

NAZIV DISERTACIJE: UČESTALOST BIOPSIHOSOCIJALNIH FAKTORA BOLA U DONJEM DIJELU LEĐA ZDRAVSTVENIH PROFESIONALACA

Autor: Ranka Ogurlić

Mentor: Prof. dr. Emira Švraka

Datum odbrane: 03.03.2025.

DOI: <https://doi.org/10.17532/DD.2025.01>



APSTRAKT

Uvod: Bol u donjem delu leđa (engl. Low back pain - LBP) je simptom s mnogim uzrocima. Najveći je i najčešći faktor onesposobljenja na radnom mjestu i jedan od vodećih uzroka morbiditeta zdravstvenih profesionalaca s godišnjom stopom 60%-70%. Međuzavisan je i složen problem dejstva biopsihosocijalnih faktora gdje komorbiditeti i mehanizmi procesuiranja utiču na doživljaj bola, funkciju, učešće u društvu i lični prosperitet.

Hipoteze: Biopsihosocijalni faktori utiču na bol u donjem dijelu leđa zdravstvenih profesionalaca. Biopsihosocijalni faktori zastupljenosti bola u donjem dijelu leđa se bitno razlikuju u odnosu na zdravstvenu profesiju i radni staž. Biopsihosocijalni faktori utiču na nivo onesposobljenja zdravstvenih profesionalaca s bolom u donjem dijelu leđa.

Ciljevi: Utvrditi učestalost biopsihosocijalnih faktora bola u donjem djelu leđa zdravstvenih profesionalaca, uticaj biopsihosocijalnih faktora bola u donjem djelu leđa na intenzitet bola zdravstvenih profesionalaca na primarnom, sekundarnom i tercijarnom nivou, razliku uticaja biopsihosocijalnih faktora na bol u donjem dijelu leđa zdravstvenih profesionalaca na primarnom, sekundarnom i tercijarnom nivou u odnosu na zdravstvenu profesiju i radni staž, zastupljenost psihološke disfunkcije zdravstvenih profesionalaca s bolom u donjem dijelu leđa i zadovoljstvo poslom zdravstvenih profesionalaca s bolom u donjem dijelu leđa.

Materijal i metod istraživanja: Sprovedeno je presječno istraživanje u pet zdravstvenih ustanova u Boki Kotorskoj (Crna Gora) od decembra 2021. do jula 2022. godine. Istraživanje je obuhvatilo 192 ispitanika s LBP zaposlenih na neodređeno vrijeme, starosti 19-65 godina. Biopsihosocijalni faktori analizirani su Upitnikom dizajniranim za ovo istraživanje, a intenzitet bola, nivo onesposobljenja, psihološka disfunkcija i zadovoljstvo poslom standardizovanim upitnicima (ODI, SF-MPQ-2, GHQ-12, JSS). Ispitanici su komparirani u grupama prema nivoima zdravstvene zaštite (primarni, sekundarni i tercijarni) i zdravstvenim profesijama (fizioterapeuti, medicinske sestre, laboranti, tehničari drugih zdravstvenih profesija i doktori medicine, stomatologije i farmaceuti). Zavisno od vrste varijable korišteni su korelacioni testovi, a granica statističke značajnosti bila je vrijednost $p=0,05$.

Rezultati: LBP ima 82,3% ispitanika ženskog pola i 17,7% muškog pola starosne dobi $41,6 \pm 12,99$ godine, s $16,19 \pm 12,62$ godina radnog iskustva. Prosječan trenutni bol je $2,15 \pm 2,35$, a ukupan bol $2,41 \pm 1,2,5$. Značajne su razlike u LBP pri bilo kom pokretu 23,9% ispitanika sekundarnog nivoa, sjedanju 70,6% doktora medicine, stomatologije i farmaceuta i bočnom nagnjanju 33,3% laboranata. Biološki faktori sekundarnog nivoa su: stajanje (17,9%), penjanje uz stepenice i podizanje tereta (16,4%), stajanje i nošenje tereta (14,9%), težak fizički rad i saginjanje (7,5%), tercijarnog sjedanje (33,9), a primarnog nivoa stajanje (52,4%). Fizioterapeuti su izloženi teškom fizičkom radu, medicinske sestre stajanju, stajanju i nošenju tereta, penjanju uz stepenice i podizanju tereta, laboranti stajanju i saginjanju, tehničari stajanju i hodanju, a doktori medicine, stomatologije i farmaceuti sjedenju. Somatski simptomi uticajni su na primarnom nivou, a anksioznost, socijalna disfunkcija i depresija na sekundarnom. Somatizaciju ima 58,5% fizioterapeuta, 75% laboranata anksioznost, 25% tehničara socijalnu disfunkciju, a 2,7% medicinskih sestara depresiju. Među socijalnim faktorima cjenjenost, povjerenje, podrška i podsticaj rukovodstva najbitni su faktori u tercijarnom nivou. U primarnom nivou posao je odličan (58,7%) i dobar (28,6%), u tercijarnom prihvatljiv (24,2%) i loš (8,1%), a u sekundarnom depresivan (4,5%). Medicinske sestre imaju odličan posao, doktori medicine stomatologije i farmaceuti dobar posao, laboranti prihvatljiv, fizioterapeuti loš, a tehničari drugih zdravstvenih profesija imaju depresivan posao. Minimalno onesposobljenje ima 90,3% ispitanika tercijarnog nivoa, lakše onesposobljenje ima 19% ispitanika primarnog nivoa, a umjereno onesposobljenje 9% ispitanika sekundarnog nivoa. Najveći nivo onesposobljenja imaju laboranti (18,75%), zatim tehničari drugih zdravstvenih profesija (15,8%), medicinske sestre (14,06%), doktori medicine stomatologije i farmaceuti (13,94%), a najmanji nivo onesposobljenja imaju fizioterapeuti (9,04%).

