Dear Editor:

Burnout syndrome is psychological experience that produces physical, emotional and mental symptoms and signs and might occur at the individual or collective level. Most authors consider the stress, in one way or another, as the key factor in the development of burnout. It has been shown that factors such as burnout and job satisfaction can have a substantial impact on the nature and quality of care (Galeazzi et al., 2004). It has been shown that people with higher education have jobs with greater responsibilities and higher stress (Maslach et al., 2001; Bakker et al., 2000; Iacovides et al., 2003). Also, health workers reported significantly greater pressure at work than workers from non-health care sectors (Gillespie & Melby, 2003). The highest burnout indices were found in general practice (Cathetras et al., 2004), psychiatry, child psychiatry, internal medicine and oncology (Olkinoura, 1990; Winefield & Anstey, 1991). Several studies have shown high levels of dissatisfaction, stress and burnout among psychiatrists (Guthrie et al., 1998; Rathod et al., 2000; Evans et al., 2006), and community psychiatric nurses (Priebe et al., 2005). Workload and shortage of time, combined with decision-making responsibilities, are considered as the major sources of stress among doctors. It is, however, useful to analyze the causes of staff burnout according to locus at which preventive action can take place, i.e. individual, job features and the organizational environment (Ozyurt et al., 2006). People do not simply respond to the work setting, they rather react to the unique qualities of their relationships. The personal factors involved in these reactions include demographic variables (such as age or formal education), enduring personality characteristics, and work-related attitudes (Maslach et al., 2001).

Age has been most consistently related to the burnout, of all studied demographic variables. However, the findings are rather controversial. In one study the level of burnout is reported to be higher among younger employees than among those over 30 or 40 years old (Schaufeli et al., 2001), while other authors reported that early career burnout does not necessarily have significant negative long-term consequences, while the burnout occurring later in a person’s career might have more serious effects (McCrae & Brandsma, 1988).

Although widely spread, the burnout syndrome was seldom studied in countries which were exposed to intense stressors, such as civil conflict and social transition. The aim of our study was to compare burnout syndrome of general practitioners in three countries - two countries that have experienced war and social transition (Bosnia and Serbia), and a highly organized and peaceful country (Norway). Our hypothesis was that the burnout syndrome is higher among general practitioners in post-war countries, that it is in positive correlation with daily number of patients and higher in female physicians.

METHOD

The study was carried out during training of general practitioners for treatment of patients with mental health problems. The training was organized during 2003, with the same programme in Sarajevo and Belgrade. Norwegian general practitioners filled in the questionnaire during their course of a continuous education. The sample consisted of 111 general practitioners who were engaged in the training.

The burnout was assessed using the Maslach Burnout Inventory (MBI), (Maslach & Jackson, 1986), which is a self-report tool yielding scores for three components - emotional exhaustion (EE), depersonalization (DP) and reduced personal accomplishment (PA). The MBI has 22 items. Participants rated the frequency of experiencing feelings related to each subscale using a 7-point scale.
For quantitative data, descriptive statistics was used with frequency and percentage distributions for categorical data and means and standard deviations for continuous data. Pearson’s and Spearman’s correlations were used to assess associations between continuous variables, and the Pearson’s Chi-Square for associations between two categorical variables. Demographic variables as well as variables derived from the qualitative analyses were all considered as predictors.

RESULTS

Seventy four of general practitioners were female (66.7%) and 37 male (33.3%). Their mean age was 40.79 (SD 7.32) ranging from 27-57 years. There were 31 general practitioners from Sarajevo (27.9%), 41 from Oslo (36.9%) and 39 (35.2%) from Belgrade.

As for their marital status, 71% of doctors from Sarajevo were married, 12% divorced and 17% single, while 53.8% of doctors from Belgrade were married, 1% was divorced and 45.2% were single. There was a significant difference between Sarajevo and Belgrade sample, regarding their married status \( \chi^2 \) is 10.024, \( p<0.01 \).

ANOVA test has shown a significant difference between general practitioners in three cities regarding their age, years of practice and number of patients. However, post hoc Schaeffe’s analysis has shown that this difference existed only between Sarajevo and Oslo \( (p<0.001) \) sample. Regarding daily number of patients there was also a difference between Belgrade and Oslo \( (p<0.001) \), as well as between Sarajevo and Oslo \( (p<0.001) \). As for years of practice, there was a difference both between Belgrade and Oslo and Sarajevo and Oslo \( (p<0.001) \). Bivariate correlation has shown a statistically significant correlation between number of patients and burnout dimension of emotional exhaustion. This correlation was positive, i.e. doctors with greater number of patients were more prone to emotional exhaustion.

