BIOMEDICINSKA ISTRAŽIVANJA
2022;13(2):177–186

UDK: 616.379-008.64+616.12-008.331.1
DOI: 10.5937/BII2202177K

Original article

Burnout syndrome and the quality of life of patients with diabetes mellitus and hypertension

Vesna Krstović Spremo[1], Sanja Marić[2], Ljiljana Kulić[3]

[1]University of East Sarajevo, Faculty of Medicine Foca, The Republic of Srpska, Bosnia and Herzegovina
[2]University Hospital Foca, The Republic of Srpska, Bosnia and Herzegovina
[3]University of Priština, Faculty of Medicine, temporarily located in Kosovska Mitrovica, Serbia

Primljen – Received: 07/07/2022
Prihvaćen – Accepted: 23/11/2022

Corresponding author:
Vesna Krstović Spremo, MD, PhD
Studentska 5, 73300 Foča
vesnakspremo@gmail.com

Summary

Introduction. The World Health Organization (WHO) defines burnout syndrome as a condition caused by chronic stress at work, which may be associated with the onset and worsening of psychosomatic illnesses and the quality of life of sufferers. The aim of the work was to determine the prevalence of burnout syndrome in the population of people with leading, chronic, massive, non-communicable diseases, type 2 diabetes and arterial hypertension, while assessing the impact of this syndrome on the quality of life of the subjects.

Methods. The research was conducted as a cross-sectional study from March 2019 until October 2019 on a randomized sample of 92 patients with type 2 diabetes and 99 patients with hypertension from two Health Centres in East Sarajevo. A special criterion for inclusion in the research was that the respondents were employed and that their age did not exceed 65 years. The research instrument was a general questionnaire, the WHO questionnaire on burnout syndrome, as well as the WHO SF-36 questionnaire on the quality of life, and statistical data processing was done in the SPSS program version 19.0. The significance of the difference was tested by the $\chi 2$ test, and the existence of burnout syndrome was defined according to the WHO questionnaire.

Results. In subjects with diabetes, burnout syndrome was present in 52.8% (mildly expressed in 15.2% of the subjects, candidate for burnout syndrome in 19.6% of the subjects, burnout syndrome was present in 17.4%, while in one subject burnout syndrome that endangers health was found) and in subjects with hypertension, burnout syndrome was found in 32% of the subjects. Burnout syndrome was more present in subjects with diabetes than in subjects with hypertension. The difference was statistically significant ($\chi 2 = 8.42$; $p = 0.003$). Subjects with diabetes were significantly more depressed and discouraged than subjects in the group with hypertension ($\chi 2 = 16.14$; $p < 0.01$). The subjects with diabetes had significantly more difficulty in performing their job than those with hypertension during the past four weeks ($\chi 2 = 13.098$; $p = 0.011$).

Conclusion. There is a significant frequency of burnout syndrome in patients with diabetes, but also in patients with hypertension. The existence of cause-and-effect relationships significantly affects the quality of life of patients and their ability to work.

Key words: burnout syndrome, diabetes, hypertension, quality of life

Introduction

The World Health Organization (WHO) describes burnout syndrome "as a condition caused by chronic stress at work. Burnout syndrome is a prolonged response to chronic emotional and interpersonal stressors at work, and it is defined by the following dimensions: emotional exhaustion, cynicism (negative, dehumanized and insensitive attitudes towards people who are service recipients), depersonalization, lack of work involvement, low level of personal achievement and labour inefficiency" [1].

Burnout syndrome is a multidimensional chronic condition related to professional work that has consequences on the health and work ability of the sufferers. Many studies have investigated the possible connection between chronic stress at work and diabetes, as well as the quality of life of people with diabetes. Chronic stressors at work in people with diabetes are work overload, a sense of inequality and injustice manifested by the management of the company they work in, the possibility of job loss, conflicts at work and other work-related factors [2, 3].

