Job burnout in emergency service workers in the Silesian Voivodeship

Zjawisko wypalenia zawodowego wśród pracowników służb ratunkowych na terenie województwa śląskiego

Key words: burnout syndrome, emergency medicine
Słowa kluczowe: wypalenie zawodowe, służby ratunkowe

INTRODUCTION

The term ‘job burnout’ was coined in 1974 by Herbert Freudenberger, who defined it as a decrease in the level of energy of a worker resulting from the worker being overwhelmed by other people’s problems. According to him, the phenomenon
is typical for occupations involving interaction with other people. Freudenberger’s
definition indicates the main reasons of job burnout, such as factors leading to emo-
tional overextension, depersonalisation in relationships at work, chronic fatigue,
decreased job satisfaction and involvement in one’s work [1]. Nowadays, the most
often applicable description of job burnout is the one introduced by Christina
Maslash. She characterises the psychological components of job burnout as emo-
tional exhaustion, depersonalisation and decreased personal accomplishments that
may be observed in individuals who work with other people in a particular way.
Emotional exhaustion is the main component and its symptoms are: lack of job satis-
faction, lack of physical and psychological energy, a feeling of emotional overload,
and exhaustion involving psychosomatic symptoms. Depersonalisation results from
emotional exhaustion and is characterised by negative responses to people one helps
and a tendency to a callous, cynical, depersonalised and detached treatment of the
individuals of which one takes care. The third component of job burnout is the expe-
rience of decreased personal accomplishments that is characterised by a tendency to
a negative perception and assessment of one’s work, reduced involvement at work
and decreased job satisfaction [5, 6]. Job burnout affects mainly individuals who
professionally deal with helping others and apply their social skills as the main tool
in their work. Occupational groups likely to be affected by job burnout are physi-
cians, nurses, emergency medical service workers, social workers, psychologists,
teachers and tutors. The reason underlying job burnout is described as failure in
managing work-related stress. When certain expectations related with one’s profes-
sion are combined with continuous exposure to stress-related factors and emotional
tension, they may cause adaptation mechanisms function improperly and, as a result,
lead to a job burnout [1, 5, 6]. Taking into account the consequences of job burnout
not only on the individual but also on the social level, one should put a stronger
emphasis on the phenomenon with regard to prophylaxis [1, 2].

AIMS

The aim of this article is to estimate the frequency of occurrence of job burnout
in emergency service workers in the Silesian Voivodeship. The scale of the phe-
nomenon is going to be closely scrutinised and the impact of gender, age, working
experience and post on the frequency of occurrence is going to be analysed. Moreo-
ver, the aims are also to define the most frequent reasons of job burnout as well as to
assess the workers’ access to job burnout-related trainings that are a part of prophy-
laxis.

MATERIAL AND METHOD

The research was conducted from the 1st March until the 31st May 2013 among
ambulance emergency medical service workers and hospital emergency depart-
ments’ staff members in Silesia. The research was based on an questionnaire pre-
pared by the author of this article. Out of 300 questionnaires that had been distribut-
ed, there were 141 (47%) properly and fully completed responses. In this way, the
The group directly involved in the research included 141 emergency service workers, out of which 55 (39%) were female and 86 (61%) male aged 20 to 65. There were 22 (16%) physicians, 43 (31%) nurses and 76 (53%) emergency medical service workers.

The method was based on a questionnaire consisting of two sections and prepared by the author of this article. The first section included 17 questions concerning the job burnout syndrome. The possibility of occurrence of job burnout was estimated on the basis of 10 questions referring to the symptoms of job burnout, including emotional exhaustion and depersonalisation. The amount of positive responses to the questions indicated the level of possibility of job burnout in the specific individual. It was agreed that job burnout posed a threat to those interviewed who provided positive responses to at least five questions. Other questions included in the first part of the questionnaire referred to the reasons of job burnout, stress management methods as well as preventive methods. The second section of the questionnaire included general questions that referred to e.g. gender, age, education, place and period of work, work experience, and post. The results of the questionnaire were analysed by means of the statistical test one-way ANOVA. The level of significance assumed for all analyses was 0.05.

