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## A Pilot Study of Cancer 101 for Incarcerated Male Smokers

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### ABSTRACT

Incarcerated men in the United States, an understudied population, have not been the focus of cancer prevention research. This pilot study explored the impact of Cancer 101 for imprisoned male smokers to increase cancer knowledge and promote cancer prevention activities in the prison population. Cancer 101 was pilot tested for adoption with representatives from the target audience in three prison facilities located in the northeastern region of the United States, and based on their feedback, modifications were implemented. Pretest and posttest surveys were used to assess knowledge of attitudes regarding the benefits of cancer prevention activities at baseline and immediately after completing Cancer 101. Furthermore, a paired *t* test procedure was used to determine whether cancer knowledge improved after participating in the Cancer 101 program. A total of 161 men completed all of the modules, participated in pre/post assessments, and qualitatively described their behavioral intentions to participate in activities that could reduce cancer risk. The mean cancer knowledge scores differed before and after completing Cancer 101,  $t(163) = -14.67$ ,  $p < .001$ . Regarding age, the older the respondent, the higher their cancer knowledge score,  $r = .29$ ,  $p < .001$ . This study showed improvements in cancer knowledge scores and behavioral intentions to participate in activities to reduce cancer. Cancer 101 provides opportunities for inmates to increase cancer knowledge, as well as promote action for cancer control during incarceration.

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cancer prevention; cancer health disparities; Cancer 101; inmates; men

### Introduction

Incarcerated men in the United States, an understudied population, have not been the focus of cancer prevention research. This is a significant oversight and missed opportunity, since most inmates in the United States are men, and approximately 1,463,500 adult males are incarcerated in United States correctional facilities.<sup>1</sup> Many incarcerated men have unmet and serious health care needs, including substance use problems, mental health disorders, and cancer health disparities.<sup>2–10</sup>

Men in the criminal justice system experience a disproportionately higher burden of viral infections related to cancer (e.g., hepatitis C, human immunodeficiency virus) than others in low-income populations.<sup>11–14</sup> Furthermore, Matthew et al. used the Surveillance, Epidemiology, and End Results (SEER) Database of the National Cancer Institute to assess the diagnoses of 1,807 incarcerated individuals with cancer and found that lung carcinomas were the most common malignancy among the participants (443

patients), followed by non-Hodgkin lymphoma and carcinomas of the oral cavity and pharynx.<sup>7</sup> Most of the cancer deaths were directly attributed to tobacco smoke in prison.<sup>7</sup> This is not surprising, considering that cigarette smoking is the leading cause of preventable mortality in the United States. Despite the correctional smoking bans in some prisons and federal policies, such as the Clean Air Act, which bans smoking in public places, not all state correctional facilities have adhered to these guidelines.<sup>6</sup> To this end, incarcerated individuals continue to smoke at very high rates in state prisons.<sup>1–3,15</sup> Among incarcerated adults in state prisons, 50% to 83% are current smokers,<sup>1–3</sup> compared to 14% in the United States adult population.<sup>16</sup> Significantly, at present, there are no cancer education programs in correctional facilities to reduce this cancer burden, despite this population's high cancer risk from tobacco smoke.<sup>11–14</sup>

Furthermore, the rates of cancer deaths among this population are rising; the latest prison health epidemiological data conducted by the United States

Bureau of Justice Statistics (2015) report that cancer represented the second-leading cause of death among inmates, a 4% increase from the year before.<sup>17</sup>

Correctional settings offer an opportunity to reach and target high-risk populations who might not otherwise receive or seek these services in the community. With this in mind, the first author worked collaboratively with the two State Departments of Corrections to pilot a cancer education curriculum—A Cancer Education and Training Program (Cancer 101)—for correctional populations with a particular focus on formerly and currently incarcerated smokers. Cancer 101 was initially developed to improve cancer knowledge, survival rates, and cancer control outcomes in American Indians and Alaska Natives; this resource has been adopted to other vulnerable populations (e.g., Latinos) but not with incarcerated people.<sup>18</sup>

### **Description of Cancer 101**

The Cancer 101 curriculum includes 10 learning modules on the following topics: (1) cancer in the target population; (2) what is cancer?; (3) cancer risk factors; (4) the role of genes in cancer; (5) cancer screening and early detection; (6) cancer diagnosis and staging; (7) the basics of cancer treatment; (8) biospecimens and biobanking; (9) chronic conditions and cancer; and (10) support for patients and caregivers.<sup>18</sup> An evaluation study of Cancer 101 conducted by Hill et al.<sup>18</sup> demonstrated a significant positive change in knowledge, attitudes, and cancer control activities among American Indian tribes in the Pacific Northwest after introduction to the Cancer 101 curriculum.

