Chapter 6
Burnout Aspects of Physical and Mental Health Conditions

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6.1 Introduction

Burnout is considered to be a huge problem in the professional world (World Health Organization 2008). It is one of the most frequent illnesses among Europeans and Americans next to diabetes and cardiovascular illnesses (Akerstedt 2004; Weber and Jaekel-Reinhard 2000).

Burnout is an English expression that means something that has stopped working owing to energy exhaustion. In the literal sense, this term means "to be exhausted or burned." Burnout syndrome is identified as a form of stress and occurs in the context of social relations, especially among professionals who deal with activities that involve public service or education (Maslach and Leiter 1999). However, Maslach and Leiter (1997) warn that burnout is not exclusively linked to these professions, as almost all professions have some interpersonal contact.

The syndrome is a subjective experience, made up of emotions and negative attitudes with regard to the work and to the persons with whom we interrelate in the workplace. It is a response to chronic work stress, but differs from this kind of stress. The first response involves attitudes and negative behaviors in relation to users, clients, organization, and labor. Thus, it is a subjective experience that involves attitudes and feelings that cause problems of practice and emotional order to the worker and to the organization. The stress concept does not necessarily involve such attitudes: it is a form of personal exhaustion that interferes with an individual's life and not necessarily with their work relationships (Codo 1999).

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We might say that burnout is a type of occupational stress that affects professionals involved in any type of care within a relationship of direct, continuous, and highly emotional attention (Maslach and Jackson 1981; Leiter and Maslach 1988; Maslach 1993). The disseminated burnout definition is based on the social–psychological perspective of Maslach and collaborators, whereas this perspective involves three dimensions: emotional exhaustion, depersonalization, and low personal realization at work.

The syndrome has been considered a social problem of great relevance and is being investigated in several countries, as it is linked to high organizational costs, personnel turnover, absenteeism, productivity and quality problems, the occurrence of serious psychological and physical problems, that might lead workers to become totally incapable of working (Carloto and Câmara 2008).

The risk of *professional exhaustion syndrome* is higher for those who live with the threat of compulsory changes within the work journey and the downturn of the economic situation. Factors connected to social and economic insecurity increase the risk (incidence) of professional exhaustion in all age groups (Ministério da Saúde Brasil 2001).

The Ordinance 1339/99 of the Brazilian Ministry of Health, established in 1999, includes the burnout syndrome or professional exhaustion syndrome in the list of mental and behavioral disorders related to work.

6.2 Physical and Mental Health Conditions

Some frequent physical and mental health conditions are (Melamed et al. 1999; Nakamura et al. 1999; Pruessner et al. 1999; World Health Organization 2008):

1. Muscular or musculoskeletal pain (neck and back)
2. Headaches, migraines
3. Constant fatigue
4. Sleep disorders
5. Gastrointestinal (gastritis to ulcers) and cardiovascular disorders (hypertension, heart attacks, among others)
6. Immunodeficiency with colds or constant gripes, disorders of the skin (rashes, allergies, hair loss, increased white hair)
7. Disorders of the respiratory system (deep breath, bronchitis, asthma)
8. Sexual dysfunctions (decreased sexual desire, dyspareunia/anorgasmia in women, impotence or premature ejaculation in men), menstrual changes in women
9. Substance use

Some initial symptoms of burnout are similar to physical stress, such as neck and back pain, so that it is often becomes difficult to diagnose the syndrome. In the traditional framework of stress there is a personal tiring fatigue that interferes with the individual's life, but not directly with their work, as in burnout (Mendes 2005).

Diagnoses such as burnout, chronic fatigue syndrome, and fibromyalgia represent different ways of reacting to an oppressive situation in the workplace. These diagnoses can form the preliminary stages of diseases such as angina pectoris and myocardial infarction (Anderberg 2001).

In relation to the psyche, lack of concentration, memory changes (evocative and fixation); slowing of thought, feelings of loneliness, impatience, feelings of impotence, emotional lability, low self-esteem, discouragement may arise (Benevides-Pereira 2002; Donatelle and Hawkins 1989; Freudenberger 1974).

There may also be the emergence of aggression, difficulty relaxing and accepting change, loss of initiative; substance use (alcohol, coffee, tobacco, tranquilizers, illicit substances), high-risk behavior and suicide.

Trigo et al. (2007) conducted a review of studies on burnout and its relationship to psychiatric disorders, indicating that the correlation between depression and burnout is still inconclusive.