RESULTS

There was a high percentage of interviewed who provided positive responses to at least five questions included in the first section of the questionnaire. This group of interviewed was composed of 126 (90%) emergency medical service workers and hospital emergency departments’ staff. The risk of job burnout was stated in 50 (91%) female- and 76 (88%) male workers. The risk of occurrence of job burnout was higher in individuals aged over 41 (level of significance p=0.01). There were no statistically significant correlations of job burnout frequency with the post of the worker. However, there was a higher frequency of occurrence of job burnout in individuals with 6 to 10 years of working experience in contrast to workers with a work experience shorter than 5 years (p<0.01). The occurrence of job burnout in the analysed group has been illustrated in detail in the tables below (table 1, 2, 3 and 4), taking into account such factors as age, post, work experience, and amount of working time.
Table 1. The correlation of the risk of job burnout with age in the group of interviewed emergency service workers in the Silesian Voivodeship

<table>
<thead>
<tr>
<th>Age</th>
<th>Burnout syndrome</th>
<th>Yes</th>
<th>No</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and percentage of interviewed emergency service workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 – 30 years</td>
<td></td>
<td>23</td>
<td>3</td>
<td>26 (100%)</td>
</tr>
<tr>
<td>31-40 years</td>
<td></td>
<td>47</td>
<td>12</td>
<td>59 (100%)</td>
</tr>
<tr>
<td>41-50 years</td>
<td></td>
<td>31</td>
<td>0</td>
<td>31 (100%)</td>
</tr>
<tr>
<td>over 51 years</td>
<td></td>
<td>25</td>
<td>0</td>
<td>25 (100%)</td>
</tr>
</tbody>
</table>

Table 2. The correlation of the risk of job burnout with profession in the group of interviewed emergency service workers in the Silesian Voivodeship

<table>
<thead>
<tr>
<th>Profession</th>
<th>Burnout syndrome</th>
<th>Yes</th>
<th>No</th>
<th>Ogółem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and percentage of interviewed emergency service workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency physician</td>
<td></td>
<td>18</td>
<td>4</td>
<td>22 (100%)</td>
</tr>
<tr>
<td>Emergency nurse</td>
<td></td>
<td>42</td>
<td>1</td>
<td>43 (100%)</td>
</tr>
<tr>
<td>Paramedic</td>
<td></td>
<td>66</td>
<td>10</td>
<td>76 (100%)</td>
</tr>
</tbody>
</table>

Table 3. The correlation of the risk of job burnout with working experience in the group of interviewed emergency service workers in the Silesian Voivodeship

<table>
<thead>
<tr>
<th>Working experience</th>
<th>Burnout syndrome</th>
<th>Yes</th>
<th>No</th>
<th>Ogółem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and percentage of interviewed emergency service workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Up to 5 years</td>
<td></td>
<td>57</td>
<td>14</td>
<td>71 (100%)</td>
</tr>
<tr>
<td>6-10 years</td>
<td></td>
<td>51</td>
<td>1</td>
<td>52 (100%)</td>
</tr>
<tr>
<td>over 10 years</td>
<td></td>
<td>18</td>
<td>0</td>
<td>18 (100%)</td>
</tr>
</tbody>
</table>

Table 4. The correlation of the risk of job burnout with amount of working time in the group of interviewed emergency service workers in the Silesian Voivodeship

<table>
<thead>
<tr>
<th>Working time per week</th>
<th>Burnout syndrome</th>
<th>Yes</th>
<th>No</th>
<th>Ogółem</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number and percentage of interviewed emergency service workers</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>up to 48 hours</td>
<td></td>
<td>35</td>
<td>0</td>
<td>35 (100%)</td>
</tr>
<tr>
<td>48 to 72 hours</td>
<td></td>
<td>41</td>
<td>15</td>
<td>56 (100%)</td>
</tr>
<tr>
<td>over 72 hours</td>
<td></td>
<td>50</td>
<td>0</td>
<td>50 (100%)</td>
</tr>
</tbody>
</table>

There were 73 (94%) hospital emergency department workers and 53 (84%) ambulance emergency service workers (including 32 members of the basic teams and 21 members of the special unit of ambulance emergency service) who responded positive to 5 or more questions related to the symptoms of job burnout.

The most frequent reasons of work-related stress that, according to the interviewed emergency service workers in the Silesian Voivodeship, might have an impact on the occurrence of the job burnout syndrome are presented in the picture no. 1.
Job burnout in emergency service workers in the Silesian Voivodeship

Picture 1. Work-related factors that are the potential sources of job burnout according to interviewed emergency service workers in the Silesian Voivodeship

The responses related to the most frequent stress management techniques are presented in the picture no. 2.

