Short Original

RESP

Perceived social support, resilience and consumption of psychoactive substances amongst inmates in prisons

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ABSTRACT

Objectives: To determine the influence of perceived social support and resilience in the use of alcohol and other drugs amongst female inmates.

Material and method: A cross-sectional study with 174 inmates was conducted in two prisons in the Region of Murcia. A self-administered questionnaire was used, which included socio-demographic, prison, alcohol and other drug consumption, perceived social support and resilience variables.

Results: 28.2% of the inmates consumed at least one of the substances analyzed (alcohol, cannabis, cocaine, heroin and/or tranquillizers without medical prescription) in prison. The female consumers showed significantly lower levels of perceived social support and resilience, compared to the counterparts who did not consume in prison.

Discussion: Findings show how perceived social support and resilience are factors of protection against substance use in prison, and these can be incorporated in future prevention programs for the consumption of alcohol and other drugs during imprisonment.

Keywords: prisons; women; alcoholic beverages; illicit drugs; social support.

INTRODUCTION

The number of female prisoners worldwide makes up approximately 7% of the total prison population[1]. The percentage in Spain at the beginning of 2019 was 7.5%[2]. Previous research has found a high prevalence of consumption of alcohol and other drugs in prison amongst the female inmate population[3-5] that is higher than that of the male population[6]. In a recent systematic review carried out by Fazel et al[6], which included approximately 6,500 inmates from 10 different studies, prevalences in prison were found that ranged from 10 to 30% in alcohol consumption and from 30 to 69% in other drugs.

In Spain, according to the latest version of the Survey on Health and Drug Abuse amongst Inmates in Spanish Prisons (*Encuesta sobre Salud y consumo de Drogas a los internados en Instituciones Penitenciarias*

en España (ESDIP 2016))[7], the drugs most commonly used by women were: cannabis (8.7%), tranquilisers without prescription (3.3%), heroin (1.2%) and alcohol (1.2%) during the previous month in prison. Likewise, Caravaca-Sánchez et al.[8] (2018) found in a sample of 225 female inmates in Spanish prisons that approximately half of the inmates had consumed alcohol or other drugs in the previous six months in prison.

Notable risk factors associated with the consumption of alcohol and other drugs in prison include: a low level of education, being unemployed prior to imprisonment and/or a record of family conflict[3,8]. However, no previous studies were found that analysed the influence of social support, defined as "social activity and availability of friends and family members"[9], since high levels of social support are perceived as a protective factor against alcohol and drug abuse amongst the general public[10]. This study analyses the association

between the following variables: socio-demographic, prison, perceived social support and resilience relating to alcohol and drug abuse in prison amongst female inmates.

MATERIAL AND METHOD

In January-March 2017, a cross-sectional study was carried out on the female inmates of two prisons (Murcia II Prison and the Guillermo Miranda Social Integration Centre) of the Region of Murcia. They were selected using a simple random sampling method; the sample was made up of a total of 174 inmates (under informed consent and with no kind of payment involved), distributed amongst 121 inmates (69.5%) at the Murcia II Prison and 53 inmates (30.4%) of the del Guillermo Miranda Social Integration Centre, out of a total of approximately 250 inmates in both centres at the time of the study.

An informed consent previously approved by the Ethics Committee of the University of Murcia was obtained from the inmates, who were then issued with a self-administered and anonymous questionnaire divided into four different blocks:

- Socio-demographic and employment variables: the socio-demographic (age, nationality, marital status and level of education) and prison (recidivism, working and/or studying in prison) variables were adapted from a previous study[8].
- Abuse of alcohol and other drugs: adapted from a previous research project on the prison population[11]. Information was obtained about consumption of the following substances in the last three months in prison: alcohol, cannabis, cocaine, heroin and non-prescribed tranquilisers. The response options were "yes" or "no" for each one. Inmates who gave an affirmative answer to at least one of the psychoactive substances were categorised as consumers.
- Perceived social support: the Medical Outcomes Study (MOS) Social Support Survey[12] questionnaire was used to evaluate the level of perceived social support. This instrument consists of 19 items with five Likert type response options, which measure the global level of social support (Cronbach's alpha = 0.822) and its four dimensions: emotional (eight items, $\alpha = 0.856$), instrumental (four items, $\alpha = 0.795$), positive social interaction (four items, $\alpha = 0.809$) and affective (four items, $\alpha = 0.724$). A high score indicates greater perceived social support.

- Resilience: the Spanish version of the Brief Resilience Scale[13] questionnaire was used to establish the level of resilience, which is made up of six items ($\alpha = 0.781$) with five Likert-type response options. A high score here indicates greater resilience.

No screening was administered to detect a psychopathology, as this was not included in the objectives of this study.

The SPSS (v. 24.0) program was used to obtain the descriptive statistics, the mean, standard deviation and percentages. The participants were first divided into two mutually exclusive groups, depending on whether or not they had consumed alcohol or other drugs over the last three months in prison. The variables for socio-demographics, prison, perceived social support and resilience in both were then analysed along with the statistically significant associations. Finally, two linear logistic regression models were carried out (model I and model II) to determine the variables associated with consumption of alcohol and other drugs in prison, being the reference group non-consumers inmates (n = 125). A significance level of 95% (p <0.05) was used.

RESULTS

The sample was made up of 174 inmates, who had an average age of 37.6 years (standard deviation [SD] = 10.3), most of whom were Spanish (74.7%), with a partner (55.2%) and with a minimum educational level in Compulsory Secondary Education (60.3%). The characteristics for criminal behaviour and prison showed that approximately four out of five inmates were serving their first sentence (79.9%) and 60.9% and 34.4% worked and studied in prison respectively. Out of the total sample, 28.2% had consumed one or more psychoactive substances over the last three months in prison. Statistically significant differences were found between both groups in the variables: nationality, studying in prison, perceived social support (global, emotional, positive social interaction and affective) and resilience (Table 1).

