ABSTRACT

BACKGROUND: In jails and prisons worldwide, older adults are among the fastest growing demographic groups. Criminal justice–involved populations smoke tobacco at high rates. Older adults are also disproportionately smokers and have more difficulty quitting smoking than other age groups. Yet, little is known about tobacco use or knowledge and attitudes toward smoking cessation among the growing population of incarcerated older adults.

METHODS: A descriptive, cross-sectional survey study of 102 adults aged 55 years or older recently incarcerated in an urban jail using items from the Global Adult Tobacco Survey (GATS).

RESULTS: More than 70% of participants reported being current smokers despite strong knowledge (95%) of the connection between smoking and serious illness. More than half of current smokers reported a past failed quit attempt (62%) and/or said they would like to quit (60%).

CONCLUSIONS: High rates of tobacco use in this population suggest that correctional institutions represent a critical site for the delivery of appropriate smoking cessation interventions to older adults, including integrated treatment approaches for those with co-occurring behavioral health diagnoses.

KEYWORDS: smoking, cessation, aging, older adults, jail

Introduction

Older adults are among the fastest growing demographic groups in criminal justice systems around the world. Older adults account for approximately 10% of the population in US jails and prisons—jails hold those who are awaiting trial or serving short sentences for relatively minor crimes while prisons hold adults serving longer sentences—up 80% in the first decade of the 21st century compared with 16% growth in the overall prison population. Adults in the criminal justice system are generally considered “older” in their 50s due to high rates of chronic illness and disability within this age demographic compared with their non-criminal justice–involved counterparts. The early onset, on average, of chronic illness (eg, diabetes, hypertension) in this population may be due in part to behavioral health risk factors that are disproportionately common in criminal justice populations. One recent study of cancer-related disparities among middle aged and older men recently released from a US jail found high rates of smoking (76%) among a cohort of 259 justice-involved men aged 35 to 67 years (average age of 47 years). Research also shows that criminal justice–involved Americans commonly experience risk factors for smoking (eg, mental illness, low educational attainment, low socioeconomic status). Furthermore, older adults, regardless of criminal justice status, smoke at disproportionately high rates and have less success quitting smoking compared with other age groups. Yet, little is known about smoking, and the need for smoking cessation programming, in the rapidly growing population of criminal justice–involved adults aged 55 years or older (“older adults”).

Studies have shown high rates of current or former smoking among individuals incarcerated in US prisons of all ages, with prevalence estimates typically ranging from 60% to 80% compared with 15% of non-incarcerated adults. Rates of smoking in incarcerated populations outside the United States are often even higher. Incarcerated people experience disproportionately high rates of mental illness and substance use disorders (SUD), both risk factors for smoking and smoking-related health outcomes. Approximately 200 000 (45%) of the annual 443 000 tobacco-related deaths in the United States occur in persons with mental illness or SUD, and persons with mental...
illness die 25 years earlier than the general population, in many cases due to tobacco-related morbidity and mortality.15-17 A small number of prison systems have adapted smoking cessation programs for use with incarcerated people, but smoking cessation is rarely, if ever, incorporated as standard practice in correctional settings.18-20 As a result, research describes persistently high rates of post-release smoking relapse among adults of all ages following release from incarceration.21-23

Although rates of cigarette smoking among all US adults have fallen since 1964, nearly 1 in 5 (18%) adults aged 45 to 64 years and 1 in 10 (8.8%) adults aged 65 years and older are current smokers.24 In addition, older adults are the age group least likely to report a desire to quit using tobacco and are less likely to reside in smoke-free environments than younger adults, which research shows is positively associated with successful quit attempts.8 Among older adults, those with low educational attainment and less knowledge of the harms of smoking, poor access to care, and psychological distress are less likely to quit smoking.25 Incarcerated older adults thus represent a uniquely high-risk population. Yet, a recent systematic review of the existing research on prison-based smoking cessation programs did not report any findings specific to older adults.18 (The literature describing smoking and smoking cessation in US jails is extremely limited; thus, the research described here predominantly reflects prison-based studies.) To better understand tobacco use and its consequences among older individuals incarcerated in jail, we conducted a cross-sectional study of recently incarcerated older adults’ tobacco use, burden of associated health problems, and experiences, knowledge, and beliefs related to tobacco use and cessation.