6.3 Physical and Mental Health Conditions of Brazilian Police Officers

Several studies highlight (Areias and Comandule 2011) the existence of a relationship between stress and risk, particularly in the profession of police officer. When applied to police activity, the burnout might be classified as being a physical, mental, and emotional breakdown, causing police officers to lose personal motivation and to develop negative attitudes in connection to his work.

Due to their attributes, police officers are among a group of professionals who suffer the most stress, as they are constantly exposed to danger, to aggression, and to conflict and tense situations, besides having to maintain a high degree of interpersonal contact. When evaluating 104 professions, Cooper (2005) classified police work as the profession with almost the highest stress index, second only to health professionals.

Media and society pressure, internal standards, negative interactions and individual confrontations, the constant state of alert, and the fear of revenge on the part of individuals who have been arrested or punished through police actions all contribute to the stress level increase in this category (Lima 2002). The profession demands that the police officer is always willing to act in situations that require intervention. The maintenance of such a state of alert creates a stressful situation that is harmful to health, and that propitiates the appearance of pathologies and dysfunctions, such as arterial hypertension, gastroduodenal ulcer, obesity, cancer, and psoriasis, which are among those most frequently studied related to stress (Trigo et al. 2007)

Besides the profession's stress agents, there are pressures concerning the organizational structure, the institutional climate, the working timetable that differs from normal sleep vigilance and social life patterns, resulting in physiological, psychological, and behavioral consequences, which are reflected directly in work performance, in mental health, and finally in the social and familial life. Costa et al.

(2007) emphasized that police officers with burnout tend to employ more often the use of violence against civilians.

Several studies (Tartaglini and Safran 1997) highlight the existence of the relationship between stress and risk, particularly in the police profession, such as anxiety, behavioral disturbances, alcohol abuse, psychic suffering, post-traumatic stress symptoms, and suicide rates.

Our data analyzed in the present chapter are derived from four studies carried out by the Latin American Center for Violence and Health Studies of the Oswaldo Cruz Foundation with civil and military police officers of the State of Rio de Janeiro/Brazil.[1] The analyzed data refer to 914 civil and 931 military police officers, totaling 1,845 professionals who act within operational sectors. Thus, they play a central role in the social production of its corporations and are characterized as highly exposed professionals with a high level of emotional and physical distress.

All the professionals answered anonymous questionnaires regarding life, health and professional risk conditions. The indications for professional distress evaluated in the present chapter incorporate the two dimensions below, and have been considered as such from positive answers to both dimensions.

1. *Presence of psychic suffering* (Self Reported Questionnaire—SRQ-20; Harding et al. 1980), as one of the signs of *emotional exhaustion*. This scale measures the existence of smaller psychiatric disturbances, such as light depression, anxiety, and psychosomatic complaints (headaches, insomnia, among others), it consists of 20 dichotomist questions, where the presence of 7 positive items of the feminine and 8 items of the masculine gender indicates psychic suffering.
2. *Low professional awareness*, measured by police officers' tendency to evaluate themselves negatively in at least two of the following items: degree of satisfaction with his professional awareness (dissatisfied or very dissatisfied); evaluation that his life got worse after entering the police; the belief that in the future working conditions will be worse than at present.

The following is a list of the other variables used according to the topics approached:

Physical health conditions—Scale of chronic diseases, composed of 85 diseases, divided into blocks:

1. Respiratory system problems
2. Heart and circulatory system;
3. Digestive system,
4. Muscle, bones and skin
5. Glands and blood cells

[1] For the Civil Police, data collection was made on different occasions: 2002 in the municipal district of Rio de Janeiro (Minayo and Souza 2003); Minayo et al. 2007 in the interior of the State (Souza et al. 2007), and in 2010 in part of the metropolitan region (*Baixada Fluminense*) (Souza and Constantino 2011). At the Military Police the data collection relating to the municipal district of Rio de Janeiro refers to the year 2006 (Minayo et al. 2008). In some locations a unit sampling (police stations) was performed, in others a survey of all existing police stations was elaborated upon. The data presented in this chapter may not extend to the whole State of Rio de Janeiro; they refer only to the locations investigated and to police officers with operational functions.

6. Nervous system
7. Urinary system
8. Transmissible diseases
9. Vision, hearing, and speech (WHO 2008)

Furthermore, three diseases of the masculine reproductive system and five of the feminine reproductive system are added totaling 93 items.