Burnout syndrome, on the other hand, is associated with a disorder of the atherogenic lipid status in patients with diabetes, but it is also marked as a "trigger" for the onset of the disease. Several studies have found that duration of diabetes is associated with reduced quality of life in both types of diabetes, and most studies report that quality of life is worse in people with diabetes than in the general population, particularly in terms of physical functioning as opposed to social or mental aspects of quality of life. Studies examining more closely the specific domains of quality of life in people with both types of diabetes suggest that type 1 diabetes may be associated with limitations in physical health and current health perception, while in people with type 2 diabetes there may be reduced domains of physical functioning and limitations due to emotional problems and energy levels [4, 5, 6, 7].

The most common symptoms of burnout syndrome are: lack of energy, exhaustion, reduced work capacity, forced thoughts about work, deconcentration, reduced need for social contacts, emotional instability, muscle pain, dizziness [8].

Although burnout syndrome was originally associated with the profession of managers, and was often described as a "managerial disease", during many years of research it was found that the most common victims of burnout syndrome are employees in the health sector, but also those who work in direct contact with people or have direct responsibility for employees [9, 10].

Burnout syndrome has been the subject of many scientific researches since the 70s of the last century, so various measurement instruments have already been designed, such as several questionnaires used for that purpose [11]. The leading, mass, non-communicable diseases of today's civilization are diabetes and hypertension, which represent a huge health problem, both for the sufferers and for society as a whole [12].

Methods

The research was conducted as a cross-sectional study from March 2019 until October 2019 on a randomized sample of 92 patients with type 2 diabetes and 99 patients with hypertension from two Health Centres in East Sarajevo. A special criterion for inclusion in the research was that the respondents were employed and that their age did not exceed 65 years.

The research instrument was a general questionnaire, the WHO questionnaire on burnout syndrome, as well as the WHO SF-36 questionnaire on the quality of life, and statistical data processing was done in the SPSS program version 19.0.

The questionnaire on the quality of life SF-36v2 (Short form SF-36 ver 2) is used to measure the general quality of life. This questionnaire has 36 questions grouped into eight aspects (domains) of the quality of life. By further grouping the domains, two summary scores (physical and mental) are obtained. Coding of responses and calculation of domain values and summary scores is performed according to the SF-36 version 2.0 method in relation to the average population. The quality of life questionnaire includes eight domains of health: physical functioning, role-physical, bodily pain, general health, vitality, social functioning, role-emotional and mental health [13, 14, 15]. For the group of patients with diabetes, the summary scores were calculated: physical (PCS) and mental (MCS), and the average values of the summary scores were calculated. For the group of respondents with hypertension, the quality of life was not calculated according to the SF-36 questionnaire, so we compared the question about the quality of life that was asked for both groups of respondents according to the subjective assessment of the respondents and categorized them into three categories as: good, satisfactory and bad, whereby we used the $\chi 2$ test to test the difference. The significance of the difference for the occurrence of burnout syndrome between subjects with diabetes and subjects with hypertension was tested with the $\chi 2$ test, and the existence of burnout syndrome was defined according to the WHO questionnaire from 1997, which was designed for research on burnout syndrome.

The research was conducted in accordance with the ethical principles based on the Declaration of Helsinki and the relevant ethical committees approved the study, and all respondents gave their consent to be included in the study.

Results

The average age of the subjects of both groups is similar and not statistically significant ($p > 0.05$), so the groups are comparable in terms of age (Table 1).

Table 1. The average age of the subjects by groups

Group of subjects	Mean value	SD	Significance (p)
Subjects with diabetes	55.08	8.281	N.S
Subjects of the control group	54.90	6.91	

SD - standard deviation
NS: not significant

In the group with diabetes, there were 53.26% of male subjects and 46.74% of female subjects, and in the group with hypertension, 52.53% of male subjects and 47.47% of female subjects (Table 2).

Table 2. Distribution of the subjects by gender

Gender	Subjects with diabetes		Subjects with hypertension	
	Number	Percentage (%)	Number	Percentage (%)
Male	49	53.26	52	52.53
Female	43	46.74	47	47.47
Total	92	100.0	99	100.0

The majority of respondents in both groups were in the occupational group from SE (secondary education) and HE (higher education) categories (Table 3).