Methods
Study design and sample

This cross-sectional study was part of a larger longitudinal study of 125 older adults in California who were enrolled in a large urban jail and followed for 6 months. Older adults constituted approximately 10% of the overall jail population in this jail, which was also disproportionately African American and Latino. The longitudinal epidemiologic study was designed to assess the health and health care needs of older adults transitioning from incarceration in a jail to the community. All participants were enrolled and completed a baseline interview between March 1 and August 15, 2014, were English or Spanish speaking, and had been detained for at least 48 hours. The study defined “older adult” as anyone 55 years of age or older to account for disproportionately high rates of health risk behaviors and poor access to health care among the criminal justice-involved which results, on average, in physiological ages approximately 10 to 15 years greater than chronological ages.3 The 48-hour cutoff was used because individuals detained in jail are often in transit or appearing in court and not able to participate in a research study in the brief period following arrest. Individuals were considered ineligible for the study if correctional staff deemed them unsafe to interview in a private setting. Potential participants were asked by a member of the nursing staff during the routine delivery of care if they would like to be contacted by an independent researcher about potential participation in a research study. Those who agreed met within 1 day with a member of the research staff in a private room reserved for visitation where they reviewed information about the study, including its potential risks and benefits, and were given the opportunity to enroll. For those who chose to enroll, written research consent was obtained by a member of the research team using the teach-to-goal approach, which was developed for use with vulnerable research participants and tests participants’ understanding of the study prior to enrollment.26 During enrollment, participants provided contact information as well as permission to contact specified friends, family, and/or local businesses and service providers for the purposes of follow-up. Participants indicated how research team staff should identify themselves in all contacts with third parties. Contact information was reviewed and updated at each follow-up contact.

Native-speaking interviewers read questionnaires to participants in private interview rooms, and research staff abstracted jail medical records. All interviews were conducted by a member of the research team. Baseline interviews were conducted in jail. Follow-up interviews for those who had been released to the community were conducted in a private room of a clinical research office located in an urban neighborhood approximately 1 mile from jail. Consistent with federal regulations governing research with incarcerated people (Code of Federal Regulations Title 45 Part C),27 permitted practice in California,28 and relevant ethical considerations,29 participants were paid US$ 20 as compensation for their time. The study was approved by the Human Research Protection Program at the University of California, San Francisco (approval number 13-11326).

Measures

Sociodemographics, health conditions, and behavioral health risk factors were assessed at baseline. Sociodemographics included age, sex, race/ethnicity, income, homelessness, food insecurity, and health insurance status. Annual income below US$ 15 000 was used based on Medicaid income eligibility criteria. Homelessness was defined as having spent one or more nights in the 30 days prior to arrest outside or in a homeless shelter. To measure recent food insecurity, all participants were asked at baseline if there had been a time in the past 12 months when they did not have enough money for food. Participants self-reported health insurance status in response to the following question: “are you enrolled in any type of health insurance such as Medicare, Medi-Cal, Healthy San Francisco, or private insurance?”

Health conditions were determined through a combination of self-report using validated questions from the Health and Retirement Study (HRS)30 and jail medical record review. Self-report was used because many participants may not have seen jail
medical staff at the time of their participation in the study and medical chart review was used to minimize underrepresentation of medical diagnoses for participants who may have been unaware of their health status. The efficacy of self-report is well validated in older populations, including homeless and criminal justice–involved populations. Serious mental illness was determined by self-reported diagnosis or medical chart abstraction, and was defined using the Bureau of Justice Statistics’ definition of any major depressive, mania, or psychotic disorder.

