

Burnout Syndrome in Family Members Taking Care of their Relatives and Professional Caregivers

Radka Kozáková¹, Šárka Vévodová¹, Jiří Vévoda¹, Lukáš Merz¹, Bronislava Grygová¹, Jiří Kozák²

¹Department of Humanities and Social Sciences, Faculty of Health Sciences,
Palacký University, Olomouc, Czech Republic

²Department of Radiological Methods, Faculty of Health Sciences, Palacký University,
Olomouc, Czech Republic

ABSTRACT

Background: Caring for a family member is demanding and poses a considerable strain for the carer. Due to this long-term strain, the carer may develop burnout. Care divided between the family and a state institution seems to be ideal. Nevertheless, there are demands which pose a strain even for professional carers.

Aim: The aim of the research was to ascertain the degree of burnout rate and differences between family caregivers and professional carers.

Methods: A quantitative approach was taken: Burnout Measure (BM) questionnaire survey was conducted. The sample consisted of 50 family caregivers (42 women, 8 men) with average care length 5 years and 57 professional carers – workers from healthcare and social services (55 women, 2 men) from a care home Pohoda, Olomouc-Chválkovice and a care home for disabled people Nové Zámky with average work experience 12 years.

Results: A higher burnout rate was found among family caregivers compared to professional carers ($p < 0.001$). Burnout was confirmed in 25 family caregivers and 2 professional carers. An increased risk for developing burnout was found in 13 family caregivers and 8 professional carers.

Conclusion: Caring for a family member presents an excessive strain for the family caregiver and respite care or community services should be introduced to prevent developing burnout.

KEY WORDS

burnout syndrome, family caregiver, professional caregiver, burden, social support

INTRODUCTION

Life expectancy has been increasing worldwide and the population starts to age very fast. The tendency is particularly noticeable in the developed countries, including the Czech Republic. The increasing proportion of elderly people will inevitably have economic and social impacts. The current long-term prognosis suggests that by the 2050s the number of people in the Czech Republic over 65 years of age will double compared to the present situation. The number of people over 85 will increase most rapidly (1). It is estimated that approx. one fourth or one third of these people will need some form of a long-term care due to their deteriorated health condition (2). Therefore, the need for a long-term care of a family member will increase (3). Family care or non-professional care is provided by family members and friends, while professional care is provided by healthcare professionals (4). Family

care is the essential element of a non-professional care. Caring for a family member is a demanding task and represents considerable strain for a caring person, and not every family member is able to cope with such a role (2, 5). The role of a family caregiver brings about a substantial life-style change often accompanied with stress, physical and psychological exhaustion (6). Carer strain may be diagnosed based on determining signs of nursing diagnosis. The nursing diagnosis Carer Role Strain (00061) is the standardized name of the problems arising from performing family or significant other caregiver role (7). It was approved and adopted within NANDA International Nursing Diagnoses in 1992 (8). The strain manifests itself through changes in somatic, emotional or socioeconomic status of a carer, resulting in e.g. headaches, hypertension, fatigue, sleep disturbances, depression, distress, isolation, withdrawal from social life, etc. (9). Carers

experience emotional stress that adversely affects their health (10). A long-term strain may result in burnout syndrome development. Burnout syndrome is defined as a prolonged stress response to chronic emotional and interpersonal stressors at work (11). Risk of burnout syndrome is found especially under conditions where there is an imbalance between the efforts invested and the positive reaction received (12). Chronic stress is, therefore, considered one of the essential inducing factors. Burnout syndrome is usually characterized as a psychological syndrome that is the response to chronic stressors at workplace. There are three dimensions: emotional exhaustion, cynicism, low work productivity (13). Symptoms of burnout syndrome include emotional exhaustion associated with feelings of helplessness, fatigue, and negative approach to life (14). Burnout syndrome results in limited social life of a carer and in the lack of positive views on caregiving (13). The carer suffers from anxiety and lacks the energy needed for the demanding situation (15). With regard to the unfavourable accompanying somatic and mental conditions it is inevitable to focus on the prevention of strain and burnout syndrome in family carers and identify specific strain factors. Social support is considered the key protective factor. Social support is the system of social relations and attachments (12) and includes the six major components: family, close friends, neighbours, colleagues, community and professionals. It is the system protecting against potentially harmful influence of stressful events (16). However, family carers often lack the needed level of social support (17). Frequently, the care is provided by a single person 7/24 for months or years without any relief or rest. This results in poorer quality of life and health of the carers (18).

