

OCCUPATIONAL STRESS AND ITS CONSEQUENCES IN HEALTHCARE PROFESSIONALS: THE ROLE OF TYPE D PERSONALITY

NINA OGIŃSKA-BULIK

Psychoprophylactic Department
Institute of Psychology
University of Łódź, Poland

Abstract

Objectives: The purpose of the study was to investigate the role of Type D personality in perceiving stress at work and the development of adverse effects of experienced stress, i.e. mental health disorders and burnout syndrome. **Materials and Methods:** A sample of 79 healthcare professionals (51 psychiatrists and 28 nurses) of a mental hospital in Łódź was eligible for the study. The mean age of the subjects was 39.71 (SD = 8.02) and their work experience was 11.20 (SD = 5.45). The DS-14 self-report to measure Type D personality, the Subjective Work Evaluation Questionnaire, the Maslach Burnout Inventory, and the General Health Questionnaire (GHQ-28) were used in the study. **Results:** The results of the study confirm a significant role of Type D personality in perceiving job stress and the development of its adverse effects reflected especially in the worsening health condition. Type D subjects perceive their workplace as more stressful than non-Type Ds and manifest more symptoms of mental health disorders and a higher level of burnout, expressed mainly in the form of emotional exhaustion and lower personal accomplishment. **Conclusion:** Modification of Type D personality aimed at reducing tendency to experience negative emotions and enhancing skills to express them combined with improving social relations is desired to prevent healthcare professionals from adverse health outcomes.

Key words:

Type D personality, Job stress, Burnout, Health status, Healthcare professionals

INTRODUCTION

Nowadays, more and more employees experience stress at work. This stress may result from work overload, high demands, poor work conditions, longer working hours, lack of control (autonomy) or lack of social support and rewards. There is a substantial evidence that stress can lead to various negative consequences for individuals, including somatic diseases, mental health disorders or feeling of exhaustion. The impact on organizations is reflected in the increased accident rates or poorer production performance, premature retirement and sickness absence. The proportion of workers who report “feeling highly stressed” has increased over the last 20 years. In Europe, of the

15 000 workers surveyed, 28% of them claim that stress is a work-related health problem [1]. According to the World Health Organization (WHO), mental health problems and stress-related disorders are the major cause of premature death in Europe [2].

Healthcare professions are regarded as very stressful. Stress experienced in this occupational group, especially by physicians and nurses, results from their responsibility for health and well-being of other people, patients' behavior (sometimes demanding and aggressive) and complaints, coping with death, injury or victims. Healthcare employees, especially emergency services workers are exposed to traumatic events, which can lead to posttraumatic disorder.

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Address reprint requests to Prof. N. Ogińska-Bulik MD, PhD, Psychoprophylactic Department, Institute of Psychology, University of Łódź, Smugowa 10/12, 91-433 Łódź, Poland (e-mail: noginska@uni.lodz.pl).

ders, manifested by recurrent dreams, intrusive thoughts, sleep disturbances, lapses in concentration and avoidance of trauma-related situations. However, evidence gathered by researchers among emergency services personnel [3–5] indicates that more routine and frequently occurring sources of stress also exert adverse effects on employees. The study carried out by Ogińska-Bulik and Kaflik-Pieróg [5] reveals that the most stressful factors in the work environment of this group of workers are: work overload, lack of rewards, lack of support, threat, physical burdens and unpleasant work conditions.

Sutherland and Cooper [6] have distinguished such sources of stress in healthcare professions as pressure of the job demands, patients expectations, increasing fear of assault during visits, worry about complaints from patients, and also conflicts between the job tasks and the role demands. The doctors also complain about lack of control, lack of support, mainly lack of consultation and communication, mundane administrative work, insufficient resources, staff shortage and lack of feedback about one's performance [7].

