



Burnout and Professional Development: A Study of Lithuanian Physiotherapists

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Abstract

Background. Physiotherapists' qualifications involve treatment, responsibility, and communication, putting them at risk of burnout. This study *aimed* to evaluate the prevalence of burnout in Lithuanian physiotherapists and its impact on their professional development.

Methods. A total of 133 physiotherapists working both in the public and private sectors completed an anonymous survey between January and March 2024 through an online form linked to www.apklausa.lt. Burnout syndrome was measured using the Copenhagen Burnout Inventory (CBI). Socio-demographics and questions related to professional development were utilized.

Results. Total CBI score was 54.92 (moderate burnout). The overall prevalence of physiotherapists reporting moderate burnout was 50.4% (n=67). Thirteen (9.8%) physiotherapists reported high levels and none had severe burnout. Respondents engaged in relevant scientific literature reading (50.8%) and felt confident in solving patients' problems (64.4%), focused on enhancing general skills (45.5%), and strongly agreed that physiotherapy seminars contribute to knowledge improvement (51.9%). There was a negative correlation ($r = -0.26, p < 0.05$), indicating a significant inverse relationship between burnout and professional development.

Conclusions. Lithuanian physiotherapists in our study group experience moderate level burnout syndrome. Despite this, they maintain a positive or neutral attitude towards professional development, actively engage in skill improvement activities, and effectively solve patients' problems.

Keywords: burnout syndrome; Copenhagen Burnout Inventory; physiotherapist; professional development

1. INTRODUCTION

Burnout syndrome is defined as work-related psychological exhaustion characterized by extreme fatigue, mental detachment, and an inability to manage one's emotions (Maslach & Leiter, 2016). It predominantly affects almost all healthcare professionals due to the significant time they spend addressing patient problems (Nair & Kumar, 2023). Due to burnout, therapists frequently experience feelings of exhaustion and depletion as they engage in tasks they once found fulfilling. Studies indicate that the prevalence of burnout among healthcare professionals ranges from 10% to 80.5%, and these rates are increasing nowadays (Puhanić et al., 2022).

Burnout syndrome is prevalent among medical and nursing professionals, as well as other healthcare practitioners. In Lithuania, 90% of occupational therapists experience moderate burnout (Tichonova & Gintilienė, 2021), 21.6% of emergency medical care nurses feel exhausted (Birbalaitė et al., 2023),



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30.3% of nurses have high emotional exhaustion (Mažionienė et al., 2019), and 32.2% of medical doctors experience general professional burnout (Žutautienė et al., 2019).

To date, few studies have been conducted worldwide to determine the prevalence of physical therapist burnout syndrome. In Italy, 45.8% of physical therapists experienced or were at high risk of burnout (Corrado et al., 2019). In Spain, 30.51% of physical therapists had a high level of burnout and 34.56% were moderately burned out (Carmona-Barrientos et al., 2020). Venturini et al. (2024) conducted a systematic review of 32 studies and a meta-analysis of 31 studies involving a total of 5,984 physiotherapists from 17 countries, finding a pooled burnout prevalence of 8%.

Physiotherapists play a crucial role in healthcare institutions, working with patients who have various health conditions. This requires involvement in the treatment process besides a high level of responsibility and constant communication with the patients and other professionals. Due to the nature of their work, physiotherapists are at high risk of burnout. It is crucial to ensure job satisfaction, as it directly affects patient safety, service quality, and physiotherapists’ motivation for professional development (Puhanić et al., 2022).

Professional development is described as a long process that involves transitioning through various stages from novice to expert. Research showed physiotherapists were committed to lifelong learning and improving clinical skills. This desire for high competence could affect emotional states and increase burnout risk, which might hinder development, diminish qualities, and lead to more errors, lower care quality, and decreased patient satisfaction (Zhang et al., 2021). Based on the previous research, we hypothesized that higher levels of burnout are correlated with negative attitudes toward professional development among Lithuanian physiotherapists.

The aim of this study was to evaluate the prevalence of burnout syndrome in Lithuanian physiotherapists and its effect on professional development.

