

ORIGINAL INVESTIGATION

“They Are Not Taking Cigarettes From Me . . . I’m Going to Smoke My Cigarettes Until the Day I Die. I Don’t Care If I Get Cancer”: Smoking Behaviors of Men Under Community Supervision in New York City

Pamela Valera PhD, MSW¹, Stephanie H. Cook DrPH, MPH², Rachele Darout MD³, Dora M. Dumont PhD, MPH⁴

¹Department of Sociomedical Sciences, Columbia University Mailman School of Public Health, New York, NY; ²Department of Health Behavior and Health Education, University of Michigan School of Public Health, Ann Arbor, MI; ³Lynn Community Health Center, Lynn, MA; ⁴Miriam Hospital, Providence, RI

Corresponding Author: Pamela Valera, PhD, MSW, Department of Sociomedical Sciences, Columbia University Mailman School of Public Health, 722 W. 168th Street, Room 940, New York, NY 10032, USA. Telephone: 212-305-5804; Fax: 212-342-1986; E-mail: pv2155@columbia.edu

Received March 12, 2013; accepted December 15, 2013

ABSTRACT

Introduction: Cigarette smoking declined from 42.4% in 1965 to 19.3% in 2010 among the general population, but it remains the leading cause of preventable death and illness in the United States, especially among high-risk populations, including those with criminal justice involvement.

Methods: A mixed-methods approach was used to investigate the smoking behaviors of men under parole or probation. Phase I focused on qualitative data of 30 semi-structured interviews of men who were recently released from a state prison and/or jail. Phase II analyzed quantitative data resulting from a study that examined smoking characteristics and treatment approaches of 259 participants, 197 of whom were cigarette smokers.

Results: The survey participants’ age of tobacco initiation ranged from 7 to 45 years of age. Participants smoked between 1 and 40 cigarettes per day; the mean number of cigarettes smoked per day was 10.37. Men released from prison used cigarettes for more years on average than men released from jail ($t[194] = -2.22, p < .05$). A linear regression procedure revealed that the influence of friends and family significantly predicted smoking behavior ($\beta = .25, p < .0001$). The qualitative data revealed the following themes: unintended consequences of the prison smoking ban, smoking as anxiety management, smoking cigarettes as part of a daily routine, and barriers to quitting.

Conclusions: Given the rapid growth of individuals under community supervision, public health and policy makers are missing an opportunity to develop strategies that promote smoking cessation treatments, especially among men who are serving parole or probation and during the incarceration period itself.

INTRODUCTION

Cigarette smoking declined from 42.4% in 1965 to 19.3% in 2010 in the general population (CDC, 2011; King, Dube, Kaufmann, Shaw, & Pechacek, 2011), but it remains the leading cause of preventable death and illness in the United States (CDC, 2008; U.S. Department of Health and Human Services, 2008). Cigarette smoking has declined largely due to public policies and smoking cessation and prevention interventions, such as taxes, tobacco regulation, indoor tobacco bans, smoking cessation programs, and social marketing campaigns. However, smoking remains particularly high for individuals under parole and/or probation, hereafter referred to as “community supervision,” suggesting that existing smoking cessation and prevention interventions are ineffective for this

population. Overall, 70% of individuals involved in the criminal justice system in the United States report a history of smoking cigarettes (Cropsey, Eldridge, & Ladner, 2004; National Commission on Correctional Health Care, 2002). These statistics are particularly alarming because lung cancer is the leading cause of death among men of color (American Cancer Society, 2009), who are nearly 6 times more likely to be criminal justice involved than White men (Harrison & Beck, 2006; Sabol, Minton, & Harrison, 2007).

Smoking bans have become common in prisons and jails in the United States and internationally, albeit motivated less by public health concerns than by fear of lawsuits from institutional staff and other inmates concerning secondhand smoke (Hammond & Emmons, 2005; Institute of Medicine, 2007). However, despite the reductions in tobacco use in

doi:10.1093/ntr/ntt280

Advance Access publication January 30, 2014

© The Author 2014. Published by Oxford University Press on behalf of the Society for Research on Nicotine and Tobacco. All rights reserved. For permissions, please e-mail: journals.permissions@oup.com.