Behavioral health risk factors included smoking (described below), problems related to drug abuse, and hazardous drinking. Problems related to drug abuse was assessed using the Drug Abuse Screening Test–10 (DAST-10) and defined as moderate, substantial, or severe problems related to drug abuse in the 12 months prior to baseline (a score of 3 or higher). Problem alcohol use was determined using the 3-item Modified Alcohol Use Disorders Identification Test (AUDIT-C) and defined as having an “active alcohol use disorder” (a score of 4 or higher).

Questions about participants’ smoking, their smoking-related knowledge, and their attitudes about smoking cessation were asked at a follow-up interview 5 months from baseline using items from the internationally validated Global Adult Tobacco Survey (GATS). The GATS was developed and validated by the global tobacco surveillance system, a coordinated effort of the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC). It has been used to describe tobacco use among medically vulnerable populations in more than 10 countries. Because the jail at which the study was conducted is a smoke-free facility, participants who completed the survey while in jail were asked about their tobacco use and related experiences in the period prior to their current incarceration.

Participants were categorized as current smokers or non-smokers based on self-report using the GATS. Current smokers were asked a series of follow-up questions including how much they smoke on the average week and the age at which they started smoking tobacco. Current smokers were also asked to estimate their weekly expenditure on tobacco.

All participants were asked questions from the GATS about their experiences and knowledge related to smoking. These questions included items about the connection between smoking and serious illness, including specific health conditions (eg, stroke, heart attack, lung cancer); about whether participants believed the use of tobacco products marketed as “light” were less harmful; and about participants’ knowledge of the dangers associated with secondhand smoke. All participants were also asked whether smoking was permitted in their residence. Current smokers were asked about experiences and knowledge related to smoking cessation, including if they had tried to quit previously and if they were interested in quitting in the future. Current smokers were asked if they had used resources for quitting in the 12 months preceding their interview, including counseling, nicotine replacement therapy, prescription medications, and a telephone quit line. Current tobacco users were also asked if they had noticed any publicly available information (eg, in newspapers, on television or radio, or on billboards) about the dangers of smoking in the last 30 days.

**Statistical analysis**

We combined data from the baseline and follow-up survey into one dataset and analyzed participant sociodemographics, health status, and smoking and related factors using descriptive statistics. We used chi-square tests to assess the associations between current smoking and sociodemographics, health, and experiences, knowledge, and beliefs related to smoking and cessation. All analyses were conducted using R version 3.1.3. Study data were collected and managed using REDCap electronic data capture.

**Results**

Of 145 persons who met eligibility criteria during the enrollment period, 15 (10%) declined to participate (recruitment rate of 90%). Four participants (3%) did not enroll in the study because they were not able to demonstrate comprehension during the teach-to-goal consent process and 1 individual (1%) was dis-enrolled from the study due to a violation of study protocol, resulting in a sample of 125 participants in the overall longitudinal study. Of these, 102 (82%) were retained and completed this study’s follow-up tobacco use questionnaire; 13 (13%) completed the survey in jail and were asked about their tobacco use and related experiences prior to their current incarceration.

Participants were predominantly men (93%) and black (62%). Most participants (84%) reported annual income of less than US$ 15,000, and more than half (53%) were homeless. Approximately 3 in 4 participants (78%) reported having health insurance. Most participants (59%) had high blood pressure or hypertension; 17% had lung disease, 5% reported congestive heart failure, and 6% had suffered a stroke. Many participants (39%) had a serious mental illness. Most screened positive for moderate, substantial, or severe problems related to drug abuse (76%) and/or problem alcohol use (71%) (Table 1).