The purpose of this present article, of which the sampling frame, methodology, questionnaire, and demographic characteristics have been reported elsewhere,<sup>15</sup> was to explore the impact of Cancer 101 for imprisoned male smokers to increase cancer knowledge and promote cancer prevention activities in the prison population. Cancer 101 has been notably successful as an educational resource tool designed to provide basic information about cancer in diverse populations,<sup>18,19</sup> and for this study, the goal was to reproduce Cancer 101 and to demonstrate preliminary efficacy for use with incarcerated smokers. Cancer 101 was fitted with the structure and philosophy of the prison staff, ensuring existing best practices that permitted nonmedical staff, such as counselors, prison chaplains, and volunteers, to administer the Cancer 101 program, as they did not require intensive training in cancer control. Because little is known about

the impact of the Cancer 101 education program in prison settings and whether the program could potentially increase cancer knowledge, this pilot was the first to document its potential practicality and applicability.

It was hypothesized that former smokers would have higher cancer knowledge scores than current smokers and be able to identify at least one activity that they can do to improve cancer health. Because tobacco contains nicotine, an ingredient that is highly addictive, many people who use tobacco find it hard to quit. As such, former smokers would have greater interest in remaining abstinent from tobacco smoke after learning about cancer than current smokers.

## **Methods**

### **Overview of study design**

The Cancer Risk in Incarcerated Men's Study (CRIIMS), a two-phase multi-method research project examining tobacco, cancer health, and psychosocial factors related to health behaviors, was conducted from 2015 to 2017. During phase I of the CRIIMS, 356 inmates were recruited and screened for study participation; of those, 89 men did not meet criteria, as described below (i.e., participants were nonsmokers and did not meet eligibility criteria), leaving a total of 267 participants from three northeastern state prisons who completed a cross-sectional survey that assessed knowledge, attitudes, and beliefs related to tobacco, substance use treatment, physical health, psychosocial factors, and other lifestyle behaviors contributing to the risk of cancer. The facilities from which participants were recruited did not enforce smoking bans. The eligibility criteria were as follows: (1) be male; (2) be 18 years and older; (3) self-report smoking tobacco, smokeless tobacco, or cigarettes before incarceration; (4) self-identify as Black, Latino, White, or Other; and (5) be fluent in English or Spanish. While the modules were translated into Spanish, none of the participants only spoke Spanish, so the classes were administered in English. The 89 who did not meet eligibility criteria were nonsmokers before incarceration.

Approximately 169 men who completed the cross-sectional survey (phase I) chose to enroll in phase II, our study here: the Cancer 101 education program. Considering the challenges of conducting clinical and behavioral health research studies in correctional settings,<sup>20</sup> we calculated a 63% (169/267) participation rate in this pilot study. The factors that influence inmates' decisions to enroll in clinical or behavioral studies are beyond the scope of this study. We do not

know the reasons why 98 participants choice not to partake in part II of the study. Furthermore, the data from eight men were excluded from the differences in cancer knowledge scores, as they did not complete all 10 modules. The reasons for not attending sessions were the following: being placed in administrative segregation; ongoing medical appointments; and problems with being released from their prison cell to attend class. At the completion of the Cancer 101 program, a certificate of completion was given to those who completed all the sessions.

### ***Recruitment procedures—Phase I***

Advertisements describing the study were given to designated prison liaisons 30 days before the scheduled recruitment. These materials were posted in common areas, bulletin boards, inmate housing units, and the prison's television channel that broadcast programs and activities. A sign-up sheet was posted at each housing unit; those who were interested in learning more about the program were asked to write their name, inmate identification number, and housing unit on a list, and the prison liaison collected the sign-up sheets two weeks before the scheduled visit.

### ***Human subjects approval***

This study received approval from the U.S. Department of Health and Human Services Office for Human Research Protections, the institutional review board (IRB) of the correctional departments, and the author's IRB. A National Institute of Health Certificate of Confidentiality was obtained for this study. All inmates who were interested in learning more about it were sent, by unit, to the gymnasium to listen to a 15-minute presentation about the study. After the presentation, interested participants were screened for eligibility and signed the informed consent forms.

