

Influence of burnout on the health of prison workers

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ABSTRACT

Objective: This study investigates differences in health (Somatic Symptoms, Anxiety / Insomnia, Social Dysfunction and Severe Depression) relating to professional burnout (emotional exhaustion, depersonalization and personal fulfillment) suffered by prison staff, taking into account the workplace where they perform their activities (therapeutic vs. non therapeutic modules).

Methods: The participants consisted of 222 workers of both sexes, with ages ranging from 18 to 60 years, working in different prisons in Spain (Educational and Therapeutic Modules, N = 1001; Non Educational and Therapeutic Modules = 121). The tools used were the General Health Questionnaire (GHQ-28) of Goldberg and Hillier (1979) and the burnout Inventory of Maslach and Jackson (1981). A mean comparison was performed using Student's t test along with a linear regression analysis, differentiating between Educational and Therapeutic Modules and Non Educational and Therapeutic Modules.

Results: Significant differences were found between both clusters and predictive values of burnout factors for the different health levels in both prison models were identified. Possible explanations for the findings and the implications for intervention are discussed.

Keywords: Prisons; burnout, Professional; Health; Workers; Stress, Psychological; Spain; Psychology; Working conditions.

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INTRODUCTION

It is a proven fact that working under certain circumstances makes people more susceptible to stress and it can potentially entail serious health problems such as depression, anxiety, mood disorders and personality disorders, among others. At the same time, it has also been related to insomnia, lack of emotional control, feeding issues, physical deterioration, the lack of both working and everyday life skills and habits¹⁻⁵.

One of the environments where the development of mental health issues among its workers is more common is in correctional facilities. Prisons develop a twofold role: on one hand they serve as a means of punishment for those who have committed a crime and on the other, interns are intended to change their attitude and thereby their thinking by accepting the power of discipline and by assuming the need for submission in order to achieve social rehabilitation, as with psychosocial intervention programs as an alternative to traditional prisons⁶. This entails a system

where differences are established between interns according to the need for security measures implied by their custody.

The work performed in modules together with the roles therein developed —surveillance and guarding of interns, re-education and social rehabilitation as well as other administrative and bureaucratic activities such as processing of penitentiary and criminal files, or health care itself— entail a series of consequences which can potentially influence the health of those performing such tasks^{3, 7-8}. To confront this situation an alternative model has been created: the Therapeutic and Educational Unit or therapeutic module. This intends to prioritize on the rehabilitation of the individual as a person as to achieve full social rehabilitation^{7, 9}. Such model intends to confront and end prison subculture, to modify the sole objective of guarding to include the objectives of educating and rehabilitating inmates. Thereby the role of prison workers is also modified and it should be expected that this has a positive influence on both burnout levels and mental health issues among these workers^{3, 8, 10}.

Dowden and Tellier¹¹ assessed work-related stress levels among correctional officers and concluded that certain aspects such as professional commitment or decision-making are highly related to stress and burnout in this context. At the same time, Lambert et al¹², point out that stress among correctional officers negatively influences the development of their work and their own mental and physical health. That is to say that the less involvement in decision-making or the lower the autonomy in the development of their tasks, the higher stress levels tend to be¹³.

Therefore, if we consider correctional facilities inclusive institutions whose main objective lies in the rehabilitation of inmates and in charge of exhaustively controlling and guarding its "inhabitants", we ask ourselves to what extent burnout entails mental health consequences for those developing their tasks within this environment. Hence our objective is to establish the influence of burnout factors on the health of a sample of prison workers.

MATERIAL AND METHODS

Participants

This study lies within quantitative explorative descriptive interpretative studies carried out within the institutional context of correctional facilities. The sample has been selected by means of non-probabilistic sampling through volunteer participants from over 10 facilities included in the study to which questionnaires were sent. Hence, the sample is made up of 222 professionals, divided into two different groups: 101 workers from therapeutic modules (which accounts for 45.5% of the sample) and 121 from conventional modules (54.5% of the whole sample).

