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Contents / Turinys

CHANGES IN COGNITIVE FUNCTIONS AND MOTIVATION AND THEIR RELATIONSHIP WITH SENSE OF COHERENCE IN PATIENTS AFTER STROKE FOLLOWING DIFFERENT OCCUPATIONAL THERAPY INTERVENTIONS DURING THE EARLY REHABILITATION PHASE	5
MOBILITY DECLINE AFTER DBS IN PARKINSON’S DISEASE: EVIDENCE FOR BETTER CARE	6
RARE AND LIFE-THREATENING ADVERSE REACTIONS FOLLOWING THE ADMINISTRATION OF IODINATED CONTRAST MEDIA IN COMPUTED TOMOGRAPHY: A LITERATURE REVIEW	7
INNOVATIONS AND BEST PRACTICES IN PALLIATIVE CARE IN THE CONTEXT OF DAY HOSPITAL SERVICES.....	8
PROFESSIONAL IMAGE AND PUBLIC PERCEPTION OF NURSING IN SOCIETY	9
EFFECT OF EXERCISE ON PSYCHOSOCIAL OUTCOMES AMONG BREAST CANCER SURVIVORS ..	11
NEUROVASCULAR CONFLICT PARADOX: EXPLAINING CLINICAL–RADIOLOGIC DISSOCIATION IN HYPERACTIVE CRANIAL NERVE SYNDROMES	12
TEMPORAL DYNAMICS OF INTERLEUKIN-6 IN ACUTE ANEURYSMAL SUBARACHNOID HEMORRHAGE: AN EVIDENCE-BASED SYSTEMATIC REVIEW FOR PUBLIC HEALTH APPLICATIONS	13
ANALYSIS OF PATIENT NEEDS AFTER SPINAL SURGERY	14
CORRELATION BETWEEN SERUM IMMUNOGLOBULIN E LEVELS AND GRADE III ADENOTONSILLAR HYPERTROPHY IN CHILDREN	15
THE ROLE OF NURSES IN PATIENT EDUCATION ON THE IMPORTANCE OF STATIN THERAPY IN CARDIOVASCULAR DISEASE PREVENTION: A LITERATURE REVIEW	16
NURSING NEEDS OF PATIENTS AFTER LUMBAR SPINE SURGERY.....	17
THE ROLE OF THE NURSE IN POLYPHARMACY AND MEDICATION MANAGEMENT IN OLDER ADULTS: A LITERATURE REVIEW.....	18
UV FILTERS IN SUNSCREENS AS EMERGING POLLUTANTS: ENVIRONMENTAL AND HUMAN HEALTH IMPACTS	19
EXPRESSION OF SELF-REGULATION AND SOCIAL INTERACTION THROUGH THE USE OF ART THERAPY METHODS FOR CHILDREN WITH ACTIVITY AND ATTENTION DISORDERS	21
ORGANIZATIONAL SUPPORT AND JOB SATISFACTION AS PROTECTIVE FACTORS AGAINST PROFESSIONAL BURNOUT AMONG EMPLOYEES WORKING WITH INDIVIDUALS WITH INTELLECTUAL DISABILITIES	22
THROUGH COLORS, CONNECTION, AND MOVEMENT: THE POWER OF THERAPEUTIC EXPERIENCES IN WORKING WITH INDIVIDUALS WITH DISABILITIES	23
EVIDENCE-BASED COGNITIVE BEHAVIORAL THERAPY METHODS IN SOCIAL WORK PRACTICE	24
ANALYSIS OF THE AGEING SITUATION IN KUPIŠKIS DISTRICT: DEMOGRAPHIC CHALLENGES AND THE NEED FOR SOCIAL SERVICES	25

USE OF ARTIFICIAL INTELLIGENCE IN MEDICAL EDUCATION: STUDENT AND FACULTY PERSPECTIVES ON ITS ROLE IN DEVELOPING EVIDENCE-BASED PRACTICE	26
FROM GLYCEMIC CONTROL TO PSYCHOSOCIAL WELL-BEING: CONTINUOUS.....	27
GLUCOSE MONITORING AS AN EVIDENCE-BASED DIGITAL HEALTH INNOVATION	27
THE ROLE OF DIGITAL COMMUNICATION AND ARTIFICIAL INTELLIGENCE TOOLS IN SHAPING A CULTURE OF EVIDENCE-BASED PRACTICE IN HIGHER EDUCATION INSTITUTIONS.....	28
BRIDGING ERGONOMIC EVIDENCE AND PRACTICE IN MANUAL HEALTH PROFESSIONS: EDUCATIONAL AND ORGANISATIONAL GAPS IN PREVENTION	29
MINDFULNESS AS A STRATEGY FOR NURSES' AND SOCIAL WORKERS' SELF-CARE AND PROFESSIONAL VALUES DEVELOPMENT	30
RECENT ADVANCES IN ARTIFICIAL INTELLIGENCE FOR ULTRASOUND DIFFERENTIATION OF UTERINE LEIOMYOMA AND SARCOMA: A LITERATURE REVIEW (2019–2025).....	31
MATHEMATICAL MODELS FOR CARDIOVASCULAR RISK ASSESSMENT AND REMOTE MONITORING IN PRIMARY CARE.....	32
THE ROLE OF MANAGEMENT IN FOSTERING SOCIAL INNOVATIONS IN SOCIAL SERVICE ORGANIZATIONS	33
CASE MANAGEMENT ANALYSIS OF UNEMPLOYED PERSONS IN THE UTENA DISTRICT: CHALLENGES, ISSUES, AND CASE MANAGER EXPERIENCES.....	34
PREREQUISITES AND BARRIERS TO THE INTEGRATION OF PERSONS WITH DISABILITIES INTO THE LABOUR MARKET	35
PROMOTING HEALTHY AND ACTIVE AGING IN A SOCIAL CARE INSTITUTION THROUGH GREEN SOCIAL WORK.....	36