### ***Cancer 101 administration***

To lay the groundwork for the adoption of Cancer 101 in phase II, the prison liaison in each correctional facility reviewed the Cancer 101 materials and was responsible for all aspects of administration, including scheduling the classes and monitoring the sign-up sheet.

### ***Cancer 101 curriculum***

A total of eight weekly sessions were provided, the average length of each session was 1.5 to 2 hours. Each module includes information on the topic that

described the learning goals and objectives, PowerPoint presentation slides, pre/post assessments with answer keys, and additional resources. Given the health risk of smoking tobacco and cigarettes, the first author provided additional content readings on the harmful effects of tobacco smoke and cigarettes, the associated risk factors of cigarette smoking, tobacco dependence treatment, e-cigarettes, and smoking cessation strategies. Supplemental information was also provided, which listed national and local organizations and contact information on how to obtain additional information.

An outline of the sessions was adopted from the original training manual, which comprised of lesson plans, sample activities, and training evaluations. All materials used in this pilot study were from the original Cancer 101 program, as the purpose of this study was to test whether the program was feasible to administer with incarcerated men.

### ***Recruitment for phase II and Cancer 101 instruction***

Inmates who completed the phase I cross-sectional survey were invited to participate in the Cancer 101 education program. An invitation was given to those who completed phase I; interested inmates were asked to complete the sign-up sheet and return it to the assigned prison liaison. At each facility, a call-out sheet listing the names and housing units of the inmates who agreed to participate in Cancer 101 was generated and given to each superintendent. Study participants were informed of phase II and completed the informed consent procedures. Two classrooms were provided to the team to hold Cancer 101 classes.

### ***Cancer 101 facilitators***

Facilitators included a certified tobacco treatment specialist with combined expertise in social work, public health, and criminal justice; two public health graduate students; and two peer specialists. There were two facilitators who were bilingual in Spanish and English—a content expert and a peer—in each assigned classroom who taught the modules. Inmates completed pretest assessments before the presentation of the module, and after each module was discussed, they completed posttest assessments. Using their journal entries, participants reflected on the lesson plans and provided feedback to facilitators on ways to improve the lectured activities to fit their needs. The peer facilitator took notes and summarized them to ensure everyone had a basic understanding of the discussions. Participants also completed an anonymous training evaluation and open-ended questions at the

end of the program. Also, instructors reflected on their experiences working in a secured and controlled environment. These reflections were emailed to the first author and discussed at regular staff meetings.

## Measures

### Demographics

The demographic variables describing the sample comprised of the following: ethnicity, level of education before incarceration, age, and current employment status (in prison).

### Smoking history and behaviors

Smoking behaviors were assessed by the following: smoking status, the age one first smoked cigarette, and age at which one became a daily smoker.

### Cancer knowledge (Cancer 101 intervention)

Cancer knowledge was assessed using answers from 43 items from the Cancer 101 curriculum, which included assessments related to the risk factors of cancer such as tobacco smoke, cancer prevention activities, and cancer disparities related to men, among others. Participants indicated whether they “agreed,” “disagreed,” or were “not sure” with statements from each module that covered different topics about cancer. Items were recoded, where “1” = correct, and incorrect or not sure responses = “0” for scaling purposes. The Cronbach’s alphas for the pretest assessment was .72 and the posttest assessment was .62. In addition, an overall cancer knowledge score was calculated by adding all module totals to produce a total score and change in pre-to-post knowledge were scores were determined.<sup>18,19</sup>

### Cancer 101 evaluation

The training evaluations comprised 16 items from the Cancer 101 curriculum to assess the usefulness and the quality of the training. A five-point Likert scale, ranging from “very poor” to “very good,” was employed to rate different aspects of the training. The items used in this analysis, which were rated by participants using the five-point Likert scale, included the following: (1) being able to understand the information; (2) the value of learning about cancer; and (3) how well the training met between participant expectations. Open-ended questions were also included to provide in-depth information about the aspects of the training that were most and least helpful. These questions also asked how participants would disseminate what they have learned to the broader community.

Participants were asked to provide answers in their own words to elicit more information about the training they received.