In case a non-professional carer and a care receiver share a household, and the carer does not get sufficient social and psychological support, and cannot share the care with another person, the negative impact on their health increases (19). Long-term psychological and physical strain may result in the carer's collapse and hospitalization (20). Mental health issues are by 20% more frequent compared to persons who do not provide such a care (19). Family carers experience lack of optimism, life perspective, they suffer from overall feeling of tiredness (18) and burnout (21).

The impact of a long-term care is seen also in the social area. Carers gradually lose their contacts with other people which may lead to social isolation (5). Since carers cannot include in their life such activities as employment, hobbies, going out with friends, they may end up as excluded from social life. Demanding

character of the care itself affects family relationships. There may occur disagreements between family members as well as between the carer and the care receiver. Conflicts result from the mutual relationship and communication and are the consequence of "satiety" due to the constant contact, or they may result from the character of the care receiver's disease (21).

Family care brings about also a financial burden, since it is poorly supported by the state, and its economic value has been underestimated (4). Family carers have to restrict their employment or leave the job completely. Attendance allowance is usually so low that it cannot cover the costs related to care provision or cover sufficiently the needs of a carer (2, 5).

The published works suggest that the early and appropriate intervention can reduce the excessive strain of family carers (22). If a family cannot cope with a caregiver's role, they should use social services. These include in-home and out-of-home health services, e.g. home care agencies or social services such as community care service, day care centre or respite care services. Respite care relieves difficult situation and helps to deal with temporary health issues and personal problems of a family carer which may prevent them from taking care of another (23). The services should provide carers the time to recover and relax. An important aid is provided by self-help groups of people with similar health and life issues (4). Another way how to minimize a family carer's overstrain is the contribution of volunteers and other members of a multidisciplinary team in the nursing process or employment of palliative care services (24). Carers should be aware of the system of social support and should get relevant information on the subject (4). The information should be provided on time, at the onset of the disease, so that a carer could better orient themselves in the new situation (25). Carers should be also informed about additional services. Nonetheless, the published studies point out to poor knowledge of social and health services offered (21, 26).

The so called shared and integrated care – where the care is performed both by the family and the state – would be an ideal situation. Within this framework a care is provided by professional and non-professional caregivers. The professionals provide more specific medical care and nursing while the non-professionals perform mainly personal care and help with activities of daily living (27).

Professionals take care of their clients especially in long-stay facilities; they provide social support and nursing (28). They are exposed to various types of strain related to their work. They often face requirements eli-

citing increased psychological and physical strain (29). They may experience increased static and dynamic load, muscular system strain, disturbed sleep pattern, etc. (30). Increased psychological strain is often due to changing emotional state of their clients (31). Specific features of professional caregivers' burden include a lot of paperwork, increased work demands, unclear professional competences, unfavourable structure of organization, stress at work, and non-sufficient remuneration (32, 33). Stress related to the working conditions may result in burnout syndrome (34).

AIM

The aim of our research was to determine the level of burnout syndrome in professional and in family caregivers, and subsequently to compare the rate of burnout syndrome between the two groups.

METHOD

We adopted the quantitative research design with Burnout Measure (BM) questionnaire. The questionnaire contains 21 items assessed on a seven-point Likert scale. The tool seeks to assess overall exhaustion, i.e. feeling of physical exhaustion, emotional and psychological strain (35). The values between 0 and 2.9 mean that burnout syndrome is not present, the values between 3 and 3.9 suggest increased risk of burnout syndrome, and values over 4 mean proved burnout syndrome.