Winefield [8] has distinguished three sources of stress in healthcare professionals:

- 1) patients as sources of stress;
- 2) non-patients as sources of stress: relations with co-workers, the juggling of emotional and time demands between work and family life (especially for women);
- 3) organizational sources of stress which can arise from workload, paper work, responsibilities, lack of career path, decreasing professional autonomy, lack of support.

Winefield also concentrates her attention on the outcomes of work stress in healthcare professions. The health effects of work stress have usually been discussed in terms of increasing risk for suicide and substance abuse problems rather than of physical illnesses. The increasing number of mental health disorders and the intention to take premature retirement or to leave practice has been observed in this group of professionals [8]. Stress that resulted from day-to-day duties (chronic stressors) may also lead to the development of burnout syndrome, which is defined by Maslach and Leiter [9,10] as a prolonged response to chronic emotional and interpersonal stressors on the job.

Stress results not only from the demands and conditions of the work environment. According to the contemporary meaning, occupational stress results from discrepancies between demands in the workplace and individual properties of the workers [11–15]. Stress occurs when a perceived demand exceeds one's perceived ability to cope. This approach explains why stressful stimuli may evoke different reactions in different people. Therefore, investigating occupational stress it is necessary to take account of individual properties of the workers, and personality traits in particular. Those properties can influence the way of perceiving stress and contribute to the development of negative consequences of experienced stress.

Findings presented in the literature indicate that such personality traits as neuroticism, type A behavior pattern, external locus of control or pessimism may increase the sense of stress and contribute to the development of burnout syndrome [16–18] and adverse health outcomes [18–21]. The high level of sense of coherence, self-esteem, and self-efficacy may in turn buffer employees from negative outcomes [5,18,22–24]. This indicates that personality traits may influence the perception of environmental work conditions and may play a mediating role between stress and its consequences.

There are very few studies of the relationship between Type D personality (which is regarded as a new construct) and perceived stress at work and its negative outcomes. The construct of Type D was developed by Denollet [25] of the University of Tilburg in 1995. Type D reflects a relatively stable psychological characteristics and entails the presence of a wide variety of negative emotions as well as the non-expression of those emotions. It is a joint tendency toward negative affectivity (NA) and social inhibition (SI). High-NA individuals experience more negative emotions, dysphoria, anxiety, irritability, have a negative view of self, and scan the world for signs of impending trouble. SI means the tendency to inhibit the expression of emotions/behaviors and to avoid potential dangers in social interaction, such as disapproval or non-reward by others. High-SI individuals tend to feel inhibited, tense, and insecure when with others. Type D applies to individuals who simultaneously tend to experience negative emotions and

to inhibit self-expression in social interactions. Experiencing negative emotions and not expressing them outwardly expose individuals to chronic stress [26]. Type D personality is a risk factor of somatic diseases, mainly cardiovascular diseases. The role of experienced negative emotions combined with their inhibited expression is underlined in the development of diseases [25,26].

Type D personality indicates some similarities to Type A behavior pattern, Type C personality, and first of all to two personality traits, neuroticism and introversion, well-known from the Five-Factor Model of personality. Those similarities (and differences) are presented elsewhere [27,28].

Type D individuals are at increased risk for a wide range of adverse health outcomes [25,26,29]. They are also at risk for posttraumatic stress [30] and vital exhaustion [31]. Type D personality is also related to job stress and its negative outcomes. Balog [32] in a Hungarian study revealed the positive relationship between type D personality and experience of occupational stress, mostly in women. Abraham [33] found that high negative affectivity individuals reported lower job satisfaction and greater intention to look for another job.

One can assume that high-NA and high-SI workers will perceive their workplace as more stressful and that they will experience more negative consequences of stress, manifested by mental health disorders and burnout syndrome.