In subjects with diabetes, burning syndrome is present in 52.8%, and in subjects with hypertension in 32% of subjects. The difference is statistically significant ($\chi 2 = 8.42$; $p = 0.003$), relative risk (RR = 1.53, Confidence interval = 1.12–2.08) (Table 4).

For the group of patients with diabetes, the summary scores were calculated: physical (PCS) and mental (MCS), and the average values of the summary scores were calculated, which were: for PCS 42.6±9.8 and MCS 37.5±13.5. The obtained values indicate that the quality of life (QOL) of subjects suffering from diabetes is significantly reduced compared to the QOL of the average population (50.0). The mental component summary (MCS) score is 1.25 SD lower than the population average, and the physical component summary (PCS) score is 0.74 SD lower than the population average. The minimum MCS value is 7.0, the maximum 65.0 producing a relatively large SD of 13.5, while the PCS values range from 20.4 to 62.6 with an SD of 9.8. According to the subjective assessment of their own quality of life, respondents suffering from diabetes do not differ from respondents with hypertension. The difference is not statistically significant ($\chi 2 = 3.472$; $p = 0.176$) (Table 5).

Table 3. Distribution of the subjects by the type of occupation

Answer	Subjects with diabetes		Subjects with hypertension	
	Number	Percentage (%)	Number	Percentage (%)
Unqualified workers	11	11.9%	8	8.0%
SE - artisans and manual workers, drivers	14	15.2%	20	20.2%
SE - clerks	39	42.3%	49	49.4
HE - clerks	25	27.1%	21	21.2%
MA and PhD (officials and university teachers)	3	3.2%	1	1.0%
Total	92	100.0	99	100.0

Table 4. Distribution of the subjects according to the presence of burnout syndrome

FORM OF THE PRESENCE OF THE SYNDROME	Diabetes		Hypertension	
	Number	%	Number	%
Not present	43	46.7	68	68.7
Mildly expressed	14	15.2	9	9.1
A candidate for burnout syndrome	18	19.6	17	17.2
Burnout	16	17.4	4	4.0
Endangers health	1	1.1	1	1.0
Total	92	100.0	99	100.0

Table 5. The subjects according to subjective assessment of the quality of life

Quality of life	Subjects with diabetes		Subjects with hypertension	
	Number	Percentage (%)	Number	Percentage (%)
Good	8	8.7%	17	17.2%
Satisfactory	50	54.3%	53	53.5%
Bad	34	37.0%	29	29.3%
Total	92	100.0	99	100.0

Table 6. The subjects who were discouraged and depressed within the past 4 weeks

Answer	Subjects with diabetes		Subjects with hypertension	
	Number	Percentage (%)	Number	Percentage (%)
All the time	11	12.0%	3	3.0%
Most of the time	23	25.0%	21	21.2%
Half the time	15	16.3%	18	18.2%
A small part of the time	32	34.8%	26	26.3%
Not at all	11	12.0%	31	31.3%
Total	92	100	99	100

Table 7. The subjects who had difficulty performing work or other activities

Answer	Subjects with diabetes		Subjects with hypertension	
	Number	Percentage (%)	Number	Percentage (%)
All the time	20	21.7%	7	7.1%
Most of the time	24	26.1%	20	26.1%
Half the time	12	13.0%	24	24.2%
A small part of the time	19	20.7%	20	20.2%
Not at all	17	18.5%	28	28.3%
Total	92	100.0	99	100.0

Subjects with diabetes were significantly more depressed and discouraged in the past four weeks than subjects in the control group with hypertension. The difference is statistically highly significant ($\chi 2 = 16.14$; $p < 0.01$) (Table 6).

The difference between subjects suffering from diabetes and subjects suffering from hypertension is statistically significant. The subjects with diabetes had significantly more difficulty performing work during the past four weeks than the subjects with hypertension ($\chi 2 = 13.098$; $p = 0.011$) (Table 7).

Discussion

This research examined the occurrence of burnout syndrome in a specific working population suffering from two massive, chronic, non-communicable diseases such as diabetes and hypertension. As it is well known that a huge number of the working population in the world suffers from these diseases. We tried to find a cause-and-effect relationship between the occurrence of these diseases and burnout syndrome at work as a special phenomenon described by the WHO as a condition caused by chronic stress at work. The question that arises during this research is whether these diseases are the cause of burnout syndrome or its consequence, given that it is known that both diseases have a psychosomatic basis that is characteristically associated with the existence of burnout syndrome [16].