The set of respondents included 50 family caregivers (42 females, 8 males) with the average length of care 5 years. The other set included 57 professional caregivers – healthcare professionals and social services workers (55 females, 2 males) who give support and care to persons over 65 with lower self-reliance in the rest home Pohoda, Olomouc-Chválkovice, and the care home for disabled people in Nové Zámky (social services provider taking care of mentally handicapped persons over 18). The mean length of care was 12 years. The research took place between 2014 and 2016. The questionnaires were anonymous. The Ethic Committee of the Faculty of Health Sciences approved the research.

The data were statistically processed with the Kolmogorov-Smirnov normality test and the Mann-Whitney test, the Spearman correlation coefficient was at the levels of significance of 5 and 1 per cent.

RESULTS

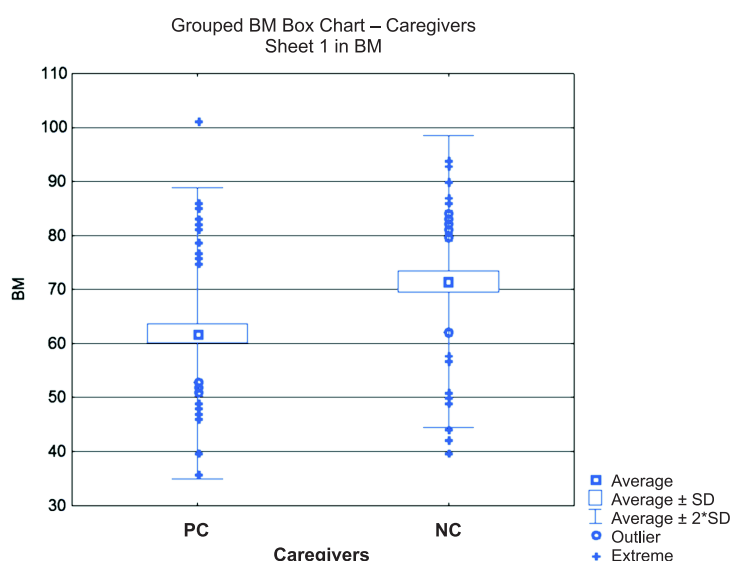
BM questionnaire revealed increased risk of burnout syndrome in 13 (i.e. 26%) family carers. Burnout syndrome was proved in 25 (i.e. 50%) family carers. Increased risk of burnout syndrome was revealed in 8 (i.e. 14%) professional carers, and in 2 (4%) of them the burnout syndrome was proved (Table 1). To assess the inner consistency of BM questionnaire, Cronbach's $\alpha = 0.81$ was calculated.

Table 1 Burnout syndrome incidence

	PC – professional caregivers	%	NC – non-professional caregivers	%
Without BS	47	82	12	24
Increased risk of BS	8	14	13	26
Proved BS	2	4	25	50
Total	57	100%	50	100%

To compare the PC group (i.e. professional caregivers) and NC group (non-professional caregivers) the non-parametric two-sample Mann-Whitney U-test was used (the data do not show normal distribution). The groups were compared with box plot and the Mann-Whitney U-test (Graph 1).

Graph 1 Comparison of professional and family (non-professional) caregivers



The Mann-Whitney U-test results suggest significant difference in the mean values between PC and NC, the level of significance $p < 0.001$. Burnout syndrome values are significantly higher in family caregivers.

To determine the relationship between burnout syndrome level and the length of care, the Spearman correlation coefficient was used. We can conclude that there is no statistically significant relationship between the level of burnout and the length of care.

DISCUSSION

The aim of our research was to determine the level of burnout syndrome in the groups of family and professional caregivers, and to compare the two groups.