Figure 1 presents the hypothesized model of the study. The major objective of this study was to confirm this assumption by making an attempt to answer the following questions:

- whether Type D subjects differ in perceiving stress and its consequences from non-Type Ds,

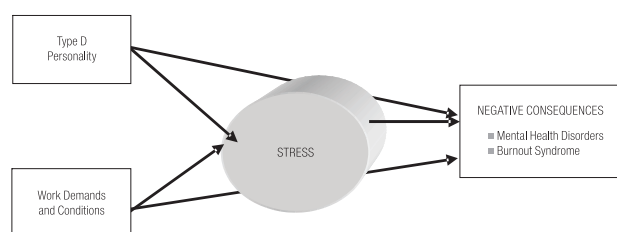


Fig. 1. Theoretical model of the study.

- what variables (stressors at work and dimensions of Type D personality) allow to predict the development of burnout syndrome and mental health disorders in healthcare professionals.

MATERIALS AND METHODS

Participants and procedures

A sample of 79 healthcare workers of a mental hospital in Łódź was covered by the study. It comprised 25 men and 26 female psychiatrists as well as 28 female nurses. In the whole group the mean age was 39.71 (SD = 8.02) and the mean work experience was 11.20 (SD = 8.05). In the group of psychiatrists and nurses these values were 39.80 (SD = 8.26) and 8.71 (SD = 5.45); 39.54 (SD = 7.71) and 15.75 (SD = 9.96), respectively.

The participants informed about confidentiality matters, administered a self-report pack (4 questionnaires) that incorporated the measure of perceived stress in the workplace, Type D personality, burnout syndrome, and general health status. Questionnaires distributed in the workplace included:

- DS-14 – a self-report measure to assess Type D personality. The scale was developed by Ogińska-Bulik and Juczyński [27,28] and consists of 14 items. Factor analysis used to examine internal-structural validity of the items revealed two dominant personality dimensions, NA and SI. Both dimensions explain 62% of variance. Cronbach's alpha (0.90 for NA and 0.74 for SI) and item-total correlations with a range of at least 0.40 (between 0.41 and 0.68) indicated the high level of internal consistency for both subscales, but a higher level for negative affectivity. NA positively correlates with neuroticism, depression and anxiety. SI negatively correlates with extraversion and positively with depression. Both dimensions, NA and SI, negatively correlate with satisfaction with life. Psychometric properties of the scale are similar to Denolett's scales, in which Cronbach's alpha was 0.89 for NA and 0.82 for SI in DS-16 [25], and 0.88 for NA and 0.86 for SI in DS-14 [26]. Internal stability, examined after 6 weeks (test-retest) was 0.85 for NA and 0.72 for SI, which confirms that relative

rankings of DS-14 scores is stable over time. Subjects rate their personality on a 5-point scale ranging from 0 (no), 1 (yes), 2 (difficult to say), 3 (rather yes) to 4 (yes). The NA and SI scales can be scored as continuous variables (range, 0–28). The subject with scores above 6 stens simultaneously for NA and SI (according to normative data by Juczyński and Ogińska-Bulik [28]) was classified as Type D.

■ The Subjective Work Evaluation Questionnaire, developed by Dudek et al. [34], consists of 55 items to measure stress at work and its ten factors. Subjects are asked to assess, on a 5-point rating scale, whether or not a given factor is present at their work, and if so, to what extent it contributes to their workload. The higher the score, the stronger the perceived job stress. The reliability of the questionnaire was satisfactory: the internal consistency coefficient was 0.84 and test-retest correlation was 0.87.

■ The Maslach Burnout Inventory (MBI) – general version developed by Maslach and Jackson (Polish adaptation by Pasikowski [35]) consists of 22 items and measures three components of burnout syndrome: emotional exhaustion (9 items), depersonalization (5 items), and lack of personal accomplishment (8 items). Subjects assess their level of particular symptoms using a 7-point rating scale (from 0 to 6). The higher the score the higher the level of particular variables. High score of emotional exhaustion and depersonalization and low level of personal accomplishment indicate burnout syndrome. Psychometric properties of the method are satisfactory. Cronbach's alpha indicators are similar to those obtained by Maslach and Jackson [36]. Cronbach's alpha for emotional exhaustion is 0.85, depersonalization – 0.59 and for personal accomplishment – 0.70.

