



Univerza v Novem mestu  
*University of Novo mesto*

Fakulteta za zdravstvene vede  
*Faculty of Health Sciences*

# *Zbornik povzetkov*

**CELOSTNA OBRAVNAVA PACIENTA**

*Mednarodna znanstvena konferenca  
Novo mesto, 16. november 2023*

**HOLISTIC APPROACH  
TO THE PATIENT**

*International scientific conference  
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## **Timski rad u funkciji sveukupne kvalitete palijativne skrbi**

Palijativna skrb se oslanja na široki spektar znanja, disciplina, vještina i iskustava kako bi se zadovoljile sve potrebe i pružila kvalitetna skrb. Kada faza bolesti postane terminalna, a kvalitetnu palijativnu skrb više se ne može postići u domu pacijenta, pacijenta se smješta u Hospicij. Strategija i razvoj palijativne skrbi u Republici Hrvatskoj, kroz sve strukture društva, kroz zajednicu i individualno, omogućuje dostojanstven život i dostojanstvenu smrt. Za pružanje kvalitetne palijativne skrbi od velikog značaja su organizacija primarne i sekundarne zdravstvene zaštite, timski rad multidisciplinarnog tima i pacijenta, obitelji te drugi nezdravstveni profesionalci. Pregledana je dostupna dokumentacija i deskriptivnom metodom su opisani primjeri dobre prakse. U radu je prikazana palijativna - hospicijska skrb u Primorsko - goranskoj županiji Republike Hrvatske, kroz primjere dobre prakse, pokazatelje timskog rada na relaciji primarne (koordinator palijativne skrbi) i sekundarne zdravstvene zaštite (glavna sestra hospicija) s ciljem pružanja najkvalitetnije moguće palijativne skrbi. Dobri primjeri iz prakse najbolji su pokazatelji timskog rada različitih službi s ciljem pružanja najkvalitetnije moguće palijativne skrbi.

*Ključne riječi:* kvaliteta palijativne i hospicijske skrbi, timski rad, zdravstveni i nezdravstveni profesionalci

## **Teamwork as a Function of Overall Quality of Palliative Care**

Palliative care relies on a wide range of knowledge, disciplines, skills and experiences in order to meet all needs and provide quality care. When a disease enters the terminal stage, and quality palliative care can no longer be achieved in the patient's home, the patient is placed in a hospice. The strategy and development of palliative care in the Republic of Croatia, through all structures of society, through the community and individually, enables a dignified life and a dignified death. The organization of primary and secondary health care, teamwork between a multidisciplinary team and the patient, family and other non-health professionals are of great importance for the provision of quality palliative care. The available documentation was reviewed and examples of good practice were described using a descriptive method. The paper presents palliative/ hospice care in the Primorje-Gorski Kotar County of the Republic of Croatia, through good practice examples, teamwork indicators in the relationship between primary (palliative care coordinator) and secondary health care (hospice head nurse) with the aim of providing the best possible palliative care. Good practice examples are the best indicators of teamwork of different services with the aim of providing the best possible palliative care.

*Keywords:* quality of palliative and hospice care, teamwork, health and non-health professionals

## **Ukrepi za preprečevanje nasilnega vedenja pacientov v psihiatrični zdravstveni negi**

Zaposleni v zdravstveni negi so pogosto izpostavljeni nasilnemu vedenju pacientov, kar vpliva na njihovo in pacientovo zdravje ter na izvajanje kakovostne ter varne zdravstvene nege. Pri tem se največkrat soočajo z verbalno in fizično obliko nasilnega vedenja pacientov, po pojavnosti pa jima sledita psihična in spolna oblika nasilnega vedenja. Namen prispevka je opredeliti ukrepe za preprečevanje nasilnega vedenja pacientov na področju psihiatrije. Uporabljena je bila deskriptivna metoda dela s sistematičnim pregledom strokovne in znanstvene literature. Za povečanje varnosti zaposlenih v zdravstveni negi na področju psihiatrije ter hkrati pacientov je potrebno povečati usposobljenost za delo z nasilnimi pacienti s strani zaposlenih v zdravstveni negi, uvedba modela rotacije, oddelčnega mentorja, krepitev skupnostne psihiatrije in profesionalizacija poklica zdravstvene nege. Varnost zaposlenih v zdravstveni negi ni samoumevna, saj so ti v nenehnem stiku s pacienti, ki so pogosto, ko želijo pokazati svoje nestrinjanje, nasilni. Pri tem nasilje ni samo, če pacient udari zaposlenega v zdravstveni negi, temveč se pacient vede nasilno že, ko s povzdignjenim glasom ne odobrava odločitve zaposlenih v zdravstveni negi. V obeh primerih so zaposleni v zdravstveni negi usposobljeni za prepoznavanje, preprečevanje in omejevanje nasilnega vedenja pacientov.

*Ključne besede:* usposabljanje, model rotacije, oddelčni mentor, skupnostna psihiatrija

## **Preventive Measures of Patients with Violent Behaviour in Psychiatric Nursing Care**

Nursing staff are often exposed to violent behaviour from patients, which affects their health and that of the patient, and the delivery of quality and safe nursing care. The most common forms of patient violence are verbal and physical, followed by psychological and sexual. The paper aims to identify measures to prevent violent behaviour in psychiatric patients. A descriptive method of work with a systematic review of professional and scientific literature was used. In order to increase the safety of nursing staff in the field of psychiatry, as well as that of patients, it is necessary to increase the competence of nursing staff to work with violent patients; to introduce a rotation model and a ward mentor; to strengthen community psychiatry; and to professionalise the nursing profession. The safety of nursing staff cannot be taken for granted, as they are in constant contact with patients, who are often violent when they want to show their disapproval. Violence is not only when a patient hits a healthcare worker, but also when a patient behaves violently by raising his or her voice in disapproval of a decision made by healthcare workers. Yet, if the former or the latter occurs, nursing staff are trained to recognise, prevent and limit violent behaviour in patients.

*Keywords:* training, rotation model, ward mentor, community psychiatry

## **Javno zdravje kot pojem v slovenskem pravnem prostoru**

Kot posebno interdisciplinarno področje javno zdravje obsega proučevanje različnih dejavnikov, ki vplivajo na zdravje prebivalstva, po drugi strani pa pomeni tudi organizirane dejavnosti, vključno z državnimi politikami, ki imajo za cilj preprečevanje bolezni in poškodb, krepitev zdravja in podaljševanje življenja. Izraz javno zdravje se je v zakonodaji Združenega kraljestva pojavil že leta 1848, ko je bil sprejet »Public Health Act«. V kontinentalni Evropi pa se je ta izraz uveljavil kasneje. Prispevek pregledno obravnava definicijo in glavne nosilce javnega zdravja v nekdanji in sedanji zdravstveni zakonodaji na slovenskem ozemlju. Ob nespornih dosežkih javnozdravstvene teorije in prakse na slovenskem ozemlju je zakonodaja pogosto uveljavljala terminološke in organizacijske spremembe na področju javnega zdravja. Po osamosvojitvi je slovensko pravo najprej sprejemalo izraz »javno zdravje« iz ratificiranih mednarodnih pogodb in pravnega reda Evropske unije. Z novelo Zakona o zdravstveni dejavnosti leta 2013 pa je bil ta izraz sprejet tudi v slovenski zakonodaji.

*Ključne besede:* javno zdravje, Slovenija, Evropska unija

## **Public Health as a Notion in the Slovenian Legal Space**

Public health is, on the one hand, a special interdisciplinary scientific field studying various factors that affect the health of the population, while, on the other hand, it can also be defined as organized activities, including state policies, aimed at preventing disease and injury, strengthening health, and prolonging life. The term public health appeared in the legislation of the United Kingdom as early as 1848, when the Public Health Act was passed. In continental Europe, however, this term became established later. The paper provides an overview of the definitions and main actors of public health in the past and present legislation in the territory of Slovenia. In parallel with indisputable achievements of public health theory and practice in Slovenian territory, the past legislation introduced several terminological and organizational changes in the field of public health. After Slovenia gained independence, the term "public health" was first introduced in the legal system by ratified international treaties and the law of the European Union. The amendments to the Health Services Act in 2013 finally introduced this term in the Slovenian legislation as well.

*Keywords:* public health, Slovenia, European Union

## **Promoting Children's Health Behaviours in the School Setting**

Promoting health and improving health literacy contributes to the Sustainable Development Goals (SDGs), in particular SDG 3 – Quality Health and SDG 4 – Quality Education. School health promotion provides the possibility of promoting health literacy through discussion, information and the acquisition of knowledge. Promoting healthy behaviours in a school environment, through educational strategies, facilitates behaviour change and develops children's capacity for self-care, decision-making and control of action. This enables them to act towards healthy behaviours to improve quality of life and well-being, and prevent illness and associated co-morbidities in adulthood. The aim of the paper is to identify frameworks and guidelines to promote children's health behaviours in the school setting. A search was conducted in the ScienceDirect, EBSCO and Google Scholar databases, and in legal and official documents to identify frameworks and guidelines to promote health and improve health literacy in the school setting. Based on the results, several guidelines and frameworks were identified for promoting children's healthy behaviours and improving health literacy in the school setting. The findings suggest that using a framework and guidelines for promoting children's healthy behaviours in the school setting can more effectively enable and empower children and families to develop healthy behaviours.

*Keywords:* school health promotion, health behaviours, children

## **Spodbujanje zdravega vedenja otrok v šolskem okolju**

Promocija zdravja in izboljšanje zdravstvene pismenosti prispevata k ciljem trajnostnega razvoja (CTR), zlasti k CTR 3 – Zdravje in dobro počutje ter CTR 4 – Kakovostno izobraževanje. Promocija zdravja v šoli lahko gradi zdravstveno pismenost prek diskusije, širjenja informacij in pridobivanja znanja. Spodbujanje zdravega vedenja v šolskem okolju s pomočjo izobraževalnih strategij omogoča spremembe vedenja in razvija otrokovo sposobnost, da skrbi za sebe, odloča in ukrepa. Z zdravim vedenjem si lahko otroci izboljšajo kakovost življenja in počutje ter preprečijo bolezni in pridružene motnje v odraslosti. Cilj raziskave je prepoznati okvire in smernice za spodbujanje zdravega vedenja otrok v šolskem okolju. Iskanje je potekalo v podatkovnih bazah ScienceDirect, EBSCO in Google Scholar ter v pravnih in uradnih dokumentih za opredelitev okvirov in smernic za spodbujanje zdravja in izboljšanje zdravstvene pismenosti v šolskem okolju. Na podlagi rezultatov iskanja smo prepoznali več okvirov in smernic za spodbujanje zdravega vedenja otrok in izboljšanje zdravstvene pismenosti v šolskem okolju. Ugotovitve kažejo, da je lahko uporaba okvirov in smernic za spodbujanje zdravega vedenja otrok v šolskem okolju učinkovita pri opolnomočenju otrok in družin, da razvijejo zdrava vedenja.

*Gljučne besede:* promocija zdravja v šoli, zdrava vedenja, otroci

## **Vloga medicinske sestre pri komunikaciji v obravnavi pacienta s frontotemporalno demenco: pregled literature**

Frontotemporalna demenca (FTD) je nevrodegenerativna motnja, ki povzroča motnje čustvene regulacije in socialnega vedenja zaradi upada izvršilnega nadzora. Simptomatika FTD s hudimi težavami v odnosih z okolico ovira kakovostno obravnavo pacienta. Namen pregleda literature je predstaviti vlogo medicinske sestre v vzpostavljanju in vzdrževanju funkcionalne komunikacije kljub negativnim učinkom pacientovega specifičnega nevrološkega poslabšanja. Enote literature smo pridobili iz bibliografskih baz PubMed, CINAHL, Medline in The Cochrane Library z iskalnimi pojmi »frontotemporal«, »dementia«, »nursing«, »communication« ter Boolovima operatorjema AND in OR. Z vključitvenimi in izključitvenimi kriteriji smo dobili 87 zadetkov za pregled. Z izločanjem po pregledu naslovov in povzetkov, vsebine in kakovosti smo v vsebinsko analizo vključili 5 prispevkov, iz katerih smo s kodiranjem identificirali intervencije komunikacije s pacientom (9), s svojci (5), drugimi zdravstvenimi delavci (3) ter drugimi službami (3).

*Ključne besede:* komunikacija s pacientom, frontotemporalna demenca, zdravstvena nega, pregled literature

## **Nurse's Role in Communication in the Treatment of Patients with Frontotemporal Dementia**

Frontotemporal dementia (FTD) is a neurodegenerative disorder that causes disturbances in emotional regulation and social behavior due to a decline in executive control. The symptoms of FTD cause severe problems in relationships with others and hinder a quality treatment of the patient. The purpose of the literature review is to present the nurse's role in establishing and maintaining functional communication despite the negative effects of the patient's specific neurological impairment. Literature units were obtained in the bibliographic databases PubMed, CINAHL, Medline and Cochrane Library with the search terms "frontotemporal, dementia", "nursing", "communication" and the Boolean operators "AND" and "OR". Using inclusion and exclusion criteria, we obtained 87 units for review. After reviewing the titles, abstracts, content and quality, we included 5 units in the content analysis, from which we have identified communication interventions with the patient (9), with relatives (5), other health professionals (3) and other services (3) by coding.

*Keywords:* patient communication, frontotemporal dementia, nursing, literature review

## **Generiranje znanja kao čimbenik u stvaranju povjerenja pacijenata prema liječnicima**

Znanje i educiranje pacijenata o njihovim zdravstvenim potrebama i teškoćama ima izuzetno veliko značenje i vrijednost u suvremenom pristupu zdravstvenoj skrbi. Cilj ovoga rada je utvrditi koliko točne, potpune, razumljive, pravovremene informacije o liječenju, skrbi i intervencijama koje pružaju liječnici utječu na stvaranje povjerenja pacijenata u te liječnike. Istraživanje je obavljeno na kvotnom, reprezentativnom uzorku ( $n = 130$ ) početkom 2023. U ispitivanju je korišten on-line upitnik, konstruiran za ovu svrhu, anonimnog karaktera. Instrument ispitivanja bila je pet stupanjska Likertova ljestvica s 9 tvrdnji. Rezultati dobiveni korištenjem multiple parcijalne korelacijske analize jasno i nedvosmisleno dokazuju da je za bolje rezultate liječenja pacijenata neophodno povećati angažman pacijenata u generiranju njihovog ciljanog znanja o zdravstvenim teškoćama u kojima se nalaze. Koeficijenti parcijalne korelacije pokazuju jaku vezu ( $r = 0,64$ ) između kumuliranog znanja i sudjelovanja pacijenata u planu njihovog liječenja. Mjesto i uloga liječnika i ostalih zdravstvenih radnika neizostavna je i nezamjenjiva u stjecanju tog znanja i kreiranju povjerenja pacijenata. Koeficijenti parcijalne korelacije pokazuju vrlo jaku povezanost ( $r = 0,82$ ) između poticanja pacijenata na generiranje znanja o njihovim bolestima i povjerenja pacijenata u te liječnike. Prezentirane spoznaje trebaju biti poticaj za naredna istraživanja, ali i putokaz u unapređenju zdravstvene skrbi i povećanju njene učinkovitosti.

*Ključne riječi:* pacijenti, liječnici, znanja, informacije, povjerenje

## **Generating Knowledge as a Factor in Creating Patients' Trust towards Doctors**

Knowing and educating patients about their health needs and difficulties is extremely important and valuable in the modern approach to health care. The aim of the paper is to determine how accurate, complete, comprehensible and timely information about treatment, care and interventions provided by doctors influences the establishment of patients' trust in these doctors. The research was carried out on a representative quota sample ( $n=130$ ) at the beginning of 2023. The research used an anonymous online questionnaire, compiled for this purpose. The research instrument was a five-point Likert scale with 9 statements. The results obtained using multiple partial correlation analysis clearly and unequivocally prove that for better patient treatment results, it is necessary to increase the engagement of patients in generating their target knowledge about the health difficulties they are encountering. Partial correlation coefficients show a strong correlation ( $r = 0.64$ ) between the accumulated knowledge and patients' participation in their treatment plan. The place and role of doctors and other health workers is essential and irreplaceable in acquiring this knowledge and creating the trust of patients. The partial correlation coefficients show a very strong correlation ( $r = 0.82$ ) between encouraging patients to generate knowledge about their illnesses and patients' trust in these doctors. The knowledge presented should be an incentive for further research, but also a guide in improving health care and increasing its efficiency.

*Keywords:* patients, doctors, knowledge, information, trust

## **Pojav urinske inkontinence v poporodnem obdobju**

Urinska inkontinenca je nehoteno uhajanje urina, ki jo povzročijo različni dejavniki, kot so stres, starost, način življenja, porod, povišana telesna masa, oslabiljene mišice medeničnega dna ipd. Je ena najpogostejših težav v poporodnem obdobju, v katerem se pojavlja med 3 % in 40 % in ima velik vpliv na kakovost življenja ženske. Namen prispevka je predstaviti pojavnost urinske inkontinence v poporodnem obdobju ter njene posledice na življenje otročnice. Pregled literature je s področja ginekologije in zdravstvene nege žene. Izbrana literatura je v slovenskem in angleškem jeziku objavljena med letom 2010 in 2020. Prikazi dobrih praks nam podajo informacijo, da pojav urinske inkontinence bistveno vpliva na kakovost življenja tako ženske kot tudi partnerja. Zaradi uhajanja urina med spolnim odnosom, se mu ženske izogibajo ali občutno zmanjšajo pogostost, saj se počutijo tesnobno, osramočeno, nesprejeto, občutijo krivdo in neprivačnost, ki posledično pripelje do nizke samozavesti in nezadovoljnim spolnim odnosom. Poleg vpliva na spolno življenje vpliva tudi na socialno in ekonomsko dinamičnost. Pojav urinske inkontinence pomeni za žensko spremenjen načina življenja in večjo potrebo po iskanju podpore zlasti pri partnerju. Poleg partnerja imajo pomembno vlogo tudi zdravstveni delavci, ki s strokovnim znanjem ustvarijo z žensko zaupen odnos in ji svetujejo, kako izboljšati kakovost življenja, ter jo vseskozi tudi spremljajo.

*Ključne besede:* urinska inkontinenca, spolnost, kakovost življenja, duševno zdravje

## **Occurrence of Urinary Incontinence in the Postpartum Period**

Urinary incontinence is the involuntary leakage of urine, caused by many factors, such as stress, age, lifestyle, childbirth, weight gain, weakening pelvic muscles, etc. It is one of the most common issues that occurs in the postnatal period. It can affect between 3 and 40% of women who give birth and can have an impact on the quality of women's lives. The purpose of the article is to present the incidence of urinary incontinence in the postpartum period and its consequences for the life of the childbearing woman. The literature review covered the field of gynecology and women's nursing. The selected literature was published in the Slovenian and English language between 2010 and 2020. The presentation of good practices shows that the occurrence of urinary incontinence significantly affects the quality of both the woman's and the partner's life. Due to urinary leakage during sexual intercourse, women often avoid or reduce sexual activity because they feel anxious, ashamed, unaccepted, guilty and unattractive, leading to low self-esteem and unpleasant sexual intercourse. In addition to the impact on women's sex lives, their social and economic status suffers. The occurrence of urinary incontinence results in lifestyle changes for women and they require more support, especially from their partners. In addition to partners, healthcare professionals have a major role, utilizing their knowledge to advise women on how to improve their quality of life.

*Keywords:* urinary incontinence, sexuality, quality of life, mental health



## **Babištvo v otroški literaturi**

Ob naprednem razvoju tehnologije lahko v današnjem času do različnih informacij dostopamo v trenutku. Njihova verodostojnost in primernost vsebin sta naslovnikom večkrat prikriti in namemo spregledani. Tudi informacije o spolnosti so velikokrat prikazane na neprimerne načine, njihova kakovost pa je vprašljiva zlasti takrat, kadar do njih lahko dostopajo otroci. Otroška literatura nam kot eden od dejavnikov socializacije v zgodnjem otroštvu pomaga vplivati na kulturizacijo in povzemanje stališč družbe tudi pri spoznavanju področja babištva, spočetja, spolne vzgoje, nosečnosti in poroda. Ker je spolnost prisotna v vsem našem življenju, si otroci zgodaj ustvarjajo predstave o spolnih odnosih, spočetju, nosečnosti in rojevanju. Te predstave so ob napačnih informacijah lahko kdaj tudi izkrivljene. Namen prispevka je ugotoviti na kakšen način so v otroški literaturi prikazani spočetje, nosečnost, porod in rojstvo. Pri raziskovanju smo uporabili kvalitativno metodo zbiranja podatkov, in sicer analizo otroških slikanic in knjig za otroke z motivi babištva. Upoštevali smo leposlovne in poučne slikanice izdane v slovenskem jeziku.

*Ključne besede:* otroška literatura, babištvo, spočetje, nosečnost, porod in rojstvo

## **Midwifery in Children's Literature**

With the advanced development of technology, we can nowadays access a variety of information in an instant. The content's authenticity and relevance to the addressee are often concealed and deliberately overlooked. Information about sexuality is also often displayed in inappropriate ways, and its quality is questionable, especially when children can access it. Children's literature, as one of the factors of socialization in early childhood, helps us to influence the culturalization and summarization of society's attitudes, also when learning about midwifery, conception, sex education, pregnancy and childbirth. Because sexuality is present in all of our lives, children can form early ideas about sexuality, conception, pregnancy and childbirth. These perceptions can sometimes be distorted in the presence of incorrect information. The aim of the paper is to find out how conception, pregnancy, labor and childbirth are depicted in children's literature. A qualitative data collection method was used to analyze children's picture books and children's books with midwifery motifs. We took into account fiction and educational picture books published in the Slovenian language.

*Keywords:* children's literature, midwifery, conception, pregnancy, labor, childbirth

## **Poteškoće roditelja u vezi poticanja aktivnog igranja predškolaraca**

Brojni su faktori koji mogu utjecati na djecu i njihovu aktivnost. Cilj ovog rada je provjeriti stavove roditelja o poteškoćama u vezi poticanja djece predškolske dobi na aktivno igranje. Također je cilj provjeriti utječe li spol i starost djeteta na stavove roditelja. Istraživanje je provedeno online tijekom 2022. godine. U istraživanju je sudjelovalo 296 roditelja djece predškolske dobi. Rezultati istraživanja upućuju da većina roditelja smatra da nemaju previše poteškoća vezano za poticanje djece na aktivno igranje. Međutim, oko 40 % djece koristi ekrane dnevno preko 60 minuta, a pojedinci i više sati dnevno. Spol i starost djeteta uglavnom ne utječu na stavove roditelja. Djeci je u zamjenu za igranje pred ekranima neophodno ponuditi neku drugu aktivnost. Igranje na otvorenom, kretanje, trčanje zabavne su aktivnosti. Aktivno igranje djece pozitivno utječe na dječje zdravlje. Pri razvoju ovih vještina i navika roditelji imaju značajnu ulogu. Roditelji bi, za dobrobit djece, trebali ograničiti vrijeme koje oni provode pred ekranima. Slobodno vrijeme djece potrebno je ispuniti zabavnim i aktivnim sadržajima.

*Ključne riječi:* djeca predškolske dobi, roditelji, poteškoće, vrijeme provedeno pred ekranima, aktivno igranje djece

## **Parents' Difficulties in Encouraging Preschoolers to Play Actively**

There are numerous factors that can influence children and their activity. The aim of the paper is to examine parents' attitudes about difficulties in encouraging preschool children to play actively. The goal is also to check whether the child's gender and age affect the parents' attitudes. The research was conducted online during 2022. A total of 296 parents of preschool children participated in the research. The results of the research suggest that most parents believe that they do not have too many difficulties in encouraging their children to play actively. However, about 40% of children use screens for more than 60 minutes a day, and some for several hours a day. The child's gender and age generally do not affect the parents' attitudes. It is necessary to offer children some other activity in exchange for playing in front of screens. Playing outdoors, moving, running are fun activities. Children's active play has a positive effect on children's health. Parents play an important role in the development of these skills and habits. For the benefit of children, parents should limit the time they spend in front of screens. Children's free time should be filled with fun and active activities.

*Keywords:* preschool children, parents, difficulties, screen time, children's active play

## **Poznavanje postopkov ter načinov zdravljenja pacientov z akutnim koronarnim sindromom**

Akutni koronarni sindrom je posledica nastanka pomembne delne ali popolne zapore koronarnih arterij zaradi nastanka krvnega strdka na aterosklerotični lehi. Namen raziskave je bil raziskati poznavanje postopkov ter načinov zdravljenja pacientov z akutnim koronarnim sindromom. Uporabljen je bil kvalitativni raziskovalni pristop in deskriptivna metoda. Vzorec je vključeval diplomirane medicinske sestre, ki so imele od 2 do 23 let delovnih izkušenj. V intervju smo vključili sedem oseb. Medicinske sestre pri obravnavi pacienta začno po naročilu zdravnika pripravljati in aplicirati zdravila, ki jih poimenujemo z okrajšavo MONA. V ambulantni internistične prve pomoči in na internem oddelku pacienti dobijo morfij, kisik, nitroglicerina in protitrombotično terapijo. Intervjuvane medicinske sestre za razrešitev prizadete koronarne arterije poznajo koronarografijo. Opravlja se perkutana koronarna intervencija (PCI) kot reperfuzijsko zdravljenje, sestavljena iz perkutane transluminalne koronarne angioplastike (PTCA) ter intrakoronarne implantacije stenta. S pomočjo posebnega intraluminalnega balona se odpre lumen, vstavi se stent ali opornica. Z raziskavo smo ugotovili, da nobena od intervjuvanih medicinskih sester ni omenila invazivne metode kirurškega zdravljenja CABG oz. presaditev koronarnih arterij. S slednjo se doseže revaskularizacija z obvozom stenotičnega plaka z uporabo presadka.

*Ključne besede:* akutni koronarni sindrom, končnica MONA, perkutana koronarna intervencija, presaditev koronarnih arterij

## **Knowledge of Procedures and Methods of Treating Patients with Acute Coronary Syndrome**

Acute coronary syndrome is the result of the formation of a significant partial or complete blockage of the coronary arteries due to the formation of a blood clot on the atherosclerotic bed. The purpose of the research was to investigate the knowledge of procedures and methods of treating patients with acute coronary syndrome. A qualitative research approach and a descriptive method were used. The sample included registered nurses who had 2 to 23 years of work experience. We interviewed seven people. When treating a patient, nurses begin to prepare and administer medications with the acronym MONA, according to the doctor's order. We have found that in the internist first aid clinic and in the internal medicine department, patients receive morphine, oxygen, nitroglycerin and antiplatelet therapy. The interviewed nurses are familiar with coronary angiography to resolve the affected coronary artery. Percutaneous coronary intervention (PCI) is performed as a reperfusion treatment consisting of percutaneous transluminal coronary angioplasty (PTCA) and intracoronary stent implantation. With the help of a special intraluminal balloon, the lumen is opened and a stent is inserted. None of the interviewees mentioned the invasive method of surgical treatment CABG or coronary artery bypass grafting. With the latter, revascularization is achieved by bypassing the stenotic plaque using a graft.

*Keywords:* acute coronary syndrome, acronym MONA, percutaneous coronary intervention, coronary artery bypass grafting

## **Uporaba kirurškega varnostnega kontrolnega seznama v operativni dejavnosti**

Kakovost in varnost v zdravstveni dejavnosti sta pomembna vidika, ki sta ključna za zagotavljanje kvalitetne in učinkovite zdravstvene oskrbe pacienta. Cilj SZO je varnost pacientov - Varna kirurgija rešuje življenja. Kirurški varnostni kontrolni seznam (KVKS) je komunikacijsko orodje, ki zagotavlja strukturiran pristop k ocenjevanju in sporočanju varnosti med kirurško ekipo. Uporabljen je bil pregled izvirnih in preglednih znanstvenih člankov na temo kakovosti in varnosti v zdravstveni dejavnosti ter uporaba KVKS v operativni dejavnosti. Uporabili smo še kvantitativno metodo zbiranja podatkov s tehniko neslučajnostnega-priložnostnega načina vzorčenja. Vzorec predstavljajo zdravniki in medicinske sestre, ki so zaposleni v UKCL in se v vsakodnevni praksi srečujejo s KVKS (N = 86). Največji delež po poklicni skupini predstavljajo anestezijske medicinske sestre (33 %), po spolu so to ženske (65 %). 71 % anketirancev ni imelo opravljenega ustreznega izobraževanja o uporabi KVKS. 35 % anketirancev meni, da je učinkovitost KVKS »zelo učinkovita«. 49 % zaposlenih meni, da je razlog neustrezno izpolnjenih KVKS v obliki izvedbe. 33 % sodelujočih meni, da je problem v organizaciji dela in neustrezni komunikaciji v timu. 22 % jih meni, da je prisotno nezanimanje in v 21 %, da je prisotna nizka kultura varnosti. Med pomembnejšimi sestavnimi deli varnosti pacienta so kultura varnosti z oblikovanjem pravične kulture, ki omejuje obtoževanje posameznika.

*Ključne besede:* kirurški varnostni kontrolni seznam, varnost pacienta, operativna dejavnost, kakovost in varnost v zdravstveni negi

## **Use of the Surgical Safety Checklist in Surgery**

Quality and safety in health care are important aspects that are crucial for ensuring quality and effective health care for the patient. The WHO aims for patient safety – Safe Surgery Saves Lives. The Surgical Safety Checklist (SSC) is a communication tool that provides a structured approach to safety assessment and communication within a surgical team. A review of original and review scientific articles on the topic of quality and safety in health care and the use of SSC in surgery was used. We also used a quantitative method of data collection using the non-random occasional sampling method. The sample is represented by doctors and nurses who are employed at the University Medical Centre in Ljubljana and who encounter SSC in everyday practice (N = 86). Nurse anaesthetists account for the highest share by occupational group (33%), and women by gender (65%). Seventy-one percent of respondents have not completed adequate training on the use of SSC. Thirty-five percent of respondents consider SSC to be "very effective". Forty-nine percent of employees believe that the reason for inadequately completed SSC lies in the form of implementation. Thirty-three percent of respondents believe that the problem lies in daily organisation and inadequate communication between teams. Twenty-two percent believe that either disinterest or a poor safety culture is present. Among the most important components of patient safety are a safety culture that involves the creation of a fair culture.