Quality of life—Community leisure quantified as the capacity to travel during free time, go to the cinema, go for a walk, go to clubs, go to church, practice sports, and meet friends. *Domiciliary leisure* includes free time to read, watch TV, stay at home with the family, stay alone, sleep, and rest. For both variables a point has been attributed for each item; it has been considered "low" leisure when the sum was equal to zero; "average" when situated between 2 and 4 points, and "high" for values ≥ 5. The *satisfaction degree concerning affective life and life in general*, was quantified by the following response options: very satisfied/satisfied, not satisfied or dissatisfied/very dissatisfied.

Social Support Scale: This scale has 19 items (Sherbourne et al. 1993). The scale of factorial analysis showed that three dimensions are present, thus enabling the grouping into three support dimensions: emotional and information, affective and positive, as well as material interaction (Minayo et al. 2008).

Statistical analysis was performed through the description of frequencies and through the odds ratio (OR), as well as via the confidence interval.

Our data underline the fact that police officers are vulnerable to developing the burnout syndrome.

The analysis results are not discriminated according to the police corporation, as a specific discussion on the different work processes is not the objective of the present chapter. They are presented according to the health conditions and to the quality of life of police officers.

The analysis has shown that 7.1% of civilian and 16.6% of military police officers show symptoms of professional distress ($p<0.001$), including psychic suffering and low professional awareness. Considering only the psychic suffering, 18.2% of civilian and 39.8% of military police officers show this mental health problem. The predominance of men in both police corporations (13.6 and 1.7% women, $p<0.001$) should also be highlighted.

Physical health conditions—among the diseases mentioned for over 10% of the operational police officers, it has been stated that only allergic rhinitis is homogeneously distributed among those with and without professional distress (Table 6.1). All other diseases have shown a higher chance of occurrence in those who are more distressed, highlighting the chance of presenting frequent problems with:

1. Neck, dorsal or column pain
2. Frequent indigestion
3. Chronic gastritis
4. Digestive system
5. Muscles, bones, and skin system

Table 6.1 Diseases presented by operational civil and military police officers in the State of Rio de Janeiro/Brazil

Variables (%)	Categories	OR[a]	CI	
Respiratory system				
Sinusitis (21.5%)	Yes	**1.46**	**1.05**	**2.02**
	No	1.00	–	–
Allergic rhinitis (20.4%)	Yes	1.37	0.98	1.91
	No	1.00	–	–
Circulatory system				
Arterial hypertension (13.2%)	Yes	**2.51**	**1.76**	**3.58**
	No	1.00	–	–
Digestive system				
Chronic gastritis (12.3%)	Yes	**3.11**	**2.19**	**4.40**
	No	1.00	–	–
Frequent indigestion (11.6%)	Yes	**3.30**	**2.32**	**4.70**
	No	1.00	–	–
Frequent constipation (10.6%)	Yes	**1.99**	**1.34**	**2.96**
	No	1.00	–	–
Muscle, bone, and skin system				
Frequent neck, dorsal or column pain (40.8%)	Yes	**3.77**	**2.76**	**5.16**
	No	1.00	–	–
Articulation torsion or luxation (21.1%)	Yes	**2.80**	**2.06**	**3.81**
	No	1.00	–	–
Skin allergy, allergic dermatitis, urticaria (15%)	Yes	**1.71**	**1.19**	**2.45**
	No	1.00	–	–
Arthritis or any other type of rheumatism (12%)	Yes	**1.75**	**1.19**	**2.59**
	No	1.00	–	–
Bursitis (10.9%)	Yes	**2.47**	**1.69**	**3.61**
	No	1.00	–	–
Nervous system				
Frequent headaches/migraines (35.3%)	Yes	**3.52**	**2.61**	**4.76**
	No	1.00	–	–
Vision, auditory, and speech				
Vision defect (myopia, astigmatism, eye fatigue, etc.) (40.3%)	Yes	**1.55**	**1.16**	**2.07**
	No	1.00	–	–
Hearing deficiency in one or both ears (14.9%)	Yes	**2.38**	**1.69**	**3.36**
	No	1.00	–	–

[a]OR crude (OR simple). OR that are statistically significant ($p < 0.05$) appear in boldface

Neck, dorsal or column pain, for example, were mentioned by 40.8% of operational police officers, regardless of the presence or absence of professional distress.