2. METHODS

Study design. A cross-sectional study was conducted from January to March 2024 to assess the psychosocial work environment factors as burnout of physiotherapists and their relations with professional development. Permission of the Kauno kolegija Higher Education Institution Rehabilitation Department Bioethics Committee (protocol No. Nr-1/23/24, issued in 2023) was obtained to conduct the survey. Study included physiotherapists employed in both public and private healthcare institutions. Participants were invited and encouraged to take part in the survey via social networks and professional networks. Using the online survey platform <https://apklausait.lt>, a structured questionnaire was administered.

The sample size of 317 participants was determined through a power analysis using the G*Power 3.1.9.7 software program, with a beta level of 0.80 and an alpha level of 0.05. Prior to participation, respondents were briefed on the study’s purpose and objectives, with assurances of information confidentiality and anonymity. In Lithuania, there are 1,769 physiotherapists (World Physiotherapy, 2023) and 133 of them answered all questions.

Participants. Table 1 presents the socio-demographic characteristics of the participants. One hundred and eighteen women (88.7%) and 15 men (11.3 %) participated in this study. Most physiotherapists were 25–39 years old, had a university bachelor’s degree, and had physiotherapy work experience less than 5 years.

Table 1. Characteristics of the participants (n = 133)

Socio-demographic data		n	%
Gender	Women	118	88.7
	Men	15	11.3

Socio-demographic data		n	%
Age	< 25 yrs	27	20.3
	25–39 yrs	79	59.4
	40–49 yrs	17	12.8
	> 50 yrs	10	7.5
Education	Master's degree	43	32.3
	Bachelor's degree	57	42.9
	Professional bachelor	32	24.1
	Vocational education	1	0.8
Work experience	< 5 yrs	68	51.1
	5–10 yrs	29	21.8
	11–20 yrs	26	19.5
	> 20 yrs	10	7.5

Instruments. The study survey consisted of 3 parts:

1. Questions about socio-demographic characteristics as age, gender, educational status, and work experience of the respondents.
2. Copenhagen Burnout Inventory (CBI). It is a 19-item questionnaire that measures three distinct dimensions of burnout: personal burnout (six items), work-related burnout (seven items), and client-related burnout (six items) (Kristensen et al., 2005). It employs a five-point Likert scale. Response options were converted into a scoring system ranging from 0 to 100 (always: 100; often: 75; sometimes: 50; rarely: 25; and never/hardly ever: 0). Evaluation for each domain was represented by the calculated average score of the scale points. Scores of 50 to 74 are categorized burnout as “moderate”, scores of 75 to 99 are considered as “high”, and a score of 100 indicates as “severe”.
3. Questions related to professional development about professional growth, evaluations of work activities, and direct work time with patients. Physiotherapists were asked how much time they spend on certain activities related to their work.

Statistical analysis. The statistical analysis was performed using SPSS-26 and MS Excel. Data were presented as mean, standard deviation, and percentage. The Kolmogorov-Smirnov test was used to assess the data distribution, and all data were normally distributed. To identify the relations between burnout syndrome and attitudes towards professional development, personal burnout, work-related burnout, and assessments of professional development were used. Statistical significance between these data was determined using the Mann-Whitney U test. P values < 0.05 were considered to be statistically significant. The Spearman correlation coefficient was used to assess the correlations between burnout and attitudes towards professional development.

3. RESULTS

Rate of burnout. Mean CBI subscale scores for this sample were 57.33 (personal); 56.77 (work-related) and 50.34 (client-related). On the personal subscale, 51.1% (n = 68) of physiotherapists reported moderate burnout, 13.5% (n = 18) reported high burnout, and 3% (n = 4) indicated severe burnout, while 52.7% (n = 70) reported moderate work-related burnout, 13.5% (n = 18) reported high levels, and 1.5% (n = 2) had severe work-related burnout, and 42.1% (n = 56) reported moderate client-related burnout, 4.5% (n = 6) reported high levels, and 3% (n = 4) had severe client-related burnout (Table 2).

