BURNOUT SYNDROME IN BULGARIAN PHARMACISTS – PILOT STUDY

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Abstract:

Introduction: Work in the field of healthcare is accompanied by considerable emotional tension. Pharmacists are at risk of professional burnout, but so far, there is very little scientific research in this professional group in Bulgaria.

Objective: To study the presence of Burnout Syndrome among Bulgarian pharmacists and perform an analysis according to the demographic characteristics of respondents.

Material and Methods: A pilot study was conducted for the presence of Burnout Syndrome among 142 pharmacists in Varna, Bulgaria, working in different areas of the pharmaceutical sector: pharmacies for public services, hospital pharmacies, pharmaceutical companies, higher education institution. The information was collected using an anonymous questionnaire that included the specialized Maslach Burnout Inventory (MBI) tool to examine professional burnout according to three subscales: emotional exhaustion, depersonalisation and personal accomplishment.

Results: Higher levels of emotional exhaustion and depersonalisation were found in male respondents in comparison to women, while the values between the two genders were almost similar according to the professional achievement subscale. The most vulnerable group was the male group at the age of 31-40. Pharmacists over the age of 50 had lower levels of burnout as they had developed good habits to deal with stress.

Conclusion: Gaining professional experience in pharmacists is associated with an increase in the levels of professional burnout. High levels of depersonalisation are a prerequisite for worse quality of pharmaceutical care.

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Keywords: burnout, pharmaceutical sector, pharmacists, demographic characteristics

Introduction:

Work in the field of healthcare is accompanied by considerable emotional tension. In performing this work, the service provided to the user (patient) is inseparable from the personality of the healthcare professional that provides these services (Georgieva and Popova, 2016). Burnout is particularly characteristic of healthcare professions because healthcare users expect not only qualified care but also human compassion and understanding (Lecheva et al., 2017).

Burnout or professional burnout is a term that has gained widespread popularity. This term describes the emotional, mental and physical exhaustion directly related to the occupational environment observed in healthy people (Maslach et al., 2001). Burnout symptoms may occur in ordinary people without pathological problems and are distinguished from other mental illnesses. Burnout is thought to be a reaction to chronic stress (Maslach et al., 2001). The term was first introduced in 1974 by Freudenberg. He described the presence of burnout in therapists who worked with drug addicts in the United States and determined it as a state of fatigue or frustration triggered by a commitment to a cause, lifestyle or ambition that cannot produce the expected reward (Freudenberg, 1974). Cristina Maslach, an American professor of psychology at the University of California, Berkeley, USA, deepened her research on the problem and developed and validated the Maslach Burnout Inventory (MBI) to distinguish occupational burnout from other mental illnesses. According to the MBI, symptoms are classified according to three scales: emotional exhaustion, depersonalisation and personal accomplishment (performance).

Emotional exhaustion is characterized by a lack of energy, chronic fatigue, insomnia, depression, increased irritability and frequent negative and affective reactions. In healthcare, depersonalisation appears as an insensitive and inhumane attitude to people who depend on the professional's activities (Boyko, 1999). High levels of professional burnout are associated with low values from the scale of professional achievement or personal accomplishment (performance). Workers show a sense of incompetence in the professional field, failure and not coping with their work. In these situations, the focus is on their personal failure, not what has been achieved (Boyko, 1999).

Burnout syndrome is a consequence of the combined effects of organizational and occupational stressors, and personality factors. Literature sources indicate that burnout correlates with the demographic factors of

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gender and age, as well as with work experience (Vodopyanova and Starchenko, 2008). Occupational burnout is generally thought to be more pronounced in women (Vodopyanova and Starchenko, 2008). There is an interesting observation that burnout is higher in women which have children aged 1-12 years (El-Ibiary et al., 2017). When examining the correlation between occupational burnout and age in healthcare professionals, age was found to correlate with the emotional exhaustion scale (Tsenova and Velkova, 1999). A survey of burnout syndrome in healthcare providers conducted in Bulgaria showed that as respondents' age increased, the quality of healthcare decreased (Yankova, 2017). A survey in pharmacists working at a hospital pharmacy in Japan found that half of the respondents had burnout and there was a negative inverse correlation between burnout and work experience (Higuchi et al., 2016).

Pharmacists are the medical professionals who are most frequently visited and most accessible to the public. The role of the pharmacist in improving public health comprises various activities – providing objective information and patient counselling on disease prevention, ensuring drug safety, performing a proper screening of patients' conditions and recommending adequate therapy (Tsvetkova et al., 2014). Pharmacists are at risk of professional burnout but currently there is very little research available in this professional group in Bulgaria.

Objective

The purpose of this study is to investigate the presence of burnout syndrome among Bulgarian pharmacists and perform an analysis according to the demographic characteristics of the respondents.

