated women's health care experiences during incarceration in Louisiana, U.S. Health and Social Care in the Community, 30(5), 1763–1774.
- Wildeman, C., Fitzpatrick, M. D., & Goldman, A. W. (2018). Conditions of confinement in American prisons and jails. *Annual Review of Law and Social Science*, 14, 29–47.
- Williams, B., & Abraldes, R. (2007). Growing older: Challenges of prison and reentry for the aging population. *Public Health Behind Bars* (pp. 56–72). Springer.
- Williams, B. A., Lindquist, K., Sudore, R. L., et al. (2006). Being old and doing time: Functional impairment and adverse experiences of geriatric female prisoners. *Journal of the American Geriatrics Society, 54*(4), 702–707.
- Wilper, A. P., Woolhandler, S., Boyd, J. W., Lasser, K. E., McCormick, D., Bor, D. H., & Himmelstein, D. U. (2009). The health and health care of US prisoners: Results of a nationwide survey. *American Journal of Public Health*, 99(4), 666–672.
- Wiltz T. (2019). Where 'Returning Citizens' Find Housing After Prison. Retrieved from https://stateline.org/2019/04/23/where-returning-citizens-find-housing-after-prison/
- Wilkinson, D., & Caulfield, L. (2020). A systematic review of the characteristics and needs of older prisoners. *Journal of Criminal Psychology*, 10(4), 253–276
- Wurcel, A. G., Guardado, R., & Beckwith, C. G. (2021). Hepatitis C virus is associated with increased mortality among incarcerated hospitalized persons in Massachusetts. *Open Forum Infectious Diseases, 8*(12), of ab 579.
- Wyand BR, Harner H, Lockwood B. (2021). Gender differences and the effect of copayments on the utilization of health care in prison. *Journal of Correctional Health Care*, 21(1).

Novisky et al. Health & Justice (2025) 13:23 Page 16 of 16

- Wyse J. (2018). Older men's social integration after prison. *International Journal of Offender Therapy & Comparative Criminology, 62*(8), 2153–2173. https://org.ezproxy.bgsu.edu/https://doi.org/10.1177/0306624X16 683210
- Zeng, Z. (2023). Jail inmates in 2022 Statistical tables. U.S. Department of Justice, Bureau of Justice Statistics. NCJ 307086
- Zhao, J., Star, J., Han, X., Zheng, Z., Fan, Q., Shi, S. K., & Nogueira, M. (2024). Incarceration History and Access to and Receipt of Health Care in the US. JAMA Health Forum., 5(2), 235318–235318.

## **Publisher's Note**

Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.