■ The General Health Questionnaire (GHQ-28), was developed by Goldberg (Polish adaptation by Makowska and Merez [37]) consists of 28 items, which allow to measure general health status and its four components: somatic complaints, functioning disorders, anxiety/insomnia and depression symptoms. The higher the score the worse the health status. Cronbach's alpha for gener-

al health status is 0.93 (0.97 for somatic complaints, 0.90 for anxiety/insomnia, 0.78 for functioning disorders, and 0.87 for depression symptoms).

RESULTS

Descriptive analyses

The means of all the analyzed variables are presented in Table 1. The study group of healthcare workers revealed a high level of experienced stress at work (sten 8 according to normative data by Dudek et al. [34]). In the analyzed variables, the differences between psychiatrists and nurses and between men and women were also checked (but not presented in Tables). The nurses did not differ from psychiatrists in the level of perceived job stress, but the gender differentiated the level of this variable. Women revealed a higher level of stress ($M = 122.02$; $SD = 27.14$) than men ($M = 101.76$; $SD = 20.36$; $p < 0.002$). The most stressful factors at work for the whole group comprised: work overload, lack of rewards, and threat expressed by being at risk of conflicts at work, worsening or loss of health. Nurses yielded a higher level of physical burdens, unpleasant work conditions, and lack of control. Psychiatrists in turn revealed a higher sense of work overload. Compared with men, women yielded stronger sense of lack of rewards and control, stronger stress related to social relations, higher level of physical burdens and stronger feelings of responsibility.

The level of both dimensions of Type D personality in the study group of healthcare workers may be regarded as average (5 sten for NA and 6 sten for SI). The nurses did not differ from psychiatrists in the level of experienced negative emotions, but revealed a higher tendency to inhibit those emotions ($M = 13.36$; $SD = 4.94$; $M = 11.25$; $SD = 3.85$; $p < 0.03$). The gender differentiated the level of negative affectivity, but not social inhibition. A tendency to experience negative emotions was found higher in women than in men ($M = 12.07$; $SD = 5.20$; $M = 6.36$; $SD = 4.11$; $p < 0.000$).

The obtained results indicate that the examined group of healthcare professionals suffer from burnout syndrome. Emotional exhaustion, which concerns the feeling of being overextended and depleted of emotional and physical re-

Table 1. Means (M) and standard deviations (SD) of all analyzed variables

Variables	M	SD
General work stress	116.61	27.02
Work overload	20.92	6.80
Lack of rewards	18.44	6.41
Uncertainty in workplace	15.56	3.91
Social relations	9.47	1.79
Threat	12.34	3.95
Physical burdens	7.68	3.47
Unpleasant work conditions	5.53	2.43
Lack of control	7.65	1.84
Lack of support	4.78	2.16
Responsibility	8.65	2.87
Negative affectivity	10.27	5.54
Social inhibition	12.00	4.35
Emotional exhaustion	21.67	12.84
Depersonalization	4.54	5.21
Personal accomplishment	29.77	9.01
General health status	24.10	10.46
Somatic complaints	7.00	4.11
Anxiety/insomnia	7.89	4.31
Functioning disorders	7.48	1.82
Depression symptoms	1.73	2.90

sources, experienced by the participants of our study was higher than in the staff of psychiatric hospital (including nursing, clinical and administrative personnel) examined by Corrigan et al. [38] (M = 15.94), the physicians examined by Dierendock et al. [39] (M = 18.31), and the employees of emergency service examined by Ogińska-Bulik and Kaflik-Pieróg [5] (M = 17.16), but similar to that observed in the psychiatric nurses examined by Beisert [40] (M = 21.79). Depersonalization (also called cynicism), which concerns a negative, hostile, or excessively detached response to the job, showed by the study group of healthcare professionals was in turn lower compared to the level of depersonalization manifested by the groups of healthcare workers investigated by the aforesaid researches (M = 8.82; M = 9.57; and M = 7.05), respectively.