correctional settings (Butler, Richmond, Belcher, Wilhelm, & Wodak, 2007; Glock, Müller, & Ritter, 2013), the smoking habits and associated health outcomes of individuals following release from incarceration are unknown (Kauffman, Ferketch, & Wewers, 2008; Lincoln et al., 2009). Several studies have examined smoking behaviors and intentions to quit with incarcerated populations (Conklin, Lincoln, & Tuthill, 2000; Cropsey, Jones-Whaley, Jackson, & Hale, 2010; Cropsey & Kristeller, 2003, 2005; Durrah, 2005; Sieminska, Jassem, & Konopa, 2006). One study of recently released men found that less than 10% of smokers who had been incarcerated under a smoking ban remained smoke-free once released into the community (Clarke et al., 2011). In another study, 97% of incarcerated individuals released following a smoking ban in jails had relapsed to tobacco within 6 months (Lincoln et al., 2009; Tuthill et al., 2002). Ford (2001) suggests that men who have been incarcerated, who return to peers and family, and who are cigarette smokers are likely to initiate tobacco use upon community reintegration. With this in mind, social influence is crucial to understanding tobacco use among individuals under community supervision. This evidence suggests that examining qualitatively and quantitatively the smoking behaviors and the social environment of men released from prison and/or jail is important to developing effective smoking cessation activities among men who have been incarcerated.

This analysis is the first step in formulating interventions to reduce tobacco use among men under community supervision in urban New York. Ninety-six percent of previous and current incarcerated populations in New York City reported substance use; 80% reported previously serving a prison term; and 16% reported previously serving a jail term (New York Department of Corrections and Community Supervisions, 2012). In 2012, the average age of individuals under correctional supervision (e.g., probation, parole, jail, or prison) was 37 years old (New York Department of Corrections and Community Supervisions, 2012). The New York City Department of Corrections became a smoke-free department in 2002 under the local law 47, the New York City Smoke-free Air Act (New York City Department of Health and Mental, 2006), and the New York State Department of Corrections and Community Supervision established a smoke-free policy in its jails and prisons in 2004 (U.S. Department of Justice Federal Bureau of Prisons, 2004). Since little is known or understood about tobacco use upon release from state prisons or city jails, the research question of this study was “What were the smoking behaviors and smoking cessation treatment approaches used by Black and Latino men under community supervision?” We used a mixed methods approach to address the research question. Phase I (qualitative study) explored the smoking behaviors of men who were formerly incarcerated, which then informed Phase II of the study (quantitative study)—the development of the cancer-health research cross-sectional survey.

METHODS

The data presented in this article are from a larger mixed method study aimed at examining cancer and health disparities among 259 Black and Latino men under community supervision. The aim of the parent study was to understand cancer risk and health disparities among racial and ethnic minority males who have been incarcerated in New York. Since men under community supervision are generally older and more likely to report a substance

use background than other men (New York Department of Corrections and Community Supervisions, 2012), we wanted to focus on a cohort of men who were aged 35 and over. Thus, the eligibility criteria of Phases I and II were the following: (a) self-identify as Black or Latino; (b) aged 35–67 years old; (c) reside in the Bronx; (d) currently under parole or probation; (e) never been diagnosed with cancer; (f) and provide informed consent. Albert Einstein College of Medicine of Yeshiva University Institutional Review Board approved the study and we obtained a Federal Certificate of Confidentiality. A convenience sample of participants was recruited through word of mouth and flyers placed in agencies and community centers frequented by men under community supervision.

Phase I

Procedures

Phase I involved semistructured interviews of 30 men who were under community supervision. The participants were recruited at the courthouse, parole and probation offices, and treatment centers. Semistructured interviews were conducted, lasting approximately 90 min; participants completed an informed consent form and were compensated \$25 cash for their time. Each interview was conducted in a private meeting space and digitally recorded. The interviews were transcribed by a professional transcriptionist, uploaded in a secure drive, and entered into NVivo qualitative data analysis software (QSR, 2011). The first and third author coded the transcripts and met biweekly from August 2011 through January 2012 to deliberate upon coding differences and to develop the final codebook. We analyzed qualitative data using constant comparative method (Creswell, 2007); the categories and themes were developed from open, axial, and selective coding (Strauss & Corbin, 1990). The coders reached 80% intercoder reliability across 30 interviews (Hruschka et al., 2004).