Evaluation tools and measures

In the first place, evaluation was carried out by means of an ad hoc questionnaire which included personal items such as age, gender, marital status, educational attainment, monthly income, job category, perception of social status, working experience, etc. Then, participants completed Goldberg's and Hillier's General Health Questionnaire (GHQ-28)¹⁴. It includes 28 items on physical and psychological issues, divided into four different aspects. The answers depend on the perception of each individual on their health throughout the last month. There are four possible answers which represent to a greater or a lesser extent the degree of health. The aspects included in this questionnaire as well as the alpha coefficient ob-

tained for each of them are the following: somatic symptoms (.898), anxiety/insomnia (.916), social impairment (.764) and depression (.948). Internal consistency of the scale as a whole is .932. Furthermore, these four aspects can be classified in two different groups: Health, with an internal consistency of .786 and Disease, .920. Last, participants were offered Seisdedos' adaptation¹⁶ of Maslach and Jackson's burnout Inventory¹⁵. This questionnaire measures burnout by means of 22 different items, regarding the attitudes of participants towards their job, with answers ranging from 0 (never) to 6 (every day). Furthermore, these 22 items can be classified in three different aspects (all of them with an appropriate degree of reliability): emotional exhaustion — feelings of being emotionally overextended and exhausted by one's work (.875); depersonalization— negative attitudes and passive response towards recipients of one's work (.656) and personal accomplishment— feelings of competence and successful achievement in one's work (.853). The alpha coefficient of the scale as a whole is .882. The last aspect (personal accomplishment) reflects a positive attitude and is therefore related negatively with emotional exhaustion and depersonalization, both of which represent to a certain extent greater levels of burnout.

Data analysis

Statistical analysis of all data was carried out by means of Student's T test, as to assess the existence of significant differences regarding the levels of burnout and health-related aspects between correctional modules- therapeutic and conventional.

Later, in order to assess the role that burnout syndrome plays in each level of health-disease, a linear regression analysis was carried out in each group: therapeutic and conventional modules.

RESULTS

The majority of participants were male (N = 164; 73.9%) while the remaining 58 were female (45.5%), age ranged between 18 and 60 years old.

Table 1 shows the mean and standard deviation of each of the aspects included in burnout syndrome, the general scale and the variables regarding health both in therapeutic and conventional units as well as in whole.

Contrasted means as shown in Table 2 depict significant differences regarding burnout factors between therapeutic and conventional units. Therefore we can see how emotional exhaustion and depersona-

Table 1. Burnout and Health descriptive statistics according to type of module: conventional and therapeutic.

ASPECTS	Therapeutic modules		Conventional modules		Total	
	X	DT	X	DT	X	DT
Emotional exhaustion	19.782	10.777	23.487	13.829	21.801	12.642
Depersonalization	6.613	6.018	10.090	7.001	8.509	6.783
Personal Accomplishment	3.6049	8.098	25.826	10.382	30.477	10.688
BURNOUT	38.346	19.602	55.752	24.718	47.833	24.105
Somatic symptoms	6.465	3.998	5.578	4.090	5.982	4.063
Anxiety/Insomnia	6.683	4.536	6.297	4.407	6.473	4.460
Social Impairment	6.604	2.433	7.413	1.837	7.075	2.162
Depression	3.445	4.050	2.173	3.749	2.752	3.932

Table 2. Independent sample tests for burnout and Health factors according to prison modules.

	F	Sig	t	gl	P	SE
Emotional exhaustion	12.045	.001	-2.242	219.014	.026	.29
Depersonalization	7.008	.009	-3.979	219.800	.000	.51
Personal Accomplishment	8.056	.005	8.237	219.042	.000	.95
BURNOUT	8.674	.004	-5.849	219.454	.000	.72
Somatic symptoms	.070	.792	1.625	220	.106	.21
Anxiety/Insomnia	.000	.997	.641	220	.522	.08
Social Impairment	5.321	.022	-2.751	183.274	.007	.37
Depression	7.112	.008	2.410	206.272	.017	.32

lization are significantly higher in conventional modules, although the effect size is small for emotional exhaustion and medium for depersonalization. On the other hand, personal accomplishment is proportionately higher in therapeutic modules with a large effect size. Overall burnout syndrome is more common in non-therapeutic units, with medium effect size.

Dimensions of health however, show statistically significant differences as far as social impairment is concerned, which is more common in conventional modules, and depression which shows higher rates in therapeutic units. Nevertheless, a small effect size has been concluded for both, while those referred to somatic symptoms and anxiety/insomnia do not show significant differences.

Regression analysis to assess the influence of different burnout categories on health/disease symptoms has allowed the conclusion of certain facts. Hence, as far as somatic symptoms are concerned, Table 3 depicts that within therapeutic modules emotional exhaustion and personal accomplishment play a role in the development of such symptoms. On the other hand, in conventional modules, only emotional exhaustion does so (Table 3).

With regard to anxiety/insomnia symptoms, Table 4 depicts how emotional exhaustion is a predictive factor for their development in therapeutic units, while in conventional ones it does so together with depersonalization.

As far as social impairment is concerned, again emotional exhaustion plays a leading role in the development of a symptom of health/disease both in therapeutic and conventional modules. Furthermore, depersonalization is also a predictive variable for social impairment in therapeutic modules (see Table 5).