Picture 2. Stress management techniques provided by the interviewed emergency service workers in the Silesian Voivodeship

There were only 34 (24%) of the interviewed emergency service workers who participated in trainings and/or workshops preventing the occurrence of the job
burnout syndrome. A high number of interviewed (105, 75%) declared a positive influence of the trainings on quality of their work as well as on their general physical and mental state.

DISCUSSION

Job burnout syndrome affects a large number of professionally active individuals and involves great social and economic costs. Bauer et al. [2] have established that the symptoms of emotional exhaustion, depersonalisation and low self-esteem occur in 25% of German professionally active population. The symptoms of job burnout have been observed in 76% of resident physicians and have corresponded with lower quality of medical care in the case of physicians with a high level of depersonalisation [11]. In our research, the risk of occurrence of job burnout has been observed in 90% of staff members of emergency medical service and hospital emergency departments: job burnout has related to 82% of physicians, 98% of nurses and 87% of emergency medical service workers. However, there has been no correlation found of the job burnout occurrence with the individual’s position in the team. A similar observation has been made by Szaton et al. [12] who have estimated the level of job burnout in a group of emergency medical service workers in the Silesian Voivodeship. Job burnout symptoms in their three aspects (emotional exhaustion, mediocre personal accomplishments, and increased depersonalisation) have been observed in individuals from all of the professional groups (physicians, nurses and emergency medical service workers). There has been no statistically significant correspondence of the level of job burnout in each of the three aspects with the individual’s post and education [12].

There were slightly different results published by Nowakowska et al. [7] who assessed styles of coping with stress as well as the job burnout syndrome among students of medicine and emergency medical services. Although there were no differences observed in the level of stress, students performed better when dealing with stress and searching for social support in the group of other future physicians. Avoiding problems and being involved in alternative activities are the two most frequent stress management coping tactics presented by the students of emergency medical services. Students applying these tactics when dealing with stress are likely to be affected by job burnout in the future.

Similar results have been discussed by Orzechowska et al. [8] who has conducted a research on job burnout among physicians and nurses of the hospital in Łódź. Although both physicians and nurses presented a similar level of depersonalisation, a lower level of emotional exhaustion has been observed in physicians than in nurses [8]. Nevertheless, in a research conducted by Popa et al., there has been a higher level of depersonalisation in physicians working in hospital emergency departments than in those working in ambulance emergency service teams and in a group of nurses. The lowest level of depersonalisation, however, has been observed in a group of paramedics.

The reason of the difference between the hospital emergency service staff and ambulance emergency service workers may derive from the fact that the former have
to deal with a higher number of patients, staff deficiencies, and poor working conditions. They are also exposed to stress related to work under time pressure and are more likely to manage conflicts with patients and their families. In contrast, it is possible for ambulance emergency service workers to work more independently. What is more, they are less exposed to interpersonal conflicts as there is a lower number of workers in their teams.

Similarly in my research, among the interviewed with symptoms of job burnout, there was a higher number of hospital emergency department workers (94%) than ambulance emergency service workers (53; 84%). However, in the article by Gillespie et al. [3] there was a higher level of emotional exhaustion observed in ambulance emergency service nurses than in nurses working in hospital emergency service departments and on intensive care units.

Moreover, the occurrence of job burnout is influenced by such socio-demographic factors as age and working experience. The results of our research have indicated that the risk of job burnout was higher in emergency service workers aged over 40 than in those under 40. In the first group, 100% of interviewed provided positive responses to questions verifying the risk of job burnout whereas in the second group, only in 80% of respondents the answers were positive. The results of the research have also shown that workers with a longer working experience are more likely to be affected by job burnout. To illustrate, the symptoms of job burnout have been observed in all workers with working experience over 10 years.

An explanation for the relation between working experience and the risk of job burnout may be the fact that the job burnout syndrome itself is a process, and it takes time for the symptoms of the syndrome to occur. A worker who fails to develop further work-related stress adaptation skills starts to suffer from emotional exhaustion. In order to avoid exhaustion resulting from contact with patients, the worker applies depersonalisation as a defence mechanism, which results in lower satisfaction with one’s work and decreased personal accomplishments and potential.

What is more, workers with longer working experience are afraid of competition with their younger colleagues and better educated colleagues, which has a negative impact on physical and mental state of workers with longer working experience and makes it difficult for them to perform their professional duties. The correlation of age and working experience with the occurrence of job burnout has also been confirmed by a research by Szaton et al. [12].

