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## Stres zawodowy w pracy lekarzy w szpitalu i w przychodni

## Occupational stress in physicians working in hospitals and outpatient clinics

### Streszczenie

**Wstęp.** Zawód lekarza może być źródłem satysfakcji, ale również znacznego stresu. Do głównych czynników stresujących należą odpowiedzialność za zdrowie i życie pacjentów, nadmierna biurokracja, długa nieobecność w domu, ciągła gotowość, jednocześnie wykonywanie wielu czynności, dylematy moralne i etyczne.

**Cel.** Celem niniejszej pracy było zbadanie związku pomiędzy specyfiką miejsca pracy lekarzy a ich podatnością na czynniki stresujące, zaburzeniami występującymi w sytuacjach stresowych oraz stosowanymi strategiami radzenia sobie ze stresem.

**Materiał i metody.** Badanie przeprowadzono w Tarnowie metodą ankietową wśród 116 lekarzy, z których 56 zatrudnionych było w szpitalach a 60 w przychodniach. W opracowaniu statystycznym zastosowano test niezależności  $\chi^2$ .

**Dyskusja.** Dla lekarzy pracujących w szpitalach bardziej stresujące niż dla ich kolegów z przychodni okazały się reformy służby zdrowia i ubezpieczeń, biurokracja, atmosfera w miejscu pracy, konflikty ze współpracownikami i ryzyko zdrowotne. Lekarze w przychodniach w sytuacjach stresowych częściej niż ci ze szpitali narzekali na trudności z koncentracją i biegunki a rzadziej na zgagę, w znacznie większym stopniu odreagowywali stres płaczem, a w mniejszym oglądaniem telewizji, piciem alkoholu czy częstym podróżowaniem.

**Wnioski.** Praca polskich lekarzy, niezależnie od miejsca jej wykonywania jest źródłem znacznego stresu, jednakże zatrudnienie w szpitalu jest znacznie bardziej stresujące niż w przychodni. Związane jest też z większą odpornością na stresy w życiu prywatnym. Objawy stresu i stosowane przez lekarzy techniki jego redukcji również w znacznym stopniu wynikały ze specyfiki miejsca pracy.

### Abstract

**Introduction.** Medical profession can be a source of satisfaction but also of great stress. The main stressors include responsibility for patients health and life, bureaucracy at work, long absence from home, constant readiness, multitasking, moral and ethical dilemmas.

**Aim.** The aim of the study was to assess whether there is any influence of workplace specifics on doctors' vulnerability to work-stressors, stress-symptoms and strategies of coping with stress.

**Material and methods.** A group of 116 physicians – 56 from hospitals and 60 from outpatients clinics of Tarnow (Poland) were surveyed. Statistical analysis was carried out with the use of Chi-square test of independence.

**Discussions.** The reforms in health service and insurance system, bureaucracy, atmosphere at work place, conflicts with co-workers and health risk were for hospital doctors significantly more stressful than for those working in outpatients clinics. Physicians in outpatients clinics experiencing stressful situations complained more often than their colleagues in hospitals about difficulties in concentration and diarrhoea whilst less frequently of heartburn. Watching TV, drinking alcohol and frequent travelling, were more often used as a stress antidote by hospital doctors.

**Conclusions.** The work environment of Polish doctors independently of their work place is a source of great stress; however physicians employed in hospitals seem to be more sensitive to work-related stressors and more resistant to stressful situations in private life than their colleagues in clinics for outpatients. Additionally doctors' stress symptoms and anti-stress methods used by them frequently resulted from the specific character of their workplace.

**Słowa kluczowe:** lekarze, stres, praca, szpital, przychodnia.

**Keywords:** physicians, stress, work, hospital, outpatient clinics.

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## INTRODUCTION

Medical practice might be a source of both great satisfaction [1,2] and great stress [3,4]. The professional life of physicians is characterized by long working hours and pressure for efficiency, which are the most common threats for the quality of patient care [5]. Long-lasting work contributes to fatigue and mood changes [6] whilst extremely high demands cause diminishing of physicians' resistance to stress [7]. How doctors perceive their workload depends on their approach to work and by measures of stress [8]. Many reports have been published about physicians' stress however little is known about the influence of particular workplace on doctors sensitivity to work-stressors, stress-symptoms and coping strategies.

## AIM

The main topic of the study was to explore whether there is any difference in factors associated with work-related stress, its symptoms and the ways of coping with work-related stress by Polish doctors employed in hospitals and in outpatient clinics.