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CHANGES IN COGNITIVE FUNCTIONS AND MOTIVATION AND THEIR RELATIONSHIP WITH SENSE OF COHERENCE IN PATIENTS AFTER STROKE FOLLOWING DIFFERENT OCCUPATIONAL THERAPY INTERVENTIONS DURING THE EARLY REHABILITATION PHASE

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Theoretical background. The study is grounded in the biopsychosocial perspective of stroke rehabilitation, integrating the concepts of cognitive recovery, motivation, and sense of coherence as key factors influencing early rehabilitation outcomes.

Aim. To evaluate changes in cognitive functions and motivation, as well as their associations with sense of coherence, in patients after stroke when applying different occupational therapy interventions during the early rehabilitation phase.

Study design and methods. A quantitative randomized pre - post experimental study with two intervention groups was conducted. Cognitive functions were assessed using the Mini-Mental State Examination (MMSE), motivation using the Motivation for Rehabilitation Scale for Stroke Patients (MORE), and sense of coherence using the (SOC-13) scale. The first group received occupational therapy based on creative methods. The second group participated in structured occupational tasks. In both groups, each 45-minute session consisted of 30 minutes of targeted activities followed by 15 minutes of guided self-reflection and discussion. Correlational analysis was performed to examine the associations between changes in cognitive functions and motivation with sense of coherence.

Practice description. I am a Master's student in the study programme "Health Promotion and Rehabilitation" at the Lithuanian University of Health Sciences and have been working as an occupational therapist at Kulautuva Rehabilitation Hospital since July 2024. In my clinical practice with neurological patients, I apply evidence-based occupational. therapy methods. My professional experience formed the basis for the development and implementation of the described interventions during the early rehabilitation phase.

MOBILITY DECLINE AFTER DBS IN PARKINSON'S DISEASE: EVIDENCE FOR BETTER CARE

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Background. Deep brain stimulation (DBS) is an established treatment for motor complications in Parkinson's disease. Although appendicular motor symptoms often improve, gait and balance may worsen over time, contributing to falls, disability, reduced independence, and increasing care needs. For evidence-based practice, the key issue is not only identifying postoperative decline, but also distinguishing whether it is related to stimulation, medication effects, or ongoing disease progression.

Objective. To re-examine gait and balance decline after DBS in Parkinson's disease using a counterfactual interpretive framework and to highlight its relevance for evidence-based, interdisciplinary care.

Methods. A structured narrative review was conducted in line with PRISMA reporting principles. Evidence from studies evaluating gait and balance after DBS was synthesized using clinically meaningful contrasts, including stimulation ON versus OFF, medication ON versus OFF, stimulation parameter changes, and early versus late postoperative time points. This approach was used to distinguish potentially reversible postoperative effects from longer-term progression.

Results. Gait and balance decline after DBS appears to be multifactorial rather than explained by a single mechanism. Early worsening may occur after stimulation activation or electrode implantation and may improve with programming adjustment. Some studies suggest that DBS and dopaminergic therapy can have non-additive or even opposing effects on gait and postural control. In contrast, longer-term decline, particularly in balance and dynamic postural stability, is more consistent with disease progression despite sustained benefit in appendicular motor symptoms.

Conclusions. This evidence-based framework supports a more accurate interpretation of postoperative mobility decline after DBS and may improve individualized programming, medication optimization, rehabilitation planning, and patient counselling. Its practical relevance extends to the multidisciplinary team involved in Parkinson's disease care, including neurologists, neurosurgeons, rehabilitation specialists, physiotherapists, speech and language therapists, occupational therapists, and DBS nurses, with broader implications for safer mobility, falls prevention, functional independence, and long-term care planning.

RARE AND LIFE-THREATENING ADVERSE REACTIONS FOLLOWING THE ADMINISTRATION OF IODINATED CONTRAST MEDIA IN COMPUTED TOMOGRAPHY: A LITERATURE REVIEW

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Iodine-based contrast media are essential in computed tomography (CT). Although modern non-ionic low-osmolar agents are considered safe, adverse reactions may occur, ranging from mild to life-threatening. Severe reactions are rare (<1 in 10,000) but clinically important due to their potential severity and similarity to other acute conditions.