Phase II

In Phase II, recruitment took place over 8 months between February 2012 and October 2012. Using a venue-based sampling approach (Muhib, Lin, Stueve, Miller, & Ford, 2011), men were primarily recruited via fliers placed in the criminal court, parole and probation offices, addiction treatment centers, and reentry agencies in Bronx, NY.

Procedures

Using a sample of 259 men recently released from state prison and/or Rikers Island and returning to Bronx, NY, Phase II examined respondents' tobacco use, frequency of use, cessation attempts, money spent on cigarettes, and interest in participating in smoking cessation programs. Participants completed an informed consent form and were compensated \$30 for their time. Respondents were asked to rate the effectiveness of various smoking cessation treatment approaches (i.e., individual therapy, reading materials, group therapy, nicotine patch, group therapy, and medication). Possible responses ranged from 1 (*not at all effective*) to 5 (*extremely effective*). We also asked an open-response question about the number of family members (i.e., parents, siblings, and other relatives) and friends who smoked cigarettes. The family and friends variable ranged from 0 cigarette smokers (no friends and family) to 200 (friends and family) cigarette smokers. Statistical analyses were performed

Smoking behaviors of men under community supervision

using SPSS for Windows version 20. We performed descriptive statistics (means, *SD*, and percentages), independent *t*-tests, and a linear regression procedure to determine whether the influence of friends and family members who were current smokers (social influence) had an effect on the number of cigarettes smoked per day.

RESULTS

Participants

Study participants in Phase I ranged in age from 35 to 60, with a mean age of 47. Forty-five percent were Black, and 55% were Puerto Rican. Over half of the men in the study did not complete high school or obtain a general education development (GED), the equivalent to a high school diploma. Eighty percent ($n = 24$) of the participants identified as a cigarette smoker upon release to the community.

Phase I: Themes Emerging From Qualitative Data

The qualitative themes that emerged in Phase I were the following: (a) unintended consequences of the prison smoking ban; (b) smoking as anxiety management; (c) smoking cigarettes as part of daily routine; and (d) barriers to quitting.

Theme 1: Unintended Consequences of the Prison Smoking Ban

Participants mentioned that the prison smoking ban had unintended consequences upon their release to the community. One participant commented that “the first thing I did was buy a pack of cigarettes. I was waiting to get to the store to get a pack of Newport as soon as I got off the bus” (ID: 22). Another participant, in particular, emphasized keeping what little freedom he had upon release:

I am comfortable with my 2 or 3 cigarettes. It’s like the things that I couldn’t do while I was in there. Like if I want to have a cigarette in my own house, I can have a cigarette. And in there, I’m not in my house, I’m in their house, so I can’t have a cigarette when I want one. See that’s my little freedom. (ID: 29)

Another participant stated, “Yeah, I quit for a couple a years. (Researcher): When you were in prison? (Participant): Yeah. When I came out I mean people put me through a lot a stress, so instead of blowing out of proportion, I said I’m going to want cigarette” (ID: 04). One participant recalled similar sentiments about the reasons for smoking cigarettes again, “When I got locked up, I stopped doing drugs. They are not taking cigarettes from me... I’m going to smoke my cigarettes until the day I die. I don’t care if I get cancer” (ID: 05). Though not frequently mentioned, one participant reported, “When I get the urge to smoke marijuana, in the morning I’m used to lighting a joint instead I get a cigarettes... I didn’t start smoking cigarettes till I came home” (ID: 25).

Theme 2: Smoking as Anxiety Management

Twenty-four of the 30 participants interviewed said they smoked cigarettes to reduce anxiety upon returning to the community. Participants found many reasons to keep smoking because of the instant enjoyment and the calming effects it brought them. Men reported physiological reasons why

smoking cigarettes felt good: “helped with jitters and stress”; “relaxed nerves instantly”; “relieved pressure and calms craving”; and “stabilized mood.”

