

Physical Activity in People Who Are Incarcerated: A Social Justice Issue

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Every year, approximately 12 million Americans cycle in and out of jail (ie, short-term facilities that hold individuals awaiting trial and/or sentenced to a term of less than 1 y).¹ Although jails allow incarcerated individuals' recreation time to engage in physical activity,² it is not clear to what extent these opportunities are utilized. This potential lack of engagement in physical activity is concerning, especially as some of the benefits of physical activity are immediate and may improve the day-to-day life for those who are incarcerated. For example, a single bout of moderate to vigorous physical activity will reduce blood pressure, improve insulin sensitivity, improve sleep and cognition, and reduce symptoms of anxiety symptoms and anger.³ Unfortunately, use of recreation time in the jail setting has not been described previously, thereby precluding an important area for policy intervention.

Between October 2017 and April 2018, we interviewed 199 individuals ≥18 years of age who were housed at a rural county jail to assess their general health status and their physical activity participation during recreation time.⁴ Briefly, participants were asked about their frequency of engagement in recreational-time physical activity (never, sometimes, or always). If a participant indicated never or sometimes engaging in recreation-time physical activity, they specified nonmutually exclusive reasons for doing so from the following: (1) safety and security (eg, safety in the yard, leaving possessions in the room, inspections of the room), (2) equipment (ie, lack of variety in exercise equipment, equipment not in working order), and (3) motivation (ie, too tired or fatigued, did not feel like going out). Our results indicated that approximately 73% of participants reported sometimes or never engaging in recreation-time physical activity. Most participants who reported never engaging in recreation-time activity had less than a high school diploma, reported fair or poor health, and reported fair or poor sleep quality (Table 1). Moreover, a high proportion of participants who never engaged in physical activity during recreational time also reported asthma (18.5%), hypertension (40.7%), high cholesterol (18.5%), diabetes (11.1%), anxiety (34.0%), and depression (39.6%). Of the 145 participants who sometimes or who never engaged in recreation-time physical activity, most reported motivation-related factors. Specifically, 87.9% of participants who sometimes and 63.0% who never engaged in activity did not “feel like going out” or were “too tired or fatigued.” In addition, participants who sometimes (59.3%) and never (20.4%) engaged

Table 1 Characteristics of Individuals Incarcerated in Coconino County Detention Facility, by Recreational Time Use, 2017–2018

Characteristic	N (%)			
	Total sample (N = 199)	Always (n = 48)	Sometimes (n = 91)	Never (n = 54)
Age at interview, mean (SD)	36.7 (10.4)	39.5 (10.0)	34.0 (9.3)	39.2 (11.5)
Sex (%female)	42 (21.1)	11 (22.9)	19 (20.9)	11 (20.4)
Race/ethnicity ^b				
American Indian or Alaska Native	117 (58.8)	38 (79.2)	40 (44.0)	36 (66.7)
Hispanic	26 (13.1)	3 (6.3)	19 (20.9)	4 (7.4)
Non-Hispanic white	46 (23.1)	6 (12.5)	28 (30.8)	11 (20.4)
Other ^c	10 (5.0)	1 (2.1)	4 (4.4)	3 (5.6)
Education				
Less than a high school diploma or GED	60 (30.2)	13 (27.1)	24 (26.4)	19 (35.2)
High school diploma or GED	76 (38.2)	23 (47.9)	36 (39.6)	17 (31.5)
Some college or greater	63 (31.7)	12 (25.0)	31 (34.1)	18 (33.3)
General health				
Excellent	16 (8.0)	3 (6.3)	7 (7.7)	4 (7.4)
Very good	39 (19.6)	12 (25.0)	23 (25.3)	4 (7.4)
Good	68 (34.2)	16 (33.3)	31 (34.1)	20 (37.0)
Fair	57 (28.6)	15 (31.3)	24 (26.4)	17 (31.5)
Poor	15 (7.5)	2 (4.2)	4 (4.4)	7 (13.0)
Missing ^d	4 (2.0)	0	2 (2.2)	2 (3.7)
Body mass index				
Normal (<25 kg/m ²)	79 (40.5)	17 (36.2)	34 (37.4)	25 (48.1)
Overweight (25–30 kg/m ²)	72 (36.9)	21 (44.7)	32 (35.2)	17 (32.7)
Obese (>30 kg/m ²)	44 (22.6)	9 (19.2)	25 (27.5)	10 (19.2)

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Table 1 (continued)

Characteristic	N (%)			
	Total sample (N = 199)	Recreational-time use ^a		
		Always (n = 48)	Sometimes (n = 91)	Never (n = 54)
Sleep quality while incarcerated				
Very good or good	43 (21.6)	13 (27.1)	21 (22.1)	9 (16.7)
Fair	78 (39.2)	15 (31.3)	38 (41.8)	23 (42.6)
Poor	49 (24.6)	14 (29.2)	15 (16.5)	17 (31.5)
Very poor	29 (14.6)	6 (12.5)	17 (18.7)	5 (9.3)
Health conditions				
Asthma	29 (14.9)	6 (12.5)	12 (13.2)	10 (18.5)
Hypertension	69 (35.6)	15 (31.3)	29 (31.9)	22 (40.7)
High cholesterol	34 (17.6)	5 (10.4)	18 (19.8)	10 (18.5)
Diabetes	15 (8.1)	4 (8.3)	4 (4.4)	6 (11.1)
Anxiety	72 (36.6)	12 (25.5)	39 (42.9)	18 (34.0)
Depression	67 (34.9)	13 (27.7)	36 (40.0)	16 (39.6)
Post-traumatic stress disorder	52 (26.8)	9 (19.2)	25 (27.5)	18 (33.3)

Abbreviation: GED, general education diploma. ^aSix participants missing recreational yard-time use and were excluded from stratified analyses. ^bNot mutually exclusive. ^cOther included participants who identified as Asian or Pacific Islander, black, or other. ^dRefused to answer or did not know.

in activity reported issues with exercise equipment. Few participants who sometimes (17.6%) and never (13.0%) indicated safety and security reasons for not engaging in physical activity.

Despite the well-established benefits of physical activity, the majority of incarcerated individuals in this small study reported not engaging in physical activity during their recreation time, even though they had permission. Environmental conditions that may affect physical activity choices (such as the availability and condition of physical activity equipment and the safety of the recreational areas within a jail) may be modified by policy and programs. Arguments can be made that policy change, such as financial allocation toward recreation, is necessary at the facility, county, state, and federal levels. Such policies would have wide implications and substantial impact, as there are over 3200 jail facilities in the United States.⁵ On the other hand, policy changes to improve equipment and safety conditions should exist within a broader context of environmental reform. The majority of survey participants indicated motivation-related reasons for not engaging in recreational physical activity. Design changes to the built environment, such as point-of-decision prompts, health messaging, or offering incentives (eg, walking dogs from the local pound twice per day) have been successful in other settings such as schools and

the workplace³; however, none of these strategies have been implemented in jails. Physical activity policy reform in the jail setting has important implications for addressing health disparities among those who are incarcerated for extended periods of time—especially as the majority of those individuals serving time in jail already come from underserved minority populations.^{6–8} Black men have a 1 in 3 and Latino men have a 1 in 6 lifetime risk of incarceration compared with non-Hispanic white men who have a 1 in 23 lifetime risk of incarceration.⁹ These minority and underserved populations, who are overrepresented in incarcerated populations, notoriously have poorer health outcomes.¹⁰ Promoting physical activity in jail facilities could help bridge the gap in health outcomes as well as provide multiple benefits to the facility itself.

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