## MATERIAL AND METHODS

The investigation was carried out on 116 physicians employed in hospitals and health centres in Tarnów (Poland) after receiving the consent from Directors of the above mentioned health-care institutions. The data were collected with specially designed anonymous questionnaires which sought information on socio-demographic variables, factors perceived as stressful, stress symptoms and the coping strategies. Most questions were close-ended which greatly eliminated the ambiguous interpretation of answers, and allowed fast and efficient collection of material. Statistical calculation was carried out with the use of Chi-square independence test.

## RESULTS

Most respondents (114) were specialists in various branches of medicine. Almost half of them were employed in hospitals (56), and the remaining group worked in outpatient clinics (60). The groups did not differ substantially regarding their age, marital status and number of children ( $p>0.7$ ).

The major sources of physicians' stress were connected with their job and socioeconomic situation (Table 1).

**TABLE 1. Comparison of the main stressors in Polish physicians employed in hospitals and outpatient clinics. Stars mean significance: \* $p<0.05$ ; \*\* $p<0.01$ ; \*\*\* $p<0.001$ .**

	Workplace		Significance
	Hospital (n=56)	Outpatient clinic (n=60)	
Sources of stress in physician's work			
Responsibility for patient's life/ health	86%	80%	0.2587
Documentation filling	79%	50%	0.0001***
Quantity of salary	59%	65%	0.3821
Threat of being laid off	45%	25%	0.0030**
Performing many things at the same time	30%	23%	0.2621
Atmosphere in work	29%	15%	0.0169*
Moral dilemmas	21%	23%	0.7328
Necessity of competition	11%	20%	0.0787
Necessity for continuous self-improvement	25%	13%	0.0305*
Health risk	20%	8%	0.0145*
Conflict with superior	16%	7%	0.0461*
Conflict with colleagues	7%	0%	0.0210*
Family members as a source of stress			
Children	18%	30%	0.0469*
Partner	14%	22%	0.1409
Material situation as a source of stress			
Lack of means for leisure time	50%	28%	0.0014**
Lack of means for self training	39%	27%	0.0711
Lack of own house	20%	10%	0.0477*
Socio-economic situation as a source of stress			
Health service reform	91%	72%	0.0050**
Increase in crime	75%	50%	0.0030**
Reduction of standard of living	55%	62%	0.3151
Increasing unemployment	63%	42%	0.0029**
Increasing number of homeless	36%	25%	0.0911
UE integration	25%	10%	0.0052**
Insurance reform	41%	22%	0.0038**

Most respondents (about 95% irrespective of their workplace) reported stressful situations at work and connected their emotional and physical problems with their job. The main stressors were the responsibility for patients' health and life, health service reform, completing necessary documentation at work, and low salaries. One in three respondents complained of fear of being dismissed. Every fourth doctor reported as job-stressors being part of multiple activities simultaneously. One in five was stressed because of moral dilemmas, the atmosphere in the workplace and the necessity of self-improvement, while one in six because of professional rivalry, conflicts with co-workers and the health risk of occupationally acquired infection (e.g. AIDS, hepatitis virus). More than half of respondents also reported socio-economic factors such as reduction in standard of living, increasing unemployment and increase in crime as a source of stress.

For physicians working in hospital, significantly more stressful than for those in outpatients polyclinics were such job-related stressors as: threat of being laid off, bureaucracy, health service and insurance reforms, necessity for continuous self-improvement, atmosphere at work, conflicts with colleagues and superiors and health risk. Additionally they were more stressed because of socio-economic and political situation: lack of own house or means for leisure time, increasing unemployment, rise in crime and number of homeless as well as Poland's accession to EU. Private life – especially problems with children stressed more frequently physicians employed in outpatient clinics.

There were also differences in stress symptoms in both groups – doctors in outpatients clinics had more often difficulties with concentration and diarrhoea, whilst those in hospitals complained of heartburn (Table 2).

In stressful situations more physicians working in hospitals (Table 2) chose as a way of dealing with problems drinking alcohol ( $p<0.01$ ), watching television ( $p<0.05$ ), travelling at least once a week ( $p<0.05$ ), whilst those employed in outpatient clinics used crying to reduce stress ( $p<0.05$ ).

## DISCUSSIONS

It is well known that doctors experience a high level of stress in their daily work that can lead to physical, psychological, and emotional disturbances, for example, burnout [9,10]. Physicians being health care workers are influenced not only by common professional stressors such as conflicts with principals or colleagues, and high requirements of employers but additionally also by their responsibility for patients health and lives, performing many activities simultaneously and the requirement of being always ready and available.

The main stressors for majority of doctors taking part in the present study were independent of their workplace similar to those reported in literature: the responsibility for patients' health and life, bureaucracy at work [11], long absence from home, the constant readiness, multitasking, ramification of moral and ethical dilemmas and shift work.