Theme 3: Smoking Cigarettes as Part of a Daily Routine

Participants seemed to regard smoking cigarettes as part of their daily routine, particularly in the morning, because it provided them with immediate pleasure and it provided them with companionship, since they were surrounded by many people, including family and friends who smoke. One participant commented that:

I smoke when I wake up. When I wake up, I want a cigarette. As soon as I wake up go to the bathroom, brush my teeth, I want a cigarette. I don’t smoke in the house. I’ll go right outside and smoke a cigarette. As soon I eat, I have a cigarette. Every time I eat, I got to have a cigarette. Any time I walk some place, got to have a cigarette. When I get off the train, I got to have a cigarette. When I’m going to the train I got to have a cigarette. (ID: 30)

Most participants discussed how they shared their cigarettes with others. One participant noted:

Right now there are a lot of guys in the house that are working so it’s easy to get a cigarette sometimes. It’s not hard to get a cigarette. And still during the course of the day I might smoke a half a pack. And I don’t have my own cigarettes. (ID: 26)

Theme 4: Barriers to Quitting

Although there were a few participants who indicated a desire to quit smoking cigarettes, several participants stated that they were addicted to the nicotine and believed that quitting was not feasible. One individual discussed his addiction by stating:

I do not have the will power to quit cigarettes right. I think it got me. It’s very addictive, Did the gum. It doesn’t work. Only thing I haven’t tried is the patches or any 311 [smoking cessation quit line] numbers. But, I’m really not trying to stop that much. (ID: 25)

Another participant attempted to quit but feared the weight gain:

Yes I actually had [sic] when I went 2 years without a cigarette. And I gained like 30 pounds. I was like 230 pounds when I quit, and 6 months later, I was 260 pounds. And it wasn’t like I wasn’t doing the same things; I was actually able to do a little more, with the weight, because my wind was a little better. (ID: 26)

Another participant stated that most of his family members smoke cigarettes:

Interviewer: Do you have any family who smoke?
Participant: Let me see who smokes? My son smokes. My daughter smokes. I got, couple a brothers and they smoke. I got maybe 40 to 50 family members that smoke. (ID: 07)

Phase II: Quantitative Assessment

Sample Characteristics

Table 1 represents the demographic characteristics of current smokers in Phase II. Seventy-six percent ($n = 197$) of the 259 study participants reported being current smokers. Of the

Table 1. Participant Characteristics of Current Smokers in Phase II

	N = 197
Age in years, mean (range)	47 (35–67)
Race/ethnicity, n (%)	
Black	92 (47%)
Latino	105 (53%)
Education	
No high school/GED completion	130 (65%)
High school/GED completion	66 (35%)
Weight status	
Not overweight	128 (65%)
10–30 pounds overweight	68 (35%)
Employment	
Yes	16 (8%)
No	122 (61%)
Disability	53 (27%)
Type of facility	
Jail	80 (40%)
Prison	117 (60%)
Medical problems related to smoking	
No	163 (83%)
Yes	29 (15%)
Do not know	4 (1%)
Health insurance type	
Medicaid	172 (90%)
Private insurance	7 (1%)
No insurance	16 (8%)

Note. GED = general educational development.

remaining respondents, 9% ($n = 24$) identified as ex-smokers and 15% ($n = 38$) as nonsmokers at the time of community reintegration.

The current smoker participants ranged in age from 35 to 67 ($M = 47$, $SD = 6.63$), 53% of the participants identified as Latino, and 47% identified as Black. This was an either/or option. Sixty-five percent did not complete high school and 35% completed at least high school or GED, an equivalent to a high school diploma. More men released from prison reported obtaining at least a high school diploma than men released from jail, $\chi^2(1) = 6.15$; $p < .05$. In addition, 88% of the respondents were unemployed; 40% of participants were released from jail and 60% were released from prison.

Smoking Behavior Characteristics of Current Smokers

Table 2 presents the smoking behavior characteristics of the respondents. Participants' cigarette smoking initiation ranged from 7 to 45 years of age ($M = 15.40$, $SD = 14.00$). Participants who identified as tobacco users smoked between 1 and 40 cigarettes per day. The mean number of cigarettes smoked per day was 10.37 ($SD = 6.76$). Less than half (48%) of the participants smoked 10 or fewer cigarettes per day (cpd), 33% smoked 10 to 19 cpd, and 19% smoked more than 20 cpd. Less than a quarter (22%) of participants reported using tobacco products other than cigarettes (e.g., chewing tobacco and cigars). Men released from prison used cigarettes for more years on average than men released from jail, $t(194) = -2.22$, $p < .05$. Overall, 28% of men spent more than \$25 per week