Table 2. Burnout results of the physiotherapists

CBI domain	Mean \pm SD	Prevalence cut-off n (%)
Personal burnout	57.33 \pm 22.25	No/low (<50) = 43 (32.3) Moderate (50–74) = 68 (51.1) High (75–99) = 18 (13.5) Severe (100) = 4 (3.0)
Work burnout	56.77 \pm 23.56	No/low (<50) = 43 (32.3) Moderate (50–74) = 70 (52.7) High (75–99) = 18 (13.5) Severe (100) = 2 (1.5)
Client-related burnout	50.34 \pm 23.81	No/low (<50) = 67 (50.4) Moderate (50–74) = 56 (42.1) High (75–99) = 6 (4.5) Severe (100) = 4 (3.0)
Total	54.92 \pm 23.43	No/low (<50) = 53 (39.8) Moderate (50–74) = 67 (50.4) High (75–99) = 13 (9.8) Severe (100) = 0 (0)

Note: CBI, Copenhagen Burnout Inventory, SD standard deviation

Time and task management in physiotherapy practice. Table 3 shows that the majority of physiotherapists (40.6%) spend 60–79% of their time with patients and 26.3% spend 80–100% of their time with patients, while the least time (0–19% of daily workload) is spent on preparation (36.4%), paperwork (41.7%), literature studying (49.2%), administration (50.4%), and group work with more than three patients (46.1%), with 36.9% spending most of their time (80–100%) on individual work with patients.

Table 3. Allocation of time and tasks in physiotherapy practice

Percentage of daily workload (%)		Prevalence cut-off (%)				
		0–19	20–39	40–59	60–79	80–100
Scheduling	Administrative tasks	50.4	31.3	10.7	5.3	2.3
	Literature studying	49.2	37.1	8.3	3	2.3
	Paperwork	41.7	29.5	15.9	10.6	2.3
	Preparation	36.4	31.1	18.2	11.4	3
	Direct patient treatment	1.5	9	22.6	40.6	26.3
Work time with patients	Individual	8.5	13.8	15.4	25.4	36.9
	Small group (2–3 patients)	30.5	14.8	23.4	13.3	18
	Group (>3 patients)	46.1	10.9	10.9	18.8	13.3

Attitude towards professional development. Findings indicate that a significant proportion engage in relevant scientific literature reading (50.8%) and feel confident in solving patients’ problems (64.4%). Approximately half (45.5%) focus on enhancing general skills. The majority (51.9%) strongly agree that physiotherapy conferences and seminars contribute to knowledge improvement. However, less than half (45.1%) agree on active participation in professional networking. Most participants reported achieving their professional development goals over the past year (Figure 1).

Correlation between burnout syndrome and professional development attitude. The correlation analysis revealed a negative Spearman correlation coefficient of -0.32 ($p < 0.05$), between total burnout and professional development.

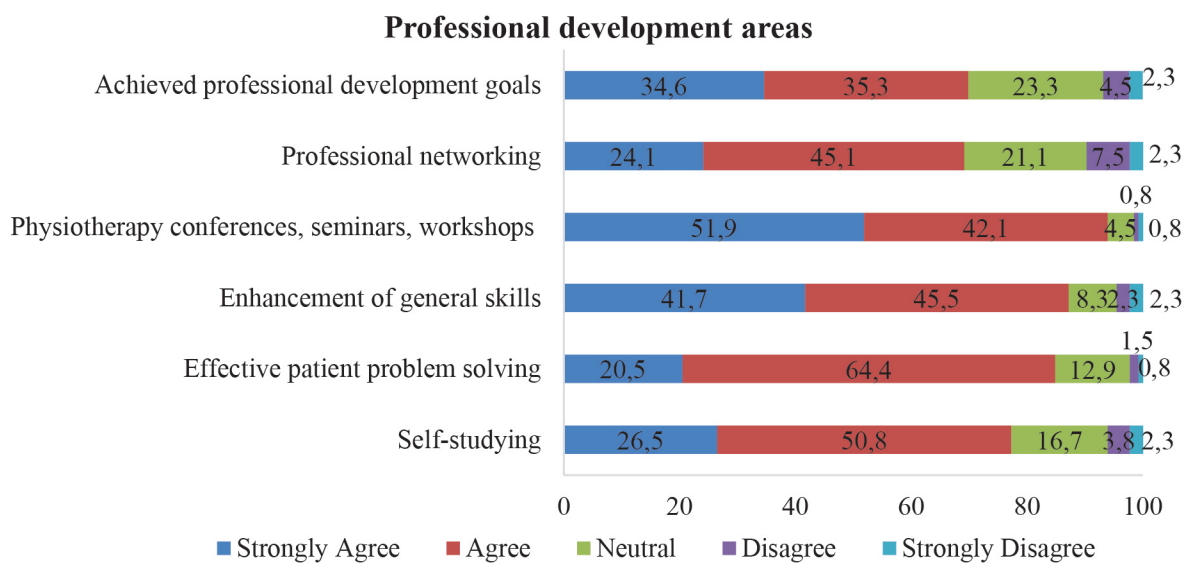


Figure 1. Self-evaluation of physiotherapists’ perception of their engagement in different areas of professional development