Table 2 shows the results of the bivariate analysis: model I (including global social support) and model II (including the different dimensions of social support). In both models, being of Spanish nationality and having a low educational level statistically increased consumption in prison, while studying in prison and having greater resilience statistically decreased it. Greater global social support (model I) and the

dimensions of positive social interaction and affective support (model II) statistically reduced the consumption of alcohol and other drugs in prison.

DISCUSSION

In this study, 28.2% of participants stated that they consumed alcohol or other drugs. This prevalence is higher than the one found in Brazil[3] and lower than in other international[6] and national[8] studies with the same group. The socio-demographic and prison variables associated with consumption in prison were found to be being Spanish, having a low educational level and studying in prison, which matches the findings of other authors[3,8].

This study breaks new ground in research terms by analysing the influence of perceived social support and resilience on consumption of alcohol and other drugs amongst female prison inmates. The inmates who consumed alcohol or other drugs in the previous three months showed significantly less perceived social support at an overall level, as was the case in the dimensions of emotional support, positive social interaction, affect along with lower resilience, which are protective factors against substance abuse in prison. These results match

Table 1. Characteristics relating to demographics, incarceration and social support for each group.

Characteristics	Non-consumers (n = 125; 71,8%)		Consumer* (n = 49; 28,2%)		
	M	SD	M	SD	*p*
Age	38.5	10.2	37.0	10.9	0.096
	Frequency	Percentage	Frequency	Percentage	
Nationality					
Spanish	87	69.6	43	87.8	0.007
Foreign	38	30.4	6	12.2	
Marital status					
Married/with partner	56	44.8	22	44.9	0.991
Divorced/single/widow	69	55.2	27	55.1	
Educational level					
Primary to Secondary	54	43.2	15	30.6	0.127
Secondary or higher	71	56.8	34	69.4	
Recidivism					
First sentence	103	82.4	36	73.5	0.186
Recidivist	22	17.6	13	26.5	
Works in prison					
No	51	40.8	17	34.7	0.458
Yes	74	59.2	32	65.3	
Studies in prison					
No	71	56.8	43	87.8	<0.001
Yes	54	43.2	6	12.2	
Social support	M	SD	M	SD	*p*
Emotional	22.0	4.79	20.0	5.38	0.036
Material	13.2	6.44	12.8	6.30	0.240
Interaction	11.9	3.03	10.1	2.97	0.008
Affective	8.53	2.48	7.04	1.87	<0.001
Global	52.8	10.6	47.6	10.4	0.007
Resilience	2.13	0.76	1.99	0.91	0.013

Note. *Depending on consumption in the last three months in prison; †SD: standard deviation; M: mean.

Table 2. Linear logistic regression analysis based on demographic, prison and social support variables of the inmates using drugs in prison.

	Model I Global social support (n = 49)			Model II Desegregated social support (n = 49)		
	B (SE*)	OR†	p	B (SE*)	OR†	p
Characteristics	-0.041 (0.024)	0.96	0.093	-0.049 (0.026)	0.95	0.065
Age	1.681 (0.067)	3.36	0.013	2.024 (0.725)	5.59	<0.001
Spanish‡	-0.122 (0.482)	0.88	0.801	-0.176 (0.503)	0.83	0.726
Married/with partner§	1.90 (0.617)	3.73	0.002	1.810 (0.640)	4.13	<0.001
Primary to Secondary‖	-0.062 (0.051)	0.94	0.905	-0.124 (0.552)	1.13	0.823
Working in prison¶	-2.17 (0.548)	0.11	<0.001	-2.396 (0.617)	0.09	<0.001
Studying in prison**	0.206 (0.559)	1.22	0.712	-0.177 (0.591)	0.83	0.764
Recidivist††						
Social support						
Global	-0.155 (0.025)	0.79	0.003			
Emotional				0.012 (0.060)	1.01	0.836
Instrumental	-	-		-0.010 (0.039)	0.96	0.977
Positive social interaction	-	-		-0.253 (0.099)	0.82	0.007
Affective	-	-		-0.333 (0.124)	0.71	<0.001
Resilience	-0.127 (0.058)	0.87	0.013	-0.134 (0.047)	0.84	0.009

Note. *SE: standard error; †OR: odds ratio; ‡Omitted category: foreigner; §Omitted category: divorced/single/widow; ‖Omitted category: Secondary or higher; ¶Omitted category: unemployed in prison; **Omitted category: does not study in prison; ††Omitted category: First time in prison.

recent research on the general public[10,14], where there is a link between greater perceived social support and less consumption of alcohol and other drugs.

Thus, these findings may have new practical implications for drug abuse prevention programs in the prison setting, including social support (building and/or strengthening already existing networks of friends and family, at a global level and in terms of social and affective interaction) and resilience in existing[15] and future preventive programmes. It is necessary to promote social support and the capacity for resilience amongst female inmates, with a greater focus on such issues throughout each phase in alcohol and drug abuse prevention programmes.

Finally, the results shown here should be interpreted with the following limitations in mind: the reduced sample size (exclusively focused on the Region of Murcia) does not make it representative at national level; the methodology of the study (analytical cross-sectional) makes it impossible to determine the evolution of the data; the use of self-administered questionnaires can lead to biases of information and/or understanding amongst participants, which should be minimised as much as

possible by the interviewer resolving any doubts during the data collection. Finally, it should be borne in mind that the sample consisted of two populations that were different a priori, since the inmates came from an ordinary prison and a social integration centre, under different prison regimes.

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