Table 2. Smoking Characteristics of Current Smokers in Phase II

	N = 197
What do you consider yourself?	
Current smoker	197 (76%)
Age first use of cigarettes in years and mean (range)	7–45 ($M = 15.40$, $SD = 14.00$)
Cigarettes smoked per day, n%	
Fewer than 10	94 (48%)
10–19	65 (33%)
20 or more	37 (19%)
Other tobacco use, n%	
None	154 (78%)
Pipe	4 (2%)
Cigars	33 (17%)
Chew/snuff	5 (3%)
Social influence	
0 family/friends to 200 family/friends	94 ($SD = 52.33$)
Money per week spent on cigarettes, n%	
None	2 (1%)
Less than \$25	97 (49%)
\$26–50	55 (28%)
\$51–75	28 (14%)
More than \$75	11 (6%)
Medical professional discussion	160 (76%)

on cigarettes. In addition, respondents had an average of 94 friends and family members ($SD = 52.33$) who were cigarette smokers.

Effectiveness of Smoking Cessation Treatments

We asked current smokers and ex-smokers to rate the effectiveness of each smoking cessation treatment approach—individual therapy, reading materials, group therapy, nicotine patch, group therapy, and medication (Table 3). Possible responses ranged from 1 (*not at all effective*) to 5 (*extremely effective*). The mean score for individual therapy was 3.51 ($SD = 2.10$). The mean score for reading materials was 2.86 ($SD = 2.03$). The mean score for group therapy was 3.15 ($SD = 2.07$). The mean score for the nicotine patch was 3.07 ($SD = 2.02$), and the mean score for medication treatment was 3.50 ($SD = 2.22$). Additionally, most of the respondents rated all of the smoking cessation treatments as noneffective, but individual therapy, the nicotine patch, and medication were rated better than reading materials and group therapy.

Predictors of Smoking Behavior

Regression analysis procedure was conducted to determine whether friends and family socially influenced the number of cigarettes the respondents smoked per day (Table 4). Prior to conducting the procedure, variables were assessed for normality. Since the number of cigarettes smoked was skewed, it was transformed using a natural log function; the transformed variable approximated a normal distribution and thus was used in the linear regression procedure. The findings revealed that the number of family members and friends who smoked tobacco was positively correlated to the number of cigarettes smoked by respondents, $\beta = .25$, $p < .0001$.

Smoking behaviors of men under community supervision

Table 3. Perceptions of Effectiveness of Approaches to Quitting Tobacco of Current Smokers and Ex-Smokers, $N = 259$

Variables	N	Range	M	SD
Individual therapy	205	1–6	3.51	2.10
Reading materials	205	1–6	2.86	2.03
Group therapy	206	1–6	3.15	2.07
Nicotine patch	204	1–6	3.07	2.02
Medications	206	1–6	3.50	2.22

Note. Participants had missing data for these variables. SE for skewness = .15; SE for kurtosis = .30.

Table 4. Linear Regression Results for Friends and Family Variable and Smoking Behavior of Current Smokers ($N = 190$)^a

Variable	Step 1, β	Step 2, β
Social influence	.25***	.25***

Note. Participants had missing data for this variable. *** $p < .001$.

DISCUSSION

This study collected self-reported perceptions of effective smoking cessation treatment approaches for both current smokers and ex-smokers involved in the criminal justice system, investigated the current smokers' smoking characteristics, and assessed the influence of family and friends on individual smoking behaviors. These findings suggest that the pathway for Black and Latino men released from prison and/or jail to the community and under community supervision is complex. In the days or weeks following release from incarceration, the individual on parole or probation must find housing, secure state identification and government entitlements (e.g., food stamps and Medicaid), reestablish ties with family and relatives, return to a high-risk environment, and find employment (Travis, 2005). Participants associated smoking with relieving stress and reducing anxiety. They reported feeling overwhelmed in having to manage their daily lives in the community. Most participants returned to marginalized and poor neighborhoods such as Bronx, NY, where 40% of all the residents live below the federal poverty level, 58% receive public assistance (New York City Department of Health, 2011), and nearly 13% are unemployed (New York State Department of Labor, 2013).