## Data analysis

Statistical analyses were performed using the Statistical Package for the Social Sciences 23 software program. Frequencies of the demographic variables were performed. Descriptive statistics for smoking variables were also conducted. Pearson  $r$  was used to assess whether there was an association between age and cancer knowledge. To determine whether cancer knowledge improved after the Cancer 101 intervention, a paired  $t$  test procedure was conducted; since improvement was expected, a one-tailed alpha of .05 was specified. To determine whether the improvement in cancer knowledge differed across smoking status, a  $2 \times 2$  mixed analysis of variance procedure was performed. The within-subjects variable was time (pre- vs. posttest), and the between-subjects variable was smoking status (current smoker vs. ex-smoker). The interaction term (time  $\times$  smoking status) was used to evaluate improvement in smoking status.

All the open-ended responses of the Cancer 101 evaluations were manually coded within specific categories.<sup>21</sup> Thematic analysis was used to analyze the categories from the open-ended responses; this analysis included a detailed line-by-line examination of the responses within the groups, allowing for a thick description of the participants’ responses.<sup>21</sup> Axial coding strategy was used to identify and reveal distinctions between some categories of coded responses.

## Results

A total of 169 inmates who completed the cross-sectional survey also enrolled in the Cancer 101 education program. Approximately 94 men out of these 169 were current smokers, and 75 claimed they were former smokers, defined as those who stopped smoking before participating in the study; this study did not explore reasons for quitting. Many participants were Black (59%), with other participants identifying as Latino (18%), White (12%), and other (5%), and most current smokers were also Black (66%), Latino (14.9%), White (8.5%), and other (10.6%). Most participants were between 36 and 54 years old (49.1%), with a mean age of 40. The majority of participants reported that they were between 12 and 15 years old when they smoked their first cigarette; this age range was consistent for both current and former smokers.

Most participants (65.7%) started becoming a “daily smoker” from the ages of 12 to 18, and this was also consistent across the current and former smoking groups. The most frequently obtained level of education for all participants (40.2%) was high school or a GED, and this was consistent across both the current (39.4%) and former (41.3%) smoking groups. Interestingly, ex-smokers reported higher levels of an education of “college or more” (5.3%) than current smokers (3.2%) and slightly lower levels of education that consisted of “less than high school” (former smokers: 34.7%; current smokers: 35.1%).

A good number ( $n = 82$ ; 48.5%) of participants were employed or “unemployed but looking for work” (27.2%). There were slightly more current smokers who were employed (50%) or “unemployed but looking for work” (30.9%) than former smokers who were employed (46.7%) or “unemployed but looking for work” (22.7%). Approximately 4.3% of current smokers reported having a disability versus only 1.3% of former smokers. In all, 95% ( $n = 161$ ) of all enrolled participants completed the pre- and post-assessments and training evaluations. The demographic variables describing the sample of current smokers and former smokers are shown in [Table 1](#).

Most participants (82%) had never attended a class, workshop, or training on cancer. The primary reasons participants gave for attending the Cancer 101 program were the following: to learn necessary information about cancer (45%); to develop knowledge and skills to educate others about cancer (22%); to understand cancer issues (14%); to build knowledge and skills to participate in cancer control activities (6%); to quit smoking (5%); to learn about cancer resources for patients and caregivers (3%); to have the opportunity to ask questions and discuss issues and concerns about cancer (3%); and to network with instructors and others in class (2%).

### **Pretest and posttest cancer knowledge scores**

In [Table 2](#), the total cancer knowledge scores differed significantly before and after receiving the eight-week Cancer 101 educational intervention,  $t(163) = -14.67$ ,  $p < .001$ . Total cancer knowledge scores prior to the educational intervention ( $M = 28.39$ ,  $SD = 4.28$ ) were significantly lower than after the intervention ( $M = 32.69$ ,  $SD = 3.38$ ). Further, as shown in [Table 2](#), all module scores increased significantly post-intervention. Therefore, the intervention had a positive effect on cancer knowledge.

### **Differences in cancer knowledge**

There was no difference in cancer knowledge between Black people and other racial and ethnic groups. For education, there was a significant difference, but only between those who attended high school/GED ( $M = 31.42$ ,  $SD = 3.68$ ) and those men who attended at least one to two years of college ( $M = 35.55$ ,  $SD = 2.56$ ) and those with a vocational degree ( $M = 35.82$ ,  $SD = 2.05$ ). Regarding age, the older the respondent, the higher their cancer knowledge score,  $r = .29$ ,  $p < .001$ . Furthermore, cancer knowledge improved, regardless of smoking status,  $F(1, 162) = 213.43$ ,  $p < .001$ , from pretest to posttest, and the amount by which it increased did not differ between current and former smokers,  $F(1, 162) = .51$ ,  $p = .478$ . We tested for differences in cancer knowledge among these groups, as differences in initial cancer knowledge may ultimately impact final understanding and application of the Cancer 101 program; furthermore, the existence of extremely significant differences may also highlight areas where study administration may be improved and/or tailored to a specific demographic.