To conclude, as far as the last symptom is considered: depression, we have been able to conclude, as depicted on Table 6, that only emotional exhaustion influences most probably the development of depression among prison professionals, regardless of the type of module where they exercise their functions.

DISCUSSION

As shown throughout the analysis of our results, variables that compound burnout syndrome are a consequence of one's working conditions and

Table 3. Linear regression analysis for the prediction of somatic symptoms according to burnout levels in different prison modules.

Module	Somatic Symptoms	Non standardized coefficients		Standardized coefficients		
		B	Standard error	Beta	t	Sig.
Theapeutic Modules	Emotional exhaustion	.176	.038	.474	4.654	.000
	Depersonalization	.131	.070	.196	1.865	.065
	Personal Accomplishment	.106	.046	.215	2.326	.022
Conventional Modules	Somatic Symptoms	.143	.029	.482	4.956	.000
	Emotional exhaustion	.085	.056	.146	1.524	.130
	Depersonalization	.020	.031	.050	.632	.528

Table 4. Linear regression analysis for the prediction of anxiety/insomnia according to burnout levels in different prison modules.

Module	Anxiety/Insomnia	Non standardized coefficients		Standardized coefficients		
		B	Standard error	Beta	t	Sig.
Theapeutic Modules	Emotional exhaustion	.212	.045	.504	4.725	.000
	Depersonalization	-.008	.083	-.011	-.100	.920
	Personal Accomplishment	-.005	.054	-.009	-.098	.922
Conventional Modules	Somatic Symptoms	.177	.027	.555	6.622	.000
	Emotional exhaustion	.107	.052	.170	2.061	.042
	Depersonalization	-.051	.029	-.120	-1.766	.080

Table 5. Linear regression analysis for the prediction of social impairment according to burnout levels in different prison modules.

Module	Social Impairment	Non standardized coefficients		Standardized coefficients		
		B	Standard error	Beta	t	Sig.
Theapeutic Modules	Emotional exhaustion	.063	.024	.281	2.628	.010
	Depersonalization	.097	.045	.240	2.169	.033
	Personal Accomplishment	-.024	.029	-.081	-.833	.407
Conventional Modules	Somatic Symptoms	.060	.014	.448	4.383	.000
	Emotional exhaustion	.018	.026	.069	.681	.497
	Depersonalization	-.021	.015	-.119	-1.441	.152

Table 6. Linear regression analysis for the prediction of depression according to burnout levels in different prison modules.

Module	Depression	Non standardized coefficients		Standardized coefficients		
		B	Standard error	Beta	t	Sig.
Theapeutic Modules	Emotional exhaustion	.175	.041	.466	4.278	.000
	Depersonalization	.000	.076	-.001	-.005	.996
	Personal Accomplishment	-.003	.049	-.006	-.058	.954
Conventional Modules	Somatic Symptoms	.141	.027	.518	5.214	.000
	Emotional exhaustion	-.005	.052	-.009	-.094	.925
	Depersonalization	-.005	.029	-.152	-1.886	.062

the demands and implications entailed by one's job. Furthermore, we know that prisons are one of the working contexts where this syndrome is more likely to be developed^{3, 8, 11-12}. In addition to this, we have also included the variable health and assessed whether burnout syndrome-related factors negatively affect the deterioration of health.

As far as the descriptive analysis of the variable burnout and Health is considered in each of the intervention alternatives of the prison context (therapeutic and conventional units), we have observed that the variable burnout in general has a broader impact in conventional modules. When considering its dimensions we have determined that Emotional Exhaustion and Depersonalization are more common in workers from conventional units (non-therapeutic) and that Personal Accomplishment prevails in the alternative perspective that therapeutic units represent. Such differences are in line with what Bringas *et al*¹³ determined establishing disparities regarding the correlation of Personal Accomplishment and the perception of a negative or positive working climate. Higher incidence rates of burnout syndrome among workers from conventional modules may be due to further exhaustion and occupational stress, with a lack of interest towards work and a series of negative attitudes and behaviours towards recipients of one's work, who are sometimes not easy to cope with- something which occasionally entails feelings of guilt over unsuccessful social relations between inmates and officers. These results are also in line with the conclusions by Hernandez¹³, who found high levels of exhaustion and depersonalization among officers and low rates of personal accomplishment with low expectations.