The results show higher risk of burnout syndrome in the group of family caregivers. In both groups, the risk factors include illness severity, confrontation with suffering, pain and death. Increased risk of strain in family caregivers is due to the lack of social support. In professional caregivers the specific factor is represented by paperwork, ineffective organizational structure, and stress at work.

Our research proved burnout syndrome in 25 (i.e. 50%) family caregivers. Similar results are given by Jedlinská, Hlubík and Levová (60) who used a BM questionnaire. The results suggest that family caregivers are under long-term increased psychological strain resulting in burnout syndrome. Burnout syndrome was fully identified in 30% of 97 respondents. Jedlinská, Hlubík and Levová (60) report severity of a care receiver's disease as the most significant risk factor. Iavarone and Kang (36) proved that the strain correlates with severity of the receiver's disease (36, 37). Kan (37) dealt with the link between cognitive impairment and a caregiver's strain. More severe condition and functional impairment correlate significantly with caregivers' increased burden. The burden is also increased by patients' symptoms of depression. Kozáková et al. (38) confirmed significantly positive relationship between altered behavior of a patient due to severity of their disease and burnout syndrome. Ornstein and Gaugler (39) report depression, aggression, and sleep disorders as the most frequent symptoms affecting caregivers. Patients' behavior worsens due to their deteriorating health condition, which increases the level of burnout syndrome in a caregiver.

Social support, functional family and experience of a family caregiver may affect their burden. Support aimed at a caregiver helps to reduce the perceived strain (40). Social support partially reduces the impact of family caregivers' distress, and helps to cope with strain effectively (41). Cherry, Salmon and Dickson (41) studied the impact of social support on caregiv-

ers' burden. Serious burden was found in caregivers whose patients did not go to daily centers, and thus, the caregiver was given no support. Increased burden was also found in those who shared a household with their clients (42).

We can assume that higher level of social support of family caregivers would reduce their burden (41, 42).

Results by Dobiášová et al. (27) show the negative impact of family caregiving on the quality of a caregiver's life. The care often leads to restriction of job activities and lack of finances of a family caregiver. They feel the state does not support them enough. Similarly, professional caregivers are not paid enough for their work. Inadequate remuneration is one of the specific problems associated with professional caregivers' burden (32, 43). Other specific problems include inappropriate organizational structure, unclear determination of competences, and stress at work. Working conditions and workplace atmosphere affect fundamentally the incidence of burnout syndrome.

Our research compared the burden of non-professional and professional caregivers. Reduced burden was proved in professional caregivers, which is in accordance with Pavelková (44). The aim of the research was to determine the level of burnout syndrome (with Burnout Measure questionnaire) in professional caregivers working in hospices (care homes, rest homes). Burnout syndrome was identified in only 6% of the caregivers, increased values in 28%. The findings correspond to those given by Pavelková (44) and they suggest that burnout syndrome is less frequent in professional caregivers. However, professional caregivers see the source of stress in excessive paperwork and in their duty to cope with suffering (44, 45). Buzgová and Ivanová (46) proved low prevalence of burnout syndrome in caregivers working in home care. The data were obtained with BM questionnaire (Burnout Measure). The set included 452 workers of direct care from 12 nursing homes. Burnout syndrome was found in only 6.5% of the employees. Similar results are given by Maroušková and Seidl (47) who report that direct care employees show significantly lower mean burden in comparison with general population. With increasing satisfaction with their free time subjectively perceived burden of the employees is decreasing. Therefore, an organization should be interested in organizing free time activities for its employees (cultural and sport events, leisure time activities).

Our results suggest that there is no relationship between the length of care and the level of burnout. On the contrary, the research by Jedlinská, Hlubík and Levová (6) identified the length of care as the risk factor of excessive mental strain. The subjects of the

research were performing care more than 1 year for over 8 hours a day. Šerfelová and Hladková (48) proved increased burden in respondents performing care for over 3 years. Tew (49) found in family caregivers performing care for about 4 years negative correlation between their quality of life and the length of illness, i.e. the length of the care provided.