Nearly 3 in 4 participants (71%) reported smoking, all in the form of cigarettes. Smokers started smoking at an average age of 15.7 years old (range: 6–55) and half of current smokers started smoking when they were younger than 14 years old. Current smokers reported smoking an average of 72 manufactured or hand-rolled cigarettes, or slightly more than 3.5 packs of cigarettes, per week (range: 7–210 cigarettes) (Table 2). Current smokers reported spending an average of US$ 19.74 per week on cigarettes.

Among all participants, more than 90% reported knowing that smoking causes serious illness and that smoking causes lung cancer. Among current smokers, 94% knew that smoking causes serious illness and 89% knew of the link between smoking and
lack of perceived effectiveness. Fewer participants—but still most—knew that smoking causes stroke (72%) and heart attack (80%). Three in 4 (75%) knew that secondhand smoke also causes serious illness in non-smokers. Approximately 1 in 4 participants (27%) believed that smoking “light,” “low-tar,” or “mild” cigarettes is less harmful than smoking “regular” cigarettes. One-third of participants (36%) reported that smoking was not allowed where they lived (Table 2).

Among current smokers, only 10% planned to quit smoking in the near future (within the next month) compared with 45% who planned to quit “someday.” Four in 10 current smokers (40%) were not interested in quitting. A similar percentage (38%) reported never having tried to quit. From among the approximately 60% of smokers who reported a past quit attempt, the majority (23, 52%) reported the length of their most recent quit attempt as shorter than 1 month. Approximately 1 in 5

Table 1. Sociodemographics, smoking-related behaviors, and health status of 102 criminal justice–involved older adults.

| Category                                      | ALL PARTICIPANTS (N = 102) |
|-----------------------------------------------|-----------------------------|
| Age, mean (SD)                                | 60.2 (3.9)                  |
| Men, N (%)                                    | 95 (93%)                    |
| Race                                          |                             |
| White                                         | 19 (19%)                    |
| Black                                         | 63 (62%)                    |
| Hispanic/Latino                               | 7 (7%)                      |
| Other                                         | 13 (13%)                    |
| Education                                     |                             |
| Less than a high school diploma               | 23 (23%)                    |
| Completed high school in the community        | 30 (29%)                    |
| Received a GED in the community               | 7 (6.9%)                    |
| Received a GED in jail or prison              | 9 (9%)                      |
| Some college but no college degree            | 28 (28%)                    |
| College degree or higher                      | 5 (5%)                      |
| Yearly income <US$ 15000                      | 86 (84%)                    |
| Recent homelessness                           | 54 (53%)                    |
| Any health insurance                          | 79 (78%)                    |
| Behavioral health risk factors                |                             |
| Current smoker                                | 72 (71%)                    |
| Moderate, substantial, or severe problems related to drug abuse (score of 3 or higher on the DAST-10) | 78 (76%) |
| Problem alcohol use (a score of 4 or higher on the AUDIT-C) | 72 (71%) |
| Health conditions                             |                             |
| Serious mental illness                        | 40 (39%)                    |
| High blood pressure or hypertension           | 60 (59%)                    |
| Chronic lung disease such as chronic bronchitis or emphysema | 17 (17%) |
| Heart attack, coronary heart disease, or angina | 11 (11%) |
| Congestive heart failure (CHF)                | 5 (5%)                      |
| Stroke                                        | 6 (6%)                      |

Abbreviations: AUDIT-C, Modified Alcohol Use Disorders Identification Test; CHF, congestive heart failure; DAST-10, Drug Abuse Screening Test–10; GED, General Education Development.