Phase II results suggest that men under community supervision spend a significant amount of money on cigarettes even though they have limited income and rely on family, friends, and government assistance upon release to the community. Men released from prison spend more money on cigarettes than men released from Rikers Island (New York City jail). Results from this study indicate that most men released from a correctional facility with a smoking ban policy relapsed from tobacco upon community reintegration. Furthermore, more than half of the respondents reported that current smoking cessation treatments were ineffective, but some participants rated individual therapy, the nicotine patch, and medication more effective than reading materials and group therapy.

Given the rapid growth of individuals under community supervision, public health and policy makers are missing an opportunity to develop strategies to help promote smoking cessation treatments especially among racial and ethnic minority men while they serve parole or probation and during the incarceration period itself. Moreover, Black and Latino men under community supervision have higher rates of chronic illnesses associated with tobacco use (Maruschak & Beck, 2001; Maruschak & Parks, 2012; Morrow & Group, 2009; Thibodeau, Jorenby, Seal, Kim, & Sosman, 2010). Despite the increased number of individuals under community supervision, their rates of tobacco relapse during community reintegration and the expensive medical cost due to tobacco-related illnesses, innovative behavioral, pharmacological, or medical interventions specifically designed for this population are limited (Clarke et al., 2011, 2013).

This study had several limitations. Although the respondents were racially and ethnically diverse, it included only Black and Latino men and was not representative of other populations (e.g., women and White men) involved in the criminal justice system, therefore limiting our ability to generalize our findings. Another limitation is the type of sampling used; a convenience sampling approach might not be representative of all men under community supervision in New York. Moreover, information obtained from self-reports are prone to issues of bias (e.g., exaggeration and selective memory) that may affect the reliability and validity of the outcome. Despite these limitations, we believe the findings described the challenges to a correctional smoking ban policy among criminal justice populations. Further studies might examine why the rate of smoking among those with a criminal justice history is several times higher than the rate of smoking among the general population. Does exposure to incarceration play a role in increasing the rate of cigarette smoking or is the higher rate of risk behaviors more generally due to the target populations' lower levels of education or greater social influence that predispose an individual to both having a criminal justice history and smoking cigarettes (CDC, 2011; Lochner & Moretti, 2004)? Answers to the latter could determine the type of interventions that could be effective for this population, whether current intervention strategies used in the general population simply need to be applied effectively and/or adapted or whether new intervention strategies need to be developed for this population.

In summary, it is safe to suggest that requiring people to give up smoking while incarcerated will undoubtedly have health benefits and be cost saving, but these benefits are time limited if people relapse to smoking after release from prison and/or jail. There is no evidence that simply banning cigarette smoking altogether is effective in reducing smoking rates over the long term (Butler et al., 2007; Clarke et al., 2013). Smoking cessation treatments can significantly reduce the risk of suffering from tobacco-related illnesses. Additional research should focus on developing smoking cessation intervention programs for men under community supervision.

FUNDING

This work was supported by the National Cancer Institute to PV (K01CA154861).

DECLARATIONS OF INTEREST

None declared.

ACKNOWLEDGMENTS

Thank you to the study team members—Molly Kratz, Christopher McLaughlin, Yvonne Gonzalez, Shae Cali, and Mario Rodriguez—for helping with data collection and first line coding of qualitative data.