Burnout syndrome is a multidimensional chronic condition that is related to professional work and has serious consequences on the health and work ability of the sufferers. Given that the examined group of the subjects had type 2 diabetes, the average age of the subjects was expected because the symptoms of this disease appear later in life [17]. The working ability of people suffering from diabetes is mainly reduced due to the underlying disease and its complications, so that the sufferers have reduced productivity at the workplace, increased work disability and increased absence from work, all of which affect the quality of life of the affected people, but at the same time lead to enormous costs for the health care system of the countries around the world [18, 19, 20].

Some of the basic symptoms that occur with burnout syndrome overlap with symptoms that occur as a result of diabetes. Thus, depression appears to be one of the main symptoms of burnout, but the connection between depression and diabetes has been proven in many studies. In our research, we found that respondents from the group with diabetes were significantly more depressed than the group with hypertension according to the SF-36 questionnaire on quality of life [21, 22].

The occurrence of burnout syndrome in the working population with diabetes is an additional burden factor on the already vulnerable category, both on their basic condition and on their ability to work. In several studies, the term burnout syndrome in diabetes is mentioned as a separate category that is not related to research of burnout syndrome in the general population, which is measured by a special questionnaire as an instrument highly specific for diabetes [23, 24]. In our research, among subjects with diabetes, the burning syndrome was present in 49 of them out of the total number of 92 subjects or 52.8%. From this percentage per category, we found a slightly pronounced burnout syndrome in 14 subjects with diabetes, or 15.2% of them. In the group that, according to the results of the questionnaire, is defined as a candidate for burnout syndrome, there are 18 subjects or 19.6% of them. Pronounced burnout syndrome was present in 16 respondents or 17.4% of them, while one respondent was diagnosed with a burnout syndrome endangering health.

In subjects with hypertension, the results were different than in the subjects with diabetes. Burnout syndrome was found in 31 subjects or 32% of them. Mildly expressed syndrome was found in 9 subjects or 9.1% of them. A candidate for burnout syndrome was found in 17.2% of the subjects. Pronounced burnout syndrome was present in 4.0% or 4 subjects, while one subject was diagnosed with a burnout syndrome endangering health. Although both diabetes and hypertension are chronic, massive, non-communicable diseases, in this study, subjects with diabetes had a much more pronounced burnout syndrome than subjects with hypertension.

In relation to occupation, in our research we found that 67 subjects with diabetes or 72.8% of them belonged to the category of white collar professions, which by nature of work were mostly sedentary occupations, while the re-

maining percentage of subjects with diabetes, 25 or 27% of them belonged to the category which, according to the valid research standards on burnout syndrome, was labelled as blue collar professions. Among subjects with hypertension, 71 subjects or 71% of them belong to the white collar profession category, while the remaining number of subjects are from the blue collar profession category. This data shows the undoubted connection of a sedentary lifestyle with the occurrence of chronic, massive diseases, such as diabetes and hypertension, and even burnout syndrome [25,5].

In a large number of studies, it has been confirmed that burnout syndrome can be a risk factor for the occurrence of type 2 diabetes, thus confirming the need to find effective primary interventions to reduce burnout syndrome before it becomes a chronic condition, thereby reducing the potential risk of damaging physical health [26, 27].

A study conducted in China on five thousand respondents showed that an increased degree of burnout syndrome was associated with chronic diseases such as diabetes, hypertension and coronary disease [29]. On the other hand, although the interrelationship of burnout syndrome with the occurrence of hypertension and coronary disease has been proven in several studies, there is a significant relation between burnout syndrome and other chronic diseases, primarily chronic lung diseases and skin diseases. All these studies show an undoubted relation between chronic diseases and stress, as well as stress at work, which the WHO characterizes as burnout syndrome [29, 30, 31].

The results of these studies comply with our research that there is a connection between the occurrence of burnout syndrome with diabetes and hypertension in affected persons and that this cause-and-effect relationship is an issue that arises as a significant problem of the working population due to the impact of this condition on the working ability of affected persons.