Methodology

A pilot study was conducted for the presence of burnout syndrome among 142 pharmacists in Varna, Bulgaria, working in different areas of the pharmaceutical sector: pharmacies for public services, hospital pharmacies, pharmaceutical companies, and a higher education institution. The information was collected using an anonymous questionnaire that included the specialized Maslach Burnout Inventory (MBI) (Maslach C, Jackson SE, Leiter MP, 1996). The Bulgarian translation of the questionnaire was validated and adapted by B.Tsenova (B.Tsenova, 1999). The tool for examining professional burnout consists of three subscales: emotional exhaustion, depersonalisation and personal achievement (working capacity).

The statistical confirmation of the questionnaire was performed by Cronbach's alpha reliability coefficient. The data demonstrated good factor structure and very good reliability coefficients (Cronbach's alpha for emotional exhaustion $\alpha = .91$; depersonalisation $\alpha = .66$; professional achievement $\alpha = .80$). Reliability coefficient of the whole questionnaire is $\alpha = .76$ (Tsenova, 1999).

Respondents' distribution according to their demographic characteristics and length of service is presented in Table 1. The majority of pharmacists were female (74%), in line with the trend for increasing feminization of the healthcare professions.

Table 1: Distribution of respondents by gender, age and length of service			
Gender		n	%
Female		105	74
Male		37	26
Age		n	%
Up to 30 years		45	32
31-40 years		34	24
41-50 years		43	30
Above 50 years		20	14
Length of service		n	%
Up to 5 years		27	19
6-10 years		41	29
Above 10 years		74	52

Source: Authors

More than half of the studied persons had over 10 years of work experience in the pharmaceutical sector (52%), which was a solid basis for a good knowledge of the peculiarities of the profession, as well as for gaining sufficient experience in various situations.

Based on the number and type of dependent and independent variables the Independent Samples t-Test was chosen for the analysis of the dependencies between the two groups (male and female).

Based on the number and type of dependent and independent variables the one-way analysis of variance (ANOVA) was used for the analysis of the dependencies between age groups (up to 30 years; 31-40; 41-50; above 50).

The analyses were performed at a level of statistical significance $\alpha=0.05$.

Results

The results of occupational burnout on the three MBI subscales, i.e. emotional exhaustion, depersonalisation and personal accomplishment (performance) in both genders, are presented in Table 2.

Table 2: Distribution of mean MBI subscale values by gender of respondents			
Gender	Emotional exhaustion (mean values)	Depersonalisation (mean values)	Professional achievement (mean values)
Female	21.13	9.46	35.13
Male	24.16	12.20	34.47
Total	21.94	10.20	35.00

Source: Authors

Male respondents demonstrated higher levels of emotional exhaustion and depersonalisation than female, while the professional achievement subscale showed almost similar values between the two genders. The pilot study found different results in terms of gender in comparison with other literature data. According to other studies, higher emotional exhaustion in women is due to the higher level of stress in women, which is explained by the need to reconcile careers and household responsibilities. The level of burnout was much higher in women who lack psychosocial support from their family. Women, who were away from work for long periods due to maternity leave, feel vulnerable and guilty while catching up and adapting to the rhythm of work and the ever-changing conditions and requirements of the profession (Vodopyanova and Starchenko, 2008).

According to the emotional exhaustion factor a statistically significant difference was not found between the arithmetic mean values for the male group ($M=24.41$; $SD=9.188$) and for the female group ($M=21.13$, $SD=8.910$) – $t=-1.902$, $p=0.059>0.05$.

According to the depersonalisation factor a statistically significant difference was found between the arithmetic mean values for the male group ($M=24.41$; $SD=9.188$) and for the female group ($M=9.46$, $SD=5.297$) – $t=-2.702$, $p=0.008<0.05$.

According to the Professional achievement factor statistically significant difference was not found between the arithmetic mean values for the male group ($M=34.81$, $SD=8.147$) and for the female group ($M=35.13$, $SD=6.902$) – $t=-1.902$, $p=0.059>0.05$.

A burnout study in various age groups revealed that the most affected persons were those in the group of persons at the age between 31-40 years (Table 3). In this age group, the level of emotional exhaustion and depersonalisation was the highest and the level of sense of professional achievement was the lowest.

Table 3: Distribution of mean MBI subscale values by age of respondents			
Age	Emotional exhaustion (mean values)	Depersonalisation (mean values)	Professional achievement (mean values)
Up to 30 years	20.73	10.73	35.73
31-40 years	23.86	11.34	33.04
41-50 years	22.29	9.35	36.08
Above 50 years	19.86	8.18	35.54

Source: Authors

Pharmacists older than 50 years had lower burnout levels. This study group of individuals felt successful and had good habits to deal with stress; however, too low levels of burnout could be an indicator of lack of emotional attachment to work and inertia in performing their professional duties.

For clearer differentiation, the mean age values were compared in both genders. This indicated the most vulnerable group more accurately. Summary results for both genders are presented in Figure 1 for women and Figure 2 for men.