REFERENCES

- American Cancer Society. (2009). *Cancer facts and figures 2009*. Atlanta, GA: Author. Retrieved from www.cancer.org/
- Butler, T., Richmond, R., Belcher, J., Wilhelm, K., & Wodak, A. (2007). Should smoking be banned in prison? *Tobacco Control, 16*, 291–293. doi:10.1136/tc.2007.021600
- Centers for Disease Control and Prevention (CDC). (2008). Cigarette smoking among adults—United States, 2007. *Morbidity and Mortality Weekly Report, 57*, 1221–1226. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm5745a2.htm
- Centers for Disease Control and Prevention (CDC). (2011). Quitting Smoking among adults—United States, 2001–2010. *Morbidity and Mortality Weekly Report, 60*, 1513–1519. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm6044a2.htm
- Clarke, J. G., Martin, R. A., Stein, L., Lopez, C. E., Mellos, J., Friedman, P., & Bock, B. (2011). Working Inside for Smoking Elimination (Project W.I.S.E.) study design and rationale to prevent return to smoking after release from a smoke free prison. *BMC Public Health, 11*, 767. doi:10.1186/1471-2458-11-767
- Clarke, J. G., Stein, L., Martin, R. A., Martin, S. A., Parker, D., Lopes, C. E., ... Bock, B. (2013). Forced smoking abstinence: Not enough for smoking cessation. *JAMA Internal Medicine, 173*, 789–794. doi:10.1001/jamainternmed.2013.197
- Conklin, T. J., Lincoln, T., & Tuthill, R. W. (2000). Self-reported health and prior health behaviors of newly admitted correctional inmates. *American Journal of Public Health, 90*, 1939–1941. Retrieved from www.ncbi.nlm.nih.gov/pmc/articles/PMC1446449/pdf/11111273.pdf
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five traditions* (2nd ed). Thousand Oaks, CA: Sage Publications.
- Cropsey, K., Eldridge, G. D., & Ladner, T. (2004). Smoking among female prisoners: An ignored public health epidemic. *Addictive Behaviors, 29*, 425–431. doi:10.1016/j.addbeh.2003.08.014
- Cropsey, K., Jones-Waley, S., Jackson, D. O., & Hale, G. J. (2010). Smoking characteristics of community corrections clients. *Nicotine & Tobacco Research, 12*, 53–58. doi:10.1093/ntr/ntp172
- Cropsey, K., & Kristeller, J. (2005). The effects of a prison smoking ban on smoking behavior and withdrawal symptoms. *Addictive Behaviors, 30*, 589–594. doi:10.1016/j.addbeh.2003.08.014
- Cropsey, K. L., & Kristeller, J. L. (2003). Motivational factors related to quitting smoking among prisoners during a smoking ban. *Addictive Behaviors, 28*, 1081–1093. doi:10.1016/S0306-4603(02)00230-7
- Durrah, T. L. (2005). Correlates of daily smoking among female arrestees in New York City and Los Angeles. *American Journal of Public Health, 95*, 1788–1792. doi:10.2105/AJPH.2004.056457
- Ford, D. C. (2001). 'Realism and research, philosophy and poverty politics: The example of smoking'. In J. Lopez & G. Potter (Eds.), *After postmodernism: An introduction to critical realism*. London, UK: The Athlone Press.
- Glock, S., Müller, B. C. N., & Ritter S. M. (2013). Warning labels formulated as questions positively influence smoking-related risk perception. *Journal of Health Psychology, 18*, 252–262. doi:10.1177/1359105312439734
- Hammond, S. K., & Emmons, K. M. (2005). Inmate exposure to secondhand smoke in correctional facilities and the impact of smoking restrictions. *Journal of Exposure Analysis and Environmental Epidemiology, 15*, 205–211. doi:10.1038/sj.jea.7500387
- Harrison, P. M., & Beck, A. J. (2006). *Prison and jail inmates at midyear 2005*. Washington, DC: Department of Justice, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/content/pub/pdf/pjim05.pdf>
- Hruschka, D. J., Schwartz, D., St.John, D. C., Picone-Decaro, E., Jenkins, R. A., & Carey, J. W. (2004). Reliability in coding open-ended data: Lessons learned from HIV behavioral research. *Field Methods, 16*, 307–331. doi:10.1177/1525822X04266540
- Institute of Medicine. (2007). Ending the tobacco problem: A blueprint for the nation. Retrieved from www.legacyforhealth.org/content/download/571/6842/file/tobacco_final_report.pdf
- Kauffman, R. M., Ferketich, A. K., & Wewers, M. E. (2008). Tobacco policy in American prisons, 2007. *Tobacco Control, 17*, 357–360. doi:10.1136/tc.2007.024448
- King, B., Dube, S., Kaufmann, R., Shaw, M. S., & Pechacek, T. (2011). Vital signs: Current cigarette smoking among adults aged ≥18 Years—United States, 2005–2010. *Morbidity and Mortality Weekly Report, 60*, 1207–1212. Retrieved from www.cdc.gov/mmwr/preview/mmwrhtml/mm6035a5.htm?s_cid=mm6035a5_w
- Lincoln, T., Tuthill, R. W., Roberts, C. A., Kennedy, S., Hammett, T. M., Langmore-Avila, E., & Conklin, T. J. (2009). Resumption of smoking after release from tobacco-free correctional facility. *Journal of Correctional Health Care, 15*, 190–196. doi:10.1177/1078345809333388
- Lochner, L., & Moretti, E. (2004). The effect of education on crime: Evidence from prison inmates, arrests, and self-reports. *American Economic Review, 94*, 155–189. Retrieved from www.jstor.org/stable/3592774
- Maruschak, L. M., & Beck, A. J. (2001). *Medical problems of inmates. 1997*. Bureau of Justice Statistics Special Report. Washington, DC: Department of Justice, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/>
- Maruschak, L. M., & Parks, E. (2012). *Probation and parole in the United States, 2011*. Washington, DC: Department of Justice, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/>
- Morrow, K. M., & Group, P. S. S. (2009). HIV, STD, and hepatitis risk behaviors of young men before and after incarceration. *AIDS Care, 21*, 235–243. doi:10.1080/09540120802017586
- Muhib, F. B., Lin, L. S., Stueve, A., Miller, R. L., & Ford, W. L. (2011). A venue-based method for sampling hard-to-reach populations. *Public Health Reports, 116*, S1. Retrieved from www.ncbi.nlm.nih.gov/pmc/articles/PMC1913675/pdf/pubhealthrep00206-0218.pdf
- National Commission on Correctional Health Care. (2002). *The health status of soon-to-be released inmates. A report to congress: Volumes I & II*. Chicago, IL: The National Commission on Correctional Health Care.
- New York City Department of Health. (2011). Health disparities in New York City: Report describes health status for