4. DISCUSSION

Here we addressed the effect of burnout syndrome on professional development in Lithuanian physiotherapists. This study showed that 50.4% of them experienced moderate burnout. A great number of respondents engaged in relevant scientific literature reading and felt confident in solving patients’ problems, focused on enhancing general skills, and strongly agreed that physiotherapy seminars contribute to knowledge improvement. The correlation that we observed suggests that higher burnout levels are associated with more positive or neutral attitudes toward professional development. This rejects our study hypothesis, as burnout is typically expected to have a negative impact on professional development. However, our data suggested an opposite pattern.

In a previous study physiotherapists were found to experience moderate to high levels of burnout which are more pronounced at the beginning of their careers, and these burnout levels do not vary between genders (Rodríguez-Nogueira et al., 2022). In our study most of them have had less than 5 years of work experience, and this could be a possible reason to experience burnout syndrome. Nair and Kumar (2023) found that burnout syndrome could occur more often in women and at a young age. In our study most of the respondents were women aged 25–39. On the other hand, there were not enough male physiotherapists to compare the distribution by gender as 70% of physiotherapists in Lithuania are female (World Physiotherapy, 2023).

A previous study about burnout in Lithuanian physiotherapists found that 23% experienced burnout (Indriūnienė et al., 2021). This study was similar to ours in that participants were mostly women, aged between 20 and 40 years, but the main difference was the average work experience. In the Indriūnienė et al. (2021) study, participants had 10.47 ± 8.84 years of work experience, almost double the time of participants in our study, and this could explain higher rates of burnout.

High burnout among physiotherapists is due to physical and emotional demands, challenging clients, and often running their own businesses (Burri et al., 2022; Seixas et al., 2020). Salaries do not match the workload, leading to additional jobs (Evans et al., 2024), and lack of decision-making independence adds stress. Rapid medical advancements require continuous skill enhancement. Results of our study suggest that burnout is also due to difficulty balancing patient work with administrative tasks, literature review, paperwork, and preparation.

Professional development for physiotherapists is crucial for high standards of care and self-confidence. Engaging in research, continuous education, and professional networking enhances their ability to address patient needs and fosters mentorship and collaboration. Although burnout can reduce motivation and energy for professional development, it may also drive individuals to seek these opportunities as a coping mechanism (Maslach & Leiter, 2016). Our study suggests that higher burnout levels correlate with positive or neutral attitudes toward professional development, indicating that physiotherapists can maintain a constructive outlook despite experiencing burnout.

The current study has limitations: a small sample size restricts generalizability of the findings, uncertainty about respondents' work settings (private vs. public, full-time vs. part-time, hours worked), and reliance on personal experiences rather than a structured assessment of professional development. However, burnout is noted as a concern across different work settings (Burri et al., 2022). Furthermore, the current analysis does not allow for determining the direction of causality between burnout syndrome and professional development.

5. CONCLUSIONS AND PERSPECTIVES

Lithuanian physiotherapists experience slightly higher than average burnout but maintain a positive or neutral attitude toward professional development, with many reading relevant scientific literature, attending conferences, seminars, and lectures, and effectively solving patients' problems. Future research should investigate the strategies that physiotherapists use to cope with burnout and the effect of workplace interventions on their psychological health to maintain the health of therapists and enhance the healthcare system's readiness to handle the situation in the medium and long term.

Author Contributions: Conceptualization, L.Ž. and H.Y.; methodology, L.Ž.; software, L.Ž.; validation, L.Ž. and H.Y.; formal analysis, L.Ž.; investigation, L.Ž.; resources, L.Ž.; data curation, H.Y.; writing—original draft preparation, L.Ž.; writing—review and editing, H.Y.; visualisation, L.Ž.; supervision, H.Y. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Informed consent was obtained from all subjects involved in the study.