The relationship between work and health are interrelated categories, where work affects health, but also health affects work. The effects can be immediate or delayed, where exposure to stress at work leads to later health problems. They can also be positive when the work directly or indirectly contributes to the health and well-being of the worker, or negative when the work leads to activity limitation, illness or even premature death of the employee. Individual work characteristics, but also their combined effect, can have a significant impact on the overall health status of each individual. All these effects can occur during an individual's working life or during retirement. The effects differ between individuals and depend on different individual and collective circumstances. According to data from the International Labour Organization (ILO), stress at work is the second most frequently reported work-related health problem in Europe. Exposure to a stressful, emotionally maladjusted and tiring work environment is associated with a higher frequency of fatigue and burnout at work, which on the other hand is associated with circumstances such as lifestyle, habits, ability to recover, access to healthcare services of employed persons. The International Labour Organization (ILO) pays a lot of attention to issues of health at work, and among other things, in recent years it has proposed specific programs and strategies to prevent the occurrence of stress in the workplace and to combat burnout syndrome as a phenomenon that directly affects the health of employees, their work ability and quality of life [32, 33, 34].

Conclusion

There is a significant frequency of the occurrence of burnout syndrome in patients with diabetes and hypertension. The existence of a cause-and-effect relationship between the occurrence of burnout syndrome and patients suffering from chronic, massive, non-communicable diseases significantly affects the quality of life of the patients and their ability to work.

Funding source. The authors received no specific funding for this work.

Ethical approval. The Ethics Committee of the University East Sarajevo, Faculty of Medicine Foca, Republic of Srpska, Bosnia and Herzegovina, approved the study and informed consent was obtained from all individual respondents. The research was conducted according to the Declaration of Helsinki.

Conflicts of interest. The authors declare no conflict of interest.

References:

1. Burn-out an "occupational phenomenon": International Classification of Diseases. Available from: https://www.who.int/news/item/28-05-2019-burn-out-an-occupational-phenomenon-international-classification-of-diseases/. Accessed December 5, 2022
2. Wheaton B. The nature of chronic stress. In: Coping With Chronic Stress. Springer, Boston, MA; 1997. p. 43–73.
3. Schaufeli WB, Bakker AB. Job demands, job resources, and their relationship with burnout and engagement: a multi-sample study. J Organiz Behav 2004;25(3):293–315.
4. Morikawa Y, Nakagawa H, Ishizaki M, Tabata M, Nishijo M, Miura K, et al. Ten-year follow-up study on the relation between the development of non-insulin-dependent diabetes mellitus and occupation. Am J Ind Med 1997;31(1):80–4.
5. Melamed S, Shirom A, Toker S, Shapira I. Burnout and Risk of Type 2 Diabetes: A Prospective Study of Apparently Healthy Employed Persons. Psychosom Med 2006;68(6):863–9.
6. Glasgow RE, Ruggiero L, Eakin EG, Dryfoos J, Chobanian L. Quality of life and associated characteristics in a large national sample of adults with diabetes. Diabetes Care 1997;20(4):562–7.
7. Klein BE, Klein R, Moss SE. Self-rated health and diabetes of long duration. The Wisconsin Epidemiologic Study of Diabetic Retinopathy. Diabetes Care 1998;21(2):236–40.
8. Schaufeli WB, Leiter MP, Maslach C. Burnout: 35 years of research and practice. Career development international 2009;14(3):204–20.
9. Waddill-Goad SM. Stress, Fatigue, and Burnout in Nursing. J Radiol Nurs 2019;38(1):44–6.
10. Rotenstein LS, Torre M, Ramos MA, Rosales RC, Guille C, Sen S, et al. Prevalence of burnout among physicians a systematic review. JAMA 2018;320(11):1131–50.
11. Schaufeli WB, Leiter MP, Maslach C, et al. Maslach Burnout Inventory – General Survey. In: Maslach C, Jackson SE, Leiter MP, editors. Maslach Burnout Inventory manual, 3th ed. Palo Alto: Consulting Psychologists Press; 1996. p. 19–26.
12. Bommer C, Heessemann E, Sagalova V, Manne-Goehler J, Atun R, Bärnighausenet T, et al. The global economic burden of diabetes in adults aged 20–79 years: a cost of illness study. Lancet Diabetes Endocrinol 2017;5(6):423–30.
13. Ware JE, Snow KK, Kosinski M, Gandek B. SF-36 Health survey: Manual and interpretation guide. Boston: The health institute, New England Medical Center; 1997.
14. McHorney CA, Ware Jr JE, Raczek AK. The MOS 36-item short form health survey (SF-36): II. Psychometric and clinical tests of validity in measuring physical and mental health constructs. Med Care 1993;31(3):247–63.
15. Ware ME, Kosinski M, Dewey JE. How to score version 2 of the SF-36 health survey (standard & acute forms). Quality Metric Incorporated, 2001.
16. The Editors of Encyclopaedia Britannica. Available from: https://www.britannica.com/science/psychosomatic-disorder/. Accessed November 1, 2022
17. Shaw JE, Sicree RA, Zimmet PZ. Global estimates of the prevalence of diabetes for 2010 and 2030. Diabetes Res Clin Pract 2010;87(1):4–14.
18. Skerjanc A. Sickness absence in diabetic employees. Occup Environ Med 2001;58(7):432–6.
19. Moucheraud C, Lenz C, Latkovic M, Wirtz VJ. The costs of diabetes treatment in low-and middle-income countries: a systematic review. BMJ Glob Health 2019;4(1):e001258.