*Keywords:* surgical safety checklist, patient safety, surgery, quality and safety in nursing care

## **Uporaba globinskih udarnih valov pri kalcinirajočem tendinitisu rame**

Akutni ali kronični kalcinirajoči tendinitis je zapletost tetiv rotatorne manšete ne povsem pojasnjene etiologije. Je stanje, pri katerem prihaja do nalaganja kalcijevih depozitov na eno ali več mišic kit rotatorne manšete. Praviloma se pojavlja pri osebah po 50. letu starosti. Gibljivost rame je zelo omejena in boleča. Zdravljenje je najprej konzervativno, če se bolečine po terapijah ne zmanjšajo in je gibljivost še vedno omejena sledi operativno zdravljenje. Med konzervativno zdravljenje štejemo tudi fizikalno terapijo, ki zajema individualne vaje, pasivno razgibavanje in elektroterapijo; med slednjo uvrščamo tudi terapijo z globinskimi udarnimi valovi. Namen raziskave je pregled literature o učinkovitosti oziroma uspešnosti UGV (udami globinski valovi), pri zdravljenju kalcinirajočega tendinitisa rame. Uporabljena je bila opisna metoda dela, sistematični pregled strokovne in znanstvene literature. Angleški članki so bili iskani v podatkovnih bazah PEDro, CINAHL, MEDLINE in Cochrane Library. Vključene so bile randomizirane kontrolirane raziskave, izvedene med letom 2003 in 2022, v katerih so preučevali učinkovitost zdravljenja udarnih globinskih valov pri kalcinirajočem tendinitisu rame. V vseh raziskavah je bilo zaslediti, dokazano večjo učinkovitost visoko energijskih globinskih valov kot nizkoenergijskih, so pa tej učinki bili zaznani samo za kratko obdobje (6 mesecev). Po terapijah je prišlo predvsem do zmanjšanja bolečin in posledično izboljšanja gibljivosti, ni pa bilo nobenih vidnih sprememb glede velikosti samega kalcinata.

*Ključne besede:* kalcinirajoči tendinitis rame, mišično skeletne poškodbe, globinski udami valovi

## **Use of Shockwave Therapy for Calcific Tendinitis**

Acute or chronic calcifying tendinitis is a tightness of the tendons of the rotator cuff of not fully explained etiology. It is a condition in which calcium deposits are deposited on one or more muscles of the rotator cuff tendons. It mostly occurs in people aged 50 and above. Shoulder mobility is very limited and painful. The initial treatment is conservative; if the pain does not decrease after the therapies and mobility is still limited, then the patient must be treated surgically. Conservative treatment also involves physical therapy, which includes individual exercises, passive exercise and electrotherapy. The latter also includes deep shock wave therapy. The purpose of the paper was to review the literature on the effectiveness or success of extracorporeal shock wave therapy (ESWT) in the treatment of calcifying tendinitis of the shoulder. All the studies have found and proven that high-energy deep waves are more effective than low-energy ones; however, these effects were only detected for a short period (6 months). After the therapies, there was primarily a reduction in pain and, as a result, an improvement in mobility, but there were no visible changes in the size of the calcinate itself. Articles were searched in the PEDro, CINAHL, MEDLINE and Cochrane Library databases. Randomized controlled trials conducted between 2003 and 2022 examining the effectiveness of deep shock wave therapy for calcifying tendinitis of the shoulder were included.

*Keywords:* extracorporeal shock wave therapy, calcific tendinitis of the shoulder, musculoskeletal injuries

## **Fizioterapija kod obostranog sindroma karpalnog tunela – prikaz slučaja**

Sindrom karpalnog tunela je vrlo česta kompresivna neuropatija, od koje češće obolijevaju žene. Poteškoće negativno utječu na funkcionalnu sposobnost osobe. Cilj ovoga rada je prikaz dobre prakse s područja rada fizioterapije. Pacijentica je tijekom protekle godine osjećala intenzivne simptome vezano za sindrom karpalnog tunela, obostrano. Uobičajena fizioterapijska intervencija nije davala očekivane rezultate. Nakon uključivanja udarnog vala nastupilo je smirivanje većine simptoma i poboljšanje kliničke slike. U novije metode liječenja sindroma karpalnog tunela ubraja se i liječenje udarnim valom. U kombinaciji s ultrazvučnom terapijom uočavaju se brzi rezultati, smanjenje edema šake, smanjenje tmjenja, smanjenje bolnosti te vraćanje funkcionalnosti šake. Suvremena fizioterapija u Hrvatskoj treba slijediti praksu utemeljenu na dokazima, kako bi ishod rehabilitacije bio što uspješniji, učinkovitiji i kvalitetniji.

*Ključne riječi:* sindrom karpalnog tunela, funkcija šake, fizioterapija, udarni val

## **Physiotherapy in Bilateral Carpal Tunnel Syndrome – Case Report**

Carpal tunnel syndrome is a very common compressive neuropathy, which is more common in women. Difficulties negatively affect a person's functional ability. The aim of the paper is to present good practice in the field of physiotherapy. During the past year, the patient experienced intense symptoms related to carpal tunnel syndrome, on both sides. The usual physiotherapy intervention did not give the expected results. After switching on the shock wave, most of the symptoms subsided and the clinical picture improved. Shock wave treatment is included in the newer methods of treating carpal tunnel syndrome. In combination with ultrasound therapy, quick results are observed, such as reduction of edema of the hand, reduction of tingling, reduction of pain, and restoration of functionality of the hand. Modern physiotherapy in Croatia should follow evidence-based practice, so that the outcome of rehabilitation is as successful, efficient and high-quality as possible.

*Keywords:* carpal tunnel syndrome, hand function, physiotherapy, shock wave

## **Pomen zobozdravstvenih storitev v skupini predšolskih otrok**

V prispevku opisujemo pomen preventivnih in kurativnih zobozdravstvenih storitev v skupini predšolskih otrok. Opazujemo vpliv različnih dejavnikov tveganja za karies pri predšolskih otrocih in opozarjamo na pravočasno odzivnost vseh vpletenih akterjev za preprečevanje le-tega. V teoretičnih izhodiščih najprej analiziramo pravno-formalne pravice s področja primarnega zobozdravstvenega varstva predšolskih otrok, medicinskega in pedagoškega preprečevanja kariesa v predšolskem obdobju, vpliv strokovnih delavcev v vrtcu in družine na zmanjšanje pojavnosti kariesa pri predšolskih otrocih. V empiričnem delu pa s pomočjo podatkov Zavoda za zdravstveno zavarovanje Slovenije (ZZZS) ugotavljamo vpliv epidemije covid-19 na obseg preventivnih in kurativnih zobozdravstvenih storitev v skupini predšolskih otrok po posameznih statističnih regijah v Sloveniji. Ugotavljamo, da je bil izpad zobozdravstvenih storitev v času epidemije tako obsežen, da bodo posledice večletne, tako v obsegu kot strukturi storitev. Preventivne storitve so sicer sestavni del pravic iz obveznega zdravstvenega zavarovanja, vendar v smislu, da je bolje preprečevati kot zdraviti. Zato je pomembno ozaveščati in učiti otroke o zdravih temeljih življenja vsakega posameznika, tudi o ustnem zdravju. Za doseganje tega cilja pa je potrebno sodelovanje med vrtcem, družino, zdravstvom ter lokalno skupnostjo kot celoto.

*Ključne besede:* predšolski otrok, vrtec, karies, ustna higiena, preventiva, zobozdravstvo

## **The Importance of Dental Services in a Group of Preschool Children**

In the article, we discuss the importance of preventive and curative dental services in a group of preschool children. We describe the impact of various factors causing caries in preschool children and point to the timely response of all actors involved to prevent this. In the theoretical background, we first analyze the legal and formal rights in the field of primary dental care of preschool children, the medical and pedagogical prevention of caries in the preschool period, and the influence of kindergarten professionals and of the family on reducing the incidence of caries in preschool children. In the empirical part, we determine the impact of the COVID-19 epidemic on the scope of preventive and curative dental services in the group of preschool children by individual statistical regions in Slovenia. The analysis was done with the help of data from the Slovenian Health Insurance Institute (ZZZS). We note that the outage of dental services during the epidemic was so extensive that the consequences will last for several years, both in terms of the volume and structure of services. Preventive services are indeed an integral part of rights deriving from compulsory health insurance, but in the sense that prevention is better than cure. Therefore, it is important to raise awareness and teach children about the healthy foundations of every individual's life, including oral health. Achieving this goal requires cooperation between the kindergarten, family, health care, and local community.

*Keywords:* preschool child, kindergarten, caries, oral hygiene, prevention, dentistry

## **Bruhanje kot ukrep prve pomoči pri zastrupitvah**

V primeru hude zastrupitve lahko s pravilnim dajanjem prve pomoči ublažimo posledice ali celo rešimo življenje. Pri nekaterih zastrupitvah je eden od ukrepov prve pomoči tudi izzivanje bruhanja. Za namen raziskave je bil razvit vprašalnik, s katerim smo ugotavljali (1) znanje anketiranih o izzivanju bruhanja, (2) načine, kako bruhanje izzvati, in (3) primere zastrupitev, v katerih bruhanje lahko oziroma ne smemo izzvati. Zbiranje podatkov je potekalo s pomočjo odprtokodne aplikacije IKA. Na anketni vprašalnik je v celoti odgovorilo 209 anketirancev, 79,9 % žensk in 20,1 % moških. Ugotovili smo, da večina (96,7 %) ve, da moramo zastrupljencu najprej iz ustne votline odstraniti ostanke zaužite trdne snovi, a le slaba polovica (46,9 %), kako je treba ravnati ob zaužitju jedke kemikalije. 77,5 % anketiranih bi se pred izzivanjem bruhanja posvetovalo z zdravnikom, kar je ustrezno. Slaba polovica (45,9 %) bi bruhanje pravilno izzvala z draženjem žrela, slaba četrtina pa neustrezno z zaužitjem mleka (23,9 %) ali slanice (23,0 %). Večina anketiranih ve, da lahko bruhanje izzivamo v primeru zastrupitve z alkoholom (90,4 %) in zdravili (84,2 %), bistveno manj pa, da bruhanja ne smemo izzvati v primeru zastrupitve s pesticidi (60,8 %) in čistili (50,7 %). Treba si je prizadevati za ozaveščanje splošne javnosti o pravih ukrepih pomoči pri zastrupitvah, saj gre za zelo kompleksen javnozdravstveni problem.

*Ključne besede:* izzivanje bruhanja, eliminacija strupene snovi, intoksikacija, smernice prve pomoči

## **Vomiting as a First-Aid Measure for Poisoning**

In cases of severe poisoning, we can mitigate the consequences or even save lives if proper first aid is administered. In some cases of poisoning, inducing vomiting is one of the proper first-aid measures. For this study, a questionnaire was developed to determine (1) respondents' knowledge of induced vomiting, (2) how to induce vomiting, and (3) the situations in which vomiting can or cannot be induced. The survey was conducted using the open-source application IKA. A total of 209 subjects responded to the questionnaire; 79.9% were women and 20.1% were men. The majority (96.7%) know that the remains of a swallowed toxic solid should be removed from the oral cavity, but less than half (46.9%) know what to do if a corrosive chemical is swallowed. As many as 77.5% of respondents would correctly consult a doctor before inducing vomiting. Less than half (45.9%) would appropriately induce vomiting by irritating the throat, while nearly a quarter would act inappropriately by offering milk (23.9%) or brine (23.0%) to drink. The majority of respondents know that vomiting can be induced in the case of alcohol (90.4%) and medicinal (84.2%) poisoning, but significantly fewer know that vomiting should not be induced when ingesting pesticides (60.8%) or cleaning products (50.7%). Efforts should be made to educate the lay public on the proper actions in cases of poisoning, as it is a very complex public health problem.

*Keywords:* induced vomiting, elimination of toxic substance, intoxication, first aid guidelines



## **Iskustvo fizioterapeuta s osobama koja boluju od mentalnih poremećajima**

Mentalni poremećaji ili psihijatrijske bolesti karakteriziraju brojni simptomi i veliki raspon problema. Mentalno zdravlje temelj je učinkovitog funkcioniranja pojedinca i njegove dobrobiti. Uloga fizioterapeuta u radu sa osobama sa mentalnim bolestima je veoma značajna. Jedan od načina poboljšanja fizioterapeutske kvalitete za pacijente sa mentalnim poremećajima je razumjevanje osobnih iskustava i percepcija zdravstvenih radnika prema takvim pacijentima. Cilj rada je bio prikazati važnost osobnih iskustava fizioterapeuta u radu sa osobama sa mentalnim poremećajima. Provedeno je sustavni pregled znanstvene i stručne literature i očekuje se da će sustavni pregled pružiti uvid u prepreke i prednosti pristupa fizioterapeuta pacijentima sa mentalnim poremećajima.

*Ključne riječi:* fizioterapeut, iskustvo, mentalno zdravlje, mentalni poremećaji, percepcija

## **Experience of Physiotherapists with Individuals Suffering from Mental Disorders**

Mental disorders or psychiatric illnesses are characterized by numerous symptoms and a wide range of issues. Mental health is the foundation of an individual's effective functioning and well-being. The role of a physiotherapist in working with individuals with mental illnesses is extremely significant. One way to improve the quality of physiotherapy for patients with mental disorders is to understand the healthcare professionals' personal experiences with and perceptions of such patients. The aim of the paper was to highlight the importance of the personal experiences of physiotherapists in working with individuals with mental disorders. A systematic review of scientific and professional literature was conducted, and it is expected that the systematic review will provide an insight into the barriers and advantages of physiotherapists' approach to patients with mental disorders.

*Keywords:* physiotherapist, experience, mental health, mental disorders, perception

## **Fluktuacija kadra v dolgotrajni oskrbi v Sloveniji**

Fluktuacija osebja v dolgotrajni oskrbi velja za enega glavnih vzrokov za pomanjkanje kadra in ključni problem sistemov dolgotrajne oskrbe v razvitem svetu. Pandemija covid-19, ki je nesorazmerno prizadela sektor dolgotrajne oskrbe, je že tako težke razmere za delavce dolgotrajne oskrbe še poslabšala. Namen prispevka je bil ugotoviti, kako so sociodemografski dejavniki povezani s fluktuacijo zaposlenih v dolgotrajni oskrbi v Sloveniji. Uporabljena je bila korelacijska presečna raziskava med zaposlenimi v dolgotrajni oskrbi (N = 452). Rezultati kažejo, da več kot polovica dolgotrajnih delavcev namerava pustiti službo in zapustiti sektor dolgotrajne oskrbe. Zaposleni, ki nameravajo oditi, so praviloma mlajši, krajši čas delajo v dolgotrajni oskrbi, večinoma so zaposleni v javnem sektorju, predvsem v domovih za starejše, in zaslužijo manj, kot je povprečna slovenska plača. Potrebni so nujni ukrepi za izboljšanje delovnega okolja.

*Ključne besede:* dolgotrajna oskrba, zaposleni, sociodemografske značilnosti

## **Staff Turnover in Long-Term Care in Slovenia**

Staff turnover in long-term care is considered one of the main causes of staff shortages and a key problem for long-term care systems in the developed world. The COVID-19 pandemic, which has disproportionately affected the long-term care sector, has exacerbated the already difficult situation for long-term care workers. The purpose of the paper was to determine how sociodemographic factors are related to the turnover of employees in long-term care in Slovenia. A correlational cross-sectional survey of long-term care employees (N = 452) was used. The results show that more than half of long-term care workers plan to quit their jobs and leave the long-term care sector. Employees who intend to leave are generally younger, have worked in long-term care for a short time, are mostly employed in the public sector, especially in homes for the elderly, and earn less than the average Slovenian salary. Urgent measures are needed to improve the working environment.

*Keywords:* long-term care, employees, sociodemographic characteristics

## **Analiza ravnanja z odpadki in usmeritve za izobraževanje: študija primera**

Namen raziskave je bil proučiti problematiko ravnanja z odpadki, ki nastajajo pri izvajanju dejavnosti zdravstvenega in socialnega varstva. Konceptualni okvir za raziskavo je bil interdisciplinarno postavljen (sanitarno inženirstvo, zdravstvene vede, izobraževalne vede, oblikovanje). Cilj raziskave je bil analizirati stanje in izdelati usmeritve za organizacijo sistema ravnanja z odpadki v izbranem primeru ter pripraviti izobraževalni program za vključene v proces ravnanja z odpadki. Raziskovalna strategija je bila študija primera, metode zbiranja podatkov pa mešane (opazovanje, intervju, anketa, sejnalna analiza). Podatke smo zbirali v izbranem domu starejših v Sloveniji. Rezultati raziskave kažejo, da so med vprašanimi različna mnenja, večina pa jih meni, da je področje ravnanja z odpadki v domu dobro urejeno. V nasprotju s tem pa rezultati kažejo, da bi le polovica zaposlenih pravilno razvrstila odpadke. Kot osrednji problem smo glede na podatke prepoznali neučinkovit sistem ravnanja z odpadki in neustrezno ločevanje odpadkov na viru nastanka. Na temelju analize stanja smo oblikovali (a) predlog sprememb sistema ravnanja z odpadki in ureditev zbirmih mest odpadkov in (b) program izobraževanja za vključene v proces ravnanja z odpadki.

*Ključne besede:* odpadki, dom starejših občanov, zaposleni, stanovalci, izobraževanje

## **Waste Management Analysis and Implication for Education: A Case Study**

The aim of the research was to examine the problems of waste management in the field of health and social care. The theoretical framework for the research was interdisciplinary (sanitary engineering, health sciences, educational sciences, design). The goal of the research was to analyse the current situation, develop guidelines for the organization of the waste management system in the selected case, and plan an educational programme for all those involved in the waste management process. Case study was the research strategy. Mixed data collection methods were used (observation, interview, survey, screening analysis). The case in our study was a selected nursing home in Slovenia. The results of the research show that the opinions of respondents differ, but that most of them are of the opinion that the waste management system in their nursing home is well regulated. On the contrary, the results show that only half of employees would classify waste correctly. According to the data collected, the main problem was identified as an inefficient waste management system and inadequate separation of waste at the source. Based on the case analysis, we developed (a) a proposal for changes to the waste management system and the arrangement of waste collection points, and (b) an educational programme for those involved in the waste management process.

*Keywords:* waste, nursing home, employees, residents, education

## **Nasilje u adolescentskim vezama**

Cilj rada je ispitati učestalost doživljavanja nasilja u adolescentskim vezama obzirom na spol. Istraživanje je provedeno na Fakultetu zdravstvenih studija Sveučilišta u Rijeci. U istraživanju je sudjelovao 101 student prvih godina preddiplomskih stručnih studija u dobi od 18 do 20 godina, no u analizi su korišteni podatci od 78 ispitanika koji su ispunili uvjet sudjelovanja u istraživanju, a to je bivanje u ljubavnom odnosu u posljednjih 6 mjeseci. Za istraživanje korišten je »Upitnik doživljenih nasilnih ponašanja u vezi« za koji je dobivena dozvola za korištenje. Rezultati istraživanja govore kako je najčešći oblik doživljenog nasilja psihičko nasilje te kako nema razlike u doživljavanju nasilja obzirom na spol. Dobiveni podatci ovog istraživanja upućuju na potrebu osmišljavanja intervencija u svrhu prevencije nasilja u adolescentskim vezama.

*Ključne riječi:* adolescencija, nasilje, oblici nasilja

## **Violence in Adolescent Relationships**

The aim of the paper was to examine the frequency of experiencing violence in adolescent relationships by gender. The research was conducted at the Faculty of Health Studies of the University of Rijeka. A total of 101 students of the first year of undergraduate professional studies between the ages of 18 and 20 participated in the research. However, the analysis used data from 78 respondents who met the condition of participation in the research, namely being in a romantic relationship in the last 6 months. For this research, we used the questionnaire called "Questionnaire of experienced violent behavior in a relationship", for which we had obtained permission to use. The results of the research show that the most common form of experienced violence is psychological violence and that there is no difference in experiencing violence based on gender. The data obtained from the research point to the need to design interventions for the purpose of preventing violence in adolescent relationships.

*Keywords:* adolescent, types of violence, violence

## **Prepoznavanje ogroženih skupin žensk v obporodnem obdobju**

Raziskave kažejo da 15 % nosečnic izpolnjuje klinične kriterije za vsaj eno od psihičnih motenj, za katere sta značilna visoka komorbidnost in transgeneracijski prenos patologije v družini. Neprepoznane in nezdravljene vodijo v negativne posledice za nosečnico, otrokov razvoj in vse odnose v družini. V letih 2017–2019 smo v okviru projekta »Prepoznavanje ranljivih skupin nosečnic in mater« razvili sodoben multimodalni model presejanja PODN (prepoznavanje odvisnosti, duševnih motenj in nasilja) s ciljem prepozave in pomoči nosečnicam in materam z depresivnimi in anksioznimi motnjami, žrtvam nasilja ter tistim, ki imajo težave z alkoholom, kajenjem in prepovedanimi snovmi. Prepoznavanje teh nosečnic in mater je zahtevno, zato smo izobrazili ginekološke time za izvajanje presejanja, patronažne sestre za prepoznavanje poporodne depresije in mrežo kliničnih psihologov in psihiatrov za obravnavo tako prepoznanih žensk. Pravilnik za izvajanje preventivnega zdravstvenega varstva na primarni ravni (Uradni list RS, št 39/2023) uvaja presejanje na depresivne in anksiozne motnje, odvisnost in nasilje v družini kot del rednega sistematičnega preventivnega pregleda nosečnice. Vloga medicinske sestre/babice v svojem timu je pri celostni skrbi za ženske v obporodnem obdobju zelo pomembna pri zgodnji prepoznavi, izobraževanju, podpori in usmeritvi ženske po ustrezno strokovno pomoč.

*Ključne besede:* obporodno obdobje, nosečnica, duševno zdravje, nasilje, presejanje

## **Identifying Groups of Women at Risk in the Perinatal Period**

Research indicates that 15% of pregnant women meet the clinical criteria for at least one of the mental disorders characterised by high comorbidity and transgenerational transmission of pathology in the family. Unrecognised and untreated, they lead to negative consequences for the pregnant woman, the child's development, and all relationships within the family. In 2017–2019, the project "Identifying Vulnerable Groups of Pregnant Women and Mothers" developed a multimodal screening model named PODN (Prepoznavanje Odvisnosti, Duševnih motenj in Nasilja – Identifying Addictions, Mental Disorders, and Violence) to identify and help women with depressive and anxiety disorders, victims of violence, and those who have problems with alcohol, smoking, and illegal substances. Identifying these women is challenging, so we have trained gynaecology teams to carry out screening, community nurses to identify postnatal depression, and a network of clinical psychologists and psychiatrists to treat them. The Rules on carrying out preventive health care at the primary level (Official Gazette of the Republic of Slovenia, No. 39/2023) introduce PODN as part of the regular preventive examination of pregnant women. In providing comprehensive perinatal care, the role of the nurse/midwife in the team is critical for the early identification, education, support, and referral of women to appropriate professional treatment.

*Keywords:* perinatal period, pregnant women, mental health, violence, screening

## Motivacija zaposlenih v zdravstveni negi

Motivacija je proces, ki se prične z inspiracijo in energijo za opravljanje dela. Je kompleksna, večdimenzionalna in zato opredeljena kot »sila« posameznika, ki vpliva oz. usmerja vedenje. Uporabili smo pregled znanstvenih člankov, v katerega smo vključili 6 člankov, objavljenih med letom 2014 in 2022, v bazi podatkov COBISS, PubMed. Uporabili smo ključne besede: motivacija zaposlenih v zdravstveni negi, pomen motivacije in načini motivacije, medicinske sestre. Ugotovili smo, da je motivacija pomemben faktor pri delu. Motivacija nam v življenju lahko veliko pripomore, saj na ta način lahko dosežemo želene cilje. Na samo motivacijo vplivajo različni dejavniki, na katere moramo biti pozorni, vendar se lahko nekatere stvari ali dogodki zgodijo nepredvidljivo. Raziskave kažejo, da je ključ do kakovosti v zdravstveni negi motivacija in motiviranost zaposlenih v zdravstveni negi, saj le z motiviranostjo lahko zagotovimo, da bodo zaposleni želeli in zmogli opraviti vse delovne naloge vezane na njihovo delovno mesto. Kakovostna oskrba je odvisna od zaposlenih, ki aktivno sodelujejo v oskrbi, če zaposleni niso zadovoljni in motivirani, končnih ciljev aktivnosti zdravstvene nege ne dosežemo, kar negativno vpliva tako na zaposlene kot na paciente, ki so odvisni od delavcev v zdravstvu. Motiviranost zaposlenih je odgovornost njih samih in njihovih nadrejenih in vodstva, ki z različnimi načini motiviranja delavcev zagotavljajo kakovost.

*Ključne besede:* motivacija zaposlenih v zdravstveni negi, pomen motivacije, načini motivacije, medicinske sestre

## Motivation of Healthcare Staff

Motivation is a process that starts with inspiration and energy to do the work. It is complex, multidimensional and therefore defined as the "force" of an individual that influences or directs behaviour. We used a review of scientific articles, which included 6 articles published between 2014 and 2022 in the COBISS and PubMed databases. We used the following keywords: motivation of nursing staff, meaning of motivation and motivation methods, nurses. We have found that motivation is an important factor at work. Motivation can help us a great deal in our life because it is a way to achieve our goals. Motivation itself is influenced by various factors, to which we must pay attention, but some things or events can happen unpredictably. We believe that the key to quality in nursing is the motivation of the nursing staff, because it is only through motivation that we can ensure that the staff are willing and able to perform all the tasks associated with their job. Quality care depends on employees actively participating in the care; if employees are not satisfied and motivated, the ultimate goals of the nursing activity will not be achieved, which will have a negative impact on both the employees and the patients who depend on healthcare workers. Employee motivation is the responsibility of the employees themselves and of their supervisors and management, who ensure quality through various ways of motivating their workers.

*Keywords:* motivation of nursing staff, meaning of motivation, ways to motivate, nurses

## **Potrošnja zdravil brez recepta in prehranskih dodatkov**

Dandanes predstavlja zdravje temeljno vrednoto marsikateremu posamezniku, zato so sodobni potrošniki aktivno vključeni v skrb za lastno zdravje. Informirajo se in skrbijo, da bi preprečili pojav bolezenskega stanja. V okviru samozdravljenja se potrošniki poslužujejo nakupa različnih prehranskih dodatkov, da bi preprečili pojav bolezenskega stanja, v primeru poslabšanja zdravstvenega stanja pa se odločijo za nakup zdravil brez recepta v lekarnah z namenom izboljšanja bolezenskega stanja pred obiskom izbranega osebnega zdravnika oz. urgentnega centra. Samozdravljenje potrošniki izvajajo na lastno pobudo in odgovornost, pri čemer jim z nasveti lahko pomagajo lekarniški farmacevti. V evropskih državah v zadnjih letih narašča delež samozdravljenja in posledično potrošnja zdravil brez recepta in prehranskih dodatkov z namenom ohranjanja telesnega in duševnega zdravja. Obseg potrošnje je odvisen tako od individualnih okoliščin posameznika kakor tudi od socioekonomskih okoliščin v družbi. Vsekakor je treba biti previden pri potrošnji tako zdravil brez recepta kakor prehranskih dodatkov pri izvoru produktov in času trajanja samozdravljenja, da ne pride do naglega poslabšanja zdravstvenega stanja, ki lahko tudi ogrozi življenje. V prispevku proučimo odnos prebivalcev Republike Slovenije do samozdravljenja in uporabe zdravil brez recepta in prehranskih dodatkov ter analiziramo obseg finančnih sredstev, ki jih temu namenijo potrošniki.

*Ključne besede:* zdravila brez recepta, prehranska dopolnila, potrošnja, izdatki, samozdravljenje

## **Consumption Over-the-Counter Medicines and Dietary Supplements**

Nowadays, health is a fundamental value for many individuals, which is why modern consumers are actively involved in taking care of their own health. In the context of self-medication, consumers buy various food supplements to prevent the onset of an illness, and in the event of an illness worsening, they opt for over-the-counter medicines from the pharmacy to improve the condition before visiting their personal doctor or an emergency center of their choice. Consumers self-medicate on their own initiative and at their own risk, seeking advice from pharmacists. In European countries, self-medication and thus the consumption of over-the-counter medicines and dietary supplements to maintain physical and mental health has increased in recent years. The extent of consumption depends on both individual circumstances and the socio-economic conditions of society. In any case, when taking over-the-counter medicines and food supplements, attention should be paid to the origin of the over-the-counter medicines and food supplements and the duration of self-medication to avoid a rapid deterioration in health, which could also be life-threatening. In this paper, we examined the attitude of the population of the Republic of Slovenia towards self-medication and the use of over-the-counter medicines and dietary supplements and analysed the amount of financial resources that consumers spend for this purpose.

*Key words:* over-the-counter medicines, food supplements, consumption, expenditure, self-medication

## **Poznavanje paliativne oskrbe med izvajalci zdravstvene nege v bolnišničnem okolju**

Paliativna oskrba se osredotoča na izboljšanje kakovosti življenja pacientov z življenjsko ogrožujočimi boleznimi in hkrati nudi podporo njihovim svojcem. Z raziskavo smo želeli proučiti in ugotoviti poznavanje paliativne oskrbe med izvajalci zdravstvene nege v bolnišničnem okolju. Uporabili smo kvantitativno, deskriptivno metodo raziskovanja. Vzorec je bil neslučajnostni, priročni in je zajemal 83 izvajalcev zdravstvene nege, ki so zaposleni v bolnišničnem okolju. Podatke smo zbrali s pomočjo tehnike anketiranja. Izvajalci zdravstvene nege so dosegli visoko povprečno število točk iz poznavanja paliativne oskrbe ( $\bar{x} = 9,87$  od 12 točk,  $SO = 1,359$ ). Rezultati raziskave so pokazali razlike v poznavanju paliativne oskrbe glede na delovno dobo izvajalcev zdravstvene nege ( $t = 2,250$ ,  $p = 0,027$ ), kot tudi, da si izvajalci zdravstvene nege želijo pridobiti dodatna znanja s področja paliativne oskrbe ( $\bar{x} = 3,95$ ,  $SO = 0,539$ ). Ugotavljamo, da je poznavanje paliativne oskrbe med izvajalci zdravstvene nege dobro in, da obstajajo potrebe po dodatnem strokovnem izobraževanju/izpopolnjevanju izvajalcev zdravstvene nege s področja paliativne oskrbe.