The level of personal accomplishment, which concerns a decline in feeling of competence and productivity at work, was lower in the study group of healthcare work-

ers than that observed by Corrigan et al. (M = 34.88), but higher than that found by in Dierendock et al. (M = 26.60), Ogińska-Bulik and Kaflik-Pieróg (M = 28.75), and Beisert (M = 14.29).

The nurses and psychiatrists participating in our study did not differ in the level of particular symptoms of burnout, but the gender differentiated the level of those symptoms. Women yielded a higher level of emotional exhaustion than men (M = 24.26; SD = 12.89; M = 16.08; SD = 10.98; $p < 0.01$) and a lower level of personal accomplishment (M = 27.96; SD = 8.64; M = 33.68; SD = 8.68; $p < 0.01$).

The general health status in the study group of healthcare workers may be regarded as average (sten 5 according to normative data by Makowska and Merecz [37]). The nurses did not differ from psychiatrists in the level of health status. The gender did not differentiate the level of this variable.

Perceived job stress and its negative outcomes in Type D and non-Type D subjects

At the next stage of the analysis, the level of perceived occupational stress and its consequences was investigated in Type D and non-Type D subjects (Ds). The results are presented in Table 2. The subjects were classified to the group with Type D personality if they simultaneously obtained scores above 6 sten in both dimensions (NA and SI). There were 22 (27.8%) workers (mostly women) with Type D personality in the examined group. The remaining 57 (72.2%) subjects did not reveal this type of personality. Type D subjects perceived their work environment as more stressful than non-Type Ds. They assessed almost all factors in the workplace (except work overload and lack of support) as more stressful compared with non-Type Ds. Moreover, Type D subjects were more exhausted than non-Type Ds and they showed lower sense of personal accomplishment, but they did not differ in the level of depersonalization. Type D workers manifested more symptoms of mental health disorders reflected in somatic complaints, anxiety/insomnia and depression symptoms than non-Type D workers.

Predictors of burnout syndrome and health status

The further stage of the analysis was performed to assess predictors of burnout symptoms and health status, using linear regression analysis with dummy variables, which allowed to control gender, work experience and profession differences. Factors related to work stress, two dimensions of Type D personality (NA and SI), profession (physician or nurse), gender, and work experience (low <11 years and high >10 years) were independent variables. The results of the regression analysis for the dimensions of burnout syndrome are presented in Table 3 and for health status in Table 4.

Two variables, work overload and negative affectivity, were predictors of emotional exhaustion. They made 62% of the total variance of dependent variable. The higher the stress related to work overload and the higher the tendency to experience negative emotions the higher the level of emotional exhaustion. Two factors related to job stress, lack of rewards and physical burdens, were predictors of depersonalization. They made 42% of the total variance of dependent variable. Unpleasant work conditions, negative affectivity and inter-

action of profession, gender, and work experience were predictors of personal accomplishment. They made jointly 26% of the variance of dependent variable.

Three variables: lack of support and both dimensions of Type D personality (NA and SI) were predictors of health status. They made 67% of the total variance of dependent variable. The higher the job stress related to lack of support and the higher the tendency to experience negative emotions combined with lack of expressions of those emotions the worse health (the higher score in GHQ) reflected by somatic complaints, anxiety/insomnia, functioning disorders, and depression symptoms.