Incarcerated older adults in this study were predominantly men and black and reported an annual income under US$ 15,000. Nearly 3 in 4 reported smoking.
Table 2. Smoking-related knowledge and beliefs among criminal justice–involved older adults.

| Smoking-related knowledge, beliefs                                                                 | OVERALL (N=102) | CURRENT SMOKERS (N=72) | NON-SMOKERS (N=30) | P VALUE |
|---------------------------------------------------------------------------------------------------|-----------------|------------------------|--------------------|---------|
| Smoking causes                                                                                    |                 |                        |                    |         |
| Serious illness                                                                                   | 98 (96%)        | 68 (94%)               | 30 (100%)          | .15     |
| Lung cancer                                                                                       | 93 (91%)        | 64 (89%)               | 29 (97%)           | .24     |
| Stroke                                                                                            | 73 (72%)        | 49 (68%)               | 24 (77%)           | .24     |
| Heart attack                                                                                      | 82 (80%)        | 57 (79%)               | 25 (88%)           | .74     |
| “Light,” “low-tar,” or “mild” cigarettes are less harmful                                         | 28 (27%)        | 19 (26%)               | 9 (30%)            | .09     |
| Secondhand smoke causes serious illness in non-smokers                                           | 76 (75%)        | 50 (69%)               | 26 (87%)           | .27     |
| Rules about smoking where participant lives                                                       |                 |                        |                    |         |
| Smoking not allowed                                                                              | 37 (36%)        | 20 (28%)               | 17 (57%)           | .002    |
| Smoking allowed                                                                                  | 46 (45%)        | 39 (54%)               | 7 (23%)            |         |
| Homeless                                                                                         | 19 (19%)        | 13 (18%)               | 6 (20%)            |         |
| Experiences with smoking                                                                         |                 |                        |                    |         |
| Age when started smoking (mean, SD)                                                              | N/A             | 15.7 (8)               | N/A                | N/A     |
| No. of cigarettes/week (mean, SD)                                                                | N/A             | 71.5 (47)              | N/A                | N/A     |
| Dollar amount spent/week (mean, SD)                                                              | N/A             | US$ 19.74 (US$ 15.37)  | N/A                | N/A     |
| Attitudes toward quitting smoking                                                               |                 |                        |                    |         |
| Plan to quit within the next month                                                               | N/A             | 7 (10%)                | N/A                | N/A     |
| Plan to quit someday                                                                             | N/A             | 32 (45%)               | N/A                | N/A     |
| Not interested in quitting                                                                       | N/A             | 29 (40%)               | N/A                | N/A     |
| Don’t know                                                                                       | N/A             | 4 (6%)                 | N/A                | N/A     |
| Experiences with quitting smoking                                                                |                 |                        |                    |         |
| Thought about quitting because of health warning on cigarette pack                                | N/A             | 19 (26%)               | N/A                | N/A     |
| Attempted to quit in the past 12 months                                                          | N/A             | 16 (22%)               | N/A                | N/A     |
| Length of most recent quit attempt                                                               |                 |                        |                    |         |
| >1 month                                                                                         | N/A             | 21 (29%)               | N/A                | N/A     |
| 1 day-4 weeks                                                                                    | N/A             | 19 (26%)               | N/A                | N/A     |
| <1 day                                                                                          | N/A             | 4 (6%)                 | N/A                | N/A     |
| Have never tried to quit                                                                         | N/A             | 27 (38%)               | N/A                | N/A     |
| Don’t know                                                                                       | N/A             | 1 (1%)                 | N/A                | N/A     |
| Used cessation resources                                                                         | N/A             | 33 (46%)               | N/A                | N/A     |
| Seen public information about dangers of smoking in the past 30 days                              | N/A             | 58 (81%)               | N/A                | N/A     |

Overall, smokers were knowledgeable of the connection between smoking and serious illness and had seen smoking-related public health information in the past 30 days. More than half of smokers planned to quit smoking in the future and nearly half had used smoking cessation resources in the past. Smokers were significantly more likely than non-smokers to live in housing that did not restrict smoking.
current smokers (22%) reported attempting to quit in the 12 months preceding their interview. In describing past cessation attempts, 1 in 4 current smokers (26%) said they had thought about quitting because of the health warning on a pack of cigarettes, and nearly half (46%) reported using cessation resources such as counseling, nicotine replacement therapy, or “other” methods of cessation (most commonly electronic cigarettes). More than 80% of current smokers reported having seen publicly available information about the dangers of tobacco use in the 30 days leading up to their interview (Table 2).