*Ključne besede:* paliativna oskrba, izvajalci zdravstvene nege, znanje, bolnišnica

## **Knowledge of Palliative Care among Nursing Care Providers in the Hospital Environment**

Palliative care focuses on improving the quality of life of patients with life-threatening illnesses while providing support to their relatives. With the research, we wanted to study and determine the knowledge of palliative care among nursing care providers in the hospital environment. We used a quantitative, descriptive research method. The sample was non-random, convenient and consisted of 83 nursing care providers employed in the hospital environment. Data was collected using a survey method. Nursing care providers achieved a high average number of points in knowledge of palliative care ( $\bar{x} = 9.87$  out of 12 points,  $SD = 1.359$ ). The research results showed differences in the knowledge of palliative care according to the length of service of nursing care providers ( $t = 2.250$ ,  $p = 0.027$ ), and showed their willingness to acquire additional knowledge in the field of palliative care ( $\bar{x} = 3.95$ ,  $SD = 0.539$ ). We have found that knowledge of palliative care among nursing care providers is good and that there is a need for additional professional education/upskilling of nursing care providers in the field of palliative care.

*Keywords:* palliative care, nursing care providers, knowledge, hospital



## **Pomen vključevanja proprioceptivne vadbe v proces rehabilitacije**

Propriocepcija je sposobnost zaznavanja položaja, drže in gibanja posameznih delov telesa v prostoru in času. V proprioceptivni sistem so vpeti številni mehanoreceptorji, katere lahko razdelimo glede na lokacijo, morfološko in po funkciji. Učinki proprioceptivne vadbe so večstranski. Pričakujemo jih lahko na centralnem in perifernem nivoju. Namen prispevka je pregled literature s področja uporabe in učinkov proprioceptivne vadbe v preventivi in rehabilitaciji, pri čemer smo se osredotočili na tri področja, s katerimi se fizioterapevti pogosto srečujemo pri svojem delu – nestabilnost ramenskega sklepa, kronična nestabilnost gležnja in bolečina v vratni hrbtenici. Iskanje literature je potekalo v treh podatkovnih zbirkah PubMed, CINAHL in Cochrane Library, s ključnimi besedami v angleškem jeziku proprioception, proprioceptive exercise, neck, shoulder, ankle. Ob pregledu zadetkov smo se odločili, da pregledamo zgolj randomizirane študije, metaanalize in sistematične preglede literature, izdane med leti 2017 in 2023, ki imajo brezplačen dostop do besedila. Proprioceptivna vadba prinese pomembne izboljšave somatosenzoričnih in somatomotoričnih funkcij v številnih zdravih in kliničnih populacijah.

*Ključne besede:* propriocepcija, proprioceptivna vadba, vrat, rama, gleženj

## **The Importance of Integrating Proprioceptive Training into the Rehabilitation Process**

Proprioception is the ability to perceive the position, posture and movement of individual body parts in space and time. The proprioceptive system involves a number of mechanoreceptors, which can be divided into location, morphology and function. The effects of proprioceptive training are multifaceted. They can be expected at both central and peripheral levels. The aim of the paper is to review the literature on the use and effects of proprioceptive exercise in prevention and rehabilitation, focusing on three areas that physiotherapists often encounter in their work – shoulder instability, chronic ankle instability, and cervical spine pain. The literature search was conducted in three databases, namely PubMed, CINAHL and Cochrane Library, with the keywords proprioception, proprioceptive exercise, neck, shoulder, ankle. When reviewing the hits, we decided to only review randomised trials, meta-analyses and systematic literature reviews published between 2017 and 2023, which provide free access to the text. Proprioceptive training produces significant improvements in somatosensory and somatomotor function in many healthy and clinical populations.

*Keywords:* proprioception, proprioceptive training, neck, shoulder, ankle

## **Multidisciplinarni pristop k obravnavi starejšega odraslega s Parkinsonovo boleznijo**

Parkinsonova bolezen je posledica stanja v možganih, ki povzroča težave pri gibanju, duševnem zdravju, spanju, bolečino in druge zdravstvene težave. Je bolezen, ki je progresivna in zanjo ne poznamo zdravila. Starejši odrasli s Parkinsonovo boleznijo se v dom starejših običajno preseli, ko je bolezen že napredovala in potrebuje več pomoči pri skrbi zase. V domu starejših njihovo stanje spremlja multidisciplinarna ekipa zaposlenih, ki vključuje zdravnika družinske medicine, socialnega delavca, fizioterapevta, delovnega terapevta, diplomirano medicinsko sestro, srednjo medicinsko sestro, bolničarja in duhovnika. V članku se bomo podrobneje osredotočili na sodelovanje med fizioterapevtom in delovnim terapevtom, ki najtesneje sodelujeta pri vsakodnevni obravnavi stanovalcev. Vsakega stanovalca s Parkinsonovo boleznijo ocenita in skrbno spremljata na vseh področjih funkcioniranja. Zahtevnejše terapevtske intervencije po nevrološkem pristopu izvajata v paru. Fizioterapevt in delovni terapevt si redno izmenjujeta informacije med seboj in jih posredujejo ostalim članom multidisciplinarni ekipe, saj je to bistveno za spremljanje stanja, pri katerem pričakujemo poslabšanje. S takim načinom delovanja prispevata k obvladovanju simptomov in izboljšanju kakovosti življenja, kar je bistvo pri obravnavi osebe s Parkinsonovo boleznijo.

*Ključne besede:* delovna terapija, fizioterapija, dom starejših, med poklicno sodelovanje

## **A Multidisciplinary Approach to the Care of the Older Adult with Parkinson's Disease**

Parkinson's disease is a brain condition that causes problems with movement, mental health, sleep, pain, and other health issues. It is a progressive disease for which there is no cure. Older adults with Parkinson's disease usually move into a nursing home when the disease has progressed, and they need more help with the activities of daily living. In the nursing home, their condition is monitored by a multidisciplinary team of staff, including a family doctor, social worker, physiotherapist, occupational therapist, registered nurse, nurse, and a priest. In the article, we will focus more on the collaboration between the physiotherapist and the occupational therapist, who work closely together in the day-to-day management of residents. They assess and closely monitor each resident with Parkinson's disease in all areas of functioning. More complex therapeutic interventions following a neurological approach are carried out in pairs. The physiotherapist and occupational therapist regularly exchange information with each other and share it with the rest of the multidisciplinary team, as this is essential to monitor a condition that is expected to deteriorate. By working in this way, they contribute to symptom management and improving the quality of life, which is essential in managing a person with Parkinson's disease.

*Keywords:* occupational therapy, physiotherapy, nursing home, interprofessional collaboration

## **Pomen fizioterapije v sodobnem protokolu obravnave epiziotomijske brazgotine**

Epiziotomija je kirurško ustvarjena rana na področju presredka s katero naj bi preprečili nadaljne poškodbe porodne poti in s tem zaplete v poporodnem obdobju. Protokoli obravnave so se skozi čas spreminjali. Sodobni protokoli obravnave epiziotomijske brazgotine vključujejo celovit pristop, ki zajema zdravljenje brazgotine, lajšanje bolečin in rehabilitacijo mišic medeničnega dna. Na ta način je obravnava ženske po porodu bolj individualna in celovita ter omogoča bolj prijetno poporodno izkušnjo. V sodobnem protokolu ima pomembno vlogo tudi fizioterapija, ki s svojimi postopki pripomore k izboljšanju mobilnosti ženske, lajšanju bolečin in je ključnega pomena pri rehabilitaciji mišic medeničnega dna. S pravočasno fizioterapevtsko obravnavo lahko zmanjšamo možnost nastanka zapletov, kateri se pojavijo po epiziotomijski rani, kot so urinska in fekalna inkontinenca, prolaps medeničnih organov ter bolečina. Namen integrativnega pregleda literature je bil pregledati že obstoječo literaturo, ki preučuje sodobne protokole in pomen fizioterapevtskih postopkov pri obravnavi epiziotomijske brazgotine. Članke smo iskali v podatkovnih bazah: PubMed, Cochrane Library in Science Direct. Iskanje je potekalo s pomočjo ključnih besed v angleškem jeziku. Iz integrativnega pregleda literature je razvidno, da ima zgodnja fizioterapevtska obravnava pozitiven učinek na izid zdravljenja epiziotomijske brazgotine in splošnega dobrega počutja ženske po porodu.

*Ključne besede:* brazgotina, epiziotomija, fizioterapija, sodobni protokol

## **The Importance of Physiotherapy in the Modern Episiotomy Scar Management Protocol**

An episiotomy is a surgically created wound in the area of the perineum with the aim of preventing further damage to the birth canal and thus complications in the postpartum period. Treatment protocols have changed over time. Current episiotomy scar management protocols include a comprehensive approach that includes scar healing, pain relief, and pelvic floor muscle rehabilitation. This ensures a more individual and comprehensive postpartum approach. Physiotherapy also plays an important role in the modern protocol; through its procedures it helps to improve women's mobility, relieve pain, and is crucial in the rehabilitation of the pelvic floor muscles. With timely physiotherapy treatment, we can reduce the possibility of complications arising after an episiotomy wound, such as urinary and fecal incontinence, prolapse of pelvic organs, and pain. The purpose of the integrative literature review was to review the existing literature examining modern protocols and the importance of physical therapy procedures in the management of the episiotomy scar. Articles were searched in the following databases: PubMed, Cochrane Library and Science Direct. The search was carried out using keywords in the English language. From the integrative literature review, it is clear that early physiotherapy treatment has a positive effect on the outcome of the treatment of the episiotomy scar and the general well-being of the woman after childbirth.

*Keywords:* episiotomy, physiotherapy, modern protocol, scar

## **Fizioterapija i strategije u prevenciji fizičkih padova kod starijih osoba**

Osobe u dobi iznad 65 godina najmanje jednom dožive fizički pad. Koji uzrokuje tjelesna oštećenja, a ima i psihosocijalne posljedice. Istraživanje je provedeno putem intervjua koji se sastojao od upitnika. Ukupni broj ispitanika u istraživanju je 296 od čega su 204 žene i 92 muškarca. Životna dob ispitanika je  $80,74 \pm 4,69$ , (75–97 godine). Osnovno obrazovanje ima 43 % ispitanika, a 20 % ispitanica je češće pohađalo gimnazije nego strukovne škole. Od ukupnog broja ispitanika 56 % je udovac/ica, a u braku živi 73 % muškaraca dok 69 % žena su udovice. Fizičke aktivnosti primjenjuje 56 % ispitanika, a provode ih nekoliko puta tjedno. U aktivnostima svakodnevnog života oblačenje ili svlačenje 49 % ispitanika percipira kao opasnost od pada. Niži stupanj obrazovanja kod ispitanika nosi jači stupanj zabrinutosti od mogućeg fizičkog pada. U prevenciji fizičkih padova i mogućih prijeloma kod starijih osoba bitnu ulogu u primjeni imaju fizioterapijski multimodalni programi vježbi, koji uključuju vježbe balansa, vježbe jačanja mišićne snage i izdržljivosti. Uspjeh organiziranog provođenja strategija, smjernica za prevenciju fizičkih padova kod starijih osoba ovisi o nizu čimbenika. pojedinca.

*Ključne riječi:* fizioterapija, fizički pad, multimodalni fizioterapijski programi vježbi

## **Physiotherapy and Strategies in the Prevention of Physical Falls in Older Adults**

Individuals aged 65 and above experience at least one physical fall at some point in their lives. This can lead to physical injuries and also has psychosocial consequences. The research was conducted through interviews that consisted of the following questionnaires. The total number of participants in the study is 296, with 204 being women and 92 being men. The average age of the participants is  $80.74 \pm 4.69$ , (75–97 years). Primary school was completed by 43% of the participants; of the 20% of female participants who completed secondary school, more of them attended grammar schools than vocational schools. Among the total participants, 56% are widowed; 73% of men are married, and 69% of women are widows. Approximately 56% of the participants engage in physical activities several times a week. Regarding daily activities, 49% of the participants perceive dressing or undressing as a potential risk for falling. Lower levels of education among participants are associated with a higher level of concern about the possibility of physical falls. In the prevention of physical falls and potential fractures in older individuals, physiotherapy multimodal exercise programmes play a crucial role, incorporating balance exercises, strength training, and endurance exercises. The success of organized strategies and guidelines for preventing physical falls in older individuals depends on a variety of factors specific to each individual.

*Keywords:* physiotherapy, physical fall, multimodal physiotherapy exercise programmes

## **Kakovostno dokumentiranje v zdravstveni negi**

Dokumentiranje v zdravstveni negi je ključnega pomena pri zagotavljanju kakovostne, celostne in varne obravnave pacienta. Je komunikacijska metoda, ki multidisciplinaren tim, ki ga ne sestavljajo samo izvajalci zdravstvene nege, temveč tudi zdravniki, terapevti itd., informira o tem, kakšno zdravstveno obravnavo je pacient že prejel, kakšna mu je predpisana, ne nazadnje pa tudi dokumentacija jasno opredeli vse pomembne informacije o pacientu. Namen raziskave je z uporabo pregleda prosto dostopne literature, ki je bila objavljena med letoma 2017 in 2023, preučiti pomen kakovostne dokumentacije v procesu zdravstvene nege.

*Ključne besede:* dejavniki slabega dokumentiranja, vpeljava e-dokumentiranja, dejavniki izboljšanja dokumentiranja

## **Quality Documentation in Health Care**

Documentation in nursing is crucial in ensuring a quality, integrated and safe treatment of the patient. It is a communication method that informs a multidisciplinary team, consisting not only of nursing providers, but also of doctors, therapists, etc., about the medical treatment the patient has already received, and about what has been prescribed. Lastly, the documentation clearly identifies all the relevant information about the patient. The aim of the study is to examine the importance of quality documentation in nursing care using a review of literature published between 2017 and 2023.

*Keywords:* poor documentation factors, implementation of electronic documentation, documentation improvement factors

## **Uporaba nefarmakoloških metod za lajšanje proceduralne bolečine pri dojenčkih**

Za obvladovanje bolečine se pri dojenčkih uporabljajo številne nefarmakološke metode. Za dojenčka so tako fizični kot kognitivno – vedenjski pristopi lajšanja bolečine bistveni, saj zmanjšujejo stisko in nudijo otroku občutek nadzora. Namen raziskave je predstaviti bolečino in vrste bolečine, bolečinske lestvice, vlogo medicinske sestre pri uporabi nefarmakoloških metod obvladovanja bolečine ter raziskati učinkovitost nefarmakoloških metod obvladovanja bolečine pri dojenčkih. Uporabili smo deskriptivno metodo dela s pregledom angleške strokovne in znanstvene literature. Literaturo smo iskali s pomočjo podatkovnih baz PubMed, CINAHL, Science Direct in Google scholar. V končno analizo je bilo vključenih 10 člankov. Pri dojenčkih različne starosti se pri uporabi različnih bolečinskih lestvic ocena bolečine razlikuje. Aplikacija saharoze in dekstroze nima vidnega učinka na dojenčke nižje starosti, medtem ko se je aplikacija glukoze pokazala za učinkovito nefarmakološko metodo. Na podlagi izmerjenih vitalnih funkcij ter uporabe različnih ocenjevalnih lestvic, so se ostale nefarmakološke metode, kot so dojenje, glasbena terapija, senzorična stimulacija, nanos hladnih in toplih obkladkov, prilagojena masaža in refleksoterapija zelo dobro obnesle. Vloga medicinske sestre pri tem je prepoznati in olajšati bolečino ter o učinkovitih nefarmakoloških metodah podučiti tudi starše.

*Ključne besede:* dojenček, proceduralna bolečina, lajšanje bolečine, nefarmakološka metoda, zdravstvena nega

## **Use of Non-Pharmacological Methods for Procedural Pain Relief in Infants**

Many non-pharmacological methods are used to manage pain in infants. Physical and cognitive-behavioral approaches are essential for pain relief in infants, as they reduce distress and offer a child a sense of control. The aim of the paper is to present pain and types of pain; pain scales for pain assessment; and the nurse's role in the non-pharmacological pain management. Another aim of the paper is to study the effectiveness of different non-pharmacological methods for pain relief in infants. We used a descriptive method that includes a review of English professional and scientific literature. The literature was found in the PubMed, CINAHL, Science Direct and Google Scholar databases. With the use of different pain scales, pain scores vary among infants of different ages. The application of sucrose and dextrose did not show any significant effect on infants of a lower age, while the application of glucose has proved to be an effective non-pharmacological method. In the execution of different nursing interventions, other non-pharmacological methods, such as music therapy, sensorial saturation, local heat and cold application, upper limb massage and foot reflexology have proved effective. The role of a nurse is to recognize and alleviate pain, as well as to teach parents about the use of effective non-pharmacological pain relief methods.

*Keywords:* infant, procedural pain, pain relief, non-pharmacological method, health care

## **Organizacijske ovire v predoperativni obravnavi pacientov z osteoartritisom**

V začetnih stopnjah razvoja osteoartritisa lahko z ustrezno obravnavo uspešno zaustavimo napredovanje degenerativnih sprememb. Integrirane klinične poti so ključne za učinkovito predoperativno obravnavo pacientov z osteoartritisom kolena in kolka. Raziskava je identificirala ključne ovire za medorganizacijsko sodelovanje v Sloveniji. Uporabili smo mešano metodologijo, ki je združevala spletno anketo ( $N = 135$ ) in intervjuje s pacienti ( $n = 21$ ) in različnimi deležniki v zdravstveni obravnavi pacientov ( $n = 42$ ). Na makro nivoju so glavne ovire individualistična kultura, organiziranost zdravstvenega sistema, finančne omejitve, zapleteni formalni postopki in regulativni okviri. Na mezo nivoju je ključna ovira pomanjkanje kadra. Hkrati se pojavljajo različni izzivi tudi na mikro nivoju. Najpomembnejše zaznane ovire so dejavniki na makro nivoju. Javni in zasebni sektor nista pokazala pomembnih razlik v dojemanju ovir. Pomembne razlike pa so se pokazale med različnimi strokovnimi skupinami pri oceni dejavnikov na mikro in mezo nivoju, ne pa na makro nivoju. Rezultati kažejo, da v slovenskem zdravstvenem sistemu prevladuje kultura ne-sodelovanja in izvršilna neodločnost zaradi šibke podpore vodstva za medorganizacijsko sodelovanje ter pomanjkanja avtonomnosti ključnih deležnikov. Ta celovita analiza prinaša ključne uvide za izboljšanje integriranih kliničnih poti, še posebej v zdravstvenih okoljih z manj učinkovito organizacijsko strukturo.

*Ključne besede:* osteoartritis, integrirane klinične poti, organizacijske ovire, medorganizacijsko sodelovanje, Slovenija

## **Organisational Barriers in the Pre-Operative Management of Patients with Osteoarthritis**

In the early stages of osteoarthritis, appropriate management can successfully prevent the progression of degenerative changes. Integrated clinical pathways are key to effective pre-operative management of patients with osteoarthritis of the knee and hip. The survey identified key barriers to inter-organisational cooperation in Slovenia. We used a mixed methodology combining an online survey ( $N = 135$ ) and interviews with patients ( $n = 21$ ) and various stakeholders in patient care ( $n = 42$ ). At the macro level, the main barriers are individualistic culture, organisation of the health system, financial constraints, complex formal procedures and regulatory frameworks. At the meso level, the key barrier is lack of staff. At the same time, at the micro level, various challenges also arise. The results showed that macro-level factors are the most important perceived barriers. The public and private sectors did not show significant differences in the perceived barriers. However, significant differences emerged between the different professional groups at the micro and meso levels, but not at the macro level. A culture of non-cooperation and executive indecision prevails in the Slovenian health system due to weak management support for inter-organisational cooperation and lack of autonomy of key stakeholders. This comprehensive analysis provides key insights for improving integrated clinical pathways, especially in health settings with less effective organisational structures.

*Keywords:* osteoarthritis, integrated clinical pathways, organisational barriers, inter-organisational cooperation, Slovenia

## **Presečna opazovalna raziskava v Ormoški regiji - tveganje za erektilno disfunkcijo**

Eretilna disfunkcija je pogosta in neprijetna nadloga, ki se pojavlja pri moških v vseh starostnih obdobjih. Evropsko urološko združenje definira erektilno disfunkcijo kot spolno motnjo, pri kateri moški ni sposoben doseči in vzdrževati zadostne erekcije za zadovoljiv spolni odnos. Ugotoviti dejavnike, ki so povezani s pojavom erektilne disfunkcije ter prevalenco erektilne disfunkcije v Ormoški regiji med moškimi starimi od 40 do 75 let. Delali smo presečno opazovalno raziskavo. Uporabili smo vprašalnik IIEF-5. Podatke smo pridobil na vzorcu 96 naključno izbranih moških v starosti od 40 do 75 let, ki so od 9. 9. 2019 do 13. 9. 2019 obiskali izbranega osebnega zdravnika v eni izmed dveh sodelujočih ambulant v Zdravstvenem domu Ormož. Povprečna starost moških je bila 52,65 let (SD = 9,36). Prevalenca erektilne disfunkcije je bila 58,3 % (n = 56). Statistična analiza je pokazala, da je erektilna disfunkcija signifikantno povezana s starostjo ( $F = 7,84$ ,  $p < 0,05$ ), arterijsko hipertenzijo ( $\chi^2 = 17,75$ ,  $p < 0,05$ ), sladkorno boleznijo ( $\chi^2 = 14,27$ ,  $p < 0,05$ ), jemanjem antidepressiva ( $\chi^2 = 12,03$ ,  $p < 0,05$ ) in operacijo na prostati zaradi raka prostate ( $\chi^2 = 9,42$ ,  $p < 0,05$ ). Naša raziskava je pokazala visoko prevalenco ter opozorila na povezavo med določenimi dejavniki tveganja in nastankom erektilne disfunkcije.

*Ključne besede:* erektilna disfunkcija, vprašalnik IIEF-5, prevalenca, dejavniki tveganja

## **Cross-Sectional Observational Study in Ormož Region – Risk for Erectile Dysfunction**

Erectile dysfunction is a common and unpleasant disorder that occurs in men in all age groups. The European Urological Association defines erectile dysfunction as a sexual disorder in which a man is unable to achieve and maintain sufficient erection for satisfactory sexual intercourse. The aim of the study was to determine the factors associated with the occurrence of erectile dysfunction and the prevalence of erectile dysfunction in the Ormož region among men aged 40 to 75 years. We conducted a cross-sectional survey using the IIEF-5 questionnaire. We obtained data on a sample of 96 randomly selected men aged 40 to 75 years who visited a selected general practitioner in two participating clinics at the Ormož Health Center over five consecutive days from 9 September 2019 to 13 September 2019. The mean age of the men was 52.65 years (SD = 9.36). The prevalence of erectile dysfunction was 58.3% (n = 56). Statistical analysis showed that erectile dysfunction is significantly related to age ( $F = 7.84$ ,  $p < 0.05$ ), arterial hypertension ( $\chi^2 = 17.75$ ,  $p < 0.05$ ), diabetes ( $\chi^2 = 14.27$ ,  $p < 0.05$ ), taking an antidepressant ( $\chi^2 = 12.03$ ,  $p < 0.05$ ) and prostate surgery due to prostate cancer ( $\chi^2 = 9.42$ ,  $p < 0.05$ ). Our research showed a high prevalence and pointed out the connection between certain risk factors and the occurrence of erectile dysfunction.

*Keywords:* erectile dysfunction, IIEF-5 questionnaire, prevalence, risk factors



## **Kakovostna obravnava otročnice pri poporodni krvavitvi: krovni sistematični pregled literature**

Kakovostna in varna zdravstvena oskrba je tista, ki dosledno dosega izide zdravljenja, ki so primerljivi s standardi ali najboljšimi praksami. Temelji na načelih uspešnosti, varnosti, pravočasnosti, kontinuiteti, učinkovitosti, enakopravnosti in osredotočenosti na pacienta. Pomembno je prepoznavanje tveganj in varnostnih odklonov, njihovo sporočanje pooblaščenim zdravstvenim delavcem ter obravnava in ukrepanje. Poporodna krvavitev je glavni vzrok obolevnosti in umrljivosti pri porodu. Pojavi se pri približno 1 % do 6 % vseh porodov. Atonija maternice je glavni vzrok za poporodno krvavitev in predstavlja 70 % do 80 % vseh krvavitev v porodništvu. Boljše prenatalno varstvo, sodobnejši diagnostični in terapevtski postopki, intenzivno zdravljenje ter usklajena multidisciplinarna obravnava so dejavniki, ki zmanjšujejo smrtnost. Ključnega pomena je zgodnje prepoznavanje znakov, uspešno ukrepanje in obvladovanje ter hitro zdravljenje. Pomembno vlogo imajo medicinske sestre, ki s preventivnimi ukrepi manipulacije maternice in zgodnjim odkrivanjem ter ukrepanjem lahko preprečijo mortaliteto zaradi poporodne krvavitve. Medicinske sestre kontinuirano spremljajo krčenje maternice, merijo vitalne znake in ocenjujejo splošno zdravstveno stanje otročnice. Za uspešno ukrepanje ob poporodni krvavitvi pri otročnici je še posebej pomemben multidisciplinarni pristop. Namen prispevka je, s pregledom literature predstaviti in analizirati ukrepe za preprečevanje poporodne krvavitve.

*Ključne besede:* zdravstvena nega, poporodna krvavitev, kakovost in varnost

## **Quality Treatment of Patients with Postpartum Hemorrhage: A Scoping Systematic Literature Review**

Quality and safe health care is one that consistently achieves treatment outcomes that are comparable to standards or best practices. It is based on the principles of effectiveness, safety, timeliness, continuity, efficiency, equity, and patient focus. It is important to recognize risks and safety deviations, communicate them to authorized health professionals, treat, and take action. Postpartum hemorrhage is a major cause of morbidity in childbirth. It can occur in about 1 to 6% of all births. Uterine atony is the main cause of postpartum hemorrhage and accounts for 70 to 80% of all obstetrics hemorrhages. Better prenatal care, more modern diagnostics, therapeutic procedures, intensive treatment and coordinated multidisciplinary treatment are factors that reduce mortality. Early recognition of symptoms, successful intervention and management, and rapid treatment are crucial. An important role is played by nurses, who can prevent mortality due to postpartum hemorrhage through preventive measures of uterine manipulation, and early detection and action. Nurses continuously monitor uterine contractions, monitor vital signs, and assess the general state of health of the patient. A multidisciplinary approach is particularly important for successful action in case of postpartum hemorrhage in a maternity hospital. The purpose of the paper is to present and analyze measures to prevent postpartum hemorrhage through a literature review.

*Keywords:* nursing, postpartum hemorrhage, quality, safety

## Poraba zdravil za zdravljenje demence 2017–2021

Demenca, klinični sindrom z motnjami kognitivnih funkcij, predvsem pri starejših ni le zdravstveni, temveč tudi socialni in ekonomski problem. Bolezen zdravimo s simptomatskimi zdravili, ki so najučinkovitejša v zgodnjih fazah razvoja bolezni. Spremljanje predpisovanja in porabe zdravil je ključno zaradi pridobivanja podatkov, ki služijo tudi za spremljanje in načrtovanje sistema zdravstvenega varstva. Covid-19 je s povzročitvijo javnozdravstvenih izrednih razmer na globalnem nivoju prizadel akutne in kronične bolnike, vključno z bolniki z demenco. Z namenom ocenitve predpisovanja in porabe zdravil za zdravljenje demence ter njihove ekonomske vrednosti za obdobje 2017–2021, v katerem je nastopila pandemija covid-19 je bila izvedena retrospektivna, opazovalna raziskava ambulantno predpisanih zdravil za zdravljenje demence v Sloveniji. Rezultati analize so pokazali naraščanje števila receptov za vsa štiri zdravila za zdravljenje demence med leti 2017 in 2020, v letu 2021 pa se je število receptov zmanjšalo. Stroški v eurih za ta zdravila pa v letu 2021 ostajajo približno na enaki ravni v primerjavi s predhodnim letom. Število bolnikov, ki so prejeli vsaj en recept se je povečalo pri obeh spolih, ženske so prejele več kot dvakratnik števila receptov, ki so jih prejeli moški. Pandemija covid-19 se je odrazila na zdravljenju bolnikov z demenco, zelo verjetno zaradi zmanjšane dostopnosti do zdravstvenih storitev.

*Ključne besede:* Slovenija, covid-19, demenca, predpisovanje zdravil, poraba zdravil

## Consumption of Medicines for Dementia 2017–2021

Dementia, a clinical syndrome with impaired cognitive functions, especially in the elderly, is not only a medical problem, but also a social and economic problem. The disease is treated with symptomatic medicines, which are most effective in the early stages of the disease. Monitoring the prescription and consumption of medicines is crucial for obtaining data that serves for monitoring and planning the healthcare system. COVID-19 has caused a global public health emergency affecting acute and chronic patients, including patients with dementia. In order to assess the prescription and consumption of medicines for the treatment of dementia and their economic value for the period 2017–2021, in which the COVID-19 pandemic occurred, a retrospective observational study of outpatient medicines prescribed for the treatment of dementia in Slovenia was carried out. The results of the analysis showed an increase in the number of prescriptions for all four medicines for the treatment of dementia between 2017 and 2020; in 2021, the number of prescriptions decreased. However, the cost in euros for these medicines in 2021 remains roughly the same as in the previous year. The number of patients who received at least one prescription increased in both sexes, with women having received more than twice as many prescriptions as men. The COVID-19 pandemic has had an impact on the treatment of dementia patients, most likely due to the reduced accessibility to health services.