20. Zhang P, Lou P, Chang G, Chen P, Zhang L, Liet T, et al. Combined effects of sleep quality and depression on quality of life in patients with type 2 diabetes. BMC Fam Pract 2016;17:40.

21. Holt RIG, De Groot M, Golden SH. Diabetes and depression. Curr Diabetes Rep 2014;14:491.

22. Fisher L, Mullan JT, Skaff MM, Glasgow RE, Arean P, Hessler D. Predicting diabetes distress in patients with type 2 diabetes: a longitudinal study. Diabet Med 2009;26(6): 622–7.

23. Nuari NA, Budury S, Pramesti TA. Factor Influencing Resiliency of Efficacy Diabetes Mellitus Patients. J Appl Environ Biol Sci 2018;8(4):83–7.

24. Patterson R, McNamara E, Tainio M, de Sá TH, Smith AD, Sharp SJ, et al. Sedentary behaviour and risk of all-cause, cardiovascular and cancer mortality, and incident type 2 diabetes: a systematic review and dose response meta-analysis. Eur J Epidemiol 2018;33(9):811–29.

25. Ochentel O, Humphrey C, Pfeifer K. Efficacy of exercise therapy in persons with burnout. A systematic review and meta-analysis. J Sports Sci Med 2018;17(3):475–84.

26. Abdoli S, Jones DH, Vora A, Stuckey H. Improving diabetes care: should were conceptualize diabetes burnout? Diabetes Educ 2019;45(2):214–24.

27. Schmidt CB, van Loon BP, Vergouwen AC, Snoek FJ, Honig A. Systematic review and meta-analysis of psychological interventions in people with diabetes and elevated diabetes-distress. Diabet Med 2018;35(9):1157–72.

28. Guan S, Xiaerfuding X, Ning L, Lian Y, Jiang Y, Liu J, et al. Effect of job strain on job burnout, mental fatigue and chronic diseases among civil servants in the Xinjiang Uygur Autonomous Region of China. Int J Environ Res Public Health 2017;14(8):872.

29. Salvagioni DAJ, Melanda FN, Mesas AE, González AD, Gabani FL, de Andrade SM. Physical, psychological and occupational consequences of job burnout: A systematic review of prospective studies. PLoS One 2017;12(10):e0185781.

30. Von Känel R, Princip M, Holzgang SA, Fuchs WJ, van Nuffel M, Pazhenkottil A, et al. Relationship between job burnout and somatic diseases: a network analysis. Sci Rep 2020;10(1):18438.