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

References

Birbalaitė, E., Skarbalienė, A., Skvarciany, Z., & Istomina, N. (2023). Skubiosios medicinos pagalbos slaugos specialistų perdegimo sindromo ir emocinių kompetencijų sąsajos. *Sveikatos mokslai*, 33(2), 105–110. <https://doi.org/10.35988/sm-hs.2023.059>

- Burri, S. D., Smyrk, K. M., Melegy, M. S., Kessler, M. M., Hussein, N. I., Tuttle, B. D., & Clewley, D. J. (2022). Risk factors associated with physical therapist burnout: a systematic review. *Physiotherapy*, 116, 9–24. <https://doi.org/10.1016/j.physio.2022.01.005>
- Carmona-Barrientos, I., Gala-León, F. J., Lupiani-Giménez, M., Cruz-Barrientos, A., Lucena-Anton, D., & Moral-Muñoz, J. A. (2020). Occupational stress and burnout among physiotherapists: A cross-sectional survey in Cadiz (Spain). *Human Resources for Health*, 18(91), 1–10. <https://doi.org/10.1186/s12960-020-00537-0>
- Corrado, B., Ciardi, G., Fortunato, L., & Iammarrone, C. S. (2019). Burnout syndrome among Italian physiotherapists: A cross-sectional study. *European Journal of Physiotherapy*, 21(4), 240–245. <https://doi.org/10.1080/21679169.2018.1536765>
- Evans, K., Papinniemi, A., Vuvan, V., Nicholson, V., Dafny, H., Levy, T., & Chipchase, L. (2024). The first year of private practice - new graduate physiotherapists are highly engaged and satisfied but edging toward burnout. *Physiotherapy theory and practice*, 40(2), 262–275. <https://doi.org/10.1080/09593985.2022.2113005>
- Indriūnienė, J., Nakutavičiūtė, I., Muntianaitė, I., Petravičienė, R., & Dadelienė, R. (2021). The relationship between work-related stress, burnout and aerobic capacity among physiotherapists. *Sveikatos mokslai*. <https://doi.org/10.35988/sm-hs.2021.037>
- Kristensen, T. S., Borritz, M., Villadsen, E., & Christensen, K. B. (2005). The Copenhagen Burnout Inventory: A new tool for the assessment of burnout. *Work & stress*, 19(3), 192–207. <https://doi.org/10.1080/02678370500297720>
- Maslach, C., & Leiter, M. P. (2016). Understanding the burnout experience: recent research and its implications for psychiatry. *World psychiatry: official journal of the World Psychiatric Association (WPA)*, 15(2), 103–111. <https://doi.org/10.1002/wps.20311>
- Mažionienė, A., & Mikužienė, V. (2019). Slaugytojų profesinio perdegimo ir jį lemiančių veiksnių sąsajos. *Sveikatos mokslai*, 29(6), 201–205. <https://doi.org/10.35988/sm-hs.2019.127>
- Nair, T., & Kumar, G. P. (2023). An overview of burnout syndrome in physiotherapists. *Current Innovations in Disease and Health Research*, 2, 23-30. <https://doi.org/10.9734/bpi/cidhr/v2/6731A>
- Puhanić, P., Erić, S., Talapko, J., & Škrlec, I. (2022). Job Satisfaction and Burnout in Croatian Physiotherapists. *Healthcare* (Basel, Switzerland), 10(5), 905. <https://doi.org/10.3390/healthcare10050905>
- Rodríguez-Nogueira, Ó., Leirós-Rodríguez, R., Pinto-Carral, A., Álvarez-Álvarez, M. J., Fernández-Martínez, E., & Moreno-Poyato, A. R. (2022). The relationship between burnout and empathy in physiotherapists: a cross-sectional study. *Annals of Medicine*. <https://doi.org/10.1080/07853890.2022.2059102>
- Seixas, A., Marques, T., Moreira-Silva, I., Azevedo, J., Ventura, N., & Rodrigues, S. (2020). Burnout in Portuguese physiotherapists, prevalence and influencing factors. *International Journal of Occupational and Environmental Safety*, 4(1), 37–47. https://doi.org/10.24840/2184-0954_004.001_0003
- Tichonova, L., & Gintilienė, M. (2021). Perdegimo sindromo poveikis ergoterapeutų profesiniam tobulėjimui. *Sveikatos mokslai*, 31(7), 222–226. <https://doi.org/10.35988/sm-hs.2021.249>
- Venturini, E., Ugolini, A., Bianchi, L., Di Bari, M., & Paci, M. (2024). Prevalence of burnout among physiotherapists: A systematic review and meta-analysis. *Physiotherapy*. <https://doi.org/10.1016/j.physio.2024.01.007>
- World Physiotherapy. (2023). Annual membership census Lithuania. Retrieved June 25, 2024, from <https://world.physio/sites/default/files/2024-01/AMC2023-Lithuania.pdf>
- Zhang, J. Y., Shu, T., Xiang, M., & Feng, Z. C. (2021). Learning burnout: evaluating the role of social support in medical students. *Frontiers in Psychology*, 12, 625506. <https://doi.org/10.3389/fpsyg.2021.625506>
- Žutautienė, R., Radišauskas, R., Ustinavičienė, R., Kirvaitienė, J., & Rakutyte, K. (2019). Gydytojų psichosocialiniai darbo aplinkos veiksniai ir jų sąsajos su gyvenimo kokybe. *Sveikatos mokslai*, 29(4), 53–59. <https://doi.org/10.5200/sm-hs.2019.057>