*Keywords:* Slovenia, COVID-19, dementia, medicines prescription, medicines consumption

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## **Sagorijevanje i nezadovoljstvo na poslu kod medicinskih sestara - instrumentara u operacijskim salama Republike Hrvatske**

Trajna izloženost stresu u operacijskoj sali uzrokuje sindrom sagorijevanja koji se stvara, kroz duži vremenski period u kojem su medicinske sestre - instrumentari pod kroničnim stresom. Stres uzrokuje zdravstvene tegobe, smanjuje učinkovitost na poslu, nemogućnost funkcioniranja na osobnoj i na profesionalnoj razini, i smislenosti vlastitog rada kao posljedicu frustracije, nezadovoljstva i stresa na radnom mjestu. Istraživanje je provedeno metodom anketiranja na populaciji 987 medicinskih sestara - instrumentara, koje rade u operacijskim salama Republike Hrvatske, odaziv na anketu je bio 43%. Rezultati ankete obrađeni su metodama deskriptivne statističke analize. Razlika u centralnoj tendenciji između grupa testirana je odgovarajućim metodama inferencijalne statistike. Navedena analiza pokazuje da je 172 od 427 (40 %) ispitanika sigurno da je doživjelo burn-out sindrom, i da je percepcija stresa u svim čimbenicima statistički značajno veća kod ispitanika koji su doživjeli burn out sindrom. Uvođenjem psihoedukacije kao djela preventivnog programa u terapijskom smislu, mogla bi utjecati na prepoznavanje i prevenciju sagorijevanja, a samim time i pojavu drugih kroničnih oboljenja uzročno povezanih.

*Ključne riječi:* medicinske sestre - instrumentari, sagorijevanje, nezadovoljstvo, operacijska sala

## **Burnout and Dissatisfaction at Work among Nurses – Surgical Technologists in Operating Rooms of the Republic of Croatia**

Permanent exposure to stress in the operating room causes burnout syndrome that develops over a long period of time in which nurses – surgical technologists are under chronic stress. Stress causes health problems, reduces efficiency at work, the ability to function on a personal and professional level, and the meaningfulness of one's own work as a result of frustration, dissatisfaction and stress at the workplace. The research was conducted using a survey method on a population of 987 nurses – surgical technologists, who work in the operating theaters of the Republic of Croatia; the response to the survey was 43%. The results of the survey were processed using the methods of descriptive statistical analysis. The difference in central tendency between the groups was tested using appropriate methods of inferential statistics. The aforementioned analysis shows that 172 out of 427 respondents (40%) are convinced that they have experienced burnout syndrome, and that the perception of stress in all factors is statistically significantly higher in respondents who have experienced burnout syndrome. By introducing psychoeducation as part of a preventive program in the therapeutic sense, it could affect the recognition and prevention of burnout, and thus the occurrence of other causally related chronic diseases.

*Keywords:* nurses – surgical technologists, burnout, dissatisfaction, operating room

## **Obravnava oseb pri soočanju s samomorom bližnjega**

Samomor je velik javnozdravstveni in družbeni problem, ki vpliva ne samo na družinske člane osebe, ki je samomor storila, temveč na širši spekter ljudi. Bližnji po samomoru so izpostavljeni visoki stopnji stresa in soočanju s posledicami samomora. Tovrsten proces od bližnjih po samomoru zahteva svojevrstne napore in specifične potrebe. Kvantitativna raziskava je temeljila na deskriptivni metodi dela. Primarni podatki za analizo so bili pridobljeni s tehniko anonimnega anketiranja. Za analizo podatkov smo uporabili anketne vprašalnike, ki so bili izpolnjeni v celoti in so jih izpolnile zgolj osebe z izkušnjo izgube bližnjega zaradi samomora. V raziskavi smo opazili navedbe anketirancev, da se pri njih še precej dolgo po samomoru bližnjega odvija proces predelave izgube. Večina se ni odločila za strokovno pomoč kljub še vedno prisotni potrebi po soočenju s travmo. Vzorec anketirancev v raziskavi ni bil deležen bistveno pomembne pomoči s strani izvajalcev zdravstvene nege. Samomor bližnjega posamezniku povzroči notranji nemir in veliko potrebo po razumevanju tega pojava. Zaradi njegove kompleksnosti in neustreznega odziva družbe na samomor je proces soočanja posameznika s tovrstno izgubo dolgotrajen. Ker se posamezniki zaradi hitrega tempa življenja ne morejo prepustiti procesu okrevanja, je le-ta še daljši, obenem pa se lahko pojavijo tudi dodatni zapleti.

*Ključne besede:* samomor, bližnji po samomoru, postvencija, žalovanje, stigma

## **Care of People Coping with the Suicide of a Loved One**

Suicide is a major public health and social problem in Slovenia and in the rest of the world. Suicide does not only affect the family members of the person who committed suicide, but a wider group of people. Suicide survivors are exposed to a high level of stress and coping with the consequences of suicide. This process requires specific efforts and needs from the family members following the suicide. The quantitative research was based on the descriptive research method. The primary data for the analysis was obtained using the anonymous survey technique. To analyze the data, we used only survey questionnaires that were completed in full and by people who had experienced the loss of a loved one due to suicide. In the research, we observed that the respondents indicated that their process of coping with the loss still continues even though quite a long time has passed after the suicide of a loved one. While their need to cope with the trauma was still present, most did not choose to seek professional help. The sample of respondents in the survey did not receive significant assistance from nursing care providers. The suicide of a loved one results in serious emotional trauma of the individual and their need to understand this phenomenon. Due to the complexity of the phenomenon and how society reacts to suicide, the individual's process of dealing with this type of loss is relatively long. The fast pace of life makes the recovery process even longer and can lead to additional complications.

*Keywords:* suicide, suicide survivors, postvention, bereavement, stigma

## **Zbrinjavanje duhovnih potreba bolesnika – neizostavan segment holističke zdravstvene njege u palijativnoj skrbi**

Duhovne potrebe koje obuhvaćaju smisao života, religiju, povezanost s prirodom i dr. često su vrlo izražene kod palijativnih bolesnika. Cilj istraživanja je utvrditi učestalost provođenja intervencija te samopercepciju znanja o duhovnim potrebama palijativnih bolesnika te utvrditi postoje li razlike u provođenju navedenih intervencija s obzirom na radno mjesto. Provedeno je kvantitativno istraživanje na uzorku od 194 medicinske sestre u Hrvatskoj. Korišten je upitnik sa sociodemografskim pitanjima te 14 tvrdnji koje se odnose na duhovne potrebe. Medicinske sestre najrjeđe provode intervencije za zbrinjavanje duhovnih potreba te o njima imaju najmanje znanja. Ne postoji statistički značajna razlika u provođenju intervencija za zbrinjavanje duhovnih potreba palijativnih bolesnika s obzirom na radno mjesto sudionika. Potvrđeni su dosadašnji rezultati o zbrinjavanju duhovnih potreba bolesnika. Vidljivo je kako postoji potreba za edukacijom medicinskih sestara o prepoznavanju i o načinima zbrinjavanja duhovnih potreba bolesnika u sklopu holističke sestrinske skrbi kako bi se povećala kvaliteta pružene zdravstvene njege.

*Ključne riječi:* holistička skrb, duhovne potrebe, palijativna skrb, medicinske sestre

## **Patient's Spiritual Needs – an Indispensable Segment of Holistic Health Care in Palliative Care**

Spiritual needs that include the meaning of life, religion, connection with nature, etc. are often very pronounced in palliative patients. The goal of the research is to determine the frequency of interventions, the self-perception of knowledge about the spiritual needs of palliative patients, and to determine whether there are differences in the implementation of the aforementioned interventions with regard to the workplace. A quantitative study was conducted on a sample of 194 nurses in Croatia. A questionnaire with sociodemographic questions and 14 statements related to spiritual needs was used. Nurses rarely carry out interventions to take care of spiritual needs and have the least knowledge about them. There is no statistically significant difference in the implementation of interventions to take care of the spiritual needs of palliative patients with regard to the workplace of the participants. The results of previous studies on taking care of the spiritual needs of patients were confirmed. It is evident that there is a need for educating nurses on the recognition and ways of taking care of the spiritual needs of patients as part of holistic nursing care in order to increase the quality of the health care provided.

*Keywords:* holistic care, spiritual needs, palliative care, nurses

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## **Vloga zdravstveno negovalnih delavcev ob postopkih oživljanja**

Sodelovanje zaposlenih v zdravstveni negi pri izvajanju temeljnih in dodatnih postopkov oživljanja se dojema kot ena najbolj stresnih situacij pri njihovem delu. Dolgotrajna izpostavljenost stresu lahko vodi do številnih negativnih posledic na osebo. V prispevku so prikazani določeni vidiki vpliva sodelovanja zdravstveno negovalnih delavcev pri reanimacijskih postopkih. Izpostavljena je vloga zdravstveno negovalnih delavcev ob izvajanju tovrstnih postopkov, skladno z ERC smericami 2021. Hkrati je predstavljen tudi teoretični okvir teorije doseganja ciljev (angl. Theory of Goal Attainment) avtorice Imogene M. King. Pri izboru teorije smo se osredotočili na dejstvo, da je teorija široko uporabna. Tako je uporabna tudi na področju oskrbe bolnikov v urgentnih stanjih, njene koncepte lahko uporabimo za preučevanje vpliva reanimacijskih postopkov na izvajalce same.

*Ključne besede:* stres, teorija Imogene King, reanimacija

## **Role of Nurses during Resuscitation Procedure**

The participation of nurses in the implementation of basic and advanced life support is perceived as one of the most stressful situations in their line of work. Prolonged exposure to stress can lead to many negative consequences. The article will show certain aspects of the influence of the participation of healthcare workers in resuscitation procedures. We will highlight the role of healthcare workers when performing such procedures, following the ERC Guidelines 2021. At the same time, we will also present the theoretical framework of the Theory of Goal Attainment by Imogene M. King. In selecting the theory, we focused on the fact that the theory is widely applicable. Thus, it is also useful in the field of patient care in emergencies, and its concepts can be used to study the impact of resuscitation procedures on the providers themselves.

*Keywords:* stress, theory of Imogene King, resuscitation

## **Biološki procesi, ki povezujejo naše misli in počutje**

Človeški organizem lahko obravnavamo kot sistem, v katerem predstavljajo osnovne enote celice. Za zagotavljanje ustreznega delovanja organizma, ki je pomembno za ohranjanje zdravja, morajo biti izpolnjeni pogoji za usklajeno delovanje naših celic in organskih sistemov. Naše notranje okolje se spreminja pod vplivom zunanjega okolja: dražljajev, informacij, snovi, ki jih vnašamo v telo. V pomembnem delu pa se naše notranje okolje spreminja pod vplivom čustev, ki so povezana z izločanjem specifičnih hormonov, ki se s krvnim obtokom razširijo po celotnem organizmu. Na to, kako se naše doživljanje manifestira v čustvih, lahko tudi zavestno vplivamo. V prispevku je predstavljen princip delovanja body-mind pristopov z vidika ustvarjanja ugodnega okolja za delovanje naših celic in organizma kot celote. Prikazani so tudi rezultati vaje za proučevanje povezanosti misli in počutja, ki smo jo izvedli s študenti prvega letnika Zdravstvene nege in Fizioterapije. Rezultati so pokazali hitro manifestacijo pozitivnih in negativnih misli v spremembi fizičnega počutja. Študenti so vajo prepoznali kot pomembno v kontekstu razumevanja celostne obravnave pacientov.

*Ključne besede:* sistemska biologija, vpliv misli na počutje, »body-mind« pristopi

## **Biological Processes that Link Our Thoughts and Our Well-Being**

The human organism can be considered a system in which the basic units are cells. In order to ensure the proper functioning of the organism, which is important for maintaining health, the conditions for the harmonious functioning of our cells and organ systems must be met. Our internal environment changes under the influence of the external environment: stimuli, information, substances we introduce into the body. To a large extent, our internal environment changes under the influence of emotions, which are linked to the secretion of specific hormones that are distributed throughout the organism by the bloodstream. We can also consciously influence how our experience manifests itself in emotions. The paper presents the principles of body-mind approaches in terms of creating a favourable environment for the functioning of our cells and the organism as a whole. The results of an exercise to explore the connection between thoughts and well-being, which was carried out with first year Nursing and Physiotherapy students, are also presented. The results showed a rapid manifestation of positive and negative thoughts in the change of physical well-being. Students identified the exercise as important in the context of understanding holistic patient care.

*Keywords:* systems biology, influence of mind on well-being, body-mind approaches

## **Med-dializni telesni in kognitivni trening hemodializnih bolnikov: randomizirana kontrolirana študija**

Hemodializni (HD) bolniki so v primerjavi s splošno populacijo večplastno prizadeti tako na področju telesnih kot kognitivnih sposobnosti. Merjenje različnih sposobnosti HD bolnikov trenutno ni del kliničnega pregleda, zato je njihov upad pogosto spregledan, podcenjen in neustrezno obravnavan. Namen raziskave je raziskati učinke kombinacije kognitivnega treninga in telesne vadbe na kognitivne in telesne zmogljivost HD bolnikov. V raziskavi ugotavljamo statistično pomembne razlike pri oceni hitrosti spontane hoje na razdalji štirih metrov, testu vstani in pojdi ter Montrealski lestvici spoznavnih sposobnosti. Inovativna, nefarmakološka, bimodalna intervencija se je izkazala kot stroškovno učinkovita, varna ter enostavna za izvajanje med HD, s pozitivnim vplivom na funkcionalni status HD bolnikov.

*Ključne besede:* hemodializni bolniki, kognitivne sposobnosti, kognitivni trening, telesna vadba, končna ledvična odpoved

## **Inter-Dialysis Physical and Cognitive Training for Hemodialysis Patients: A Randomized Controlled Clinical Trial**

Hemodialysis (HD) patients generally exhibit decreased cognitive abilities and physical fitness compared to healthy individuals of the same age. Clinicians often overlook the decline in cognitive function in these patients, leading to an underestimation and lack of effective treatment for cognitive impairments. The objective of the study was to assess the effects of combining cognitive training and physical exercise on cognitive function and physical performance in HD patients. The results showed a significant improvement in the four-meter spontaneous gait speed, the Timed Up and Go test and the Montreal Cognitive Assessment. Our research indicates that integrating cognitive and physical exercise training during the HD process could enhance the functional well-being of HD patients. The innovative, nonpharmacological, bimodal intervention is not only cost-effective and safe, but also easily administered during HD sessions. It holds promise for positively affecting patients' quality of life and overall well-being.

*Keywords:* hemodialysis patients, cognitive function, cognitive training, physical exercise, end-stage kidney disease



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## **Kongenitalne anomalije mozga: Dandy Walker sindrom - prikaz slučaja**

Razvojne anomalije mozga skupina su bolesti karakterizirana abnormalnim strukturama razvoja mozga heterogene etiologije i klasifikacije. Najčešće manifestirane abnormalnosti obuhvaćaju – Dandy Walker sindrom, akveduktalnu stenozu, Chiari malformacije tipa I i II, encefalokele, ageneze žuljevitog tijela, haloprocencefalije i brojne druge. Dandy Walker sindrom – rijetka malformacija koja zahvaća mali mozak i četvrtu moždanu komoru, karakteriziran je agenezijom ili hipoplazijom vermisa malog mozga, cističnom dilatacijom četvrtke klijetke i povećanjem stražnje lubanjske jame s pomakom lateralnim sinusima prema gore. Najčešća manifestacija je hidrocefalus, koji je prisutan u oko 80 % slučajeva. Cilj rada je prikazati ulogu medicinske sestre u skrbi za osobu sa Dandy Walker sindromom. Skrb medicinske sestre proporcionalna je težini stanja pacijenta. Skrb za pacijenta s Dandy Walker sindromom je individualizirana i prilagođena potrebama pacijenta. Važno je da medicinska sestra razumije uzroke bolesti simptome, komplikacije, načine dijagnosticiranja i liječenja te različite mjere skrbi koje se mogu primijeniti u specifičnoj situaciji.

*Ključne riječi:* kongenitalne anomalije mozga, Dandy Walker sindrom, zdravstvena njega

## **Congenital Anomalies of the Brain: Dandy-Walker Syndrome – A Case Report**

Brain developmental anomalies represent a group of diseases characterized by abnormal brain development structures of heterogeneous etiology and classification. The most frequently manifested abnormalities are: Dandy-Walker syndrome, aqueductal stenosis, Type I and Type 2 Chiari malformations, encephaloceles, agenesis of the corpus callosum, holoprosencephaly and numerous others. Dandy-Walker syndrome, a rare malformation affecting the cerebellum and the fourth cerebral ventricle, is characterized by agenesis or hypoplasia of the vermis of the cerebellum, cystic dilatation of the fourth ventricle, and enlargement of the posterior cranial fossa with upward displacement of the lateral sinuses. The most common manifestation is hydrocephalus, which is present in about 80%. The aim of the paper is to present the role of the nurse in providing care for a person with Dandy-Walker syndrome. Nursing care is proportional to the severity of the patient's condition. Nursing care for a patient with Dandy-Walker syndrome is individualized and tailored to the patient's needs. It is important for the nurse to understand the causes of the disease, its symptoms, complications, diagnosis and treatment methods, as well as various nursing care measures that may be applied in a specific situation.

*Keywords:* congenital anomalies of the brain, Dandy-Walker syndrome, health care

## **Informiranost o vodenim kozicama među osobama zdravstvenog i nezdravstvenog usmjerenja: komparativno presječno istraživanje**

Vodene kozice su jedna od najčešćih zaraznih bolesti koje se pretežito javljaju u dječjoj dobi, no mogu se javiti i u drugim životnim razdobljima. Pojavljuju se epidemijski i sezonski u zimskim i proljetnim mjesecima te se u početku manifestiraju prodromalnim simptomima, a kasnije drugi do treći dan bolesti karakterističnim osipom u obliku kožnih eflorescencija. Cilj istraživanja bio je ispitati postoje li razlike u informiranosti osoba o vodenim kozicama s obzirom na područje obrazovanja; zdravstveno i nezdravstveno usmjerenje. Provedeno je presječno istraživanje u periodu od ožujka do travnja 2023. godine u kojem je sudjelovalo ukupno 521 osoba s područja Republike Hrvatske. Dobiveni rezultati upućuju kako postoji dobra informiranost o vodenim kozicama u obje skupine sudionika te kako ne postoji velika razlika s obzirom na područje obrazovanja. Premda postoji dobra informiranost osoba o vodenim kozicama, važno je da se i dalje provodi kontinuirana edukacija i informiranje o ovoj bolesti te modalitetima liječenja kod svih dobnih skupina, neovisno o području obrazovanja.

*Ključne riječi:* vodene kozice, informiranost, zdravstveni djelatnici

## **Chickenpox Awareness among Individuals with and without Background in Healthcare: A Comparative Cross-Sectional Study**

Chickenpox is one of the most common infectious diseases, which primarily occur in childhood, but can also manifest at different stages of life. It tends to appear epidemically and seasonally, often in the winter and spring months. Initially, it presents with prodromal symptoms, followed by the characteristic skin rash on the second or third day of the illness. The aim of the study was to examine whether there are differences in people's awareness of chickenpox based on their educational background, i.e., whether they come from a healthcare or non-healthcare background. A cross-sectional survey was conducted between March and April 2023, involving a total of 521 participants from the Republic of Croatia. The obtained results indicate a good level of awareness about chickenpox in both groups of participants, regardless of their educational background. However, it is important to underscore the need for ongoing education and information dissemination about this disease and its treatment modalities for all age groups, regardless of their educational background.

*Keywords:* chickenpox, awareness, health professionals

## **Uporaba zelišč za zdravstvene namene med slovenskimi potrošniki**

Zelišča se v Sloveniji in Evropi že stoletja uporabljajo zaradi njihovega kulinaričnega, medicinskega in kulturnega pomena. Potrošniki se v zadnjem desetletju vse bolj zanimajo za zelišča, saj je njihova uporaba skladna s trendom prizadevanja za uravnotežen in zdrav način življenja. Vse večje povpraševanje po naravnih izdelkih, skupaj z naraščajočo razširjenostjo kroničnih bolezni, spodbuja rast trga zelišč. Kljub trendu povečane uporabe zelišč v Evropi, so raziskave v zvezi s sprejemanjem zdravilnih zelišč pri potrošnikih redke. Zaradi obstoječe raziskovalne vrzeli na področju uporabe zelišč pri slovenskih potrošnikih, je bil na podlagi kvantitativnega pristopa s tehniko anketiranja namen študije ugotoviti, kakšne so značilnosti kupcev zelišč, kako jih uporabljajo in kakšen je nakupni potencial izbranih zelišč. Rezultati navad potrošnje zelišč med slovenskimi potrošniki (N = 508) so pokazali, da imajo ti razmeroma malo znanja in malo izkušenj z zelišči, uporabljajo zelišča predvsem za prehrano in zdravstvene namene, pri čemer najpogosteje uporabljajo kamilico, meto, žajbelj, rožmarin, bezgov cvet, sivko, meliso, timijan, šipek, alojo vero, ognjič, kumino, lipov cvet in ameriški slamnik.

*Ključne besede:* zelišča, zdravilne rastline, navade potrošnikov, uporaba zelišč, zdrav način življenja

## **Use of Herbs for Medicinal Purposes among Slovenian Consumers**

Herbs have been used in Europe and Slovenia for centuries on account of their culinary, medicinal and cultural importance. In the last decade, consumer interest in herbs has increased, as their use is associated with the trend towards a balanced and healthy lifestyle. The increasing demand for natural products, as well as the growing prevalence of chronic diseases, is driving the growth of the herbal market. Despite the trend of increased use of herbs in Europe, there is limited research on consumer acceptance of medicinal herbs. Due to the existing research gap in the field of herb use by Slovenian consumers, the aim of the study was to determine the characteristics of herb consumers, their herb use habits, and the purchase potential of selected herbs based on a quantitative survey approach. The results of herb consumption habits among Slovenian consumers (N = 508) showed that they have relatively little knowledge and experience with herbs; they use herbs mainly for food and medicinal purposes, with chamomile, mint, sage, rosemary, elderflower, lavender, lemon balm, rosehip, thyme, aloe vera, marigold, caraway, linden flower, and Echinacea being most commonly used.

*Keywords:* herbs, medicinal plants, consumer habits, use of herbs, healthy lifestyle

## **Pravni režim zdravstvenog osiguranja u Republici Srbiji**

Zdravstveno osiguranje u Republici Srbiji regulisano je Zakonom o zdravstvenom osiguranju, a nadležnost za organizovanje i sporovođenje zdravstvenog osiguranja poverena je Republičkom fondu zdravstvene zaštite. Autori smatraju da zdravstveno osiguranje Srbije ima određene specifičnosti u odnosu na zdravstvene sisteme u okruženju, naročito u domenu dobrovoljnog zdravstvenog osiguranja. U radu će se koristiti metod deskripcije, analize i komparacije. Autori zaključuju da je sistem zdravstvenog osiguranja u Srbiji specifičan u pogledu dobrovoljnog zdravstvenog osiguranja u kontekstu uloge Republičkog fonda zdravstvenog osiguranja i uređenosti instituta dobrovoljnog zdravstvenog osiguranja.

*Ključne riječi:* zdravstveno osiguranje, osiguranik, ugovarač, dobrovoljno zdravstveno osiguranje

## **Legal Regime of Health Insurance in the Republic of Serbia**

Health insurance in the Republic of Serbia is regulated by the Law on Health Insurance, and the responsibility for organizing and managing health insurance is entrusted to the Republic Health Insurance Fund. Authors describe the health insurance of Serbia that has certain specificities in relation to health systems in its surroundings, especially in the field of voluntary health insurance. The method of description, analysis and comparison are used in the paper. The authors conclude that the health insurance system in Serbia is specific in terms of voluntary health insurance in the context of the role of the Republic Health Insurance Fund and the organizers of the Institute of Voluntary Health Insurance.

*Keywords:* health insurance, insured, contractor, voluntary health insurance

## **Dostop pacientov do specialistične obravnave glede na čakalne dobe v Sloveniji 2019–2023**

V letu 2023 je bila izvedena obsežna retrospektivna (ex-post) raziskava, v kateri smo se osredotočili na čakalne dobe za prve specialistične preglede otrok (do 19 let) in odraslih (20 let in več) v letih od 2019 do 2023 v Sloveniji. Na podlagi administrativnih podatkov centralnega informacijskega sistema eNaročanje, Nacionalnega inštituta za javno zdravje, smo primerjali povprečne čakalne dobe po stopnjah nujnosti obravnave (zelo hitro, hitro, redno). Na podlagi primerjalne analize ugotavljamo, da so se povprečne čakalne dobe med pandemijo covid-19 začasno skrajšale medtem ko je naša primerjalna analiza pokazala, da so se po pandemiji povprečne čakalne dobe v primerjavi s stanjem pred pandemijo podaljšale v vseh stopnjah nujnosti obravnave in vseh petih proučevanih medicinskih specialnostih: v kardiologiji, alergologiji, revmatologiji, urologiji in nevrologiji za prve specialistične preglede otrok in odraslih, kar ima lahko resne posledice za zdravje in dobrobit pacientov. Zagotavljanje pravočasnega dostopa do prvih specialističnih pregledov je v procesu celovite zdravstvene obravnave pomembno za pacienta in eden izmed pogojev za zagotavljanje kakovostne zdravstvene obravnave. Analiza čakalnih dob pa podlaga za oblikovanje učinkovite zdravstvene politike, vključno z zbiranjem pomembnih podatkov za zagotavljanje slednjega.

*Ključne besede:* dostop, prvi specialistični pregledi, čakalne dobe, odrasli, otroci, Slovenija

## **Patient Access to Specialist Care in Relation to Waiting Times in Slovenia 2019–2023**

We conducted a comprehensive retrospective (ex-post) research focusing on waiting times for the first specialist examination of children (up to 19 years) and adults (20 years and older) in Slovenia from 2019 to 2023. Based on the administrative data of the central information system eNaročanje of the National Institute of Public Health, we compared the average waiting times according to the degree of urgency of treatment (high priority, priority and regular). Based on the comparative analysis, we find that average waiting times temporarily decreased during the COVID-19 pandemic. Our own comparative analysis showed that average waiting times increased post-pandemic compared to the pre-pandemic situation in all urgency levels of care and in all five medical specialties studied: cardiology, allergology, rheumatology, urology and neurology for the first specialist appointments of children and adults. This can have serious consequences for patients' health and well-being. Ensuring timely access to initial specialist examinations is important for patients in the context of comprehensive medical treatment and is one of the prerequisites for guaranteeing high-quality medical treatment. The analysis of waiting times serves as a basis for the formulation of effective health policies, including the collection of important data to ensure the latter.

*Keywords:* access, first specialist appointments, waiting time, adults, children, Slovenia

## **Empatija pri delu v nujni medicinski pomoči**

V zdravstveni negi je poleg strokovnosti za kakovostno opravljanje poklica temeljna lastnost empatija, torej zmožnost posameznika, da na eni strani razume situacijo trpeče osebe, na drugi pa se z njo ne poistoveti. Namen tokratne raziskave je opredeliti težave, ki jih izvajalcem v nujni medicinski pomoči predvidoma povzroča empatija. V kvalitativni raziskavi so sodelovali trije diplomirani zdravstveniki, ena diplomirana medicinska sestra, dve magistri zdravstvene nege, dve specialistki družinske medicine in en specialist urgentne in družinske medicine, vsi zaposleni v urgentnem centru enega od slovenskih zdravstvenih domov. Povprečna starost vseh intervjuvanih oseb je 34,5 let, povprečna delovna doba na področju nujne medicinske pomoči pa 8,6 let. Analiza odgovorov je pokazala, da je empatija sicer nujno potrebna lastnost za kakovostno opravljeno delo zaposlenega v nujni medicinski pomoči, da pa ne povzroča hujših posledic med njimi. Rezultati kažejo tudi na to, da lahko empatija zaposlene občasno ovira oziroma - kot pravijo sami - zamegli zdrav razum, da pa so za delo z ljudmi, še posebej z bolnimi, za kakovostno delo pomembne še nekatere druge lastnosti, kot so odgovornost, spoštovanje, natančnost, urejenost, zanesljivost, poštenost, komunikativnost, sposobnost reševanja konfliktov, ročne spretnosti in prilagodljivost.

*Ključne besede:* empatija, izvajalci zdravstvene nege, nujna medicinska pomoč

## **Empathy at Work in Emergency Medical Services**

In addition to professionalism, empathy is a fundamental characteristic in nursing for the quality performance of the profession. It is the ability of an individual to understand the situation of a suffering person, but not to identify with it. The purpose of the research is to define the problems that empathy is expected to cause to providers in emergency medical services. Three medical graduates, one registered nurse, two masters of nursing, two specialists in family medicine and one specialist in emergency and family medicine participated in the qualitative research, all employed in the emergency center of one of the Slovenian medical centers. The average age of all interviewed persons is 34.5 years, and the average length of service in the field of emergency medical services is 8.6 years. The analysis of the answers showed that empathy is a necessary trait for the high-quality work of an employee in emergency medical services, but that it does not lead to serious consequences. The results also show that employees' empathy can sometimes hinder or – as they have said – cloud their judgement, and that certain other traits are important for quality work with people, especially sick people, such as responsibility, respect, accuracy, orderliness, reliability, honesty, communication, conflict resolution skills, manual dexterity and flexibility.

*Keywords:* empathy, healthcare providers, emergency medical services

## **Odnos staršev do cepljenja predšolskih otrok**

Precepljenost predšolskih otrok v Sloveniji je že nekaj let zapored na državni ravni in tudi v večini zdravstvenih regij razmeroma visoka, vendar pa se le ta znižuje. V zadnjem času narašča število staršev, ki ne cepijo svojih otrok ali dvomijo o cepljenju. Proučevali smo dejavnike povezane s sprejemanjem cepljenja otrok in ugotavljali ali in kako se sprejemanje cepljenja razlikuje med materami in očetmi predšolskih otrok v Dolenjski regiji. Rezultati raziskave so pokazali, da so stališča staršev glede cepljenja predšolskih otrok podobna in se ne razlikujejo glede na izobrazbo. Razlike so pokazale glede starosti. Anketirani starši zaupajo zdravnikom in medicinskim sestram. Anketirani starši otrok, ki niso cepljeni po predpisanem programu kot glavni razlog navajajo strah pred neželenimi učinki cepiva. Sicer pa rezultati kažejo na naklonjenost staršev k obveznemu cepljenju otrok proti določenim nalezljivim boleznim v Sloveniji. Najpomembnejši dejavnik, ki prepreči, da očetje in matere predšolskih otrok ne pripeljejo na cepljenje je premalo informacij in gradiv v zvezi s cepljenjem, pa tudi nerazumljive informacije in gradiva v zvezi s cepljenjem. O problematiki je potrebno več razpravljati. K ozaveščanju naj več prispevajo zdravstveni delavci, saj so v očeh staršev ti najbolj zaupanja vredni viri.