CONCLUSION

The research results emphasize the increased risk of burnout syndrome in family caregivers. In case a family cannot manage the care they should engage social services. These include in-home and out-of-home health care services, e.g. home care agencies, or social services, e.g. nursing services, day centers, or respite service. An important aid is represented by self-help groups of people with similar health and life conditions.

ACKNOWLEDGEMENT

This article is dedicated to Student's grant competition of Palacky University in Olomouc (Faculty of Health Sciences competition): Quality of Life and Burden of Family Carers (FZV_2016_005).

REFERENCES

1. Ministerstvo práce a sociálních věcí. Odbor rodinné politiky a politiky stárnutí. [online]. Poslední revize 4. 11. 2015 [cited 2017 Feb 3]. Available from: <http://www.mpsv.cz/cs/2856>
2. Klímová Chaloupková J. Neformální péče v rodině: sociodemografické charakteristiky pečujících osob. Data a výzkum – SDA Info 2013, 7(2):107-23. Sociologický ústav AV ČR, v.v.i., Praha 2013. Available from: [http://dx.doi.org/10.13060/23362391.2013.127.2.39\(c\)](http://dx.doi.org/10.13060/23362391.2013.127.2.39(c))
3. Rychtaříková J. Perspektiva seniorů v České republice a ve vybraných zemích EU. Demografie. 2006;48(4):252-6.
4. Bártlová S. Postavení laických pečovatelů v péči o seniory a nemocné. Kontakt. 2006;8(2):235-9.
5. Formánková P, Novotný A, Efenberková M. Problematika realizace rodinné péče o osobu se sníženou soběstačností. Kontakt. 2011;14(2):159-70.
6. Jedlinská M, Hlúbik P, Levová J. Psychická zátěž laických rodinných pečujících. Profese online [Internet]. 2009 [cited 2017 Feb 3]; 2(1):27-38. Available from: <http://profeseonline.upol.cz/>
7. Marečková J. 2006. Ošetrovateľské diagnózy v NANDA doménách. Praha: Grada Publishing, a.s.; 2006.
8. Kolegarová V, Zeleníková R. Hodnocení definujících charakteristik ošetrovateľské diagnózy pretížení pečovatele. Ošetrovateľství a porodní asistencie. 2011;2(4):282-7.
9. Herdman H. Nanda International Nursing Diagnoses: Definice & klasifikace 2012–2014. Praha: Grada Publishing,a.s.; 2013.
10. Do Kyung Y. Informal care and caregiver's health. Health Economics. 2015;24:224-37.
11. Maslach C. Cometary. Engagement research: Some thoughts from a burnout perspective. European Journal of Work and Organizational Psychology. 2011;20(1):47-52.
12. Kupka M. Paliativní péče a syndrom vyhoření. E-psychologie [Internet]. 2008 [cited 2017 Feb 5];2(1):23-5. Available from: <http://e-psychologie.eu/clanek/11>
13. Truzzi A, et al. Burnout in familial caregivers of patients with dementia. Revista Brasileira de Psiquiatria. 2012;34(4):405-12.
14. Zacharová E. Syndrom vyhoření – riziko ohrožující zdravotnické pracovníky. Interní medicína pro praxi. 2008; 10(1):41-2.
15. Yilmaz A, Turan E, Gundogar D. Predictors of burnout in the family caregiver of alzheimer's disease: evidence from Turkey. Australas J Ageing [Internet]. 2009 Mar [cited 2017 Feb 5];28(1):16-21. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/19243371>
16. Kebza V. Psychosociální determinanty zdraví. Praha: Akademie věd České republiky; 2005.
17. Jarolímová E, Nováková H. Význam podpůrné (svěpomocné) skupiny pro rodinné pečující o seniory se syndromem demence. Geriatrie a gerontologie. 2013; 2(3):151-3.
18. Michalík J. Kvalita života osob pečujících o člena rodiny s těžkým zdravotním postižením. Olomouc: Univerzita Palackého v Olomouci; 2011.
19. Wija P. Poskytování a financování dlouhodobé péče v zemích OECD (III) – poskytování neformální péče a její dopad na zaměstnanost a zdraví. Praha: ÚZIS ČR, Aktuální informace č. 33, 2012. Available from: http://www.uzis.cz/system/files/33_12.pdf
20. Geissler H, et al. Závěrečná zpráva z fokusních skupin. Praha: Fond dalšího vzdělávání, 2015.
21. Kotrusová M, Dobiášová K, Hošťálková J. Role rodinných pečovatelů v systému sociální a zdravotní péče v ČR. Fórum sociální politiky In: Fórum sociální politiky [Internet]. 2013 [cited 2017 Feb 5]; (6):10-20. Available from: http://praha.vupsv.cz/Fulltext/FSP_2013-06.pdf