### **Cancer 101 topics most useful**

[Table 3](#) describes the topics that were most useful to the men enrolled in this study. The majority of participants expressed a desire to understand cancer prevention and control activities, such topics included: dispelling myths about cancer, cancer prevention and healthy lifestyle in prison, cancer screening and early detection, cancer survivorship, among others.

### **Cancer 101 evaluations**

Overall, upon completion of Cancer 101, participants evaluated the training positively and reported on their knowledge scores changing significantly from pretest to posttest quizzes. In determining exposure to the Cancer 101 curriculum, 65% of the men noted that they significantly understood the information provided; 67% of participants reported that the training in cancer and additional resources provided to them were immensely valuable, and 64% of the sample noted that the training exceeded their goals and expectations.

### **Discussion**

Increasing inmates’ cancer knowledge may provide opportunities for incarcerated men to reflect on their cancer risk-taking behaviors, which can be personally

**Table 1.** Frequencies and percentages for the demographic variables.

Variables	Total sample (N = 169)		Current smokers (N = 94)		Ex-smokers (N = 75)	
	n	%	n	%	n	%
<b>Race/ethnicity</b>						
Black	100	59.1	62	66.0	38	50.7
Latino	30	17.8	14	14.9	16	21.3
White	20	11.8	8	8.5	12	16.0
Other	19	5.3	10	10.6	9	12.0
<b>Age* (Mean = 40.19; SD = 12.8)</b>						
18–24	20	11.8	8	8.6	12	16.0
25–35	41	24.2	23	24.7	18	24.0
36–54	83	49.1	49	52.7	34	45.3
55–70	23	13.6	12	12.9	11	14.7
71–82	1	> .01	1	1.1	> .01	> .01
<b>Age at first cigarette*</b>						
1–5	2	.01	1	1.1	1	1.1
6–11	30	17.8	20	16.8	10	14.3
12–15	84	49.7	51	57.3	33	47.1
16–20	37	21.9	14	15.7	23	32.9
21–25	4	2.4	2	2.2	2	2.9
26–31	3	1.8	1	1.1	2	1.3
<b>Age at first daily smoker*</b>						
6–11	5	2.9	4	2.6	1	1.1
12–18	111	65.7	59	62.8	52	33.8
19–25	32	18.9	22	23.4	10	6.5
26–34	6	3.6	2	1.3	4	2.6
> 35	3	1.8	1	1.1	2	1.3
<b>Level of education prior to incarceration*</b>						
Less than high school	59	34.9	33	35.1	26	34.7
High school or GED	68	40.2	37	39.4	31	41.3
Some college/vocational	34	20.1	21	22.3	13	17.3
College or more	7	4.1	3	3.2	4	5.3
<b>Prison labor*</b>						
Student	12	.07	6	6.4	6	8.0
Employed	82	48.5	47	50.0	35	46.7
Unemployed but looking for work	46	27.2	29	30.9	17	22.7
Disability	5	3	4	4.3	1	1.3
Other	16	9.5	5	5.3	11	14.7

\*Missing values.

**Table 2.** Means, standard deviations, and paired *t* test results for cancer knowledge prior to and after the educational intervention (N = 161)

	(Pre) M	(SD)	(Post) M	(SD)	df	<i>t</i>
Total score	28.39	(4.28)	32.69	(3.38)	163	−14.67***
Cancer in men	2.64	(.99)	3.32	(.92)	167	−7.76***
What is cancer?	3.52	(1.17)	4.18	(1.14)	167	−5.85***
Risk factors	3.52	(.78)	3.67	(.63)	167	−2.86**
Role of genes	3.53	(1.08)	4.16	(.84)	167	−6.78***
Screening/detection	3.58	(.69)	3.95	(.74)	167	−6.55***
Diagnosis/staging	3.56	(.71)	3.89	(.51)	167	−5.66***
Cancer treatment	3.84	(.95)	4.58	(.81)	167	−8.40***
Chronic conditions	3.93	(.94)	4.43	(.91)	165	−5.90***
Survivorship/support	3.75	(.72)	4.26	(.67)	163	−7.88***

