ORIGINAL ARTICLE

Prison Health in Transitional Albania

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ABSTRACT

Aim: The information about prisoners' health in transitional countries including Albania is limited. The aim of our study was to assess the health status and its correlates among adult prisoners in Albania, a post-communist country in Southeast Europe. **Methods:** This was a cross-sectional study conducted in 2013 including 401 prisoners in Albania [290 (72%) males and 111 (28%) females]. All participants were administered an anonymous and structured questionnaire including information on self-perceived health status, health-related problems, lifestyle factors (smoking, alcohol intake and drug use) and demographic and socioeconomic characteristics (age, sex, educational attainment and income level). Binary logistic regression was used to assess the association between self-reported health status and covariates. **Results:** Overall, 173 (43.1%) of prisoners included in this study reported a poor health status, with a clear predominance of the female gender (P<0.01). Overall, 28.1% of prisoners reported the presence of at least one disease. The overall prevalence of smoking, excessive alcohol consumption and drug use were 59.1%, 34.9% and 10.2%, respectively. Upon multivariable-adjustment, poor self-perceived health status was positively associated with female gender (OR=2.01, 95%CI=1.41-2.96), smoking (OR=1.58, 95%CI=1.29-2.04), excessive alcohol consumption (OR=1.71, 95%CI=1.38-2.13) and the presence of diseases (OR=1.86, 95%CI=1.52-2.87). **Conclusion:** This study provides important information about the health status among Albanian prisoners. There is an urgent need for Albania to make a significant progress in health services provision for prisoners, which constitute a particularly vulnerable population subgroup.
Key words: **Albania, marginalized groups, prison health, self-perceived health status, vulnerable groups.**

1. INTRODUCTION

The information about prisoners' health in transitional countries including Albania is quite limited and unreliable, similar to the situation observed in other developing and transitional settings (1). It should be noted that even in industrialized countries there are concerns regarding the health status and general conditions of prisoners (2, 3). Only in a limited number of countries there has been made a noteworthy progress in health care provision for prisoners (1). The key for such a success in prisoners' health in these countries relates to the delegation of health care provisions to health authorities instead of the detaining authorities (1). From this point of view, the Swiss canton of Geneva was a pioneer in making prison health completely independent from the prison administration in a process that started in the mid-1980s (1, 4). In addition, there are some other recent examples which have been properly documented including a few countries in the Western Europe and Australia (5-8).

Contrary to the aforementioned good practices, there is some evidence pointing to a poor health status among prisoners in Albania, which is one of the poorest countries in Europe undergoing a very difficult period of political and socioeconomic transition towards a market-oriented system. Yet, since the communist breakdown in early 1990s, there are no reliable reports on the health status and the epidemiological profile of adult prisoners in Albania, notwithstanding the anecdotic evidence suggesting a rather difficult situation of Albanian prisoners. In this framework, the aim of our study was to describe the health profile of adult prisoners in Albania, which constitute a particularly marginalized population subgroup.

2. 2. METHODOLOGY

We conducted a cross-sectional study which included 401 adult prisoners in Albania: 290 (72%) males and 111 (28%) females. The study was carried out in 2013.

All state prisoners were administered an anonymous and structured questionnaire including information on self-perceived health status (dichotomized in the analysis into: poor vs. not poor), health-related problems (presence of various diseases including acute diseases, but also cardiovascular diseases including hypertension, diabetes, or other chronic diseases), and lifestyle/behavioral factors (smoking, alcohol intake and drug use). Furthermore, information about demographic and socioeconomic characteristics (age, sex, educational attainment and income level) was collected.

Binary logistic regression was used to assess the association between self-reported health status (poor vs. not

poor) and covariates (demographic and socioeconomic characteristics and behavioral factors). Initially, age-adjusted odds ratios (ORs) and their respective 95% confidence intervals (95%CIs) were calculated. Subsequently, all socioeconomic characteristics and lifestyle/behavioral factors were entered simultaneously into the logistic regression models. Multivariable-adjusted ORs and their respective 95%CIs were calculated. Hosmer-Lemeshow test was used to assess the goodness of fit of the logistic regression models. Statistical Package for Social Sciences, version 17.0, was used for all the statistical analyses.

3. RESULTS

Mean age of study participants in this study was 31.4±7.3 years. There were 290 (72%) males and 111 (28%) females in the study sample.

Table 1 presents the distribution of demographic and socioeconomic characteristics and lifestyle/behavioral factors among study participants by self-perceived health status. Overall, 173 (43.1%) of prisoners included in this study reported a poor health status, with a clear predominance of the female gender (P<0.01). Overall, 28.1% of prisoners reported the presence of at least one disease. The overall prevalence of smoking, excessive alcohol consumption and drug use were 59.1%, 34.9% and 10.2%, respectively.