DISCUSSION

The study group of healthcare workers suffered from extensive job stress, which was more manifested among women than in men; 60.7% of them experienced high level of stress at work; 34.2% – average and only 5.1% – low level of stress. The level of stress suffered in this occupational group is

Table 2. Means (M) and standard deviations (SD) of perceived stress, burnout syndrome, and general health status in Type D and non-Type D subjects

Variables	Type D (n = 22)		Non-Type D (n = 57)		t	P
	M	SD	M	SD		
General work stress	134.89	21.34	109.50	25.86	-3.87	0.000
Work overload	23.00	8.10	20.27	6.26	-1.54	NS
Lack of rewards	23.37	6.88	16.88	5.44	-4.23	0.000
Uncertainty in workplace	17.05	4.72	15.08	3.53	-1.98	0.05
Social relations	10.32	1.89	9.20	1.69	-2.44	0.01
Threat	13.89	3.49	11.85	3.98	-2.05	0.05
Physical burdens	9.16	3.45	7.22	3.37	-2.19	0.03
Unpleasant work conditions	7.00	1.89	5.07	2.41	-3.19	0.01
Lack of control	9.37	2.19	7.10	1.32	-5.48	0.000
Lack of support	5.26	2.70	4.63	1.96	-1.10	NS
Responsibility	10.95	2.39	7.92	2.63	-4.46	0.000
Emotional exhaustion	26.42	14.84	20.17	12.01	-2.40	0.05
Depersonalization	5.26	4.76	4.32	3.84	-0.78	NS
Personal accomplishment	24.58	8.38	31.42	8.62	3.03	0.003
General health status	31.37	9.41	21.80	9.76	-3.76	0.000
Somatic complaints	9.32	4.27	6.27	3.81	-2.96	0.01
Anxiety/insomnia	10.01	3.54	7.22	4.35	-2.54	0.01
Functioning disorders	7.42	0.96	7.50	2.02	0.16	NS
Depression symptoms	4.64	4.26	0.82	1.41	-6.02	0.000

t – test value;

P – level of significance;

NS – not significant.

higher than in other professions (measured with the same method), e.g., bank workers ($M = 90.5$), journalists ($M = 98.6$), and managers ($M = 99.2$) [41]. The most stressful factors at work for the whole group comprised: work overload, lack of rewards, and threat. This confirms that healthcare workers are burdened with too many duties, they feel threatened and they are underestimated in their work.

Healthcare workers are exposed to negative consequences of occupational stress, mainly to the development of emotional exhaustion – the basic individual stress dimension

of burnout syndrome. The level of this component in the study group of workers is much higher than in other occupational groups, measured with the same method, e.g., police officers ($M = 14.4$), teachers ($M = 15.5$), managers ($M = 15.4$) or journalists ($M = 14.2$) [41].

In the study group, 34.2% of subjects showed poor mental health; 30.4% – good; and 35.4% – average mental health status. The general health status of healthcare workers was better than that observed in workers of other occupational groups (measured with the same method), e.g., teachers

Table 3. Predictors of burnout syndrome

Predictors	B	SEB	Beta	SE Beta	t	P
EMOTIONAL EXHAUSTION						
Work overload	1.22	0.14	0.65	0.08	8.42	0.000
Negative affectivity	0.61	0.18	0.26	0.08	3.46	0.000
Constant	-10.16	3.02			-3.36	0.001
$R^2 = 0.62$; $F(2;76) = 61.20$; $p < 0.000$						
DEPERSONALIZATION						
Lack of rewards	0.54	0.07	0.67	0.09	7.23	0.00
Physical burdens	0.56	0.14	0.37	0.09	4.06	0.000
Constant	-1.13	1.51			-0.74	NS
$R^2 = 0.42$; $F(2;76) = 27.73$; $p < 0.000$						
PERSONAL ACCOMPLISHMENT						
Unpleasant work conditions	0.79	0.39	-0.21	0.10	-3.84	0.000
Negative affectivity	-0.70	0.18	-0.43	0.11	-3.84	0.000
Profession • gender • work experience*	-1.99	0.99	-0.22	0.11	-2.01	0.05
Constant	40.97	2.51			16.31	0.000
$R^2 = 0.26$; $F(3;75) = 8.83$; $p < 0.000$						

* Profession: 1 – physicians, 2 – nurses; gender: 1 – male, 2 – female; work experience: 1 – low (<10 years), 2 – high (>10 years);
 B – regression coefficient; SEB – standard error of Beta; Beta – standardized regression coefficient; t – test value;
 P – level of significance; R^2 – multiple regression coefficient; F – test F value; NS – not significant.