*Ključne besede:* predšolski otroci, cepljenje, starši, sprejemanje cepljenja

## **Attitude of Parents towards Vaccination of Preschool Children**

At the national level, vaccination of preschool children in Slovenia has been relatively high in most health regions for several years in a row, but now it is decreasing. Recently there has been an increase in the number of parents who do not vaccinate their children or have doubts about vaccination. We investigated factors associated with the acceptance of child vaccination and assessed whether and how vaccination acceptance differs between mothers and fathers of preschool children in the Dolenjska region. The research results have shown that parents' attitudes towards vaccinating preschool children are similar and do not differ based on education. Differences were observed concerning age. In our survey the parents expressed their trust in doctors and nurses. The surveyed parents of children who are not vaccinated according to the prescribed program cite fear of vaccine side effects as the main reason. However, the results indicate that parents are in favor of the mandatory vaccination of children against specific infectious diseases in Slovenia. The most important factor preventing fathers and mothers of preschool children from bringing them in for vaccination is a lack of information and materials related to vaccination, as well as incomprehensible information and materials regarding vaccination. More discussion is needed on the issue. Healthcare professionals should contribute more to raising awareness, as they are seen as the most trustworthy source by parents.

*Keywords:* preschool children, vaccination, parents, vaccination acceptance

## **Ohranjanje funkcionalne sposobnosti starejših oseb s telesno aktivnostjo**

Kakovost življenja v zrelih letih je odvisna od posameznika in njegovega prizadevanja za ohranitev svojih telesnih sposobnosti. Telesna nedejavnost vodi v večjo odvisnost od tuje pomoči in slabšo kakovost življenja bodisi v domačem ali institucionalnem okolju. Ohranjanje funkcionalne sposobnosti starejših oseb vodi v preprečevanje nastanka padcev in poškodb. Namen raziskave je bil ugotoviti vpliv telesne vadbe na funkcionalne sposobnosti starejših oseb. Uporabili smo kvalitativen raziskovalni pristop s tehniko intervjuvanja. Raziskava je potekala od 15. 6. 2023 do 31. 8. 2023. V raziskavo je bilo vključenih 23 starejših oseb nastanjenih v domovih za starejše Jugovzhodne Slovenije (19 žensk in 4 moški). Povprečna starost vključenih starostnikov v raziskavo je bila 84,5 let. Na podlagi analize rezultatov smo ugotovili, da ima vadba pozitiven učinek tako na fizičnem kot emocionalnem področju. Ugotovili smo, da je pri večini udeležencev v raziskavi razlog individualne obravnave bolezensko stanje (zlomi kolka, nadlahtnice, koželjnice, bolečine v nogah, rokah, ramah, možganska kap ...). Iz rezultatov lahko sklepamo, da starejšim osebam redna telesna vadba veliko pomeni, saj na eni strani ohranjajo funkcionalne sposobnosti na drugi pa čustveno stabilnost. Ugotavljamo, da domovi za ostarele izvajajo tako skupinsko kot individualno vadbo glede na potrebe uporabnikov. Udeleženci bi želeli več individualne vadbe, ki je povezana z večjim številom zaposlenih na področju fizioterapije.

*Ključne besede:* funkcionalna sposobnost, telesna aktivnost, starejše osebe

## **Maintaining the Functional Capacity of Older People through Physical Activity**

The quality of life in old age depends on the individual and his/her efforts to preserve his/her physical abilities. Physical inactivity leads to greater dependence on outside help and a poorer quality of life, either in the home or in an institutional setting. Maintaining the functional capacity of older people leads to the prevention of falls and injuries. The aim of the study was to determine the impact of physical exercise on the functional ability of older people. A qualitative research approach was used with an interview technique. The study was conducted from 15 June 2023 to 31 August 2023. A total of 23 elderly people accommodated in residential homes for the elderly in South-Eastern Slovenia were included in the study. Nineteen of them were women and 4 were men. The average age of the elderly included in the survey was 84.5 years. Based on the analysis of the results, we found that exercise has a positive effect both in the physical and emotional domains. We found that for most of the interviewees, the reason for the individual treatment is a medical condition (hip fractures, fractures of the upper arm, radius fractures, pain in the legs, arms, shoulders, a stroke, etc.). From the results, we can conclude that regular exercise is very important for the elderly, as it enables them to maintain their functional abilities on the one hand, and their emotional stability on the other. We find that nursing homes provide both group and individual exercise according to the needs of the users. The interviewees would like to see more individual exercise, which would require more physiotherapy staff.

*Keywords:* functional capacity, physical activity, older persons



## **Uporaba zaščitnih sredstev zdravstvenih delavcev**

Pri delu zdravstvenih delavcev je za preprečevanje širjenja okužb ključna pravilna uporaba zaščitnih sredstev in postopkov za preprečevanje okužbe. Namen raziskave je bil ugotoviti, v kolikšni meri zdravstveni delavci poznajo pravilno uporabo varovalne opreme in katero vrsto zaščite najpogosteje uporabljajo, kakšno vlogo ima medicinska sestra pri ozaveščanju o preprečevanju prenosa okužbe in kakšna je samoocena usposobljenosti zdravstvenih delavcev glede rokovanja z zaščitno opremo. Vsi sodelujoči zdravstveni delavci so kot najpogosteje uporabljeno zaščitno opremo navedli maske in rokavice, nekoliko manj intervjuvancev je navedlo tudi predpasnik ali plašč, več kot polovica sodelujočih je izbrala še zaščitno pokrivalo ter vizir, slaba polovica zdravstvenih delavcev pa je navedla tudi obutev ali zaščito za čevlje. Pravilna uporaba zaščitne opreme ključno pripomore k zaježitvi širjenja okužbe. Zdravstveni delavci navajajo pomanjkanje prostorskih kapacitet in materiala za ustrezno zaščito pred prenosom okužbe. Da so delovni pogoji za zdravstvene delavce težki, potrjuje tudi teorija.

*Ključne besede:* zaščitna oprema, zdravstveni delavci, obvladovanje okužb, delovni pogoji

## **Use of Protective Equipment by Health Workers**

In the work of healthcare workers, the correct use of protective equipment and procedures to prevent the spread of infection is vital. The purpose of the research was to determine to what extent health workers know the correct use of protective equipment, which type of protection health workers use most often, what role the nurse plays in raising awareness about the prevention of transmission, and what is the self-assessment of the competence of health workers in handling protective equipment. All the participating health workers indicated masks and gloves as the most frequently used protective equipment; slightly fewer interviewees also indicated an apron or coat. More than half of the participants also chose a protective headgear and a visor, and less than half of the health workers also indicated footwear or shoe protection. Proper use of protective equipment is crucial in containing the spread of the virus, although due to its aggressive nature, the virus continues to spread despite consistent adherence to measures. Health workers cite a lack of spatial capacity and materials for adequate protection against the transmission of infection. However, theory also confirms that working conditions are difficult for health workers.

*Keywords:* protective equipment, health workers, spread of infections, working conditions

## **Priložnosti za timsko delo v zdravstvenih in socialno varstvenih zavodih**

Učinkovito vedenje zaposlenih v zdravstvu ima ključno vlogo pri oblikovanju dinamike timskega dela v vsaki organizaciji. Če se zaposleni aktivno vedejo pozitivno, se ustvari okolje, ki spodbuja sodelovanje in produktivnost. Nasprotno pa lahko negativna vedenja zaposlenih, delujejo kot ovira za učinkovito timsko delo. Uporabljen je bil kvantitativni raziskovalni pristop. Instrument za zbiranje podatkov je bil revidiran vprašalnik »The MISSCARE Survey«. V vzorec smo zajeli 180 izvajalcev zdravstvene nege, od tega 104 v bolnišnični dejavnosti, 59 v primarnem zdravstvenem varstvu, 14 v socialno varstvenih zavodih, dva respondenta pa sta navedla možnost »drugo«. S faktorsko analizo (Oblimin rotacijo) smo določili dva faktorja. Prvi faktor smo poimenovali Pozitivna vedenja za delovanje tima, drugi faktor pa Negativna vedenja za delovanje tima. Udeleženci so poročali o pogostejšem pozitivnem vedenju za delovanje tima ( $M = 3,69$ ,  $SD = 0,824$ ) kot o negativnem vedenju za delovanje tima ( $M = 2,66$ ,  $SD = 0,834$ ). Skupni dosežki pri podlestvicah so bili izračunani kot povprečje v posamezno lestvico vključenih postavk. Podlestvici sta bili med seboj statistično značilno negativno povezani ( $r = -0,382$ ,  $p < 0,001$ ). Organizacije se vse bolj zavedajo velikega vpliva vedenja zaposlenih na timsko delo, zato se vse bolj osredotočajo na spodbujanje organizacijske kulture, ki v ospredje postavlja medsebojne odnose in vrednote.

*Ključne besede:* vedenje v timu, zdravstvena nega, zdravstvene organizacije, zdravstveno negovalni tim

## **Opportunities for Collaborative Teamwork within Healthcare and Social Care Organizations**

Effective healthcare worker behaviour plays a key role in shaping the dynamics of teamwork in any organisation. When employees actively behave in a positive way, an environment that fosters collaboration and productivity is created. Conversely, negative employee behaviours can act as a barrier to effective teamwork. A quantitative research approach was used. The data collection instrument was a revised questionnaire "The MISSCARE Survey". The sample consisted of 180 healthcare providers, i.e., 104 in hospital, 59 in primary health care, 14 in social care institutions, and two respondents indicated the option "other". Using factor analysis, we determined two factors. The first was named Positive Team Functioning Behaviours, and the second factor Negative Team Functioning Behaviours. Participants reported more frequent Positive Team Functioning Behaviours ( $M = 3.69$ ,  $SD = 0.824$ ) than Negative Team Functioning Behaviours ( $M = 2.66$ ,  $SD = 0.834$ ). Total scores on the subscales were calculated as the average of the items included in each scale. The two subscales were statistically significantly negatively correlated with each other ( $r = -0.382$ ,  $p < 0.001$ ). Organisations are increasingly aware of the significant impact of employee behaviour on teamwork and are therefore increasingly focusing on fostering an organisational culture that puts relationships and values at the centre.

*Keywords:* team behaviour, nursing, healthcare organisations, healthcare team

## **Politika zdravja in država**

Politika zdravja zajema vse večji kompleks problemov, ki jih je treba rešiti in potreb, ki terjajo zadovoljitev. Na drugi strani je s politiko zdravja povezanih mnogo izzivov, saj je zdravstvo gospodarska panoga, ki zlasti z raziskovalno-inovativnimi aktivnostmi in projekti lahko ustvarja pomembno dodano vrednost. Zdravje v XXI. stoletju ni zgolj vrednota in pravica posameznika, je pomemben dejavnik produktivnosti tako na nivoju posameznika kot družbe. Krize, ekonomska, finančna, vojna in covid-19 pa so nedvomno dokazale, da je javno zdravstvo ključni del zdravstvenega sistema v državi. V majhni državi, ki je zaradi tega še posebej ranljiva, je tako nujno poskrbeti, da se v njej lastnem kontekstu upošteva različna znanja in še več: pomemben je postal koncept prevajanja znanja in z njim povezani novi mehanizmi in ukrepi, ki se razvijajo v okolju EU. Slednji so predmet predstavitve tega prispevka.

*Ključne besede:* politika zdravja, javno zdravstvo, prevajanje znanja, poslanstvo Evropske mreže EVIPnet, misija rak

## **Health Policy and the State**

Health policy embraces a host of problems to solve and needs to fulfill. On the other hand, there are challenges: health care is an industry whose research and innovation activities and projects generate added value. Health in the 21st century is not only a value and an individual's right. It is an important productivity driver for an individual and for society at large. Economic, financial, war and COVID-19 crises have exposed – without a doubt – that the public health system is the key part of the state health system. In a small country, which is even more vulnerable, we must ensure that different types of knowledge are taken into account in its own context. Moreover, the concept of knowledge translation and the related new mechanisms and measures being developed in the EU is very important. These are presented in the paper.

*Keywords:* health policy, public health, knowledge translation, EVIPnet's mission, Mission on Cancer

## **Povezanost načina korištenja slobodnog vremena s verbalnom komunikacijom**

Komunikacija u zdravstvu predstavlja jednu od temeljnih vještina jer služi kao sredstvo kojim se uspostavlja suradnja između pacijenta i njegove obitelji i zdravstvenih radnika, kako bi se međusobno informirali, te između zdravstvenih radnika, kako bi se uspješno proveli postupci zdravstvene skrbi. Komunikacijske vještine u sestrinstvu potrebno je usavršavati tijekom čitavog radnog vijeka, a važno je razvijanje komunikacijskih vještina barem na jednom stranom jeziku, osobito onog koji se često koristi na međunarodnoj razini, što je najčešće engleski jezik. Ovim istraživanjem ispitivala se povezanost između načina korištenja slobodnog vremena studenata i samoprocjene elemenata verbalne komunikacije na hrvatskom i engleskom jeziku. Ispitano je postojanje razlika u samoprocjeni elemenata verbalne komunikacije na hrvatskom jeziku s obzirom na vrijeme koji studenti provode čitajući, razlika u korištenju stručne terminologije iz područja sestrinstva s obzirom na učestalost čitanja stručne literature te razlika u samoprocjeni elemenata verbalne komunikacije na engleskom jeziku između studenata s obzirom na godinu studija.

*Ključne riječi:* komunikacijske vještine, verbalna komunikacija, sestrinstvo

## **Relationship between Leisure-Time Activities and Verbal Communication**

Communication in health care represents one of the fundamental skills because it serves as a means to establish collaboration between the patient and their family and healthcare professionals, enabling mutual information exchange, as well as among healthcare professionals to successfully carry out healthcare procedures. Communication skills in nursing need to be continuously improved throughout one's career. It is important to develop communication skills in at least one foreign language, especially in one that is frequently used on an international level, which is most often the English language. The research examined the connection between how students spend their free time and their self-assessment of verbal communication elements in Croatian and English. We have examined the existence of differences in the self-assessment of verbal communication elements in the Croatian language in relation to the time students spend reading, of differences in the use of nursing-specific terminology based on the frequency of reading professional literature, and of differences in the self-assessment of verbal communication elements in the English language among students based on the year of study.

*Keywords:* communication skills, verbal communication, nursing

## **Implikacije tereta antimikrobne rezistencije u Europi kroz prizmu pacijenta**

U 2019. godini zabilježeno je 541 tisuću smrtnih slučajeva povezanih s bakterijskom antimikrobnom rezistencijom, dok je 133 tisuće smrti direktno povezano s bakterijskom rezistencijom u čitavoj europskoj regiji Svjetske zdravstvene organizacije. Najveći teret odnosio se na slučajeve infekcija krvotoka, a navedeno su slijedile intra-abdominalne i respiratorne infekcije. Pojava značajne rezistencije, tj. otpornosti mnogih ključnih bakterijskih patogena i specifičnih kombinacija mikroorganizama-antibiotika, zajedno s povećanjem stopa smrtnosti povezanih s tim patogenima, upravo otkrivaju ozbiljnost antimikrobne rezistencije kao ključnog problema javnog zdravlja u cijeloj Europi. Navedeno znači da će rješavanje ovog izazova zahtijevati usmjerene inicijative i financijske investicije, uz kontinuirane istraživačke napore usmjerene na mjerljive rezultate. Razumijevanje utjecaja antimikrobne rezistencije treba svakako uključivati društvene i ekonomske aspekte. Postoji hitna potreba za koordiniranim naporima u rješavanju problema antimikrobne rezistencije – od antibiotskog stewardshipa do istraživanja i inovacija – s krajnjim ciljem osiguranja učinkovitih terapijskih opcija za krajnje pacijente. Ključno je prepoznati ne samo važnost problema antimikrobne rezistencije, već i staviti pacijente u središte pozornosti prilikom usmjeravanja učinkovitih rješenja za suočavanje s ovim itekako složenim globalnim zdravstvenim izazovom.

*Ključne riječi:* bakterijske infekcije, antimikrobne rezistencije, globalno zdravstvo, promocija zdravlja

## **Implications of the Burden of Antimicrobial Resistance in Europe through the Lens of the Patient**

In 2019, there were 541 thousand deaths associated with bacterial antimicrobial resistance (AMR) and 133 thousand deaths directly attributed to bacterial AMR across the entire WHO European Region. The most substantial burden was associated with bloodstream infections, followed by intra-abdominal and respiratory infections. Such significant resistance observed in numerous crucial bacterial pathogens and specific drug-pathogen combinations, along with a surge in mortality rates linked to these pathogens, underscore the gravity of antimicrobial resistance as a substantial public health concern in Europe as a whole. This means that addressing AMR will necessitate focused initiatives and financial investments, in addition to ongoing research endeavors that are driven by measurable outcomes. Comprehending the impact of AMR should encompass social and economic aspects. There is an urgent need for coordinated efforts to address AMR – from antibiotic stewardship to research and innovation – with the ultimate goal of safeguarding effective treatment options for patients. We should acknowledge not only the importance of the AMR challenge, but also put patients into focus when guiding effective solutions to combat this complex global health issue.

*Keywords:* bacterial infectious, antimicrobial resistance, global health burden, health promotion

## **Vpliv priporočilnih sistemov na znanje, vedenje in zdravje otrok**

V sodobnem digitalnem svetu se je z napredkom tehnologije povečal pomen priporočilnih sistemov (npr. Spotify, YouTube, Netflix ...). Čeprav so ti sistemi t. i. sistemi splošnih priporočil in niso zasnovani posebej za otroke, otrokom sugerirajo priporočila o tem, katere videoposnetke naj gledajo, katere igre naj igrajo na spletu z ali brez povezave, katero glasbo naj poslušajo, katere informacije naj berejo in celo s kom naj se spoprijateljijo. Z zbiranjem »klikov« posameznega otroka med gledanjem, poslušanjem, iskanjem, deljenjem, »surfanjem« po spletu, lahko priporočilni sistemi ustvarijo »profil« skupine s podobnimi lastnostmi. Ker so otroci tako kot odrasli t. i. končni uporabniki priporočilnih sistemov, se postavlja vprašanje, kako ranljiv je ta svojevrsten segment družbe, torej kako sistemi priporočil vplivajo na vedenje in znanje otrok. V prispevku so orisana le nekatera potencialna tveganja, med drugim (i) ustvarjanje »informatijskih mehurčkov«, v katere so otroci ujeti zaradi prevelike izpostavljenosti podobnim vsebinam, pri čemer imajo manj možnosti za raziskovanje različnih vsebin in pridobivanja novih znanj, (ii) zasvojenost in odvisnost, (iii) vpliv na stereotipno vedenje otrok ter (iv) vpliv na zdravje otrok.

*Ključne besede:* priporočilni sistemi, otroci, zasvojenost, zdravje

## **Impact of Recommendation Systems on Children's Knowledge, Behavior, and Health**

With the advancement of technology, the importance of recommendation systems (e.g., Spotify, YouTube, Netflix) in the digital world of today's children has increased. Although these systems are general recommendation systems and not designed specifically for children, they provide children with recommendations on what videos to watch, what games to play online or offline, what music to listen to, what information to read, and even whom they should befriend. By collecting children's "clicks" during viewing, listening, searching, sharing, hovering online, recommendation systems are able to create a "profile" of a group with similar attributes. As children (same as adults) are the "end users" of recommendation systems, the question is how vulnerable this peculiar segment of society is, i.e., how does the recommendation system impact children's behavior and knowledge? In the paper, only a few potential risks are outlined, including how recommendation systems are creating (i) "information bubbles" in which children are trapped due to overexposure to similar content, having less opportunity to explore different content and acquire new knowledge, (ii) addiction and dependency, (iii) stereotypical behavior, and (iv) a negative impact on children's health.

*Keywords:* recommendation systems, children, addiction, health

## **Izzivi v sistemu zdravstvenega varstva**

Zavod za zdravstveno zavarovanje Slovenije je strokovna institucija in pomemben podsistem v sistemu zdravstvenega varstva v Sloveniji. V zadnjih letih si izjemno prizadeva za stabilizacijo zdravstvenega sistema z mnogimi uvedenimi razbremenitvami v procesih delovanja zdravstvenega sistema in digitalizacijskimi posodobitvami. Predvsem pa predlaga izvedbo nujnih sistemskih ukrepov, da bi zavarovanim osebam povečali dostopnost do zdravstvenih storitev in hkrati razbremenili zdravstveno službo. Ključni so nefinančni, organizacijski, kadrovsko-plačni ukrepi, predvsem na ravni izvajalcev zdravstvenih storitev ob ustreznem normativnem okviru, ki bo zagotovil optimalno izrabo razpoložljivih kapacitet kadrov, opreme, prostorov in največjo mogočo učinkovitost in kakovost storitev, ki jih potrebujejo zavarovane osebe.

*Ključne besede:* sistem zdravstvenega varstva, Zavod za zdravstveno zavarovanje Slovenije, sistemski ukrepi, dostopnost do zdravstvenih storitev

## **Challenges in the Healthcare System**

The Health Insurance Institute of Slovenia is a professional institution and an important sub-system in the healthcare system in Slovenia. In recent years, the Institute has been working hard to stabilise the healthcare system, by introducing many optimisations in the processes of the healthcare system and by digitalisation of processes. In particular, Institute proposes to implement urgent systemic measures to increase access to health services for insured persons and at the same time relieve the burden on the health service. Among these measures are non-financial, organisational, staffing and payment measures, especially at the level of health service providers, with an appropriate normative framework to ensure optimal use of the available capacities of staff, equipment, premises and to maximise the efficiency and quality of the services needed by insured persons.

*Key words:* health care system, Health Insurance Institute of Slovenia, systemic measures, access to health services

## **Vpliv samo-aplicirane miofascialne masaže na obseg gibljivosti in mišično zmogljivost**

Uporaba masažnih valjev kot oblike manualne terapije se je v zadnjih letih močno povečala. Pri tej tehniki posamezniki z uporabo lastne telesne teže in masažnega valja izvajajo pritisk na prizadeta mehka tkiva, pri čemer uporabljajo predvsem zgornje okončine. Učinki samo-aplicirane miofascialne masaže s pomočjo masažnega valjčka vključujejo zmanjšanje mišične napetosti in togosti, zmanjšanje bolečin v mišicah, povečanje obsega gibljivosti sklepov, pospešeno celjenje poškodovanega tkiva, izboljšano zmogljivost mišic in boljše športne rezultate. Namen raziskave je predstaviti vpliv samo-aplicirane miofascialne masaže na mišice in sklepe, pregledati literaturo o samo apliciranem miofascialnem sproščanju z uporabo pripomočkov ter razpravljati o učinkih miofascialne masaže na telo. Iskanje literature je potekalo v podatkovnih zbirkah PubMed, Science Direct, Google Scholar, CINAHL in PEDro s ključnimi besedami v angleškem jeziku (foam rolling [Title/Abstract]) AND (myofascial release [Title/Abstract]) AND (performance [Title/Abstract]) AND (delayed onset muscle soreness [Title/Abstract]) OR (DOMS [Title/Abstract]). Analizirali smo deset raziskav, kjer so ugotovili zmanjšanje odložene mišične bolečine (delayed onset muscle soreness - DOMS) ter regeneracijo mišic kar je izboljšalo zmogljivost mišic in imelo pozitiven vpliv na gibljivost.

*Ključne besede:* valjčkanje, miofascialno sproščanje, zmogljivost, odložena mišična bolečina, DOMS

## **Effect of Self-Applied Myofascial Massage on Range of Motion and Muscle Performance**

The use of massage rollers as a form of manual therapy has greatly increased in recent years. In this technique, individuals use their own body weight and a massage roller to apply pressure to the damaged soft tissue, using mainly the upper limbs. The effects of self-administered myofascial massage with the help of a massage roller include a decrease in muscle tension and stiffness, a decrease in muscle pain, an increase in joint range of motion, accelerated healing of damaged tissue, an increase in muscle strength, and better sports results. The purpose of the research is to present the impact of self-administered myofascial massage on muscles and joints, to review the literature on self-administered myofascial relaxation using aids, and to discuss the effects of myofascial massage on the body. A literature search was conducted in the PubMed, Science Direct, Google Scholar, CINAHL and PEDro databases using English keywords (foam rolling [Title/Abstract]) AND (myofascial relaxation [Title/Abstract]) AND (exercise [Title/Abstract]) AND (delayed onset muscle soreness [Title/Abstract]) OR (DOMS [Title/Abstract]). We analyzed ten studies that found improvement in DOMS and muscle regeneration, which improved muscle performance and had a positive impact on mobility.

*Keywords:* foam rolling, myofascial release, performance, delayed onset muscle soreness, DOMS



## **Care for Patients Diagnosed with Crohn's Disease**

Crohn's disease (CD) is an inflammatory bowel disease that is characterized with chronic intestine inflammation with relapse and remission phases. CD patients require a multidisciplinary approach including the treatment of symptoms and complications, monitoring during remission, and psychological support. These patients have a higher risk of developing colorectal, cervical and skin cancer. Therefore, cancer screening is crucial. It has been suggested that lifestyle can implicate the course of the disease. Smoking is a risk factor for developing CD; it may worsen the course of the disease, and may increase the flares and recurrence after surgery. It is linked to more intense corticosteroid therapy and side effects. Furthermore, obese and overweight patients have a higher risk of treatment failure, hospitalization, and surgery. On the other hand, malnutrition is common, linked to deficiencies of vitamin B12, folate and ferrum. Accompanying osteoporosis and osteopenia require Calcium and vitamin D monitoring and supplementation. Moderate physical activity may reduce inflammation and risk of relapse in remission patients. Many patients suffer from sleep disorders that can increase the risk of disease flares. Care for CD patients requires a holistic approach to achieve and maintain remission and to prevent potential complications.

*Keywords:* Crohn's disease, patient care, lifestyle

## **Obravnava pacientov s Crohnovo boleznijo**

Crohnova bolezen (CB) je vnetna črevesna bolezen, za katero je značilno kronično vnetje črevesja z obdobji poslabšanja in remisije. Pacienti s CB potrebujejo multidisciplinarni pristop, ki zajema zdravljenje simptomov in komplikacij, spremljanje med remisijo in psihološko podporo. Ti pacienti imajo večje tveganje za nastanek kolorektalnega raka, raka materničnega vratu in kožnega raka. Zaradi tega so presejalni pregledi za odkrivanje raka ključnega pomena. Raziskave kažejo, da lahko življenjski slog vpliva na potek bolezni. Kajenje je dejavnik tveganja za nastanek CB, ki lahko poslabša potek bolezni ter sproži izbruhe in ponovni pojav bolezni po posegu. Povezano je z intenzivnejšo kortikosteroidno terapijo in stranskimi učinki. Poleg tega imajo pacienti s prekomerno težo tudi večje tveganje za neuspešno zdravljenje, hospitalizacijo in kirurški poseg. Po drugi strani pa je pri njih pogosta podhranjenost, povezana s pomanjkanjem vitamina B12, folne kisline in železa. Pacienti s pridruženno osteoporozo in osteopenijo pa potrebujejo spremljanje in dodajanje kalcija ter vitamina D. Zmerna telesna dejavnost lahko zmanjša vnetje in tveganje za poslabšanje bolezni pri pacientih v remisiji. Veliko pacientov ima motnje spanja, ki lahko povečajo tveganje za izbruhe bolezni. Obravnava pacientov s CB zahteva celostni pristop, s katerim lahko dosežemo in vzdržujemo remisijo ter preprečimo morebitne komplikacije.

*Ključne besede:* Crohnova bolezen, obravnava pacienta, življenjski slog

## **Podatki kot ključna surovina za procesa digitalizacije in menedžment v zdravstvu**

V svetu, kjer se zdravstveni ekosistem sooča z neprestano rastjo podatkov, postaja očitno, da so podatki osrednja sila, ki poganjajo digitalizacijo in so osnova za sprejemanje odločitev menedžmenta v zdravstvu. Integracija podatkov iz različnih virov, kot so elektronski zdravstveni kartoni, laboratorijski rezultati in medicinske slike, namreč omogoča celovit pogled na pacientovo zdravje. To integracijo podpirajo napredne analitične tehnike, ki pomagajo pri odkrivanju vzorcev in trendov, kar vodi do boljšega razumevanja bolezni in stanj, in s tem pripomore k razvoju prilagojenih terapevtskih pristopov. Dotaknemo se tudi vloge umetne inteligence pri tem in prednostih, ki jih prinaša na področju zdravstva. V prispevku prav tako predstavljamo dve študiji primera, ki ilustrirata vrednost integracije in analize podatkov v zdravstvenem sektorju. Prva študija se osredotoča na menedžment v zdravstvu, zlasti na upravljanje s človeškimi viri. Drugi primer študije se nanaša na digitalizacijo zdravstva, kjer smo razvili sistem za navzkrižno preverjanje podatkov med računovodskimi in skladiščnimi sistemi. V obeh študijah primera smo uporabili anonimizirane podatke, da zagotovimo zasebnost in varnost informacij vseh vpletenih. Kljub vsemu pa lahko povzamemo, da so študije potrdile pomen in učinkovitost uporabe naprednih analitičnih tehnik in integracije podatkov za izboljšanje operativne učinkovitosti in kakovosti zdravstvene oskrbe.