\**p* < .05;\*\**p* < .01;\*\*\**p* < .001.

lifesaving for them, should they modify their behaviors based on this new information. Implementing a Cancer 101 program alongside smoking cessation programs (or integrating them therein), would further increase survival rates among this population. These changes have the potential to reduce the incidence and impact of tobacco-related cancers in the United States state prison system by helping inmates see the

**Table 3.** Cancer 101 topics most useful

Topics most useful
Biological therapies, radiation, hormonal, and chemotherapy
Cancer screening and early detection
Cancer prevention and healthy lifestyle in prison
Cancer risk and causes
How genetics, environment, and lifestyle effect your overall health
Benign and malignant tumors
Cancer survivorship
Biologics and biospecimen
Dispelling myths about cancer
Chronic conditions

impact of smoking on their health; the benefits of smoking cessation on their cancer risk; and the importance of quitting smoking inside and outside prison walls. Studies have shown that smoking bans are not entirely effective in preventing the incarcerated from smoking while in prison or jail, and they certainly have no effect on encouraging cessation after release.

CRIIMS is the first study of its kind to explore the practicality of a Cancer 101 education and training program with incarcerated men. Studies have shown

that populations who have access to cancer knowledge are better equipped to identify activities that promote cancer prevention and control.<sup>22,23</sup> Our findings suggest that providing Cancer 101 helps participants' cancer knowledge increase significantly from all pre- and posttest exposure, which is consistent among research studies that Cancer 101, as noted in the post-training evaluation.<sup>18,19</sup> This is a very welcome finding, considering the great stressors, demands, and complexity of incarceration and the prison environment. Cancer education courses in correctional settings could help incarcerated men understand and prevent their risk of common cancers.

This study had several limitations that impacted generalizability. The major limitation of this study was the lack of follow-up to determine whether the intervention was impactful on behavior. There may also be limits on generalizability due to the limited number of participants, coming from three selected prison facilities. Furthermore, the study was limited to incarcerated adult male current smokers and former smokers, which excludes generalizability to incarcerated female smokers. Another limitation is that of possible self-selection, as participants chose to volunteer for this study; these participants may be different from other inmates who chose not to participate or were not informed of the study, with more "motivation to quit." These limitations do not undermine the importance and applicability of our study, however.

Our study proved that the Cancer 101 program was very effective in changing smoking habits and established an important step in improving cancer health knowledge and smoking cessation programs for the incarcerated, whether or not participants "wanted to quit." There may be multiple reasons for nonparticipation in our study besides the lack of desire to improve health, such as medical issues, mental health issues, administrative segregation, fear or lack of confidence in quitting, and/or confusion/skepticism about the study, among others, all of which can be overcome to allow these participants to eventually take part in a Cancer 101 program. It is impossible to conclude that inmates who did hear about the study or decided not to participate would not benefit from the Cancer 101 program; in fact, because the program was so helpful for participants, it should be hypothesized that it would be helpful for other future populations who did not participate in this study, such as incarcerated women, who are also disproportionately affected by the dangers of tobacco smoke. The baseline Cancer 101 program tested in our study is left

open to tailoring for whichever population might need to use it and invites targeted smoking cessation strategies (i.e., pharmacotherapy, individual/group therapy) to be integrated inside or alongside the Cancer 101 program.

Future research should include a follow-up period to determine whether participating in the Cancer 101 translates to participating in cancer prevention activities post-training, especially for former and current smokers where tobacco bans are not enforced. Including female prison facilities in studies about the Cancer 101 would provide additional information on the adoption process of Cancer 101 within female prison facilities and other state and federal correctional facilities.

## Conclusions

Addressing the gap in cancer knowledge and improving prevention and early detection measures, screening approaches, and treatment among incarcerated populations is urgently needed. Inside the prison walls, jails and prisons should consider implementing tobacco-free policies/smoking bans where smoking is permitted or enforce smoking bans and concurrently offer smoking cessation and cancer health programs as a means of reducing smoking-related cancers in this population.<sup>24</sup> Until this need is met, the ability to address incarcerated men's cancer-health disparities will remain unknown, placing thousands of people at increased risk of dying from cancer. CRIIMS is the first effort to adopt and pilot Cancer 101, which now serves as a potential blueprint for reducing the burden of cancer-health disparities among criminal justice populations across the correctional system (jail, prison, parole, and probation).

## Conflict of interest

The authors declare no potential conflicts of interest.

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