Kokią įtaką Lietuvos kineziterapeutų profesiniam tobulėjimui turi perdegimo sindromas?

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Santrauka

Tyrimo pagrindimas. Perdegimo sindromas dažniausiai paveikia sveikatos priežiūros specialistus, kadangi jie daug laiko skiria pacientų sveikatos problemų sprendimui. Perdegimo sindromo paplitimas tarp sveikatos priežiūros specialistų svyruoja nuo 10 iki 80,5 proc. ir šie rodikliai didėja. Kineziterapeuto profesija reikalauja didelės atsakomybės, nuolatinio bendravimo su pacientais bei išitraukimo į gydymo procesą. Dėl tokio darbo pobūdžio kineziterapeutams kyla didelė perdegimo rizika, o darbas gali nebeteikti malonumo.

Tikslas. Įvertinti perdegimo sindromo įtaką Lietuvos kineziterapeutų profesiniam tobulėjimui.

Metodai. 133 kineziterapeutai, dirbantys tiek viešajame, tiek privačiame sektoriuose, 2024 m. sausio–kovo mėnesiais užpildė anoniminę apklausą internetinėje formoje www.apklausa.lt. Perdegimo sindromas buvo vertinamas naudojant Kopenhagos perdegimo klausimyną (angl. Copenhagen Burnout Inventory (CBI)). Taip pat buvo įtraukti socio-demografiniai ir su profesiniu tobulėjimu susiję klausimai.

Rezultatai. Bendras CBI balas buvo 54,92 (vidutinis perdegimas). 50,4 proc. kineziterapeutų patyrė vidutinį perdegimą ($n = 67$). 13 (9,8 proc.) kineziterapeutų patyrė aukšto lygio perdegimo sindromą ir nė vienas nepatyrė sunkaus perdegimo. Respondentai skaitė aktualią mokslinę literatūrą (50,8 proc.) ir jautėsi užtikrintai spęsdami pacientų problemas (64,4 proc.), orientavosi į bendrųjų įgūdžių ugdymą (45,5 proc.), tvirtai sutiko, kad kineziterapijos seminarai prisideda prie žinių tobulinimo (51,9 proc.). Nustatyta neigiama koreliacija ($r = -0,26$, $p < 0,05$), rodanti reikšmingą atvirkštinį ryšį tarp perdegimo sindromo ir profesinio tobulėjimo.

Išvados. Lietuvos kineziterapeutai patiria vidutinio lygio perdegimo sindromą. Nepaisant to, jie išlaiko teigiamą arba neutralų požiūrį į profesinį tobulėjimą, aktyviai dalyvauja įgūdžių tobulinimo veikloje, veiksmingai sprendžia pacientų problemas.

Reikšminiai žodžiai: kineziterapeutai, Kopenhagos perdegimo klausimynas, perdegimo sindromas, profesinis tobulėjimas

Received 2024 08 20

Accepted 2024 10 03