31. Traunmüller C, Stefitz R, Gaisbachgrabner K, Hofmann P, Roessler A, Schwerdtfeger AR. Psychophysiological concomitants of burnout: Evidence for different subtypes. J Psychosom Res 2019;118:41–8.

32. Work Place Stress: A collective challenge International Labour Organization 2016. Available from: https://www.ilo.org/global/publications/lang--en/index.htm/. Accessed November 1, 2022

33. United Nations Economic Commission for Europe (UNECE). Handbook on Measuring Quality of Employment. A Statistical Framework; United Nations Economic Commission for Europe: New York, NY, USA, 2015.

34. Tynes T, Aagestad C, Thorsen SV, Andersen LL, Perkio-Makela M, García FJP, et al. „Physical working conditions as covered in European monitoring questionnaires“. BMC Public Health 2017;17(1):1–9.

Sindrom profesionalnog sagorijevanja i kvalitet života oboljelih od dijabetes melitusa i hipertenzije

Vesna Krstović Spremo[1], Sanja Marić[2], Ljiljana Kulić[3]

[1]Univerzitet u Istočnom Sarajevu, Medicinski fakultet Foča, Republika Srpska, BiH

[2]Univerzitetska bolnica Foča, Republika Srpska, Bosna i Hercegovina

[3]Univerzitet u Prištini, Medicinski fakultet, sa privremenim sedištem u Kosovskoj Mitrovici, Srbija

Uvod. Svjetska zdravstvena organizacija (SZO) definiše burnout sindrom kao stanje prouzrokovano hroničnim stresom na poslu, što može biti povezano sa pojavom i pogoršanjem psihosomatskih oboljenja i kvalitetom života oboljelih. Cilj rada je bio da se utvrdi prevalencija burnout sindroma u populaciji osoba sa vodećim, hroničnim, masovnim, nezaraznim bolestima, dijabetesom tipa 2 i arterijskom hipertenzijom uz procjenu uticaja ovog sindroma na kvalitet života ispitanika.

Metode. Istraživanje je obavljeno po tipu studije presjeka od marta do oktobra 2019. godine na randomizovanom uzorku od 92 oboljelih od dijabetes melitusa tipa 2 i 99 ispitanika oboljelih od hipertenzije iz dva Doma zdravlja u Istočnom Sarajevu. Poseban kriterijum za uvrštavanje u istraživanje je bio da su ispitanici zaposleni i da nisu stariji od 65 godina. Instrument istraživanja je bio opšti upitnik, upitnik SZO o burnout sindromu, kao i upitnik SZO SF-36 o kvalitetu života, a statistička obrada podataka je rađena u programu SPSS v.19. Značajnost razlike je testirana $\chi 2$ testom, a postojanje sindroma izgaranja je definisano prema upitniku SZO.

Rezultati. Kod ispitanika sa dijabetesom, burnout sindrom je prisutan kod čak 52,8% (blago izražen kod 15,2% ispitanika, kandidat za burnout sindrom kod 19,6% ispitanika, burnout sindrom prisutan kod 17,4%, dok je kod jednog ispitanika utvrđen burnout sindrom koji ugrožava zdravlje), a kod ispitanika sa hipertenzijom burnout sindrom je nađen u procentu od 32% ispitanika. Burnout sindrom je bio više prisutan kod ispitanika oboljelih od dijabetesa nego kod ispitanika sa hipertenzijom. Razlika je statistički značajna ($\chi 2 = 8,42$; $p = 0,003$). Ispitanici sa dijabetesom su bili značajno više depresivni i obeshrabreni od ispitanika kontrolne grupe sa hipertenzijom ($\chi 2 = 16,14$; $p < 0,01$). Ispitanici sa dijabetesom su značajno više od ispitanika sa hipertenzijom imali teškoća pri obavljanju posla tokom protekle 4 nedjelje ($\chi 2 = 13,098$; $p = 0,011$).

Zaključak. Postoji značajna učestalost pojave burnout sindroma kod oboljelih od dijabetesa, ali i hipertenzije. Postojanje uzročno-posljedične veze značajno utiče na kvalitet života oboljelih i njihovu radnu sposobnost.

Ključne riječi: burnout sindrom, dijabetes, hipertenzija, kvalitet života