Table 4. Predictors of general health status

Predictors	B	SE B	Beta	SE Beta	t	P
Lack of support	0.78	0.33	0.16	0.07	2.40	0.01
Negative affectivity	1.57	0.14	0.83	0.07	11.38	0.000
Social inhibition	0.55	0.17	0.23	0.07	3.17	0.002
Constant	18.80	2.54			4.25	0.000
$R^2 = 0.67$; $F(3;75) = 37.33$; $p < 0.00$						

B – regression coefficient; SEB – standard error of Beta; Beta – standardized regression coefficient; t – test value;
 P – level of significance; R^2 – multiple regression coefficient; F – test F value; NS – not significant.

($M = 17.18$), taxi-drivers ($M = 17.54$), but worse than that of probation officers ($M = 25.52$), journalists ($M = 24.77$) and emergency service workers ($M = 24.11$) [41].

The obtained data confirm the assumption that Type D personality plays an important role in the perception of job stress and the occurrence of negative health outcomes. Type D subjects are more likely to perceive their work environment as stressful (mainly because of lack of rewards, lack of control and responsibility), they also manifest more symptoms of professional burnout (mainly emotional exhaustion and lack of personal accomplishment) and mental health disorders (e.g., somatic complaints, anxiety/insomnia, and depression symptoms).

The data are in agreement with the results obtained in a group of managers examined by Ogińska-Bulik [17]. Type D managers, compared to non-Type Ds, perceived their work environment as more stressful and they report more health complaints. They are also partly congruent with the results obtained by De Fruyt and Denollet [42] who found that Type D individuals had higher scores on GHQ-28 scales measuring general health and well-being, but not on the job stress measure.

Of the two dimensions of Type D personality, NA appeared more important in the development of burnout syndrome. Tendency to experience negative emotions promote the development of emotional exhaustion and lack of personal accomplishment. None of the dimensions of Type D personality appeared to be a predictor of depersonalization. Tendency to reveal negative and hostile attitudes towards patients (depersonalization) results rather from experienced stress at work, and unpleasant work conditions in particular, but not from personality traits. Job characteristic (physician or nurse), gender and work experience also seem to play a significant role in the development of this component of burnout syndrome.

Type D personality plays more important role in shaping the health status than in developing burnout syndrome. Both dimensions of this personality type appeared to be predictors of health status. Tendency to experience negative emotions, such as anxiety, anger, irritability combined with tendency to inhibit those emotions promotes the development of health disorders, probably regardless of the work environment.

CONCLUSIONS

The results of the study indicated the need to develop preventive programs aimed at reducing stress experienced at work and protecting health of healthcare workers. The programs should be addressed to organizations with the aim to change the system of rewards, to improve social relations between both employees and employers and employees and co-workers, and to reduce workload and the sense of threat.

Modification of personality traits (aimed at both reducing tendency to experience negative feelings and enhancing skills to express them) is also desired. Assertiveness and training of conversation skills may equip healthcare employees with a repertoire of interpersonal behaviors, which may be helpful in coping with job stressors. Social support also seems to be very important in protecting healthcare workers from negative consequences of job stress, especially emotional exhaustion. As Maslach [43] noticed, burnout rate is lower in individuals who actively express and share their personal feelings with their colleagues. In addition, support groups can defuse tension and assist in problem solving, and workers with large networks may possess greater skills to cope with job stressors.

There are some limitations of the presented study. The research was focused on self-report measures. The adopted cross-sectional research design provides no information on the job stress process and does not allow for affirmative causal explanations. Therefore, further research, including measurements of other personality variables, is required.

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