22. Zvěřová M. Alzheimerova demence a zátěž pečovatele. Česká a slovenská psychiatrie. 2010; 106(5):307-9.
23. Rössner P. Alzheimerova nemoc – diagnostika a léčba. Zdravotnické noviny [Internet]. 2004 [cited 2017 Feb 7]; (1):11-6. Available from: <http://www.neurologiepropraxi.cz/artkey/neu-200401-0004.php>
24. Šerfelová R, Žiaková K. Kvalita života opatrovatele v procese starostlivosti o zomierajúceho. Ošetrovatelství a porodní asistence. 2011;2(1):152-6.
25. Dohnalová Z, Hubíková O. Problematika lidí pečujících o blízkou osobu v městě Brně. 2013. Masarykova univerzita, Fakulta sociálních studií. [cited 2017 Feb 7]. Available from: file:///C:/Users/HP/AppData/Local/Temp/Studie_Pecujici_o_blizkou_osobu-1.pdf
26. Bareš P, et al. Analýza potřeb a nabídky sociálních služeb na území hlavního města Prahy: Závěrečná zpráva projektu. Praha: CESES FSV UK, 2012. Available from: http://ceses.cuni.cz/CESES-277-version1-analyza_potreb_a_nabidky_socia.pdf
27. Dobiášová K, Kotrusová M, Hošťálková J. Role praktických lékařů v podpoře neformální péče o seniory a osoby se zdravotním postižením z pohledu rodinných pečujících. Praktický lékař. 2015; 95(4):161-6.
28. Janečková H. Sociální práce se starými lidmi. In: Matoušek O, Kodymová P, Kolářková J. Sociální práce v praxi: specifika různých cílových skupin a práce s lidmi. Praha: Portál; 2010. p. 163-94.
29. Tajanovská A. BOZP a stres na pracovišti a jeho specifikace v odvětvích sociálních služeb. 2011. [cited 2017 Feb 7]. Available from: http://www.apsscr.cz/images/obr/1320833496_pozvanka-konference-bozp.pdf
30. Rozprýmová H. Syndrom vyhoření. In: Hermanová M, et al aktuální kapitoly z péče o seniory. Brno: T.I.G.E.R., 2008; p. 65-80.
31. Tuček M, Cikrt M, Pelcová D. Pracovní lékařství pro praxi: příručka s doporučenými standardy. Praha: Grada; 2005.
32. Paulík K. K otázce zvládání pracovních nároků v sociální práci. Kontakt. 2006;8(2): 292-300.
33. Mlčák Z. Temperament, syndrom vyhaslosti a sociální opora u vybraných skupin sociálních pracovníků. Projekt GAČR č. 406/03/0535 s názvem „Profesní kompetence sociálních pracovníků a jejich hodnocení klienty.“ [cited 2017 Feb 7]. Available from: http://www.phil.muni.cz/~hump/SPO/_SPaO_2003/ZALOHA/2003_all/Texty/Ml-cak.rtf
34. Sováříová Soósová M, Sušinková J, Cenkenrová M. Stres v práci sester v paliativnej ošetrovateľskej starostlivosti. Ošetrovatelství a porodní asistence. 2013; 4(3):622-7.
35. Křivohlavý J. Jak neztratit nadšení. Praha: Grada; 1998.
36. Iavarone A, et al. Caregiver burden and coping strategies in caregivers of patients with Alzheimer's disease. Neuropsychiatric Disease and Treatment. 2014Jul;10:1407-13.
37. Kang HS, et al. Factors associated with caregiver burden in patients with Alzheimer's disease. Psychiatry Investigation. 2014;11(2):152-9.
38. Kozáková R, et al. Zátěž a syndrom vyhoření u rodinných pečujících. In: Ošetrovateľský výzkum a praxe založená na důkazech. Ostrava: Ostravská univerzita v Ostravě, 2016; p. 104-110.
39. Ornstein C, Gaugler J. The problem with problem behaviors: a systematic review of the association between individual patient behavioral and psychological symptoms and caregiver depression and burden within the dementia patient-caregiver dyad. International Psychogeriatrics. 2012;24(10):1536-52. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2012-23415-002&lang=cs&site=ehost-live>
40. Hongmei Y, et al. Measuring the Caregiver Burden of Family for Community-Residing People with Alzheimer's Disease. Plos one. 2015; 10(7):e0132168. Available from: <http://search.ebscohost.com/login.aspx?direct=true&db=psyh&AN=2014-34726-001&lang=cs&site=ehost-live>
41. Cherry M, Salmon P, Dickson P, et al. Factors influencing the residence of carers of individuals with dementia. Reviews in Clinical Gerontology. 2013;23(4): 251-66.
42. Sousa MF, et al. Factors associated with caregivers burden: comparative study between Brazilian and Spanish caregivers of patients with Alzheimer's disease (AD). International Psychogeriatrics. 2016;28(8):1363-74.
43. Ježorská Š, Vévoda J, Chrástina J. Motivace sester a syndrom vyhoření – existuje souvislost? Profese on-line [Internet]. 2014 [cited 2017 Feb 1];7(1):9-15. Available from: <http://profeseonline.upol.cz/>
44. Pavelková H, Bužgová R. Burnout among healthcare workers in hospice care. Central European Journal of Nursing and Midwifery [Internet]. 2015 [cited 2017 Feb 1];6(1):218-23. Available from: <http://periodika.osu.cz/cejnm/dok/2015-01/6-pavelkova-buzgova-cz.pdf>