Among sociodemographic, health, and tobacco-related factors assessed in this study, current smokers differed significantly from non-smokers in 2 areas. First, current smokers were more likely to have chronic lung disease such as bronchitis or emphysema (20.8% compared with 6.7%, \( P = .04 \); Table 3). Second, a higher proportion of non-smokers indicated that smoking was not allowed where they lived compared with smokers (56.7% vs 27.8%, \( P \) value = .001; Table 2).

Discussion
This study found that the prevalence of smoking in a population of recently incarcerated older adults was more than 70%, more than 4 times the smoking prevalence in the general US adult population. Participants in this study also reported high proportions of risk factors for tobacco use, including mental illness (39%), problems related to drug abuse (76%), and problem alcohol use (71%). Overall, participants in this study reported high rates of socioeconomic vulnerability and chronic health conditions, including conditions associated with smoking such as chronic lung disease. These high rates of smoking and associated health conditions did not correspond with a lack of knowledge regarding the likely harms of tobacco use—95% of participants said they knew of the link between smoking and serious illness. Nor were current smokers unexposed to public health warnings—more than 80% reported seeing public information on television, in newspapers, or on billboards describing the dangers of smoking in the past 30 days. More than half of smokers reported a prior unsuccessful attempt to quit their use and a similarly high percentage said they planned to quit in the future.

As criminal justice and public health systems face increasing populations of medically vulnerable older adults, these findings suggest a critical need to deploy appropriate smoking cessation resources to meet the needs of incarcerated older adults. The percentage of smokers in this study who reported that they were not interested in quitting (40%) is not substantially greater than the 32% of the general US population of tobacco users who state no interest in quitting.24 This level of interest in quitting in the context of extremely high prevalence suggests that smoking-related public health messages may be insufficient to drive smoking-related behavior change in this population. This pattern also likely reflects unique challenges to successfully quitting smoking in this population. These may include high rates of mental illness, drug abuse, and problem alcohol use, each of which suggest a need for integrated treatment approaches to smoking cessation that account for mental health and SUD treatment needs, for example, combining pharmacotherapy and engagement in regular cognitive-behavioral therapy over a sustained period of time (eg, 7-10 weeks).37-39 The use of integrated treatment approaches in addition to intensive tobacco dependence interventions in this population is further supported by the fact that nearly half of smokers in this study said they had used cessation resources like counseling and the nicotine patch or gum unsuccessfully in the past.