*Ključne besede:* podatkovna vrednost, integracija podatkov, digitalizacija, umetna inteligenca

## **Data as Key "Raw Material" for the Digitalization and Management Processes in Health Care**

In a world where the healthcare ecosystem is grappling with the relentless growth of data, it is becoming evident that data is the central force driving digitalization and forming the basis for healthcare management decision-making. The integration of data from various sources, including electronic health records, laboratory results, and medical images, provides a comprehensive view of a patient's health. This integration is supported by advanced analytical techniques that assist in identifying patterns and trends, leading to a better understanding of diseases and conditions and, consequently, aiding in the development of tailored therapeutic approaches. We also touch upon the role of artificial intelligence and the advantages it brings to the field of health care. In the article, we also present two case studies illustrating the value of data integration and analysis in the healthcare sector. The first study focuses on healthcare management, particularly human resources management. The second case study pertains to the digitalization of health care, where we developed a system for cross-verifying data between accounting and warehouse systems. In both case studies, we utilized anonymized data to ensure data privacy and security for all involved parties. While detailed results have been withheld due to the sensitive nature of the data and the current situation in Slovenia, we can summarize that these studies affirm the importance and effectiveness of using advanced analytical techniques and data integration for enhancing the operational efficiency and quality of health care.

*Keywords:* data value, data integration, digitalization, artificial intelligence

## **Poznavanje paliativne oskrbe med študenti zdravstvene nege**

Paliativna oskrba predstavlja celostno oskrbo pacientov z neozdravljivimi in življenjsko ogrožujočimi stanji. Zajema obravnavo fizičnih, psihičnih, socialnih in duhovnih potreb posameznika. S tem pa vpliva na boljšo kakovost življenja pacientov ter njihovih bližnjih. Za izvajanje holistične in kakovostne paliativne oskrbe zdravstveni delavci potrebujejo ustrezno znanje s tega področja. Namen raziskave je bil ugotoviti, kakšna je stopnja znanja s področja paliativne oskrbe med dodiplomskimi študenti zdravstvene nege. Raziskava je temeljila na kvantitativni metodi dela s tehniko anketiranja. Anketa je bila izvedena z uporabo anketnega vprašalnika. V raziskavo vključeni študenti so predstavljali neslučajnostni priložnostni vzorec. Rezultati raziskave so pokazali, da se znanje s področja paliativne oskrbe med anketiranimi študenti glede na letnik študija razlikuje. Po mnenju študentov učne vsebine s področja paliativne oskrbe v učnih načrtih niso obravnavane v zadostni meri. V povezavi s tem se študenti za obravnavo pacientov v paliativni oskrbi ne počutijo zadostno usposobljene. Pridobljeno znanje pomembno vpliva na opolnomočenost diplomantov in s tem na kakovostno izvajanje oskrbe.

*Ključne besede:* študentje, znanje, paliativna oskrba

## **Knowledge of Palliative Care among Nursing Students**

Palliative care represents the holistic care of patients with incurable and life-threatening conditions. It includes consideration of the physical, psychological, social and spiritual needs of the individual. It also affects the quality of life of patients and their loved ones. In order to provide holistic and high-quality palliative care, health professionals need adequate knowledge in this field. The purpose of the research was to determine the level of knowledge in the field of palliative care among undergraduate nursing students. The research was based on the quantitative research method with the survey technique. The survey was conducted using a survey questionnaire. The students included in the research represented a non-random opportunity sample. The results of the research showed that the knowledge in the field of palliative care among the surveyed students varies depending on the year of study. According to the students, learning content in the field of palliative care is not covered sufficiently in the curricula. In connection with this, students do not feel sufficiently qualified to treat patients in palliative care. The acquired knowledge has a significant impact on the empowerment of graduates and thus on the quality of care.

*Keywords:* students, knowledge, palliative care

## **Celostna obravnava pacienta z demenco v Centru za duševno zdravje odraslih**

S podaljševanjem življenjske dobe se povečuje tudi možnost, da posameznik zboli za demenco. Ta bolezen prizadene vsakega petega starostnika v skupini nad 65 let, v starosti nad 80 let pa že vsakega tretjega. V Sloveniji je obolelih že več kot 32 tisoč oseb. Demenca se začne postopoma in se razvija več let. Na splošno so zanjo značilni poslabšan kratkoročni spomin, oteženo reševanje problemov, zmanjšane zaznavne sposobnosti, težave v komunikaciji ter osebnostne spremembe. Osebe z demenco imajo posledično težave pri opravljanju osnovnih dnevnih aktivnosti, predvsem pri osebni higieni in hranjenju. Težave se pojavljajo tudi pri opravljanju širših dnevnih aktivnosti, kot so gospodinske aktivnosti, opravljanje finančnih aktivnosti, vožnja avtomobila in druge pomembne aktivnosti. Zaradi demence tako usihajo sposobnosti osebe na vseh področjih delovanja, zato potrebujejo pomoč pri izvajanju vsakodnevnih aktivnosti, v napredovanju bolezni tudi oskrbo in nenehen nadzor. Podatki kažejo, da vsak deseti državljan Slovenije skrbi za kronično bolnega ali invalidnega svojca. V podporo pacientom s težavami v duševnem zdravju ter njihovim svojcem so se v zadnjih letih razvili območni Centri za duševno zdravje odraslih. V prispevku bomo preko študije primera pacientov obravnavanih v Centru za duševno zdravje odraslih Posavje poskusili osvetliti vlogo medicinske sestre pri oskrbi pacientov z demenco.

*Ključne besede:* demenca, starost, celostna oskrba

## **Holistic Care of a Dementia Patient in an Adult Mental Health Centre**

Increasing age expectancy also increases the risk of dementia. This degenerative disease affects every fifth elderly person over 65 and every third person aged over 80. In Slovenia over 32 thousand persons are already affected. Dementia evolves slowly and over several years. It is generally characterized by reduced short-term memory, reduced cognition, communication issues, and personality changes. Consequently, persons with dementia have trouble with basic daily activities, like personal hygiene and feeding. Issues also arise in the broader daily activities such as managing financial activities, household chores, driving, etc. Due to dementia a person's capability of performing activities diminishes in all areas of life and they become dependent on help in daily activities. In the progressive stages of the disease, they need constant supervision and care. Some data show that every tenth Slovenian citizen cares for a chronically ill or disabled family member. With this in mind, Adult Mental Health Centres have been established in recent years to support mental health patients and their families. In the paper we will use a case study to highlight the role of nurses in the care of dementia patients treated at the Posavje Adult Mental Health Centre.

*Keywords:* dementia, old age, holistic care

## **Edukacija o nevroznanosti bolečine pri pacientih z vztrajajočo bolečino**

Kronična oz. vztrajajoča bolečina negativno vpliva na številna področja v posameznikovem življenju, kot so funkcionalna sposobnost, družbeno življenje, sposobnost za delo in opravljanje vsakodnevnih aktivnosti, spanje ter razpoloženje. Vključevanje razlage o psiholoških in fizioloških procesih, prisotnih pri izkušnji bolečine, v obravnavo pacientov s kronično bolečino prispeva k zmanjšanju intenzitete bolečine, kineziofobije, nezmožnosti in katastrofiziranja. Takšno razlago imenujemo tudi edukacija o nevroznanosti bolečine (ENB). Z ENB želimo pacientu na razumljiv način približati biopsihosocialni vidik razumevanja bolečine, kar poleg biomedicinskih vključuje tudi razlago o nevrofizioloških, psiholoških, socialnih in okoljskih dejavnikih, povezanih z nastankom in vztrajanjem bolečine. Cilj ENB je zmanjšati z bolečino povezano katastrofiziranje in nevarnost, ki jo pacient pripisuje bolečini, povečati pacientovo znanje o bolečini, spremeniti neustrezna prepričanja o bolečini in neprilagojeno vedenje ter spodbuditi pacienta k bolj aktivnemu načinu spopadanja z bolečino. Ključnega pomena za izkoriščanje pozitivnih učinkov ENB je ustrezno znanje terapevta, ki podaja informacije, primeren pristop podajanja informacij in vključevanje ENB v celovito obravnavo skupaj z ostalimi fizioterapevtskimi pristopi, kot sta vadba in manualna terapija.

*Ključne besede:* edukacija o nevroznanosti bolečine, nevroznanost, kronična bolečina, biopsihosocialni model zdravja, izobraževanje pacientov

## **Pain Neuroscience Education in Patients with Persistent Pain**

Persistent (i.e., chronic) pain negatively impacts various areas of a person's life, such as functioning, social life, ability to work and perform daily activities, sleep, and mood. Incorporating an explanation of the psychological and physiological processes involved in the experience of pain into the treatment of patients with chronic pain can help reduce pain intensity, kinesiophobia, disability, and catastrophizing. This educational approach is often termed pain neuroscience education (PNE). Through PNE, the aim is to introduce the patient to the biopsychosocial aspect of understanding pain, which includes an explanation of the neurophysiological, psychological, social, and environmental factors associated with the occurrence and duration of pain, in addition to the biomedical ones. The goal of PNE is to reduce pain-related catastrophizing and the threat value of pain, increase the patient's knowledge about pain, change inappropriate beliefs about pain and maladaptive behaviours, and encourage the patient to adopt a more active way of coping with pain. The key to harnessing the positive effects of PNE lies in the knowledge of the therapist providing the information, an appropriate method of conveying information, and incorporating PNE into comprehensive treatment along with other physical therapy approaches, such as exercise or manual therapy.

*Keywords:* pain neuroscience education, neuroscience, chronic pain, biopsychosocial model, patient education

## **Uporaba sodobnih komunikacijskih kanalov v ambulantah družinske medicine**

Informacijska tehnologija je v zadnjih letih vse bolj uveljavljena tudi na področju zdravstvene nege. Uvajanje elektronskih rešitev povečuje kakovost in učinkovitost zdravstvenih storitev. Kakovost zdravstvene oskrbe prežema tudi pravilno oskrbo ob pravem času in na usklajen način, ki se odziva na potrebe in želje uporabnikov storitev ter zmanjšuje škodo na zdravju uporabnika. Pritiski na zdravstveni sistem so se povečali zaradi naraščanja tako kroničnih bolezni, kot tudi kompleksnosti zdravstvenih težav. Namen prispevka je bil pregledati dostopno strokovno literaturo s področja uvedbe digitalnih rešitev ter aplikacij za komunikacijo z ambulantami družinske medicine. Po temeljitnem pregledu podatkovnih baz PubMed ter Cinahl smo našli 9 člankov, ki prikazujejo prednosti in slabosti uporabe sodobnih komunikacijskih kanalov v ambulantah družinske medicine. V preteklosti je uvedba novih komunikacijskih tehnologij povzročila zaskrbljenost med zdravniki družinske medicine. Uvedba telefona v ambulante je prinesla zaskrbljenost glede dodatnih delovnih obremenitev, uvedba e-pošte pa pomisleke glede zaupnosti in varstva pacientovih podatkov. Tehnologije seveda niso samodejno sprejete, potreben je proces, da se uvedejo v splošno sprejet način dela. Če želimo, da bi bili sodobni komunikacijski kanali rutinsko uporabljeni pri vsakdanjem delu, morajo zdravstveni delavci imeti občutek, da je tehnologija zanesljiva ter da dodatno ne moti njihovega procesa dela.

*Ključne besede:* informacijske tehnologije, digitalizacija, dostopnost zdravstvenih storitev

## **Use of Modern Communication Channels in Primary Health Care**

In recent years, information technologies have become increasingly established in the field of nursing. The introduction of electronic solutions improves the quality and efficiency of healthcare services. The quality of health care also includes providing the right care at the right time and in a coordinated manner that responds to the needs and wishes of service users and reduces harm to the user's health. Unfortunately, there is a growing pressure on the healthcare system due to the increase in both chronic diseases and the complexity of health problems. The purpose of the paper was to review the available professional literature in the field of introducing digital solutions and applications for communicating with a general practitioner. After a thorough review of the PubMed and CINAHL databases, we found 9 articles that show the advantages and disadvantages of using modern communication channels in primary health care. In the past, the introduction of new communication technologies has caused concern among general practitioners. The introduction of the telephone in the clinic brought concerns about additional workloads, and the introduction of e-mail raised concerns about confidentiality and the protection of patient data. Of course, these technologies are not automatically adopted; a process is needed to introduce them into the established way of working. If modern communication channels are to be routinely used in everyday work, healthcare professionals must feel that the technology is reliable.

*Keywords:* information technology, digitization, access to health care

## **Moral Distress of Nurses**

The moral distress of nurses cannot be ignored when talking about quality of care in oncology. The difficulties nurses face in clinical practice when dealing with the moral distress of oncology patients, how they perceive it and how they respond to it, are highlighted in this review study. A systematic search of the PubMed, Scopus, and Google Scholar databases was conducted. The results revealed that nurses experience a significant amount of moral distress, particularly when it comes to making significant and swift decisions. The impact of personal and professional experiences on dealing with moral distress is emphasized, making it highly subjective to deal with. In conclusion, moral distress is a phenomenon that has the potential to enhance interpersonal understanding and reflection. To mitigate this phenomenon and improve health care, further studies are necessary.

*Keywords:* moral, distress, oncology

## **Moralni stres medicinskih sestara**

Moralna uznemirenost medicinskih sestara ne može se zanemariti kada se govori o kvaliteti skrbi u onkologiji. Poteškoće s kojima se medicinske sestre suočavaju u kliničkoj praksi kada se bave moralnim stresom onkoloških pacijenata, kako to percipiraju i kako reagiraju na njega, istaknute su u ovoj studiji. Provedeno je sustavno pretraživanje PubMeda, Scopusa i Google Scholar. Rezultati su pokazali da medicinske sestre doživljavaju značajnu količinu moralne boli, posebno kada je riječ o donošenju značajnih i brzih odluka. Naglašen je utjecaj osobnih i profesionalnih iskustava na suočavanje s moralnim stresom, što ga čini vrlo subjektivnim za rješavanje. Zaključno, moralni stres je fenomen koji ima potencijal poboljšati međuljudsko razumijevanje i razmišljanje. Kako bi se smanjila ova pojava i poboljšala zdravstvena zaštita, potrebna su daljnja istraživanja.

*Ključne riječi:* moral, stres, onkologija

## Vpliv preventivne vadbe na razvoj osteoporoze

Osteoporoza je pogosto označena kot »tiha bolezen« in dobesedno opisuje »porozne kosti«. Gre za stanje, kjer se kosti tanjšajo, postanejo manj goste in njihova kakovost upada. Posledično so bolj nagnjene k zlomu, ki pa lahko povzroči bolečino in omejitve v gibanju. Takšni zlomi lahko drastično vplivajo na kakovost življenja, mobilnost in samostojnost posameznika. Mnogi ugotovijo, da imajo osteoporozo šele, ko doživijo zlom zaradi neznatnega padca ali blagega udarca. Fizioterapija lahko igra pomembno vlogo pri načrtovanju in vodenju preventivnih vadb za ljudi s tveganjem za osteoporozo ali tiste, ki so že diagnosticirani s to boleznijo. Namen te raziskave je bil pregledati že obstoječe študije, ki so preučevale vpliv preventivne vadbe na razvoj osteoporoze. Članki so bili iskani v podatkovnih bazah PubMed, Google Scholar in Cochrane Rehab ebook, objavljeni med leti 2013 in 2023, uporabljeno gradivo pa je bilo v angleškem jeziku. Rezultati so pokazali, da vadba pozitivno vpliva na gostoto kostne mase. Najboljši vpliv na gostoto kostne mase ledvene hrbtenice in kolka ima visokointenzivna vadba z uporabo.

*Ključne besede:* vadba, osteoporoza, fizioterapija, preventiva, ženske po menopavzi

## Impact of Preventive Exercise on Osteoporosis Development

Osteoporosis is often referred to as the "silent disease" and literally describes "porous bones". It is a condition where bones thin out, become less dense, and experience a decline in quality. As a result, they become more prone to fractures, which can cause pain and limitations in movement. Such fractures can drastically impact the quality of life, mobility, and independence of individuals. Many people only discover they have osteoporosis when they experience a fracture from a minor fall or a mild impact. Physiotherapy can play a crucial role in planning and guiding preventive exercises for individuals at risk of osteoporosis or those already diagnosed with this condition. The purpose of the research was to review existing studies that investigated the impact of preventive exercise on the development of osteoporosis. The articles were searched for in various databases, namely PubMed, Google Scholar, and Cochrane Rehab Ebook. These articles were published between 2013 and 2023, and the material used was in the English language. The results indicated that exercise has a positive impact on bone mineral density. The most significant impact on bone mineral density in the lumbar spine and hip is achieved through high-intensity resistance exercise.

*Keywords:* exercise, osteoporosis, physiotherapy, prevention, postmenopausal women



## **Kakovostna obravnava pacienta s poškodbo hrbtenice**

Poškodba hrbtenice v svetu ni tako množična poškodba, vendar je lahko posameznik do konca življenja zaznamovan z njo. Pri tem mislimo predvsem na paraplegijo in tetraplegijo, ki poškodovancu za vedno spremenita način izvajanja dejavnosti, hranjenja, druženja, doživljanja spolnega življenja in ne nazadnje proces samooskrbe. V pacientovem akutnem stanju poškodbe hrbtenice ga izvajalec sprejme v klinično okolje, izvaja proces učenja in terapije ter je ves čas, sicer posredno, ob pacientu po odpustu. Zato je pomembno, da so izvajalci zdravstvene nege usposobljeni, čuječni in poznajo najsodobnejše smernice, tehnologije in modele na področju zdravstvenih ved, ki temeljijo na teorijah zdravstvene nege. Namen raziskave je z uporabo metode pregleda prosto dostopne literature, ki je bila objavljena med letoma 2012 in 2023, preučiti uporabnost teorije Doroteje Orem pri kakovostni obravnavi pacienta s poškodbo hrbtenice.

*Ključne besede:* modeli rehabilitacije, uspešnost modelov rehabilitacije, vidiki pacientovega življenja

## **Quality Treatment of Patients with Spine Injury**

Spinal cord injury is not a common human injury worldwide, but when it happens, it can scar an individual for life. Paraplegia and tetraplegia in particular forever change the way the injured person performs activities, feeds, socializes, experiences sexual life and, finally, the process of self-care. In the acute state of a spinal injury, the nurse practitioner admits the patient in the clinical setting, carries out the learning and therapy process, and is with the patient throughout, albeit indirectly, after discharge. It is therefore important that healthcare providers are trained, sensitized and familiar with the latest guidelines, technologies and models in the health sciences based on nursing theories. The aim of the study is to examine the applicability of Dorothea Orem's theory in the quality management of patients with spinal cord injury, using a review of freely available literature published between 2012 and 2023.

*Keywords:* rehabilitation models, success of rehabilitation models, aspects of the patient's life

## **Učinki izvajanja telesne vadbe na delovnem mestu pri medicinskih sestrah**

Težke delovne obremenitve, stres, izgorelost, zahteven in naporen delovni čas ter slabe in neprimerne delovne razmere vplivajo na psihofizično zdravje medicinskih sester. Spodbujanje zdravega načina življenja na delovnem mestu je koristno tako za zaposlene kot tudi za delovno organizacijo. Namen prispevka je opredeliti učinke izvajanja telesne aktivnosti na delovnem mestu pri medicinskih sestrah. Uporabili smo metodo sistematičnega pregleda literature. Pri iskanju smo uporabili ključne besede: telesna vadba, delovni čas, gibanje, promocija zdravja, medicinske sestre ter v angleškem jeziku: physical activity, workplace, movement, health promotion, nurses. Za iskanje literature smo uporabili knjižnico Slovenije – COBISS ter podatkovne baze PubMed in Google učenjak. Uporabili smo omejitvene kriterije s ciljem zmanjšanja števila zadetkov. V prispevku smo upoštevali naslednje: literatura, ki ni starejša od 10 let (obdobje od 2013–2023), brezplačna dostopnost člankov, dostopnost v polnem besedilu ter jezik besedila v slovenščini ali angleščini. Od skupno 3195 zadetkov smo izbrali 7 člankov, ki smo jih uporabili v razpravi. Glede na vsebino prispevka smo oblikovali dve kategoriji: dejavniki, ki vplivajo na telesno aktivnost na delovnem mestu in učinke izvajanja telesne aktivnosti pri medicinskih sestrah. Promocija zdravja na delovnem mestu ter pomen zavedanja delovne organizacije in skrb za zaposlene izboljšajo uspešnost in učinkovitost podjetja.

*Ključne besede:* telesna vadba, promocija zdravja, medicinska sestra, gibanje, delovni čas

## **Effects of Performing Physical Activity in the Workplace among Nurses**

Heavy workloads, stress, burnout, demanding and tiring working hours, and poor and unsuitable working conditions affect the psychophysical health of nurses. Promoting a healthy lifestyle in the workplace is beneficial both for employees and for the work organization. The aim of the paper is to define the effects of physical activity in the workplace among nurses. We used the method of systematic literature review. In the search, we used the following keywords: physical exercise, working hours, movement, health promotion, nurses. To search for literature, we used the Digital Library of Slovenia – COBISS, as well as the databases PubMed and Google Scholar. We used limiting criteria with the aim of reducing the number of hits. In the contribution, we took into account the following: literature that is not older than 10 years (the period from 2013–2023), the free availability of articles, full text availability and the language of the text in Slovenian or English. From a total of 3195 hits, we selected 7 articles that we used in the discussion. Based on the content of the paper, we created two categories: factors that influence physical activity in the workplace and the effects of physical activity on nurses. The promotion of health in the workplace and the awareness of work organization and care for employees improve the performance and efficiency of the company.

*Keywords:* physical exercise, health promotion, nurse, movement, working hours

## **Kakovost življenja onkoloških pacientk po avtologni rekonstrukciji dojke**

Rak dojke je najpogostejši rak med žensko populacijo razvitega sveta. Pogosto je potrebna mastektomija dojke, kar za žensko pomeni veliko estetsko prizadetost, saj so dojke od nekdaj predstavljale simbol ženskosti. Posledično so ženske tako fizično kot psihično močno zaznamovane. Danes imamo na voljo rekonstrukcijo dojke z lastnim tkivom, kar pripomore k izboljšanju kakovosti življenja žensk po mastektomiji. Namen raziskave je bil ugotoviti, kako so pacientke doživljale spremembe v samopodobi po opravljeni mastektomiji in kakšne so bile njihove izkušnje z avtologno rekonstrukcijo. Uporabljen je bil kvalitativen raziskovalni pristop z deskriptivno metodo dela. Kot inštrument za raziskavo je bil izdelan polstrukturiran intervju, s pomočjo katerega smo pridobili primarne podatke za analizo raziskave. Kar štiri od šestih intervjuvank so bile mlajše od 50 let. Ugotovitve kažejo, da so bile ženske zadovoljne z opravljeno rekonstrukcijo in bi se zanj še enkrat odločile, kaže pa se primanjkljaj psihične podpore. Avtologna rekonstrukcija pomeni, da se naredi transplant z lastnim tkivom, prednost tega je naraven in trajen rezultat. Glede na to, da rak dojke prizadene tudi mlajše ženske, je predvsem v nižji starosti rekonstrukcija dojke izrednega pomena za kakovostno življenje pacientk.

*Ključne besede:* rekonstrukcija dojke, mastektomija, kakovost življenja onkoloških pacientk

## **Quality of Life in Oncological Patients after Autologous Breast Reconstruction**

Breast cancer is the most common type of cancer in the female population in the developed world. A breast mastectomy is often required, which means a great deal of aesthetic damage for a woman, since the breast has always been a symbol of femininity. This affects women both physically and psychologically. Today, a breast reconstruction using one's own tissue is available, which is helping to improve the quality of life for women who have had a mastectomy. The aim of the study was to find out how the patients experienced changes in their self-image after a mastectomy and what experiences they had with the autologous reconstruction. A qualitative research approach with a descriptive working method was used. A semi-structured interview was created as the research instrument, with the help of which we obtained primary data for the research analysis. Four out of six respondents were younger than 50 years. The results show that the women were satisfied with the rebuild and would choose to do it again, but lack psychological support. Autologous reconstruction is a transplantation with one's own tissue, the advantage of which is a natural and permanent result. Since breast cancer also affects younger women, breast reconstruction is extremely important for the patient's quality of life, especially at a younger age.

*Keywords:* breast reconstruction, mastectomy, quality of life of oncological patients

## **Vpliv vadbe na izboljšanje dinamike hoje pri posameznikih s Parkinsonovo boleznijo**

Parkinsonova bolezen (PB) je kronična progresivna nevrodegenerativna bolezen, ki primarno prizadene črno substanco centralnega živčnega sistema, povzroča zmanjšano proizvodnjo dopamina in se manifestira z motoričnimi in ne motoričnimi simptomi. Motorični simptomi se kažejo kot tresenje, togost, akinezija, težave z ravnotežjem, spremembe drže ter težave pri hoji, ne motorični pa kot kognitivne težave, depresija in motnje spanja. Težave pri hoji so izrazit simptom, pri katerem se vzorec hoje spreminja z zmanjšano kadenco hoje, flektiranim zgornjim delom telesa, krajšimi koraki in z neaktivno spremljavo rok med hojo. Obstajajo specializirani vadbeni programi in klinične smernice, osredotočene na izboljšanje ravnotežja, preprečevanje padcev in obnovitev funkcionalnega vzorca hoje. Namen raziskave je bil s pregledom literature opredeliti pomen telesne vadbe na dinamiko hoje pri posameznikih s Parkinsonovo boleznijo. V raziskavi smo uporabili metodo pregleda strokovne literature. Za iskanje podatkov je bilo uporabljeno gradivo v angleškem jeziku, objavljeno v obdobju med letoma 2013 in 2023. Literaturo smo iskali v podatkovnih bazah PubMed, Google Scholar in Cochrane Library. Iskanje je potekalo s pomočjo ključnih besednih zvez v angleškem jeziku, ter s pomočjo Boolovih operatorjev »AND« in »OR«. Iz pregledne literature je razvidno, da je specifično načrtovana vadba dokazano učinkovita oblika obravnave motenj hoje pri bolnikih s PB. Večina pregledane literature navaja splošno telesno vadbo kot pozitiven dejavnik pri izboljšanju vzorca hoje pri bolnikih s PB, vendar manj učinkovit, kot specifično usmerjena in oblikovana vadba.

*Ključne besede:* parkinsonova bolezen, vadba, telesna aktivnost, hoja

## **Impact of Exercise on Improving Gait Dynamics in Individuals with Parkinson's Disease**

Parkinson's Disease (PD) is a chronic progressive neurodegenerative condition primarily affecting the substantia nigra of the central nervous system, leading to reduced dopamine production and manifesting with motor and non-motor symptoms. The motor symptoms manifest as tremors, rigidity, akinesia, balance issues, posture changes, and walking difficulties, while the non-motor symptoms include cognitive problems, depression, and sleep disturbances. Walking difficulties are a prominent symptom, characterized by altered gait patterns with reduced stride length, flexed upper body, and reduced arm swing. Specialized exercise programs and clinical guidelines aim to enhance balance, prevent falls, and restore functional gait patterns. The study aimed to review literature to elucidate the importance of exercise on gait dynamics in individuals with Parkinson's disease. English-language materials published between 2013 and 2023 were searched using the PubMed, Google Scholar, and Cochrane Library databases, employing English keywords and the Boolean operators "AND" and "OR". The literature review reveals that specifically designed exercise is a proven effective approach to address gait disorders in PD patients. While most literature acknowledges general physical activity as beneficial for improving gait patterns in PD, it is less effective compared to targeted and structured exercise.

*Keywords:* Parkinson's disease, exercise, physical activity, gait

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## **Fizioterapevtska obravnava zadnjih stegenskih mišic pri plesalcih**

Skrajšane upogibalke kolena negativno vplivajo na biomehaniko kolenskih in kolčnih sklepov, otežujejo vadbo plesalcem in povečajo tveganje za mišično skeletne poškodbe. Ustrezna fizioterapevtska obravnava zadnjih stegenskih mišic zmanjša in odpravi bolečino, ter vzdržuje normalno dolžino in prožnost mehkih tkiv. V raziskavi je sodelovalo 60 plesalcev hip hop tekmovalnih selekcij, registriranih pri Plesni zvezi Slovenije, ki so bili naključno razdeljeni v dve skupini po 30 plesalcev. Prva skupina je 1–3-krat tedensko izvajala raztezne vaje (enkrat tedensko pod nadzorom fizioterapevta in dvakrat tedensko sami doma), pri drugi skupini smo 1-krat tedensko izvajali manualno terapijo. V raziskavi smo dokazali, da sta obe tehniki učinkoviti pri zmanjšanju bolečine plesalcev in izboljšanju prožnosti mišic, med seboj pa se statistično značilno ne razlikujeta. Z ustrezno fizioterapevtsko obravnavo zadnjih stegenskih mišic vplivamo na varno in učinkovito vadbo in zmanjšamo tveganje za poškodbe. Manualna obravnava in raztezne vaje sta se pokazali kot primerni tehniki za obravnavo zadnjih stegenskih mišic.

*Ključne besede:* zadnje stegenske mišice, fizioterapija, športniki

## **Physiotherapeutic Treatment of Posterior Thigh Muscles in Dancers**

Shortened knee flexors have a negative effect on the biomechanics of the knee and hip joints, make it more difficult for dancers to exercise, and increase the possibility for musculoskeletal injuries. Adequate physiotherapy treatment of the hamstrings reduces pain, eliminates and then maintains normal length and flexibility of the soft tissues. Sixty competitive hip hop dancers registered with the Dance Association of Slovenia who took part in the research, were divided into two groups of 30 dancers each. The first group performed stretching exercises 1–3 times a week (once a week under the supervision of a physiotherapist and twice a week alone at home), while the second group performed manual therapy once a week. The research has proven that both techniques are effective in reducing dancers' pain and improving muscle flexibility, but they are not statistically significantly different from each other. With appropriate physiotherapeutic treatment of the hamstring muscles, we enable safe and effective exercise and reduce the risk of injuries. Manual treatment and stretching exercises have been shown to be suitable techniques for treating the hamstrings.