45. Zálešáková J, Bužgová R. Psychická zátěž sester pečujících o onkologicky nemocné. *Pracovní lékařství*. 2011;63(3-4):113-8.
46. Bužgová R, Ivanová K. Violation of ethical principles in institutional care for older people. *Nursing Ethics*. 2011;18(1):64-78.
47. Matoušková I, Seitl M. Pracovní zátěž, životní spokojenost a work-life balance zaměstnanců přímé péče v domovech pro seniory v jižních Čechách a Praze. *Sociální práce* [Internet]. 2014 [cited 2017 Feb 1];14(1):40-51. Available from: http://www.socialniprace.cz/soubory/sp1_2014_web-151202114855.
48. Šerfelová R, Hladeková B. Zátěž opatrovatele v procese starostlivosti o chronicky chorého. *Ošetřovatelství a porodní asistence*. 2010;1(3):89-92.
49. Tew EH, Naismith SL, Pereira M. The Contribution of Personality traits. *BioMed Research International*. 2013;2013:151872.

CONTACT DETAILS OF MAIN AUTHOR

Mgr. Radka Kozáková
Department of Humanities and Social Sciences
Faculty of Health Sciences
Palcký University Olomouc
Hněvotínská 3
CZ-775 15 OLOMOUC
radka.kozakova@upol.cz