The correctional setting may be uniquely suited to implement smoking cessation in the vulnerable population of criminal justice-involved older adults. Due to a number of factors—high rates of mental illness and addiction and a high proportion of African American men, who have been shown to be less successful in quit attempts than other demographic groups40—the criminal justice-involved represent a challenging population for smoking cessation. Forced abstinence in a growing number of jails and prisons that have adopted tobacco-free policies41 confers health benefits for some people while in custody40,42 but such bans are inconsistently enforced, meaning that many continue to smoke while incarcerated,43 and have otherwise been shown to accomplish little in preventing high rates of smoking relapse following release from custody.18,22 Such findings further support the need for integrated treatment approaches to smoking cessation for those managing co-occurring mental illness and/or SUD following return to the community,39 particularly because criminal justice involvement may represent rare or even first-time access to smoking cessation for many who are incarcerated43 and evidence has shown that appropriate interventions in incarcerated settings are effective. For example, one study found that a behavioral intervention combining elements of motivational interviewing with cognitive-behavioral therapy significantly improves the likelihood of continued cessation post-release44 and another showed more moderate success with an intervention combining pharmacotherapy with brief in-custody counseling.45 Further research should assess the effectiveness of approaches like these with older adults in the criminal justice system given their unique barriers to cessation, the high proportion of participants in this study that reported no desire to quit, and the relative dearth of research on effective smoking cessation in the broader population of criminal justice-involved persons following release.39 Because smokers in this study were significantly less likely to report living in a tobacco-free residence, smoking cessation interventions that focus on the transition back to the community may be of particular value. Furthermore, these findings suggest that smoke-free housing for those returning to the community following a period of incarceration likely serves a critical public health purpose but may be undersupplied. More research is also needed to better understand the role that smoke-free housing can play in promoting smoking cessation among the formerly incarcerated.
The public health opportunity to engage criminal justice–involved populations in smoking cessation is particularly critical for older adults. Although often overlooked in smoking cessation efforts, older adults can benefit greatly from smoking cessation while ongoing smoking contributes to costly morbidity and mortality, including raising older adults’ risk of Alzheimer disease and other dementias. Participants in this study with an average age of 59.5 years reported a diagnosis of chronic lung disease substantially greater than the rate of adults aged 75 years or older in the general population (17% compared with 12.3% in the general population of older adults). But evidence shows that even in those with severe...
chronic obstructive pulmonary disease, smoking cessation can slow the rate of lung function decline and improve survival.\textsuperscript{54} In addition to health costs, this study found that smoking may pose additional challenges to this population as tobacco users spent an average of US$ 19.74 per week, or more than US$ 1000 annually, on tobacco products despite more than 80\% of participants reporting less than US$ 15 000 in annual income. This level of expenditure likely has a significant impact on socioeconomic well-being in a population also reporting high rates of homelessness (53\%). These findings underscore the recent literature showing that a Pigovian tax on tobacco disproportionally benefits the health and socioeconomic status of the lowest income households\textsuperscript{55} and likely represents a critical tool in addressing high rates of smoking among the formerly incarcerated.

Several limitations should be considered when interpreting these results. First, this study was conducted at one site, potentially limiting generalizability. However, the city in which this study was conducted has an adult smoking rate (13.5\%) that is similar to the national rate. In addition, this study did not include an assessment of any unique age-related barriers this population may have to making successful use of smoking cessation resources and programming. However, this is the first study to our knowledge to describe smoking cessation experiences and attitudes in a population of incarcerated older adults and as such constitutes an important first step toward connecting this medically vulnerable population to needed smoking cessation resources and programming. Further research is needed to determine if existing smoking cessation interventions developed for criminal justice populations require adaptation to meet the special needs and preferences of older adults.

Conclusions
Overall, this study found a high prevalence of smoking and co-occurring chronic illness among older adults recently incarcerated in jail despite their strong knowledge of the associated health risks and most smokers reported both past quit attempts and a desire to quit smoking in the future. Criminal justice–involved older adults in this study reported behavioral health risk factors and demographic characteristics associated with increased difficulty in achieving smoking cessation. Criminal justice institutions represent a critical site for the development and delivery to vulnerable older adults of intensive smoking cessation interventions as well as integrated treatment approaches to smoking cessation that can account for commonly co-occurring mental illness and SUD in this population. In the United States, jails may be less optimal than prisons to deliver such care because people incarcerated in jail may remain there for relatively short periods of time (days to weeks). Yet a considerable number of people each year spend months in jail either awaiting trial or serving short sentences, and even those who come into contact with jail-based health services for only a short time often have limited access to health care in the community and would potentially benefit from even brief interventions. Although further research is needed to determine how existing cessation interventions should be adapted to meet the unique needs of criminal justice–involved older adults, the implementation of appropriate smoking cessation and related integrated treatment approaches for this population represents a public health opportunity with the potential to improve health and quality of life while lowering the cost of care for an often overlooked yet medically vulnerable population.

Author Contributions
All authors listed meet authorship criteria and no persons not listed here provided substantive input to this manuscript. CA and BW conceived of the study and drafted the manuscript. TB and JM analyzed the data and provided critical revisions to the manuscript. All authors reviewed and approved the final manuscript.

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