Results showed that men were more susceptible to professional burnout, especially those aged 31-40 years, followed by men aged 41-50 years. Men in these age groups had high scores on the emotional exhaustion and depersonalisation subscales. Respondents in the age group 31-40 years were at such a stage of their lives that they wanted to gain recognition for their efforts so far through career development. Many men did not see any opportunity for career growth. During the preparation of this study, one of the study individuals in

that group shared, “The more I work, the more doors close in front of me.” Men over 50 had low scores in all subscales, which could be interpreted as a lack of emotional involvement in the work process.

Figure 1. Distribution of mean MBI subscale values by age of female respondents

Source: Authors

Figure 2. Distribution of mean MBI subscale values by age of male respondents

Source: Authors

No statistically significant difference was found in the average values of the emotional exhaustion factor ($p=0.415>0.05$), depersonalisation factor ($p=0.066>0.05$) and professional achievement factor ($p=0.505>0.05$) between the separate age groups.

The analysis of the results according to the respondents' work experience showed the lowest emotional exhaustion in persons with up to 5 years of experience, which can be explained with the initial enthusiasm for practicing the profession. In the first years of their work, pharmacists performed their job duties with great pleasure and had high expectations for their professional development. Later on, their job satisfaction declined but they developed a work routine, which to some extent balanced the constant stress at work.

Discussion

The identified statistically significant depersonalisation in men was a prerequisite for insufficient understanding of the patient looking for advice about their health issues, communication difficulties and subconscious avoidance of empathy. It should be noted that the majority of staff in pharmacies were women and according to the study findings they demonstrated a more adequate adaptability to the working environment and better stress management. We presume that women's preference to work as pharmacists was because they got attuned to the requirements and dynamics of the working environment faster.

In the scientific literature in cases of depersonalisation the person experiences a state of detachment and helplessness, loss of motivation, destruction of ideals and lack of confidence in personal development. In the social sphere, depersonalisation manifests itself as an insensitive and inhumane attitude towards people depending on the professional's activities. Initially that attitude could remain hidden but gradually the internal irritability grows and becomes more evident and which leads to conflicts (Maslach et al., 2001, Boyko, 1999). All of that has a negative impact on the quality of the provided pharmaceutical care. A task of the

pharmaceutical community is to preserve pharmacists' health, to provide good-quality pharmaceutical care, maintain the prestige of the profession and expand the opportunities for professional development.

Conclusion

Pharmacists practicing in various sectors show a high level of emotional exhaustion and depersonalisation, with the professional burnout being more pronounced in men. The most vulnerable group is the male group aged 31-40 years. Depersonalisation shows high levels across the entire population, which is a prerequisite for reduced attention to patients and poor pharmaceutical care.

References

- Boyko V (1999). Method for diagnosing the level of emotional burnout; In: D. Raigorodsky (eds.) Practical Psychodiagnostics: Methods Tests. Samara; S. 161-169.
- El-Ibiary SY, Yam L, Lee KC (2017). Assessment of Burnout and Associated Risk Factors among Pharmacy Practice Faculty in the United States; *Am J Pharm Educ*; 81(4):75 -78 (ISSN: 1553-6467)
- Eslami A, Kouti L, Javadi M R, Assarian M, Eslami K (2015). An Investigation of Job Stress and Job Burnout in Iranian Clinical Pharmacist, *J Pharm Care*; 3(1-2):21-25.
- Freudenberger, H. (1974) Staff Burnout. *Journal of Social Issues*, 30, 159-165. <http://dx.doi.org/10.1111/j.1540-4560.1974.tb00706.x>
- Georgieva L, Popova S (2016). Professions in Healthcare; Varna: Steno. ISBN: 978-954-449-864-1
- Higuchi Y, Inagaki M, Koyama T et al. *BMC Public Health* (2016). A cross-sectional study of psychological distress, burnout, and the associated risk factors in hospital pharmacists in Japan: 16:534 -538.
- Lecheva Z, Georgieva L, Stoicheva M (2017). Theoretical Foundations of Occupational Stress and Burnout Syndrome; *Journal of Social Medicine*; 1:33-35. ISSN 1310 – 1757
- Maslach C, Jackson SE, Leiter MP. *Maslach Burnout Inventory Manual*; 3 ed. Palo Alto, CA: Consulting Psychologists Press; 1996
- Maslach C, Schaufeli W, Leiter M (2001). Job burnout.; *Annu Rev Psychol*; 52:397-422.
- Tsenova B, Velkova D,(1999) Psychosocial factors and stress in nurses. *Hygiene problems*; Vol. XX (1):23-31.
- Tsvetkova A, Todorova A, Petkova V (2014). The role of pharmacist as an advisor on responsible self-medication: a survey- *World journal of Pharmacy and Pharmaceutical sciences*; 3(11): 325-335. ISSN 2278 – 4357
- Vodopyanova NE Starchenko ES (2008) Burnout syndrome: diagnosis and prevention; St. Petersburg: Peter, 2008.
- Yankova G (2017). Health Care and Burnout Syndrome in the Context of Professional Activity; Medical University of Sofia; 10.01.2017 (<http://hdl.handle.net/10861/1146>)