Smoking behaviors of men under community supervision

- city's five counties. 2009. Retrieved from www.nyc.gov/html/doh/html/pr2011/pr008-11.shtml
- New York City Department of Health and Mental Hygiene. (2006). New York City Smoke Free Act (2002). Retrieved from www.nyc.gov/html/doh/downloads/pdf/smoke/tc5.pdf
- New York State Department of Corrections and Community Supervision. (2012). Under custody report: Profile of incarcerated offender population under custody on January 1, 2012. Retrieved from: www.doccs.ny.gov/Research/Reports/2013/UnderCustody_Report_2012.pdf
- New York State Department Labor. (2013). *Unemployment rates by County, 2013*. Retrieved from http://www.labor.ny.gov/stats/PDFs/ur_map.pdf
- QSR. (2011). NVivo (Version 10) [computer software]. QSR International. Retrieved from <http://qsrinternational.com>
- Sabol, W. J., Minton, T. D., & Harrison, P. M. (2007). *Prison and jail inmates at Midyear 2006*. Washington, DC: Department of Justice, Bureau of Justice Statistics. Retrieved from <http://bjs.ojp.usdoj.gov/>
- Sieminska, A., Jassem, E., & Konopa, K. (2006). Prisoners' attitudes towards cigarette smoking and smoking cessation: A questionnaire study in Poland. *BMC Public Health*, 6, 181. doi:0.1186/1471-2458-6-181
- Strauss, A., & Corbin, J. (1990). *Basics of qualitative research: Grounded theory procedures and techniques*. Newbury Park, CA: Sage Publications.
- Thibodeau, L., Jorenby, D. E., Seal, D. W., Kim, S. Y., & Sosman, J. M. (2010). Prerelease intent predicts smoking behavior post-release following a prison smoking ban. *Nicotine & Tobacco Research*, 12, 152–158. doi:10.1093/ntr/ntp188
- Travis, J. (2005). *But they all come back: Facing the challenges of prisoner reentry*. Washington, DC: Urban Institute Press.
- Tuthill, R., Lincoln, T., Conklin, T., Kennedy, S., Hammett, T., & Roberts, C. (2002). Does involuntary cigarette smoking abstinence among inmates during correctional incarceration result in continued abstinence post release? 26th National Conference on Correctional Health Care, Nashville, TN.
- U.S. Department of Health and Human Services. (2008). Smoking attributable mortality, years of potential life lost, and productivity losses, 2000–2004. *Morbidity and Mortality Weekly Report*, 57, 1226–1228. Retrieved from www.cdc.gov/mmwr/PDF/wk/mm5745.pdf
- U.S. Department of Justice Federal Bureau of Prisons. (2004, March 22). Federal Bureau of Prisons, Program Statement No. P1640.04. Retrieved from www.bop.gov/policy/prog-stat/1640_004.pdf