Zaključci: Istraživanje je potvrdilo važnost različitih uticaja i zastupljenosti biopsihosocijalnih faktora u onesposobljenju, psihološkoj disfunkciji, zadovoljstvu poslom i bolu donjeg dijela leđa zdravstvenih profesionalaca.

Ključne riječi: učestalost, uticaj, biopsihosocijalni faktori, bol u donjem dijelu leđa, zdravstveni radnici

DISSERTATION TITLE:**Author:** Ranka Ogurlić**Mentor:** Prof. dr. Emira Švraka**Date of defence:** 03. March 2025.**DOI:** <https://doi.org/10.17532/DD.2025.01>**ABSTRACT**

Introduction: Low back pain (LBP) is a symptom with many causes. It is the biggest and most common factor of incapacitation in the workplace and the leading cause of morbidity among health professionals at an annual rate of 60%-70%. It is an interdependent and complex problem of the effect of biopsychosocial factors where comorbidities and processing mechanisms affect the experience of pain, function, participation in society and personal prosperity.

Hypotheses: Biopsychosocial factors influence low back pain in healthcare professionals. Biopsychosocial factors of lower back pain are significantly different in relation to the health profession and work experience. Biopsychosocial factors influence the level of disability of health professionals with low back pain.

Objectives: To determine: the frequency of biopsychosocial factors in low back pain among health professionals, the impact of biopsychosocial factors in low back pain on the intensity of pain among health professionals at the primary, secondary and tertiary levels, the difference in the impact of biopsychosocial factors on low back pain among health professionals at primary, secondary and tertiary levels in relation to the health profession and work experience, the prevalence of psychological dysfunction in health professionals with low back pain and the job satisfaction of health professionals with low back pain.

Material and method: A cross-sectional survey was conducted in five health institutions in Boka Kotorska (Montenegro) from December 2021 to June 2022. The research included 192 subjects with LBP employed for an indefinite period, aged 19-65 years. Biopsychosocial factors were analyzed with a questionnaire designed for this research, and pain intensity, level of disability, psychological dysfunction and job satisfaction with standardized questionnaires (ODI, SF-MPQ-2, GHQ-12, JSS). Respondents were compared in groups according to levels of health care (primary, secondary and tertiary) and health professions (physiotherapists, nurses, laboratory technicians, technicians of other health professions and doctors of medicine, dentistry and pharmacists). Depending on the type of variable, correlation tests were used, and the limit of statistical significance was the value $p=0.05$.

Results: LBP has 82.3% female respondents and 17.7% male respondents aged 41.6 ± 12.99 years, with 16.19 ± 12.62 years of work experience. Average current pain is 2.15 ± 2.35 , and total pain is $2.41 \pm 1.2.5$. There are significant differences in LBP during any movement 23.9% of secondary level subjects, sitting 70.6% of doctors of medicine, dentistry and pharmacists and side leaning 33.3% of laboratory workers. Biological factors of the secondary level are: standing (17.9%), climbing stairs and lifting loads (16.4%), standing and carrying loads (14.9%), heavy physical work and bending (7.5%), sitting at the tertiary level (33.9%), and standing at the primary level (52.4%). Physiotherapists are exposed to heavy physical work, nurses to standing, standing and carrying loads, climbing stairs and lifting loads, laboratory technicians to standing and bending, technicians to standing and walking, and doctors of medicine, dentistry and pharmacists to sitting. Somatic symptoms are more influential at the primary level, and symptoms of anxiety, social dysfunction and depression at the secondary level. 58.5% of physiotherapists are prone to somatization, 75% of laboratory workers are prone to anxiety, 25% of technicians are prone to social dysfunction, and 2.7% of nurses are prone to depression. Among the social factors, appreciation, trust, support and encouragement of management are the most important factors in the tertiary level. At the primary level, the work is excellent (58.7%) and good (28.6%), at the tertiary level it is acceptable (24.2%) and bad (8.1%), and at the secondary level it is depressing (4.5%). Nurses have an excellent job, doctors of dentistry and pharmacists have a good job, laboratory technicians have an acceptable job, physical therapists have a bad job, and technicians of other health professions have a depressing job. 90.3% of tertiary level respondents have minimal disability, 19% of primary level respondents have mild disability, and 9% of secondary level respondents have moderate disability. Laboratory technicians have the highest level of disability (18.75%), followed by technicians of other health professions (15.8%), nurses (14.06%), doctors of medicine, dentistry and pharmacists (13.94%), while physiotherapists have the lowest level of disability (9.04%).

Conclusions: The research confirmed the importance of various influences and representation of biopsychosocial factors in disability, psychological dysfunction, job satisfaction and lower back pain of health professionals.

Key words: frequency, impact, biopsychosocial factors, low back pain, healthcare professionals