*Keywords:* hamstring muscles, physiotherapy, athletes

## **Ohranjanje kognitivnih funkcij pri starejših osebah s kognitivnimi igrami – kvantitativna raziskava**

Proces staranja je obdobje, ki se dogaja od rojstva do smrti, čeprav pogosto sam pojem staranje povezujemo s starejšimi osebami, ki imajo več kot 65 let. Gre za obdobje, v katerem z različnimi fiziološkimi spremembami v organizmu prihaja do upada kognitivnih sposobnosti, ki so potrebne pri vsakodnevnem delovanju človeka, zato je potrebno njihovo ohranjanje. Namen raziskave je bil preučiti zadovoljstvo starejših s kognitivno igro, ki ohranja kognitivne funkcije. Izvedena je bila neeksperimentalna kvantitativna metoda empiričnega raziskovanja. Ugotovljeno je bilo, da so starejše osebe zadovoljne oz. zelo zadovoljne s kognitivno igro (ženske nekoliko bolj kot moški). Ugotovljeno je tudi bilo, da so najbolj zadovoljne starejše osebe, ki so razvezane, imajo enega otroka in živijo v lastnem domu. Ohranjanje kognitivnih funkcij s kognitivnimi igrami je zelo pomembno, saj povečujejo zadovoljstvo starejših hkrati pa ohranjajo kognitivne sposobnosti starejših. Ti tako ostajajo dlje časa vitalni, samostojno razrešujejo težave, analizirajo podatke, lažje pomnijo in se učijo ter nenazadnje – so aktiven del družbe.

*Ključne besede:* kognitivna sposobnost, starejši, medgeneracijske igre, zadovoljstvo, kognitivni upad

## **Preserving Cognitive Functions in Elderly People with Cognitive Games: A Quantitative Study**

The ageing process is the period from birth to death, although often the term ageing itself is associated with older people over 65. It is a period during which, through various physiological changes in the organism, there is a decline in cognitive abilities that are necessary in the daily functioning of a person, and therefore need to be preserved. The aim of the study was to investigate the satisfaction of older people with cognitive play that maintains cognitive function. A non-experimental quantitative method of empirical research was used. It was found that older people are satisfied or very satisfied with cognitive play, taking into account the respondents' gender (women were slightly more satisfied than men). It was also found that older people who are divorced, have one child and live in their own home are the most satisfied. Maintaining cognitive function through cognitive games is very important, as they increase the satisfaction of the elderly while at the same time preserving their cognitive abilities. They remain vital for longer, solve problems independently, analyse information, remember and learn more easily, and – last but not least – are an active part of society.

*Keywords:* cognitive ability, elderly, intergenerational games, satisfaction, cognitive decline

## **Vpliv epidemije covid-19 na vnos vitamina D pri premenopavznih in pomenopavznih ženskah**

Skupini, ki imata pogosto nizke ravni vitamina D, so premenopavzne in pomenopavzne ženske. Želimo ugotoviti status vitamina D pri premenopavznih in pomenopavznih ženskah v času pandemije covid-19 v Sloveniji. Uporabljena je bila deskriptivna metoda s pregledom znanstvene literature ter kvantitativna metoda z anketnim vprašalnikom in odvzemom vzorcev krvi preiskovank za merjenje vrednosti vitamina D. V končno analizo je bilo vključeno 176 žensk, 69 premenopavznih in 107 pomenopavznih. Raziskava je bila izvedena v letu 2021. Pomenopavzne ženske so imele višjo raven 25(OH)D ( $69,64 \pm 27,81$  nmol/L) od premenopavznih ( $61,43 \pm 26,06$  nmol/L). 61,36 % preiskovank je jemalo prehranska dopolnila in zdravila z vitaminom D. V primerjavi s prejšnjimi študijami, so pri nas imele pomenopavzne ženske višjo raven 25(OH)D kot premenopavzne ženske. 61,36 % preiskovank je dopolnjevalo količino vitamina D v telesu s prehranskimi dopolnili ali zdravili ( $>5\mu\text{g}/\text{dan}$ ).

*Ključne besede:* covid-19, vitamin D, menopavza

## **Impact of the COVID-19 Epidemic on Vitamin D Intake in Premenopausal and Postmenopausal Women**

Groups that often have low vitamin D levels are premenopausal and postmenopausal women. The primary objectives were to investigate the impact of the pandemic on vitamin D status and the use of vitamin D supplements and medications through a questionnaire and serum 25(OH)D measurements. A descriptive methodology was employed, involving a review of scientific literature, a quantitative method with a questionnaire survey, and blood sample collection from participants for measuring vitamin D levels. The final analysis included 176 women, 69 premenopausal and 107 postmenopausal. The study was conducted in 2021. Postmenopausal women exhibited higher 25(OH)D levels ( $69.64 \pm 27.81$  nmol/L) compared to premenopausal women ( $61.43 \pm 26.06$  nmol/L). Of the total sample, 61.36% of participants were taking vitamin D supplements and medications. Postmenopausal women in the study had higher 25(OH)D levels compared to premenopausal women, unlike the findings of earlier studies. A notable proportion (61.36%) of participants supplemented their vitamin D intake through dietary supplements or medications ( $>5\mu\text{g}/\text{day}$ ).

*Keywords:* COVID-19, vitamin D, menopause

## **Dolgotrajna videoelektroencefalografija (LTM) in vloga medicinske sestre**

V prispevku bomo predstavili eno od diagnostičnih tehnik pri bolnikih z epilepsijo ter pomembnost vloge medicinske sestre pri obravnavi bolnikov z epilepsijo pri dolgotrajni videoelektroencefalografiji (LTM). Dolgotrajno spremljanje pacienta z epilepsijo je diagnostična tehnika, ki se jo izvaja pri hospitaliziranih bolnikih z epilepsijo in se jo lahko beleži v daljšem časovnem obdobju in ne le določeno trajanje ter se beleži možganske valove preko EEG in morebitne napade preko videa. To metodo se uporablja predvsem pri bolnikih s paroksizmalnimi napadi za postavitve dokončne diagnoze, določitev vrst napadov ter za izbiro bolnikov, ki so primerni za kirurško zdravljenje epilepsije. Pomembno pri snemanju je tudi natančno spremljanje bolnika s strani usposobljene medicinske sestre, ki v primeru epileptičnega napada tudi testira bolnika med samim napadom ter po napadu ter beleži vsa opažanja.

*Ključne besede:* LTM, spremljanje epilepsije, kirurško zdravljenje, vloga medicinske sestre

## **Long-Term Video-Electroencephalography Monitoring (LTM) and the Role of the Nurse**

In the article, we will present one of the diagnostic techniques for patients with epilepsy and the importance of the nurse's role in the treatment of patients with epilepsy during long-term video-electroencephalography monitoring (LTM). Long-term monitoring of a patient with epilepsy is a diagnostic technique that is performed on hospitalized patients with epilepsy and can be recorded over a long period of time and not just for a certain duration. Brain waves are recorded via EEG and potential seizures via video. This method is mainly used in patients with paroxysmal seizures to establish a definitive diagnosis, determine the types of seizures, and to select patients who are suitable for the surgical treatment of epilepsy. It is also important during recording that a qualified nurse closely monitors the patient and, in case of an epileptic seizure, also tests the patient during the seizure itself and after it, recording all observations.

*Keywords:* LTM, epilepsy monitoring, surgical treatment, nurse's role



## **Analiza obravnave odpusta pacientov na kirurškem oddelku**

V bolnišnici se vse bolj skrajšuje ležalna doba, povečuje se starost hospitaliziranih pacientov. Zlasti starejši v bolnišnico prihajajo nepripravljene v smislu kasnejšega odpusta. Pri tem naletimo na nemalo izzivov, ki nas vodijo k temu, da aktivno pristopimo k reševanju težav starostnikov in kronično bolnih pacientov. Izbrali bomo kvantitativno deskriptivno metodo dela. Podatke za empirični del bomo pridobili iz dokumentacije pacientov, ki so bili hospitalizirani na kirurškem oddelku od meseca aprila 2022 do konec avgusta 2023. Statistična analiza podatkov bo narejena s pomočjo programa Microsoft Excel 2013. Z raziskavo bomo prikazali podatke o številu hospitaliziranih pacientov na kirurškem oddelku, pri katerih je bila potrebna vključitev koordinatorja odpusta in socialne delavke in kaj je bil vzrok vključitve. Predstavili bomo podatke o povprečni starosti obravnavanih pacientov, ležalni dobi, številu potreb po družinskih sestankih, vključitev patronažne službe in mesto odpusta.

*Ključne besede:* kirurški oddelek, koordinator odpusta, socialna obravnava, družinski sestanki

## **Analysis of Patient Discharge Management in a Surgical Ward**

The length of hospital stay is increasingly shortening, and the age of hospitalized patients is increasing. In particular, the elderly come to the hospital unprepared in terms of subsequent discharge. In doing so, we encounter many challenges that lead us to actively approach solving the problems of the elderly and chronically ill patients. We will choose a quantitative descriptive research method. Data for the empirical part will be obtained from the documentation of patients who were hospitalized in the surgical ward from April 2022 to the end of August 2023. Statistical data analysis will be done using Microsoft Excel 2013. The study will show data on the number of hospitalized patients in the surgical ward who required the involvement of a discharge coordinator and a social worker, and what the reason was for the involvement. We will present data on the average age of the treated patients, the length of stay, the number of family appointments required, the involvement of the community nursing service, and the place of discharge.

*Keywords:* surgical ward, discharge coordinator, social treatment, family appointments

## **Sestrinske intervencije u nezi bolesnika sa plućnom trombembolijom: prikaz slučaja**

Plućna trombembolija (PTE) je klinička manifestacija venskog tromboembolizma i predstavlja okluziju plućnih arterija embolusom usled čega dolazi hemodinamske nestabilnosti i respiratornog poremećaja kod bolesnika. Predstavlja značajan zdravstveni problem zbog nespecifične kliničke slike i visokog rizika od smrtnog ishoda. Rad ima za cilj da prikaže kompleksnost zdravstvenih potreba pacijenta sa PTE i predstavi plan zdravstvene nege koji uključuje procenu potreba bolesnika, formulaciju dijagnoza nege i planiranje sestrinskih intervencija. U radu je prikazan slučaj pacijentkinje starosti 56 godina koja je u Urgentni centar KCS primljena u stanju sopora, sa znacima hipertenzije, tahikardije i hipoksije. Dijagnostičkim pretragama dokazano je postojanje embolije plućne arterije. Pacijentkinja je intubirana zbog neadekvatne plućne ventilacije i priključena na intermitentnu mehaničku ventilaciju. Sprovedeno je lečenje septičnog i kardiogenog šoka. Da bi se postigao zadovoljavajući nivo kvaliteta zdravstvene nege i lečenja bolesnika sa PTE praksa medicinskih sestara treba biti zasnovana na dokazima i holističkom pristupu u proceni zdravstvenih potreba bolesnika. Od izuzetnog značaja je i spremnosti medicinskih sestara da svoju delatnost modifikuju i prilagode individualnim potrebama bolesnika i novinama u naučnom saznanju i time zadovolje standard pružanja progresivne nege.

*Ključne reči:* plućni tromboembolizam, plan zdravstvene nege, sestrinske intervencije

## **Nurse's Interventions in the Care of Patient with Pulmonary Thromboembolism: A Case Report**

Pulmonary thromboembolism (PTE) is a clinical manifestation of venous thromboembolism and represents the occlusion of pulmonary arteries by an embolus, resulting in hemodynamic instability and respiratory disorders in patients. It represents a significant health problem due to the non-specific clinical picture and high risk of death. The aim of the paper is to show the complexity of the health needs of a patient with PTE and to present a healthcare plan that includes the assessment of the patient's needs, the formulation of care diagnoses, and the planning of nursing interventions. The paper presents the case of a 56-year-old female patient who was admitted to the KCS Emergency Center in a comatose state, with signs of hypertension, tachycardia and hypoxia. Diagnostic tests proved the existence of pulmonary artery embolism. The patient was intubated due to inadequate pulmonary ventilation and connected to intermittent mechanical ventilation. Treatment of septic and cardiogenic shock was performed. To achieve a satisfactory level of healthcare quality for patients with PTE, the practice of nurses should be based on evidence and a holistic approach to assessing the patient's health needs. The willingness of nurses to modify and adapt their activities to the specific needs of patients and new scientific knowledge, and thus meet the standard of providing progressive care, is of exceptional importance.

*Keywords:* pulmonary thromboembolism, healthcare plan, nurse's interventions

## **Vadba hoje na sistemu Lokomat pri pacientih z multiplo sklerozo**

Multipla skleroza je bolezen, ki najpogosteje prizadene mlajšo, delovno aktivno populacijo, v obdobju največjega razmaha njihovega življenja. Temelj zdravljenja v današnjem času predstavlja dobro načrtovana rehabilitacija, v sklopu katere postaja vse pomembnejša uporaba novodobnih medicinsko-tehničnih pripomočkov, med katere spada tudi sistem Lokomat. Namen raziskave je ugotoviti, koliko pacientov z multiplo sklerozo v Sloveniji pozna vadbo na Lokomatu, koliko jih je takšno obliko terapije že imelo in kakšne vplive je imela na sposobnost hoje. Uporabljena je bila kvantitativna tehnika pridobivanja podatkov. Podatke smo pridobili s pomočjo anketnega vprašalnika, ki ga je izpolnilo 122 pacientov s potrjeno diagnozo multiple skleroze. Na podlagi rezultatov raziskave lahko trdimo, da kljub temu, da naj bi imela vadba na Lokomatu ugodne vplive, je v Sloveniji premalo pacientov seznanjenih s to obliko terapije, še manj pa jih je tovrstno obliko vadbe tudi že preizkusilo. Pacienti, ki so preizkusili vadbo na Lokomatu, so poročali o izboljšanju hitrosti hoje, vzdržljivosti, prehojene razdalje in zmanjšanju bolečin pri hoji. Na področju uporabe Lokomata pri pacientih z multiplo sklerozo je torej še vedno premalo raziskav in dokazov, zato ne moremo z gotovostjo trditi, ali je učinkovita pri vseh pacientih in v kateri koli fazi bolezni.

*Ključne besede:* multipla skleroza, hoja, fizioterapija, Lokomat

## **Gait Training on the Lokomat System in Patients with Multiple Sclerosis**

Multiple sclerosis is a disease that most often affects the younger, working population in the prime of their lives. The basis of treating multiple sclerosis today is well-planned rehabilitation, within which the use of modern assisted technology, including the Lokomat system, is becoming an indispensable part. The purpose of the study is to find out how many patients with multiple sclerosis in Slovenia are familiar with gait training on the Lokomat, how many of them have already had this type of therapy, and which effects were observed after the treatment. A quantitative data acquisition technique was used. We obtained the data using a questionnaire filled out by 122 patients with a confirmed diagnosis of multiple sclerosis. The findings of the study show that despite the fact that gait training on the Lokomat is supposed to have beneficial effects, Slovenian patients are still poorly informed about modern therapy and only few have had the opportunity to try gait training on the Lokomat. Patients that have already had this type of therapy report an improvement in walking speed, endurance, walking distance, and a reduction in pain when walking. There is limited research and evidence to determine its effectiveness in patients with multiple sclerosis. Therefore, we cannot claim that the therapy is effective in patients at different stages of the disease.

*Keywords:* multiple sclerosis, gait, physical therapy, Lokomat

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## **Vpliv probiotikov na pojavnost okužb zgornjih dihalnih poti pri starejših osebah**

Starejše oseba zaradi sprememb v starosti in tudi zaradi sprememb v imunskem sistemu spadajo v rizične skupine za povečano tveganje obolenosti zgornjih dihal. Namen raziskave je bil s pomočjo dvojno slepe randomizirane klinične študije ugotoviti, ali večsevni probiotiki OMNi-BiOTiC® Active vplivajo na zmanjšanje in lažji potek okužb zgornjih dihal. V raziskavo je bilo vključenih 49 starejših oseb v testni in 46 v kontrolni skupini. Testna skupina je dvakrat dnevno prejela probiotični napitek, ki je vseboval 11 probiotičnih sevov, kontrolna skupina pa placebo. Pojavnost okužb zgornjih dihalnih poti pri starejših ljudeh po 12-tedenskem jemanju probiotikov ni pokazala statistično značilne razlike med obema skupinama ( $p = 0,524$ ). Trajanje okužb zgornjih dihalnih poti med skupinama se je statistično značilno razlikovalo ( $p = 0,011$ ). Udeleženci, ki so uživali probiotik, so imeli povprečno trajanje bolezni  $3,1 \pm 1,6$  dneva, medtem ko so imeli udeleženci, ki so prejeli placebo, simptome v povprečju  $6,0 \pm 3,8$  dneva ( $p = 0,011$ ). Zdrav način življenja v starosti pripomore k izboljšanju imunskega sistema. Ključne besede: večsevni probiotiki, okužba zgornjih dihalnih poti, starejše osebe, preventiva

## **Effect of Probiotics on the Incidence of Upper Respiratory Tract Infections in the Elderly**

Older people are at increased risk for upper respiratory tract diseases because of changes due to aging and changes in their immune system. The aim of our double-blind randomised clinical study was to determine whether OMNi-BiOTiC® Active multi-strain probiotics help to reduce and alleviate upper respiratory tract infections. The study included 49 older people in the test group and 46 older people in the control group. The test group received a probiotic drink containing 11 probiotic strains twice a day and the control group received a placebo. The incidence of upper respiratory tract infections in older people after 12 weeks of probiotic supplementation did not show a statistically significant difference between the two groups ( $p = 0,524$ ). The duration of upper respiratory tract infections was statistically significantly different between the two groups ( $p = 0,011$ ). Participants taking the probiotics had a mean duration of illness of  $3.1 \pm 1.6$  days, while the participants receiving the placebo had symptoms for a mean of  $6.0 \pm 3.8$  days ( $p = 0,011$ ). A healthy lifestyle in old age helps to improve the immune system.

**Keywords:** multi-strain probiotics, upper respiratory tract infection, older person, prevention

## **Učne metode in izkušnje študentov zdravstvene nege**

Učne metode so načini vzgojno-izobraževalnih aktivnosti, s katerimi se dosegajo vzgojno-izobraževalni cilji. Med seboj se razlikujejo po različni učiteljevi in učenčevi aktivnosti, učitelj pa v pedagoškem procesu prepleta več različnih metod in metodičnih pristopov. Pri tem upošteva različne objektivne in subjektivne dejavnike, ki vplivajo na njegovo izbiro. Namen raziskave je preučiti izkušnje študentov z uporabo učnih metod pri učnih enotah študijskega programa Zdravstvena nega UNM FZV. Raziskava temelji na kvantitativnem raziskovalnem pristopu. Za zbiranje podatkov je bilo uporabljeno spletno anketiranje, ki je potekalo maja in junija 2023. Zanimala nas je raznolikost uporabe učnih metod pri posameznih učnih enotah ter uporabo katerih učnih metod si študenti pogosteje želijo za vzpodbujanje aktivnosti. Anketo je izpolnilo 132 študentov, od tega 21 % moških in 79 % žensk, 64 % študentov rednega študija in 36 % študentov izrednega študija ter 30 % prvega, 37 % drugega 33 % tretjega letnika. Študenti so izrazili, da si za vzpodbujanje aktivnosti v največji meri želijo več metode razprave, diskusije, izkustvenega učenja, problemskega pouka, pa tudi študije primera, metode dela po skupinah, metode dela s slikami in fotografijami ter sodelovalnega učenja.

*Ključne besede:* učne metode, aktivnost študentov, pedagoški proces

## **Learning Methods and Experiences of Nursing Students**

Teaching methods are methods of educational activities that achieve educational goals. They differ from each other in different teacher and student activities, and the teacher interweaves several different methods and methodical approaches into the pedagogical process. In doing so, teachers take into account various objective and subjective factors that influence their choice. The purpose of the research is to examine the experiences of students with the use of teaching methods in the study units of the study program Nursing Care at UNM FHS. The research is based on a quantitative research approach. An online survey was used to collect data; it took place in May and June 2023. We were interested in the diversity of the use of teaching methods in individual study units and which teaching methods students want to see used more often to encourage activities. The survey was completed by 132 students, of whom 21% were men and 79% were women; 64% were full-time students and 36% were part-time students; 30% were first-year students, 37% were second-year students, and 33% were third-year students. The students expressed that they want more methods of discussion, experiential learning, problem-based teaching, as well as case studies, methods of working in groups, methods of working with pictures and photos, and cooperative learning in order to encourage the activity to the greatest extent.

*Keywords:* teaching methods, student's activity, pedagogical process

## **Utjecaj tjelesne aktivnosti i vježbanja na promjene u mikrookruženju tumora**

Neki epidemiološki dokazi ukazuju da tjelesna aktivnost smanjuje učestalost raka i progresiju bolesti nakon dijagnoze. Pretkliničke studije pokazale su kako vježbanje mijenja fiziološko mikrookruženje tumora. Cilj ovog pregleda je predstaviti dokaze kako tjelovježba mijenja mikrookruženje tumora i kako tjelesnim vježbanjem možemo poboljšati ishod liječenja karinoma. Mikrookolina tumora uključuje hipoksiju, hipoglukozu, laktozu i smanjenje pH. Vaskulatura tumora je nepropusna i neorganizirana, jer su mnogi dijelovi tumora nefunkcionalni. Hipoksija tumora doprinosi progresiji bolesti kemorezistenciji i radiorezistenciji. Vježbe smanjuju hipoksiju tumora, poboljšavaju vaskularnu zrelost te posebno poboljšavaju perfuziju. Smanjena hipoksija i poboljšana perfuzija u mikrookruženju tumora mogu poboljšati odgovor tumora na kemoterapiju, poboljšati isporuku lijekova i konačno dovesti do bolje prognoze. Radioterapija zahtijeva dovoljnu dostavu kisika tumoru, što je od suštinskog značaja za stvaranje reaktivnih oksidativnih vrsta koje olakšavaju terapijski učinak. Trend vježbanja snažno utiče na cirkulaciju krvi i isporuku kisika perifernom tkivu. Trenutna literatura podržava koncept da dobro oksigenirano mikrookruženje tumora poboljšava bolji odgovor na radioterapiju i kemoterapiju. Vježbanje je potencijalni novi adjuvantni tretman za pacijente s rakom.

*Ključne riječi:* tjelesna aktivnost, vježbanja, mikrookoliš tumora

## **Effect of Physical Activity and Exercise on Change in Tumor Microenvironment**

Some epidemiological evidence has indicated that physical exercise reduces cancer incidence and progression of disease after diagnosis. Preclinical studies have shown how exercise changes the physiological tumor microenvironment. The aim of the review is to present the evidence of how exercise changes the tumor microenvironment and how we can improve the cancer treatment outcome with physical exercise. The tumor microenvironment includes hypoxia, hypoglycemia, lactic acidosis and reduced pH. Tumor vasculature is leaky and unorganized, as many tumor parts are non-functional. Tumor hypoxia contributes to tumor progression, chemoresistance and radioresistance. Exercise reduces tumor hypoxia, improves vascular maturity and especially improves perfusion. Reduced hypoxia and improved perfusion in the tumor microenvironment could enhance tumor response to chemotherapy, improve drug delivery, and finally lead to a better prognosis. Radiotherapy requires sufficient oxygen delivery to the tumor which is essential for promoting the generation of reactive oxygen species that facilitate the therapeutic effect. The exercise trend strongly affects blood circulation and oxygen delivery to peripheral tissue. The current literature supports the concept that a well-oxygenated microenvironment improves the response to radiotherapy and chemotherapy. Exercise is a potential novel adjuvant treatment for cancer patients.

*Keywords:* physical activity, exercise, tumor microenvironment

## **Zdravstvena nega in preprečevanje bolnišničnih okužb**

Bolnišnične okužbe predstavljajo vse večji problem. Najpogosteje nastanejo pri obravnavi pacientov v bolnišnicah, pa tudi v socialnovarstvenih zavodih in med postopki rehabilitacije. Med najpogostejše bolnišnične okužbe prištevamo okužbe sečil in kirurških ran, pljučnice in sepse. Želeli smo ugotoviti, v kolikšni meri študenti zdravstvene nege poznajo dejavnike, ki povzročajo nastanek bolnišničnih okužb in ukrepe za preprečevanje bolnišničnih okužb, pa tudi vlogo, ki jo imajo zdravstveni delavci pri preprečevanju in obvladovanju bolnišničnih okužb. Uporabili smo kvantitativni način raziskovanja in deskriptivno metodo dela. Podatke smo pridobili s tehniko anketiranja. V raziskavi je sodelovalo 114 študentov zdravstvene nege. Večina anketiranih (75 %) dobro pozna dejavnike, ki povzročajo nastanek bolnišničnih okužb, malo manj (69 %) pa jih pozna ukrepe za preprečevanje nastanka bolnišničnih okužb. Večina anketiranih (82 %) tudi pozna vlogo zdravstvenih delavcev pri preprečevanju in obvladovanju bolnišničnih okužb. Poznavanje dejavnikov tveganja kot tudi ukrepov za preprečevanje nastanka bolnišničnih okužb s strani študentov zdravstvene nege je pomembno tako za njihovo kakovostno izvajanje aktivnosti zdravstvene nege kot tudi za celostno zdravstveno obravnavo pacientov.

*Ključne besede:* bolnišnične okužbe, dejavniki tveganja, pacient, zdravstvena nega

## **Nursing Care and Prevention of Nosocomial Infections**

Hospital-acquired infections are a growing problem. They most commonly occur during the treatment of patients in hospitals, as well as in social services and rehabilitation settings. The most common hospital-acquired infections include urinary tract and surgical wound infections, pneumonia, and sepsis. We aimed to determine the extent to which nursing students are aware of the factors that cause the occurrence of hospital-acquired infections and what measures can be taken to prevent them, as well as the role that health professionals play in preventing and controlling hospital-acquired infections. We used a quantitative research method and a descriptive work method. We collected data using the survey technique. A total of 114 nursing students participated in the study. Most of the respondents (75%) are aware of the factors that cause the occurrence of hospital-acquired infections, but slightly fewer (69%) are aware of the measures that prevent the occurrence of hospital-acquired infections. The majority of respondents (82%) are also aware of the role of medical staff in preventing and controlling hospital-acquired infections. Nursing students' knowledge of risk factors and of measures to prevent hospital-acquired infections is important for both the high-quality performance of nursing activities and the holistic medical treatment of patients.

*Keywords:* nosocomial infections, risk factors, patient, nursing

## **Vpliv stresa na zaposlene v intervencijskih službah**

Zaposleni v intervencijskih službah so še posebej izpostavljeni stresu, saj se pri delu vsak dan srečujejo s situacijami, pri katerih so v neposredni življenjski nevarnosti. Namen raziskave je bil ugotoviti vpliv stresa na zaposlene v intervencijskih službah. Raziskava je temeljila na kvantitativni metodi raziskovanja. Uporabili smo tehniko anketiranja in neslučajnostni, namenski vzorec. Anketiranih je bilo 355 ljudi, pravilno izpolnjenih je bilo 178 anket, kar predstavlja 50 % realizacijo vzorca. Podatki so bili obdelani s pomočjo programa Microsoft Office Excel 2007. 49 % anketiranih ocenjuje svoje delovno mesto pogosto stresno, 40 % kot občasno stresno in 11 % kot zmeraj stresno. 21 % anketiranih delovanje stresa občuti kot živčnost, 19 % kot nespečnost, 15 % kot glavobol. Kot zdravstvene težave povezane s stresom je 25 % anketiranih navedlo glavobole, 22 % težave s hrbtenico, 18 % tesnobo. Najbolj učinkovit način za obvladovanje stresa so anketirani navedli telesno aktivnost (23 %). 9 % anketiranih je v koledarskem letu 2022 zaradi stresa iskalo zdravniško pomoč. Ugotovili smo, da so zaposleni v intervencijskih službah izpostavljeni stresu in da ta vpliva na njihovo počutje. Z negativnim stresom se dobro spopadajo in ga obvladujejo, kljub temu pa nekateri poiščejo zdravniško pomoč in so posledično odsotni z dela. Zaposleni predlagajo izboljšano razpoložljivost strokovni služb za psihološko pomoč, več prostega časa in predpriprave v obliki delavnic.

*Ključne besede:* stres, intervencijske službe, mehanizmi spoprijemanja, duševno zdravje

## **Effect of Stress on Employees in Emergency Services**

Emergency services personnel are particularly vulnerable to stress, as they face situations where they are in imminent danger of their lives on a daily basis. The aim of the study was to determine the impact of stress on employees in emergency services. The study was based on a quantitative research method. We used a survey technique and a non-randomised, purposeful sample. A total of 355 people were interviewed and 178 surveys were completed correctly, which represents a 50% sample realisation. The data were processed using Microsoft Office Excel 2007. Forty-nine percent of respondents rated their workplace as often stressful, 40% as occasionally stressful and 11% as always stressful. Twenty-one percent of respondents perceived the effects of stress as nervousness, 19% as insomnia and 15% as headaches. Headaches were reported as a stress-related health problem by 25% of respondents, back problems by 22% and anxiety by 18%. The most effective way to cope with stress was physical activity (23%). Nine percent of respondents had sought medical help for stress in the calendar year 2022. We have found that emergency workers are exposed to stress and that it affects their well-being. They cope well with and manage negative stress, but some seek medical attention and are absent from work as a result. The employees suggest an improved availability of professional psychological support services, more free time, and advance preparations in the form of workshops.

*Keywords:* stress, emergency services, coping mechanisms, mental health



## **Celostna obravnava paceinta s poškodbo hrbtenice**

Hrbtenica, osrednji koščen steber telesa, sestavljena iz 33 vretenc, igra ključno vlogo pri podpori telesa, ščiti hrbtenjačo in omogoča gibanje. Najpogostejši vzrok za nastanek poškodbe hrbtenice so prometne nesreče. Zdravljenje poškodb se razlikuje glede na njihovo resnost, vključuje pa lahko operacijo ali konzervativne metode, kot so zdravlila in fizioterapija. Cilji zdravstvene nege po operaciji so preprečiti zaplete v zvezi z nego pooperativne rane in lajšanje pooperativne bolečine, spremljanje življenjskih funkcij in ukrepanje ob odstopanjih, omogočiti hitro in nemoteno okrevanje, zagotoviti čim višjo stopnjo psihofizičnega ugodja pri pacientu. Diagnosticiranje poškodb hrbtenice vključuje klinični pregled, slikovne preiskave in nevrološko oceno. Celostna obravnava pacienta s poškodbo hrbtenice zahteva sodelovanje strokovnjakov različnih področij, da se zagotovi najboljša oskrba in okrevanje pacienta. Kakovost življenja pacienta, ki doživi poškodbo hrbtenice, se lahko bistveno izboljša ob odsotnosti bolečine, ki jo lajšamo s kombinacijo farmakoloških in nefarmakoloških metod. Če medicinska sestra pridobi zaupanje pacienta in ima z njim dober odnos ter kakovostno komunikacijo, lahko s svojim znanjem in izkušnjami močno prispeva k izboljšanju kakovosti življenja pacienta. Namen prispevka je predstaviti celostno in kakovostno obravnavo pacienta s poškodbo hrbtenice in prikazati rezultate raziskave o znanju dijakov zdravstvene nege o obravnavi pacienta s poškodbo hrbtenice.