In 60.1% of all the investigated diseases (93), there exists a higher chance of occurrence among professionals who present professional distress, compared with those who do not mention it (OR higher than in the first group). Among the diseases most frequently mentioned by police officers are:

1. Pneumonia (prevalence of 3.2% of police officers)
2. Ulcer (6.7%)

Table 6.2 Life quality indicator mentioned by operational civil and military police officers of the State of Rio de Janeiro/Brazil

Variables	Categories	OR[a]	CI	
Community leisure	Low	**2.29**	**1.55**	**3.38**
	Average	1.42	0.98	2.04
	High	1.00	–	–
Domiciliary leisure	Low	1.51	0.81	2.83
	Average	**1.57**	**1.15**	**2.13**
	High	1.00	–	–
Degree of satisfaction with affective life	Satisfied, highly satisfied	1.00	–	–
	Not satisfied, not dissatisfied	**2.52**	**1.67**	**3.80**
	Dissatisfied, highly dissatisfied	**3.50**	**2.17**	**5.63**
Satisfaction degree with life in general	Satisfied, highly satisfied	1.00	–	–
	Not satisfied, not dissatisfied	**4.72**	**3.32**	**6.72**
	Dissatisfied, highly dissatisfied	**14.90**	**9.89**	**22.60**
Social support – emotional and information	Low	**2.82**	**1.92**	**4.13**
	Moderate	1.24	0.81	1.92
	High	1.00	–	–
Social support – affective and positive interaction	Low	**2.39**	**1.77**	**3.22**
	High/moderate	1.00	–	–
Social support – material	Low	**2.15**	**1.59**	**2.90**
	High/moderate	1.00	–	–

[a]OR crude (OR simple). OR that are statistically significant ($p<0.05$) appear in boldface

3. Hernia (4.9%)
4. Gout (5%)
5. Osteophytosis (6%)
6. Sciatica (5.7%)
7. Spinal disc herniation or pinched nerve (8.1%)
8. Bone fracture (6.9%)
9. Chronic skin disease (3.9%)
10. Anemia (4%)
11. Neuralgias/neuritis (5%)
12. Cystitis/urethritis (5.1%)
13. Kidney stones (5.3%)
14. Sexually transmissible diseases (4.8%)

Quality of life—Police officers with professional distress have 2.29 times the chance of experiencing low community leisure than those without such distress (Table 6.2). With regard to domiciliary leisure, there is a chance that 57% of the professionals with distress experience moderate activity in this area.

The degree of dissatisfaction with life is another aspect that distinguishes professionals: among those with distress there is a higher chance (OR = 3.5) of them declaring themselves dissatisfied or highly dissatisfied with their affective life, or with life in general (OF = 14.9).

Table 6.2 shows that low social support is more common among distressed professionals, in the context of emotional support and information (OR = 2.82), affective support and positive interaction (OR = 2.39), and material support (OR = 2.15).

6.4 Conclusions

As might be stated with regard to the professional category of police officer in the State of Rio de Janeiro/Brazil, a generalized aggravation of the health conditions and quality of life can be observed among those with signs of professional distress, thus indicating that the burnout syndrome should be investigated in more depth within this population,; also, it is necessary to use mechanisms to deal with this health problem in the health system. This has been assessed in several countries worldwide (Kates 2001; Toch 2002; Sanchez-Milla et al. 2001).

As has been extensively commented on in this chapter, some stress factors are inherent to the work of certain professional categories, as is pertinent in the case of police officers. Several international entities (the International Labor Organization [ILO], the World Health Organization [WHO]) draw attention to the need for studies that allow more knowledge on this topic to be accumulated, as well as prevention and intervention strategies. When setting health development targets for the twenty-first century population, the Pan American Health Organization (PAHO) alerts for the necessity of policies that promote workers' quality of life and also mentions that burnout is one of the problems that affect worker's health (http://www.paho.org).

A fact that deserves attention is that several prevention and intervention actions concerning stress and burnout are exclusively directed at individual management (the worker's coping capacity) of the stress condition, through cognitive and behavioral changes, as well as exercise and relaxation. They focus more on the changes the worker makes than on existing working conditions and organization. However, if we have identified in this chapter that the stress factors are related both to individual questions and to aspects of work, actions to prevent burnout and minimize the effects are more efficient if they involve strategies on both levels.

Finally, we emphasize the crucial importance of considering burnout to be a priority for public policy and for society, allowing workers to enjoy a better standard of physical and mental health and to achieve a better quality of work and life.

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