Mean burnout scores for the three samples are shown in table I.

### Table I. - Means and standard deviations of the burnout scores of general practitioners in three cities.

<table>
<thead>
<tr>
<th>Maslach Burnout Inventory</th>
<th>Belgrade</th>
<th>Sarajevo</th>
<th>Oslo</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>27.3(12.14)</td>
<td>19.5(9.69)</td>
<td>18.6(8.95)</td>
<td>8.09</td>
<td>0.001</td>
</tr>
<tr>
<td>Depersonalisation</td>
<td>8.0(5.81)</td>
<td>5.7(5.74)</td>
<td>7.4(4.12)</td>
<td>1.66</td>
<td>0.19</td>
</tr>
<tr>
<td>Personal accomplishment</td>
<td>17.9(6.91)</td>
<td>19.3(6.82)</td>
<td>18.7(5.85)</td>
<td>0.41</td>
<td>0.66</td>
</tr>
<tr>
<td>Total score</td>
<td>53.2</td>
<td>44.5</td>
<td>44.7</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Table II. - Gender difference of the burnout level.

<table>
<thead>
<tr>
<th>Burnout dimension</th>
<th>Gender</th>
<th>Mean (SD)</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional exhaustion</td>
<td>Female</td>
<td>24.21(10.9)</td>
<td>0.32</td>
<td>0.02</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>17.4(10.01)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depersonalization</td>
<td>Female</td>
<td>7.4(5.69)</td>
<td>0.683</td>
<td>0.486</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>6.6(4.32)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal accomplishment</td>
<td>Female</td>
<td>18.56(6.8)</td>
<td>-0.122</td>
<td>0.903</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>18.72(5.7)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total score</td>
<td>Female</td>
<td>50.34(18.67)</td>
<td>2.077</td>
<td>0.040</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>42.89(15.7)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

All burnout indices (emotional exhaustion, depersonalisation, personal accomplishment) were high in Belgrade sample. The first two were average in Sarajevo and Oslo sample, while the third (personal accomplishment) were high in these two samples as well.

Gender difference in the burnout is shown in table II. There was a statistically significant difference on the dimension of emotional exhaustion \( (p<0.05) \) and on the global score \( (p<0.05) \), with these two indices higher among female general practitioners.

However, computed separately for each centre, these differences were clear only for Sarajevo sample. There were no differences for Belgrade (only three men) and for Oslo (where the people apparently have different approach to gender issues).

DISCUSSION

Our study analyzed presence of the burnout syndrome in general practitioners from three cities in Europe, in two countries with recent war experience, currently in the process of social transition (Serbia and Bosnia), and in a country with a high standard and social and economic stability (Norway).
Our results have shown that the burnout was higher in post-war cities. The unexpected finding was the rather high level of burnout among general practitioners in Oslo, who work under favourable conditions. But, the finding is in accordance with findings in developed countries (Winefield & Anstey, 1991). This might be related to the influence of organizational factors (daily number of patients) and personal characteristics (age, years of practice).

Our study has also shown that there is a positive correlation between number of patients and burnout dimension of emotional exhaustion, i.e. doctors with greater number of patients are more prone to emotional exhaustion. Our finding of a greater burnout among female physicians is in accordance with findings of previous studies, and is logical, due to a double role, or a specific “role strain” experiencing by most female doctors (due to conflict between professional and domestic duties). More prevalent burnout syndrome in female physicians may result from structured but implicitly different gender-related work expectations and more compassionate attitude towards patients, colleagues and other coworkers (McMurray et al., 2000).

According to our knowledge, the burnout was seldom studied in the countries that experienced prolonged stress due to war, civil arrest, economic deprivation and political upheaval. Under these conditions health workers experience persistent stress due to many reasons. Because of low salaries many of them have to accept extra work demands in order to survive and do not have vacation for years. Sometimes, that overwork is a defense mechanism against feeling of hopelessness, and gives meaning to life. All this happens under a continuous great external environmental pressure. Multiple roles and responsibilities of doctors during war cause chronic stress and burnout. The additional cause might be related to the work with traumatized individuals, i.e. by secondary traumatization.

There is no doubt that the burnout syndrome can have harmful effects. Therefore it should be recognised early and preventive measures as well as mental health promotion should be planned, especially in countries experiencing multiple and prolonged stressors.

Limitations of our study might be relatively small sample size which is due to the number of participant included in the training process. However, the study is ongoing among health workers of different specialties.

BIBLIOGRAFIA