*Ključne besede:* poškodbe hrbtenice, diagnostika, zdravljenje, perioperativna zdravstvena nega

## **Comprehensive Treatment of a Patient with Spinal Cord Injury**

The spine plays a crucial role in supporting the body, protecting the spinal cord, and enabling movement. The most common cause of spinal injuries statistically is traffic accidents. The treatment of injuries varies depending on their severity and can include surgery or conservative methods such as medication and physiotherapy. The goals of postoperative care are to prevent complications related to postoperative wound care, alleviate postoperative pain, monitor vital signs, take action if there are deviations, facilitate a quick and smooth recovery, and ensure the highest possible level of psychophysical comfort for the patient. Diagnosing spinal injuries involves a clinical examination, imaging tests, and a neurological assessment. Providing comprehensive care for a patient with a spinal injury requires the collaboration of experts from various fields to ensure the best possible care and recovery for the patient. The quality of life of a patient who experiences a spinal injury can be significantly improved in the absence of pain, which can be alleviated through a combination of pharmacological and non-pharmacological methods. If nurses gain the trust of patients, maintain a good relationship with them, and communicate effectively, they can make a significant contribution to improving the patients' quality of life. The purpose of the paper is to present the comprehensive and high-quality treatment of a patient with a spinal cord injury, and to present research on the knowledge of nursing students about the treatment of a patient with a spinal cord injury through a survey.

*Keywords:* spinal injuries, diagnostics, treatment, perioperative care

## Izbira presadkov pri rekonstrukciji sprednje križne vezi

Rekonstrukcija sprednje križne vezi (SKV) je v medicini zelo pogost operacijski poseg. Operater ima na izbiro več različnih presadkov. Lahko je odvzet iz lastnega tkiva pacienta ali pa iz tkiva druge osebe. Najbolj pogosta mesta odvzema presadka so tetiva sprednje stegenske mišice, tetiva zadnje stegenske mišice ali patelarni ligament. Namen raziskave je s pregledom literature predstaviti prednosti in slabosti določenega presadka v smislu njegovega vpliva na gibljivost in stabilnost kolena, pridobivanje mišične moči in stopnjo bolečine po operativnem posegu. Zanimalo nas je tudi, kako izbira presadka vpliva na ponovno rupturo SKV. V raziskavo je bilo vključenih deset študij, objavljenih med letoma 2013 in 2023. Študije kažejo, da je najmanj ponovnih ruptur SKV pri tistih pacientih, katerim je bil presadek odvzet iz patelarnega ligamenta. Ta zagotavlja tudi največ stabilnosti kolenskega sklepa. Mnenja, kako izbira odvzemnega mesta vpliva na stopnjo bolečine, gibljivost in pridobivanje mišične moči po operaciji, se med študijami razlikujejo.

*Ključne besede:* rekonstrukcija SKV, presadek iz tetive zadnje stegenske mišice, presadek iz tetive sprednje stegenske mišice, presadek iz patelarnega ligamenta

## Choice of Autograft for Anterior Cruciate Ligament Reconstruction

Anterior cruciate ligament (ACL) reconstruction is a very frequent intervention in medicine. The doctor has several different grafts to choose from. It can be a transplant from the soft tissue of the patient or from another person. The most common grafts are taken from the quadriceps tendon, the hamstring tendon or the patellar ligament. The purpose of the research is to find out how each graft influences the mobility and stability of the knee, the gaining of muscle strength, and the pain level after surgery. We also want to determine the connection between different grafts and the ACL re-rupture. We analyzed ten studies, published between 2013 and 2023. The fewest re-ruptures occur with the patellar tendon graft, which also provides strong stability of the knee. We found different opinions in the studies concerning the pain level, knee mobility and gaining of muscle strength after surgery with the above-mentioned grafts.

*Keywords:* ACL reconstruction, hamstring tendon autograft, quadriceps tendon autograft, patellar tendon autograft

## **Kakovostna digitalna vsebina kot podpora pri uspešnem adaptiranju v zgodnjem postnatalnem obdobju**

Razvoj digitalnih tehnologij vzporedno vpliva tudi na način in kvaliteto zdravstvene obravnave na vseh nivojih zdravstvenega varstva. Zato je potrebno upoštevati potrebe uporabnikov storitev in temu redno prilagajati vsebine nekaterih zdravstvenovzgojnih storitev in neprestano vključevati dodatna napredna znanja. Običajno izvedba takšnih delavnic temelji na skupini, kjer strokovnjaki različnih zdravstvenih strok nudijo ustrezne informacije, poučujejo veščine in predstavljajo pomen integracije v zgodnjem perinatalnem obdobju v družinsko okolje. Prav tako nudijo tudi podporo pri svetovanju o izvajanju zdravega življenjskega sloga. Glavni razlog preoblikovanja delavnic v digitalni format je bila, še ne tako dolgo nazaj, aktualna pandemija. Digitalna oblika delavnic še vedno deluje kot skupina, vendar obstaja znotraj skupine možnost individualne oblike. Prednosti so vsekakor podvajanje ogledov in ponavljanje posameznih vsebin, dostopnost do strokovnih vsebin. Posamezne študije primerov predstavljajo, kako lahko nosečnicam teoretično in praktično predstavimo različne veščine in spretnosti, ter adaptacijo na življenjsko vlogo v zgodnjem perinatalnem obdobju.

*Ključne besede:* digitalizacija, porod, obravnava, zdravstvena nega, izobraževanje

## **Quality Digital Content as Support for Successful Adaptation in the Early Postnatal Period**

The development of digital technologies has a parallel effect on the manner and quality of medical treatment at all levels of health care. Therefore, it is necessary to take into account the needs of service users, to regularly adapt the content of some health education services to these needs, and to continuously include additional advanced knowledge. Usually, the implementation of such workshops is based on a group in which experts from different medical professions provide relevant information, teach skills, and present the importance of their integration into the family environment in the early postnatal period. They also provide support in advising on how to lead a healthy lifestyle. The main reason for transforming the workshops into a digital format was the recent pandemic. The digital workshops are still in a group format, but there is the possibility of an individual format within the group. The advantages are certainly being able to view them again, to revise individual contents, and to access professional contents. Individual case studies present how pregnant women can be theoretically and practically presented with various skills and abilities, and taught how to adapt to their new life roles in the early postnatal period.

*Keywords:* digitalization, delivery, treatment, nursing, education

## Težave pri etičnem odločanju v delovni terapiji

Delovni terapevti (DTh) se vsakodnevno srečujejo s situacijami, ki zahtevajo etično odločanje in upoštevanje Kodeksa etike delovnih terapevtov Slovenije & Standarde prakse v delovni terapiji (Kodeks). V interakcijah s pacienti (uporabniki), svojci (skrbniki), interdisciplinarnim timom in delodajalci, se lahko znajdejo v težavah etičnega odločanja, kar lahko privede do etične negotovosti, stiske ali dileme. Namen pregleda literature je bil raziskati najpogostejše težave pri etičnem odločanju DTh in njihov vpliv na kakovost zdravstvene obravnave. Preiskali smo PubMed, CINAHL in DLib.si. Zaradi številnih sopomenk na temo etičnih težav, smo pri pregledu literature ustvarili 4 skupine, ki so vključevale določeno kombinacijo ključnih besed: (1) »occupational therapy (OT)«, »ethical decision - making«, (2) »OT«, »ethical uncertainty«, »ethical considerations«, »ethical reasoning«, (3) »OT«, »ethical distress«, »ethical tension«, (4) »OT«, »ethical dilemmas«, »ethical issues«. Oblikovali smo iskalno strategijo s pomočjo Boolovih operatorjev (AND, OR) in vključitvenih ter izključitvenih kriterijev. V DLib.si smo uporabili ključno besedo »delovna terapija«. Proces iskanja in analize literature je prikazan v diagramu PRISMA. V pregled smo vključili 7 virov, ki smo jih razporedili v 4 kategorije z 11 kodami, ki so izhajale iz Kodeksa. Iz pregleda literature smo ugotovili, da imajo morala in težave pri etičnem odločanju velik vpliv na delo DTh v praksi in dolgoročno na njihovo zdravje.

*Ključne besede:* delovna terapija, etično odločanje, etična negotovost, etična stiska, etična dilema

## Ethical Decision-Making Problems in Occupational Therapy

Occupational therapists (OTs) are confronted on a daily basis with situations that require ethical decision-making and adherence to the Slovenian Code of Ethics for Occupational Therapists & Standards of Practice (the Code). In interactions with patients (clients), relatives (caregivers), the interdisciplinary team and employers, they may face difficulties in ethical decision-making, which may lead to ethical uncertainty, distress or dilemmas. The aim of the literature review was to explore the most common ethical decision-making problems among OTs and their impact on the quality of therapy. We searched in the PubMed, CINAHL and DLib.si databases. Due to the numerous synonyms for ethical problems, 4 groups were created in the literature review, which included a specific combination of keywords: (1) "occupational therapy (OT)", "ethical decision-making", (2) "OT", "ethical uncertainty", "ethical considerations", "ethical reasoning", (3) "OT", "ethical distress", "ethical tension", (4) "OT", "ethical dilemmas", "ethical issues". We formulated a search strategy using Boolean operators (AND, OR), and inclusion and exclusion criteria. In the DLib.si database we used the keyword "delovna terapija" (occupational therapy). The literature search and analysis process are shown in the PRISMA diagram. We included 7 sources in the review, which were grouped into 4 categories with 11 codes derived from the Code. We found that ethical decision-making problems and morality have a major impact on OTs' work and on their health in the long term.

*Keywords:* occupational therapy, ethical decision-making, ethical uncertainty, ethical distress, ethical dilemma

## **Videoposnetki za boljše razumevanje in uspeh pri praktičnem pouku**

Videoposnetki so učinkovito učno orodje za izboljšanje kakovosti izobraževanja dijakov v programu zdravstvena nega. Omogočajo interaktivno in vizualno učenje ter ponavljanje praktičnih spretnosti in veščin. Dijaki dostopajo do različnih intervencij zdravstvene nege kjerkoli in kadarkoli. Namen študije je predstaviti sodobne tehnike učenja, zlasti videoposnetke, kot učno orodje, ki je privlačnejše in zanimivejše za dijake, saj si vsebine lahko ogledajo po svojem lastnem tempu brez časovnih in prostorskih omejitev. Z videoposnetki zagotovimo najboljše učne rezultate za dijake. Raziskava je temeljila na kvantitativni metodi dela s tehniko anketiranja in je imela za cilj raziskati, mnenje dijakov o uporabi videoposnetkov pri praktičnem pouku. Rezultati raziskave so potrdili, da se z videoposnetki zagotavlja dinamično učno okolje, ki spodbuja dijake k aktivnemu učenju in samostojnemu razmišljanju, kar povečuje zavzetost in motivacijo dijakov ter vodi do boljšega znanja. S tem pridobivajo večjo zavzetost in motivacijo za učenje, kar vodi k boljšemu znanju. Uporaba različnih sodobnih načinov učenja ne le povečuje znanje ter praktične spretnosti in veščine dijakov zdravstvene nege, temveč ga dijaki pogosto raje izberejo zaradi njegove prilagodljivosti.

*Ključne besede:* videoposnetki, dijaki, zdravstvena nega

## **Videos for Better Understanding and Success in Practical Lessons**

Videos are an effective teaching tool to improve the quality of nursing education for students. They allow interactive and visual learning, and the revision of practical skills. Students can access different nursing interventions anywhere and at any time. The aim of the study is to present modern learning techniques, in particular videos, as a learning tool that is more engaging and interesting for students, as they can view content at their own pace without time and space constraints. Videos ensure the best learning outcomes for students. The research was based on a quantitative method using a survey technique and aimed to explore students' opinions on the use of videos in practical lessons. The results of the survey confirmed that videos provide a dynamic learning environment that encourages students to learn actively and think independently, which increases students' engagement and motivation, and leads to better knowledge. The use of different modern learning modalities not only increases the knowledge and practical skills of nursing students but is often preferred by students because of its flexibility.

*Keywords:* videos, students, nursing

## **Ali lahko vaje za krepitev orofaringeusa izboljšajo kakovost življenja starostniku z motnjami požiranja?**

V EU narašča število starejših, zato postaja vedno bolj pomemben izziv za zdravstvene delavce, da razumemo izzive s katerimi se sooča ta posebna populacija. Ocenjuje se, da ima trenutno 40 % odraslih, starih 60 let in več, težave s požiranjem. Ta visok odstotek je povezan z motoričnimi in senzoričnimi funkcijami požiranja, ki se spreminjajo s starostjo in s starostjo povezanimi boleznimi. Starejši posamezniki so lahko dovzetni za motnje požiranja zaradi nevromišičnih sprememb, povezanih s starostjo. Namen raziskave je preučiti ali lahko vaje za krepitev orofarinsa vplivajo na kakovost življenja pri požiranju starejših posameznikov. Sedemindvajset starejših je opravilo štiri tedenski programski trening vaj za krepitev orofarinksa v domačem okolju. Izpolnili so vprašalnik Swallowing Quality of Life (SWAL-QOL) pred in po programu. Statistične primerjave so bile narejene s t-testom ujemajočih se parov ( $p < 0,05$ ). Skupni rezultati iz vprašalnika kažejo, da sta se požiranje in kakovost življenja vidno izboljšala po zaključku 4-tedenskega programa usposabljanja. Udeleženci so izjavili, da so ugotovili, da so se simptomi, povezani s požiranjem, vidno izboljšali, zlasti pogost kašelj med uživanjem hrane se je znatno zmanjšal. Vaje za krepitev mišic orofarinksa prispevajo k boljši kakovosti življenja pri starejših posameznikih.

*Ključne besede:* kakovost življenja, požiranje, starost, trening

## **Can Exercises Strengthen the Oropharynx and Thus Improve Quality of Life for Older People with Swallowing Disorders?**

The number of elderly is rising in the EU, confronting healthcare workers with the challenge of needing to understand the difficulties faced by this particular group of people. It is estimated that 40% of the population over the age of 60 have problems swallowing. This high number is connected with motor and sensory swallowing functions that change with age, and with aging-related illnesses. There is no theoretical explanation as to why or how this occurs. These changes are becoming increasingly more important as they are affecting a growing number of older people. Older individuals can be affected by changes in neuromuscular deterioration associated with aging. Older individuals who have problems swallowing can improve this with preventive training. The purpose of the study is to assess whether specific exercises for the oropharynx can improve the quality of life for older individuals with swallowing disorders. Twenty-seven older patients participated at home in a 4-week training programme of exercises for the oropharynx. They completed the Swallowing Quality of Life (SWAL-QOL) questionnaire before and after the programme. Statistical comparisons were carried out using the paired-samples t-test ( $p < 0.05$ ). Altogether, the results of the questionnaire show that swallowing and quality of life visibly improved after completing the 4-week training programme. Participants stated that they recognised a visible improvement in the symptoms connected with swallowing, particularly a significant reduction in frequent coughing whilst eating. Exercises to improve the muscles of the oropharynx lead to greater quality of life for older individuals.

*Keywords:* quality of life, swallowing, elderly

## **Zdravstvena obravnava marginaliziranih odraslih na področju duševnega zdravja**

Breme bolezni zaradi motenj v duševnem zdravju je največje med vsemi zdravstvenimi težavami po svetu in predstavlja 13 % celotnega bremena bolezni zaradi vseh bolezni. Zagotavljanje kakovostne zdravstvene obravnave oseb z motnjo v duševnem zdravju je obveznost socialne države, dolžnost strokovnjakov in pravica pacientov. Namen prispevka je identifikacija vrzeli za celovito, integrirano in kontinuirano zdravstveno obravnavo različnih skupin marginaliziranih odraslih na področju duševnega zdravja. Uporabljen je bil nestrukturiran pregled in analiza dosedanjih raziskav in relevantne literature s področja zdravstvene obravnave marginaliziranih odraslih na področju duševnega zdravja. Ugotovljeno je, da je znanstvenih dokazov v Sloveniji malo. Določene skupine prebivalstva, kot so moški, starejši in ločeni ter iz regij z najslabšimi kazalniki duševnega zdravja in hkrati najbolj obremenjene s samomorom, imajo najbolj izraženo stigmo do duševnih težav in iskanja pomoči. Le četrtnina oseb, ki so v preteklosti že bile v duševni stiski, je poiskala pomoč. Stigma in diskriminacija oseb z duševnimi motnjami se kaže v iskanju pomoči in na vseh področjih življenja, v slabem prepoznavanju njihovih potreb in spregledanju njihovih zahtev. Družbeno marginalizirane skupine imajo običajno višjo stopnjo duševnih motenj kot splošna populacija in jih je težje vključiti v zdravstveno oskrbo. Nujno je nadaljnje, bolj sistematično, raziskovalno delo.

*Ključne besede:* duševno zdravje, zdravstveno varstvo, marginalne skupine, kakovost psihiatrične obravnave, destigmatizacija

## **Health Care of Marginalized Adults in the Mental Health Field**

The burden of disease from mental health disorders is the highest among all health problems worldwide, accounting for 13% of the total burden of disease from all diseases. Ensuring quality health care of persons with mental health disorders is the obligation of the welfare state, the duty of professionals, and the right of patients. The aim of the paper is to identify gaps for comprehensive, integrated and continuous health care of various groups of marginalized adults in the field of mental health. An unstructured review and analysis of previous research and relevant literature in the field of health care of marginalized adults in mental health was conducted. It was found that there is limited scientific evidence in Slovenia. Certain population groups, such as men, the elderly, the divorced, and people from the regions with the worst mental health indicators, who are at the same time most burdened by suicide, are the most stigmatized when it comes to mental health problems and seeking help. Only a quarter of people with a history of mental health problems also sought help. Stigma and discrimination against people with mental disorders manifests itself in seeking help, in all areas of life, in that their needs are barely acknowledged and in their concerns being overlooked. Marginalized social groups tend to have higher rates of mental disorders than the general population and are difficult to integrate into health care. Further and more systematic research is needed.

*Keywords:* mental health, health care, marginal groups, quality of psychiatric health care, destigmatization

## **Učinkovitost terapije z ogledalom pri rehabilitaciji zgornje okončine pri pacientih po možganski kapi**

Večina pacientov v akutni fazi po možganski kapi ima motorično disfunkcijo zgornje okončine. Te omejitve lahko vodijo do mišične šibkosti, omejene gibljivosti sklepov, spastičnosti, izgube senzorične funkcije in zmanjšane obsega vsakodnevnih življenjskih aktivnosti. Rehabilitacija pacientov po možganski kapi je povezana z različnimi nevrofizioterapevtskimi metodami in koncepti, ki so med drugim usmerjeni v rehabilitacijo zgornje okončine. Terapija z ogledalom je nova metoda, ki izkorišča lastnost delovanja možganov, ki dajejo prednost vidnim informacijam pred somatosenzornimi. Številne raziskave poudarjajo potrebo po aktivaciji različnih sistemov v senzorični in motorični skorji možganov. Uporabljena je bila deskriptivna metoda raziskovanja. Namen raziskave je prikaz obstoječe znanstvene literature in identifikacija učinkovitosti terapije z ogledalom pri rehabilitaciji zgornje okončine pri pacientih po možganski kapi. Ugotovili smo, da je uporaba terapije z ogledalom kot dodatek h konvencionalni terapiji pomembna za izboljšanje motorične funkcije zgornje okončine, najbolj v akutni fazi. V prihodnje bi bilo potrebno razmisliti in raziskati, kako terapija z ogledalom vpliva na zaznavanje, senzoriko in zmanjšanje bolečine.

*Ključne besede:* terapija z ogledalom, možganska kap, zgornja okončina, rehabilitacija

## **Effectiveness of Mirror Therapy in Upper Limb Rehabilitation in Post-Stroke Patients**

Most patients in the acute phase after a stroke have motor dysfunction of the upper limb. These limitations can lead to muscle weakness, limited joint mobility, spasticity, loss of sensory function, and a reduced range of activities of daily living. Rehabilitation of stroke patients involves various neurophysiotherapeutic methods and concepts, which focus, among other things, on upper limb rehabilitation. Mirror therapy is a new method that exploits a feature of the brain that favours visual information over somatosensory information. Many studies emphasise the need to activate different systems in the sensory and motor cortex of the brain. A descriptive research method was used. The aim of the study is to review the existing scientific literature and to identify the effectiveness of mirror therapy in upper limb rehabilitation in post-stroke patients. We have found that the use of mirror therapy as an adjunct to conventional therapy is important to improve upper limb motor function, most notably in the acute phase. Future work should consider and investigate how mirror therapy affects perception, sensation, and pain reduction.

*Keywords:* mirror therapy, stroke, upper limb, rehabilitation



## **Procjena obrazovnih potreba medicinskih sestara o ozljedama od pritiska**

Prevenција, dijagnosticiranje i liječenje dekubitusa ovisi o širenju znanja i njegovoj primjeni. Ozljeda od pritiska (dekubitalni ulkus) predstavlja značajan zdravstveni problem u zajednici koji zahtijeva sveobuhvatnu skrb, a medicinske sestre su ključni djelatnici koji sudjeluju u zbrinjavanju i prevenciji ozljeda zbog pritiska. Prevalencija dekubitusa, osobito u nemoćnoj starijoj odrasloj populaciji, i dalje je visoka i vrlo skupa, posebice kod onih koji pate od kroničnih bolesti, te je dovela do veće svijesti o sveobuhvatnim, preventivnim i terapijskim mjerama za liječenje dekubitusa. Dekubitalni ulkus je često štetni događaj u bolnicama, koji utječe na dobrobit pacijenata i uzrokuje značajan finansijski teret zdravstvenim sustavima. Međutim, procjene prevalencije, incidencije i bolničke stope ozljeda zbog pritiska u hospitaliziranih pacijenata znatno variraju u relevantnim objavljenim studijama. Klinički proces donošenja odluka u liječenju dekubitusa je složen, a njegova kvaliteta ovisi i o iskustvu medicinske sestre i dostupnosti znanstvenih spoznaja. Ovaj proces trebao bi slijediti praksu utemeljenu na dokazima koja uključuje zdravstvene informacijske tehnologije za pomoć zdravstvenim radnicima, kao što je korištenje kliničkih sustava za podršku odlučivanju.

*Ključne besede:* test znanja o dekubitusu, znanje, dugotrajna njega, njegovanje, dekubitus

## **Assessing the Educational Needs of Nurses about Pressure Ulcers**

Prevention, diagnosis, and treatment of pressure ulcers depend on the dissemination and application of knowledge. Pressure ulcers represent a significant health problem in a community that requires comprehensive care, and nurses are key workers in treating and preventing pressure ulcers. The prevalence of pressure ulcers, especially in the frail older adult population, remains high and very expensive, especially in those suffering from chronic diseases. This has led to a greater awareness of comprehensive, preventive, and therapeutic measures for treating pressure ulcers. A pressure ulcer is a frequent adverse event in hospitals, affecting the well-being of patients and causing a significant financial burden on healthcare systems. However, estimates of the prevalence, incidence, and in-hospital rates of pressure ulcers in hospitalized patients vary considerably in the relevant published studies. The clinical decision-making process in the treatment of pressure ulcers is complex, and its quality depends on the nurse's experience and the availability of scientific knowledge. This process should follow evidence-based practice that incorporates health information technologies to assist healthcare professionals, such as the use of clinical decision support systems. The purpose of the research is to identify areas of insufficient knowledge among nurses from the clinical environment in Croatia.

*Keywords:* Pressure Ulcer Knowledge Test, knowledge, long-term care, nursing, pressure ulcers

## **Rehabilitacija pri osebah s surfersko mielopatijo – pregled literature**

Surferska mielopatija (SM) je posledica ishemične kapi hrbtenjače, ki nastane s ponavljajočo se hiperekstenzijo hrbta. V prispevku smo prikazali mehanizem nastanka SM in postopke rehabilitacije parapareze oz. paraplegije po poškodbi hrbtenjače. Uporabili smo pregled strokovne ter znanstvene literature, objavljene v podatkovnih bazah PubMed, PEDro, COBISS+, DOAJ, National Library of Medicine, SpringerLink, ProQuest in Google Scholar. Zadetke smo omejili z vključitvenimi kriteriji: slovenski in angleški jezik, leto objave, vsebinska ustreznost in članki s celotnim besedilom. Izmed 126 dobljenih zadetkov smo v končni pregled vključili 18 znanstvenih in strokovnih člankov, oblikovali 40 kod in jih združili v tri kategorije. Fizioterapija je pomembna komponenta rehabilitacije paraplegije po SM, saj s specifičnimi postopki, ki upoštevajo temelje nevropastičnosti in s kombinacijo znanj, pacientu omogočijo doseg stopnje neodvisnosti in samostojnosti. Različni fizioterapevtski postopki vplivajo na krepitev mišične moči, ohranjanje gibljivosti sklepov, izboljšanje ravnotežja in funkcionalnosti ter izboljšajo kvaliteto življenja.

*Ključne besede:* parapareza, paraplegija, netravmatska poškodba hrbtenjače, hrbtenjačna kap, rehabilitacija po poškodbah hrbtenjače

## **Rehabilitation in People with Surfer's Myelopathy – Literature Review**

Surfer's myelopathy (SM) is a result of an ischemic spinal cord stroke with repeated hyperextension of the back. The article identifies the mechanism of the formation of SM and the procedures of rehabilitation in paraparesis or paraplegia after a spinal cord injury. We conducted a review of professional and scientific literature published in the following databases: PubMed, PEDro, COBISS+, DOAJ, National Library of Medicine, SpringerLink, ProQuest, and Google Scholar. We restricted the results with inclusion criteria, including Slovenian and English languages, publication year, content relevance and articles with full text available. The final review included 18 scientific and professional articles of the 126 articles found. We created 40 codes and combined them into three categories. Physiotherapy is an important component of paraplegia rehabilitation after SM, as it enables the patient to achieve independence and autonomy through techniques and neuroplasticity. Various physiotherapeutic methods contribute to muscle strength enhancement, preservation of joint mobility, improvement of balance, and can, in general, enhance the quality of life.

*Keywords:* paraparesis, paraplegia, nontraumatic spinal cord injury, spinal cord stroke, rehabilitation after SCI

## **Samo-ocena diplomantov študijskega programa fizioterapije o usvojitvi kompetenc v času covid-19 razmer**

Na kompetencah temelječe visokošolsko izobraževanje, omogoča študentom sposobnost uporabe znanja, veščin in sposobnosti v različnih situacijah. Pandemija covid-19 je vplivala na razvoj prilagojenega načina študija, pri katerem je bilo potrebno študentom zagotoviti enako raven usvojenih kompetenc kot pred pandemijo. Namen prispevka je predstaviti v kolikšni meri so študentje študijskega programa fizioterapije na Zdravstveni fakulteti v Ljubljani zaznali usvojitve kompetenc v času študija v covid-19 razmerah. Za zbiranje podatkov smo uporabili anonimni anketni vprašalnik, ki je bil sestavljen iz dveh delov, demografskih vprašanj in vprašanj za samooceno kompetenc. Za analizo rezultatov smo uporabili deskriptivne statistične metode, za samooceno usvojenih kompetenc pet-stopenjsko Likertovo lestvico, za primerjavo samoocen pa t-test za dva odvisna vzorca. Anketa je bila poslana 78 diplomantom, za analizo pa smo uporabili podatke 50 diplomantov (12 moških in 38 žensk). Povprečna vrednost samoocene vseh usvojenih kompetenc je bila 3,45 ( $\pm 1,08$ ), kompetenc na fakulteti je bila 3,06 ( $\pm 1,11$ ), v kliničnem okolju pa 3,84 ( $\pm 0,9$ ). Rezultati so pokazali, da so študentje v času covid-19 razmer po njihovem mnenju večino kompetenc bolje usvojili v kliničnem okolju kot na fakulteti. Praktične izkušnje so pomembne, saj omogočajo primerjavo kompetenc, ki jih študentje usvojijo na fakulteti, z realnostjo in kompleksnostjo delovnega mesta.

*Ključne besede:* covid-19, poučevanje in učenje na daljavo, visokošolski študij, kompetence

## **Self-Assessment of Physiotherapy Graduate Students' Competence under COVID-19 Conditions**

Competence-based higher education enables students to apply knowledge, skills, and abilities in various situations. The COVID-19 pandemic has influenced the development of an adapted mode of study, in which it was necessary to ensure that students achieved the same level of competence acquisition as before the pandemic. The purpose of the article is to present to what extent students of the physiotherapy study programme at the Faculty of Health Sciences in Ljubljana perceived competence acquisition during their studies under COVID-19 conditions. Data were collected using an anonymous questionnaire, which consisted of two parts – demographic questions and questions for the self-assessment of competences. Descriptive statistical methods, a five-point Likert scale and a t-test for two dependent samples was used to analyse the results. The survey was sent to 78 graduates; for the analysis we used data from 50 graduates (12 males and 38 females). The average self-assessment value of the total acquired competences was 3.45 ( $\pm 1.08$ ), of competences at the faculty 3.06 ( $\pm 1.11$ ), and of those in the clinical environment 3.84 ( $\pm 0.9$ ). The results of the study showed that, according to the students, they acquired most competences better in the clinical environment than at the faculty under the COVID-19 conditions. Practical experiences are important as they allow a comparison of the competences acquired at the faculty with the reality and complexity of the workplace.

*Keywords:* COVID-19, online teaching and learning, university education, competences

## **Častni pokrovitelj konference**

ZBORNICA ZDRAVSTVENE IN BABIŠKE NEGE SLOVENIJE -  
ZVEZA STROKOVNIH DRUŠTEV MEDICINSKIH SESTER,  
BABIC IN ZDRAVSTVENIH TEHNIKOV SLOVENIJE



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