Additional work-stressors of doctors typical for Poland and caused by specific character of political and socio-economic situation were low salaries, health service and insurance reform, Poland's accession into the EU, increased unemployment and crime. Unfortunately in Poland a powerful source of physicians' stress is their material situation and unexpected changes taking place in health care services that cause more and more dissatisfaction, somatic complaints and emotional exhaustion. Limiting provision of health services as a result of unsatisfying financial contributions for health-care institutions, queues of patients requiring medical help, searching for cheaper ways of health care, shortages of medical equipment and liquidation of many hospitals combined with uncertainty of tenure at work, are also reasons for stress.

For hospital doctors, significantly more stressful than for those in outpatient clinics, were: health service reform, completing necessary documentation, threat of being laid off, insurance reform, atmosphere at work place, necessity of continuous self improvement, conflicts with superiors and colleagues and health risk. Such perceptions of work-related stressors might be caused by the specific character

**TABLE 2. Comparison of the main stress symptoms and ways of dealing with stress in Polish physicians employed in hospitals and outpatient clinics. Stars mean significance: \* $p<0.05$ ; \*\* $p<0.01$ ; \*\*\* $p<0.001$ .**

	Workplace		Significance
	Hospital (n=56)	Outpatient clinic (n=60)	
Physical symptoms of stress			
Difficulty with concentration	29%	43%	0.0392*
Insomnia	34%	47%	0.0611
Heartburn	20%	10%	0.0477*
Diarrhoea	9%	22%	0.0111*
Ways of dealing with stress			
Alcohol	43%	22%	0.0015**
Smoking	23%	13%	0.0657
Watching television	39%	23%	0.0144*
Crying	11%	23%	0.0239*
Listening to music	48%	35%	0.0621
Travelling as a method of dealing with stress			
Once a week	11%	3%	0.0266*
Once a month	20%	10%	0.0477*
Once a half-year	11%	37%	0.0001***

of the work place. Many Polish hospitals are threatened by bankruptcy resulting in reduction of medical staff. Additionally most documentation has to be filled by doctors because of lack of medical secretaries, whilst in polyclinics such bureaucratic duties can be done by workers at the registration desk. The requirements and health risk are also much higher in hospitals, where usually more difficult cases and more seriously ill patients are treated. Moreover the team work needs constant co-work and contact with other people, which in traditional dependence system (ward heads) and in situation of overwork caused by long working hours and night shifts, following normal daily work, may trigger interpersonal conflicts. Lots of data reveals significant relationship between high prevalence of doctors' working for long (more than 8) hours and, work-related stress, severe anxiety, suicidal ideas and conflicts with colleagues [12]. Decidedly easier working conditions apply to physicians employed in outpatient clinics in Poland as well as other countries e.g. Croatia [13] who mostly work alone and independently.

Striking a balance between domestic life and professional activity as a medical doctor is very difficult, independently of work place and country of living [14,15]. Physicians who took part in the present study mentioned their private life as a source of stress, however unexpectedly relationships with partner and children were more stressful for doctors working in outpatients polyclinics. It seems that work in hospitals gives the doctors special skills to avoid or to deal with conflicts with ease and to control for longer their awareness and emotions in stressful situations not only in work environment for instance within night shifts but also at home.

It is obvious that job-related stress may contribute to somatic complaints and emotional exhaustion. In stress situations both groups of the surveyed doctors also had health problems, first of all they suffered from insomnia. Additionally physicians working in hospitals complained more often of heartburn, while those employed in outpatient clinics noticed more frequently difficulties with concentration and diarrhoea. Probably doctors in hospitals got used to constant mental work in stress combined with high workload and time pressure.

Doctors employed in hospitals in higher numbers than those in outpatients polyclinics drank alcohol, watched television, listened to music or smoked as a way of coping with stress. Some of those methods could be consequences of the specific character of the workplace in hospitals where even during work hours especially in night shifts it is possible to watch TV or listen to the radio in doctors' rooms. Additionally many hospitals are provided with special rooms for smoking. It also is known that after their hospitalization the satisfied patients offer gifts to their doctors, sometimes alcohol as well.

## CONCLUSIONS

The obtained results show that the work environment of Polish doctors is a source of great stress; however their sensitivity to stressors, stress symptoms and ways of dealing with stress depend on their work place (hospital or outpatient clinics). Physicians' employment in hospitals seems to be more stressful in comparison to that in outpatient clinics and result in anti-stress methods which in great degree may be a result of workplace specifics.

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