With reference to the dimensions of the variable Health, Social Impairment prevails (without distinguishing between conventional and therapeutic modules) although there are no significant differences with the other three dimensions. Social relations are one of the basic pillars of this profession and obviously balanced and healthy relations are difficult to keep in the prison working environment- a fact that would explain in part a certain degree of social inhibition and withdrawal. On the other hand, we have observed that Depression plays a more significant role in therapeutic modules, while Social Impairment prevails in conventional modules. We have determined that Depression is the dimension of Health whose development is less probable in both modules.

When considering the influence of burnout-variables over Somatic Symptoms, we have observed that Emotional Exhaustion and Personal Accomplishment prevail as potential agents for the development of so-

matic symptoms among workers from therapeutic units. It would appear that people under the effects of stress experiment further physiological activation which entails further awareness of such states and a higher probability of labeling symptoms as signs of disease. This makes sense, since emotional exhaustion and weakening entail difficulties handling stress, a lack of control, unpredictability and other common factors. In the study by Arroyo *et al*¹⁷, no significant differences were concluded for the development of hypochondriasis in prison, a fact which could mean that it is similarly found in other working contexts although it could also be explained by the consideration of other variables such as Personality and Perception of the working climate, which could have influenced the results. Presumably, Personal Accomplishment influences the development of these symptoms that suggest the appearance of a physical disorder without a clear organic cause or physiological mechanism, and so they may be associated to stress factors. We say presumably because it has not been proven that self-fulfillment, self-esteem and a positive perception of personal accomplishment entail the presence of hypochondriasis. The questionnaire used is an identification method of patients designed for outpatient consultation and to detect alterations of standard function, which may mean that they are not necessarily ill. With respect to conventional modules, we have concluded that the most influential variable is Emotional Exhaustion. In other studies which assess workers from correctional facilities¹⁸⁻¹⁹, high rates of physical and emotional exhaustion were found among such, as well as higher rates of burnout syndrome in comparison with workers from other settings.

As far as the probability of developing anxiety and insomnia, the variable emotional Exhaustion scores higher in therapeutic modules. Sleep disorders are mostly related with a series of emotional disturbances which can, in many cases, appear as anxiety symptoms and hence both factors are consistent between them. Indeed, these features can be a consequence of Emotional Exhaustion as the influence negatively in success expectations and efficiency, which are also related to self-esteem and can imply the appearance of anxiety symptoms and sleep disorders. In conventional modules, Emotional Exhaustion and Depersonalization are the main predictors for the development of Anxiety and Insomnia. Adherence to the later in alternative therapeutic modules can be due to further personal disrealization and its consequent negative attitudes in the relations with inmates due to constant surveillance and alert functions. The attitudes derived from depersonalization can entail states of nervous

anxiety and sleep disorders since they imply high levels of exigency and continuous pressure.

Another factor included in the variable Health is Social Impairment. In this case we find the opposite situation: Emotional Exhaustion and Depersonalization act in the therapeutic modules and only Emotional Exhaustion in conventional ones. Social impairment is developed after low levels of wellness and a negative perception of social skills implied in the development of one's work, which mostly influence social relations. According to Lambert *et al*¹² stress, understood as working and emotional exhaustion, influences physical and mental health, while it is also true that emotional exhaustion entailed by working stress together with depersonalization, with negative attitudes towards the rest, may lead to Social Impairment both in the alternative and conventional prison perspectives since there are no significant differences in this regard.

Depression includes symptoms such as indifference, impaired concentration, dejection, low self-esteem and a sense of futility, among others. According to our results this can be due to Emotional Exhaustion, without significant differences between modules. Again emotional and working weakening, due to the pressure entailed by such works, seem to be responsible in the development of the aforementioned feelings, at least among prison officers. Pressure derived from coping with inmates and keeping a state of alert throughout most of their working time implies emotional exhaustion and this leads to a decay of performance, positive perception of one and one's work and increased feelings of sadness or melancholy.

This study has focused on the analysis of the influence of burnout categories over different health-related factors. We believe that it would be necessary to assess the previous health status of workers, at least one month before, as established by the test GHQ-28. Previous health status may play a role in the development of one's tasks and therefore levels of emotional exhaustion and/or depersonalization may influence one's health status. Likewise, it is advisable to assess the role that each health factor plays in the development of burnout syndrome.

In conclusion, burnout syndrome has consequences on the deterioration of health. Its dimension can act as predictors in the development of disease in the context of correctional facilities. Nevertheless, such effects are not exclusive, since such deterioration can be developed regardless and previous to burnout syndrome. On the other hand, it would be necessary to consider potential bias of this study, such as the level of prison officers, the type of tasks developed in a se-

ries of aspects, for example to what extent they keep a relation with inmates, which can affect the different dimensions included in the burnout Syndrome and in the variable Health.

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