Table 2 exhibits the age-adjusted association between self-reported health status with socioeconomic characteristics and behavioral factors among prisoners included in this survey. There was evidence of a strong positive

Variable	OR (95%CI)*	P*
Sex:		
Men	1.00 (reference)	<0.01
Women	2.76 (1.79-3.29)	
Age-group:		
<30 years	1.00 (reference)	0.79
≥30 years	1.13 (0.71-2.16)	
Educational attainment:		
0-8 years	1.00 (reference)	0.02
≥9 years	1.61 (1.08-2.16)	
Income level:		0.01 (2)†
High	1.00 (reference)	-
Middle	1.48 (1.04-2.98)	0.04
Low	2.19 (1.37-3.01)	<0.01
Smoking:		
No	1.00 (reference)	<0.01
Yes	1.76 (1.34-2.29)	
Excessive alcohol intake:		
No	1.00 (reference)	<0.01
Yes	2.27 (1.58-3.06)	
Drug use:		
No	1.00 (reference)	0.05
Yes	1.73 (1.01-2.39)	
Presence of diseases:		
No	1.00 (reference)	0.01
Yes	2.03 (1.63-3.02)	

Table 2. Association of self-reported health status with socioeconomic characteristics and behavioural factors among adult prisoners in Albania; age-adjusted odds ratios (ORs) from binary logistic regression * Age-adjusted (introduced as a numerical variable) odds ratios (ORs: poor health vs. not poor), 95% confidence intervals (95%CI) and p-values from binary logistic regression. † Overall p-value and degrees of freedom (in parentheses).

association between poor self-perceived health status with female gender (OR=2.76, 95%CI=1.79-3.29), a lower educational attainment (OR=1.61, 95%CI=1.08-2.16), a lower income level (OR=2.19, 95%CI=1.37-3.01), smoking status (OR=1.76, 95%CI=1.34-2.29), excessive alcohol consumption (OR=2.27, 95%CI=1.58-3.06), drug use (OR=1.73, 95%CI=1.01-2.39) and the presence of at least one disease (OR=2.03, 95%CI=1.63-3.02).

Upon simultaneous adjustment for demographic and socioeconomic characteristics and lifestyle/behavioral factors, poor self-perceived health status was positively associated with female gender (OR=2.01, 95%CI=1.41-2.96), smoking (OR=1.58, 95%CI=1.29-2.04), excessive alcohol consumption (OR=1.71, 95%CI=1.38-2.13) and the presence of diseases (OR=1.86, 95%CI=1.52-2.87) [data not shown in the tables].

4. DISCUSSION

In this study including a representative sample of adult prisoners of both sexes in Albania, there was evidence of a strong positive relationship between poor self-perceived health status and lifestyle/behavioral factors including cigarette smoking, excessive alcohol consumption and drug use. However, upon multivariable adjustment for all covariates, only smoking and excessive alcohol intake were strong and significant correlates of poor health status among study participants. In addition, the presence of at least one disease was associated, as expected, with poor

Variable	Numbers (column percentages)	
	Poor health (N=173)	Not poor health (N=228)
Sex:		
Men	98 (56.7)	192 (84.2)
Women	75 (43.3)	36 (15.8)
Age-group:		
<30 years	51 (29.5)	72 (31.6)
≥30 years	122 (70.5)	156 (68.4)
Educational attainment:		
0-8 years	119 (68.8)	124 (54.5)
≥9 years	54 (31.2)	104 (45.6)
Income level:		
Low	93 (53.8)	94 (41.2)
Middle	49 (28.3)	69 (30.3)
High	31 (17.9)	65 (28.5)
Smoking:		
No	52 (30.0)	112 (49.1)
Yes	121 (70.0)	116 (50.9)
Excessive alcohol intake:		
No	102 (59.0)	159 (69.7)
Yes	71 (41.0)	69 (30.3)
Drug use:		
No	149 (86.1)	211 (92.5)
Yes	24 (13.9)	17 (7.5)
Presence of diseases:		
No	107 (61.8)	181 (79.4)
Yes	66 (38.2)	47 (20.6)

Table 1. Distribution of socioeconomic characteristics, behavioural factors and health status in a sample of adult prisoners in Albania in 2013 (N=401)

self-perceived health regardless of demographic and socioeconomic characteristics, as well as behavioral factors.

As elsewhere, health problems in prisons reflect, to a larger scale though, problems present in communities and societies (1). Nonetheless, prisoners tend to exhibit a poorer health status as a consequence of personal circumstances, lifestyle factors, or other characteristics (1, 2, 9). In addition, it has been convincingly argued that prisons present a rather unhealthy environment (1, 10). From this point of view, poor conditions of imprisonment may rapidly lead to poor health outcomes including transmission of several infectious diseases (1, 11). All these factors may well apply – even in a multiplicative scale – in the Albanian context, which is characterized by a rapid and chaotic transition associated with a lack of suitable capacities and resources for appropriate health care provision among adult prisoners.

It must be noted that our study may suffer from different limitations including the representativeness of the sample (selection bias) and potential information biases. In our study, we included a relatively large sample of adult prisoners of both sexes in Albania, with a high response rate. These arguments tend to argue against the possibility of selection bias in our study sample. Regarding the possibility of information bias, we employed an anonymous and structured questionnaire in all study participants. Nevertheless, the self-reported information about lifestyle/behavioral factors and especially on self-reported health status may be subject to information bias. Therefore, we cannot completely exclude the possibility of differential reporting of lifestyle/behavioral factors between different groups of individuals characterized by the presence of various diseases and/or poor self-perceived health status. In any case, associations reported in cross-sectional studies should always be interpreted with extreme caution, as such associations are not assumed to be causal. Hence, there is a need for future prospective studies in Albanian settings to confirm findings of our survey.

5. CONCLUSION

This study provides important information about the health status among Albanian prisoners. There is an urgent need for Albania to make a significant progress in health services provision for prisoners, which constitute a particularly vulnerable population subgroup.

CONFLICT OF INTEREST: NONE DECLARED

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