However, according to some sources that job burnout more frequently concerns young people with shorter working experience [3,4], which could be explained by their difficulty in finding themselves in a new role of a worker, lack of experience and social support, as well as lack of developed stress coping mechanisms that more experienced workers usually have developed. What may also be important are the discrepancies between the expectations concerning the new work and the everyday reality of the work in the particular medical profession lacking spectacular achievements and demanding a lot of work and effort.
To add to this, a tendency has been observed that some specific symptoms of job burnout depend on gender. In other words, women are more often affected by emotional exhaustion, whereas depersonalisation is more characteristic to men [5, 6, 12]. However, according to the findings of our research, job burnout syndrome itself occurs independently from gender. The risk of occurrence of job burnout has been stated in 50 (91%) female workers and 76 (88%) male workers.

Important factors increasing the risk of occurrence of job burnout are workplace related factors, such as work under time pressure, improper working conditions, long working hours and night work. Other factors relate to the sector of healthcare and include psychological burden resulting from high responsibility, poor salary, conflicts in the team, low social support and poor cooperation with patients [1, 3, 9]. Among the interviewed ambulance emergency service- and hospital emergency service workers in the Silesian Voivodeship, job burnout has been more frequently observed in individuals with a higher number of weekly working hours. The most often sources of job burnout syndrome provided by the interviewed were long working hours and nervous atmosphere accompanying their professional activities at work.

There are both individual and social negative consequences of job burnout. Prolonged stress and job burnout are harmful to one’s health. Mental diseases, cardiovascular- and respiratory system disorders and illnesses affecting motor organs are frequent reasons of a higher absence rate at work, which involves certain economic consequences. Moreover, job burnout causes decreased one’s involvement in professional activities and effectiveness of work, which results in worse quality of work done.

Prevention and treatment with regard to the job burnout syndrome is not easy, difficult to apply and, unfortunately, not very common. Coping with and preventing job burnout is based on a training with the use of relaxation techniques, making oneself familiar with stress management tactics, social skills and time management training [1, 2].

There have been only 25% of emergency medical service workers in our research who participated in any trainings focused on preventing job burnout. A majority of respondents has declared a positive influence of the trainings in which they participated on their psychical and mental state and on quality of work. Therefore, it would be beneficial when employers were obliged to assure that job burnout preventive measures are introduced among employees.

CONCLUSION

1. The symptoms of job burnout has been observed in 90% of emergency service workers participating in the research.

2. Statistically significant, there has been a higher risk of occurrence of job burnout in groups aged over 41.
3. The results of the research indicate that the frequency of occurrence of job burnout was higher in individuals with working experience between 6 and 10 years as well as in respondents working longer than 72 hours per week.

4. The most often sources of job burnout syndrome provided by the interviewed were long working hours and nervous atmosphere accompanying their professional activities at work.

5. There have been only 25% of emergency medical service workers in our research who participated in any trainings focused on preventing job burnout. A majority of respondents has declared a positive influence of the trainings in which they participated on their psychical and mental state and on quality of work.

REFERENCES


**ABSTRACT**

The aim of the study was to evaluate the frequency of occurrence of job burnout in emergency service workers in the Silesian Voivodeship. An questionnaire was conducted among 141 emergency service workers. The symptoms of job burnout has been observed in 90% of emergency service workers. There has been a higher risk of occurrence of job burnout in groups aged over 4, with working experience between 6 and 10 years, working longer than 72 hours per week. The most often sources of job burnout syndrome provided by the interviewed were long working hours and nervous atmosphere. There have been only 25% of emergency medical service workers who participated in any trainings focused on preventing job burnout. A majority of respondents has declared a positive influence of this trainings.

**STRESZCZENIE**

Celem pracy była ocena występowania wypalenia zawodowego wśród pracowników służb ratunkowych na terenie województwa śląskiego. Badanie przeprowadzono za pomocą autorskiego kwestionariusza wśród 141 pracowników służb ratunkowych. Objawy wypalenia zawodowego występowały u 90% ankietowanych. Zagrożenie wypaleniem zawodowym występowało częściej w grupach wiekowych powyżej 41 roku życia, ze stażem pracy od 6 do 10 lat, pracujących dłużej niż 72 godziny tygodniowo. Jako najczęstsze przyczyny zespołu wypalenia zawodowego ankietowani podawali wydłużone godziny pracy oraz nerwową atmosferę. Tylko 25% ankietowanych uczestniczyło w szkoleniach z zakresu profilaktyki zespołu wypalenia zawodowego z czego większość deklaruje pozytywny wpływ szkoleń na poprawę samopoczucia i jakości pracy.

*Artykuł zawiera 22670 znaków ze spacjami + grafika*