Aim. To summarize rare and clinically significant adverse reactions to iodine-based contrast media reported in 2019–2026, focusing on clinical presentation, diagnostic challenges, and management.

Methods. A structured literature review with elements of a systematic search was conducted according to PRISMA 2020. Publications from PubMed, Scopus, and Web of Science (2019–2026) were analyzed. Included were case reports, case series, and reviews on severe reactions in adults. A total of 23 sources were included.

Results. Main phenotypes included neurological, cardiopulmonary, dermatological, endocrine, and salivary gland reactions. The most frequent was contrast-induced encephalopathy, presenting within minutes to hours with altered consciousness, focal deficits, or seizures. Cardiopulmonary reactions (non-cardiogenic pulmonary edema, Kounis syndrome) cause dyspnea, hypoxemia, or chest pain soon after administration. Dermatological reactions (SJS/TEN, DRESS, AGEP) develop within 1–4 days with skin and mucosal involvement. Endocrine complications include iodine-induced thyrotoxicosis, while sialadenitis presents with gland swelling. A biphasic pattern was observed: early (minutes–hours) and delayed (hours–days). Diagnosis is challenging due to similarity to stroke, acute coronary syndrome, or infection. Management relies on early recognition, stabilization, differential diagnosis, and prevention of recurrence.

Conclusions. Although extremely rare adverse reactions to iodine-based contrast media occur infrequently, their early recognition is critical for patient safety. In clinical practice, greater attention should be paid to the timing of symptom onset after contrast administration, recognition of warning signs, proper documentation, and interdisciplinary collaboration.

INNOVATIONS AND BEST PRACTICES IN PALLIATIVE CARE IN THE CONTEXT OF DAY HOSPITAL SERVICES

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Relevance. Day hospice is a form of palliative care services for patients who require complex care, but do not require permanent inpatient hospitalization. This model allows patients to receive medical, nursing, psychological, social and spiritual support during the day, and return home in the evening. **Problem.** Although day hospices have been operating in the United Kingdom, Ireland, Germany and Australia for several decades, it's still lacking scientific evidence of their clinical effectiveness.

The aim of the study is to review the scientific literature on day hospice as a form of palliative care.

Key findings. Day hospice services improve patients' emotional well-being and social inclusion, but objective clinical indicators do not always change significantly (Higginson et al., 2003; Terjung et al., 2021). An interdisciplinary team-based day hospice model significantly improves symptom control and quality of life compared to usual outpatient care (Marret et al., 2021). Implementation of day hospice in clinical practice allows for comprehensive medical, nursing and psychosocial care in one place (Marret et al., 2023). The implementation of good practices depends on team training, clear protocols and involvement of nurses in decision-making (van Riet Paap et al., 2015). Early integration of palliative care into oncology care improves patients quality of life and emotional state (Ferrell et al., 2017). The effectiveness of palliative care depends on systematic symptom assessment, coordinated team care, and access to services, which are essential components of the day hospice model (Hui and Bruera, 2016).

Conclusions. A form of day palliative care that provides emotional, social and comprehensive medical care to patients and their families. The development of these services may reduce the need for inpatient care and improve the accessibility of services in Lithuania. In order to substantiate the effectiveness of the model, further empirical research and the development of standardized quality indicators are necessary.

PROFESSIONAL IMAGE AND PUBLIC PERCEPTION OF NURSING IN SOCIETY

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The nursing profession is a key component of healthcare systems, based on a holistic approach to the patient and significantly contributing to the accessibility and quality of healthcare services. However, public perception of the nursing profession does not always accurately reflect nurses' functions, responsibilities, and professional status. Misinterpretation of the professional role may influence the formation of professional identity and the overall image of nursing in society.

Objective. To analyze the image and public perception of the nursing profession in society based on scientific literature.

Methods. A systematic literature review was conducted using the PubMed (Medline) database. The search was performed using keywords such as “nursing profession”, “professional image”, and “public perception”, and articles were selected according to predefined inclusion and exclusion criteria. Inclusion criteria comprised articles matching the search keywords, published in English, including empirical studies and literature reviews, with free full-text access, and focusing on the image of the nursing profession and public perception. Exclusion criteria included articles older than five years and studies not relevant to the research topic. A total of 104 publications were identified, of which 60 were selected based on publication year. After excluding studies without free full-text access, 39 publications remained, and following title screening, 25 articles were selected for full-text analysis. Finally, six publications meeting all criteria were included in the final analysis.

Results. Six studies met the inclusion criteria. The studies mainly examined the image of the nursing profession, professional recognition, evaluation of autonomy, and the role of media. The findings revealed that nurses are frequently associated with empathy and professionalism; however, they are less often perceived as autonomous healthcare professionals with decision-making authority. Media representation was found to reinforce traditional stereotypes, contributing to inconsistent perceptions of professional prestige.

Conclusions. Nurses are most often perceived as empathetic and professional; however, this perception is not always associated with high professional status or recognition of autonomy. The image and prestige of the nursing profession remain inconsistent due to persistent stereotypes and unfavorable media portrayal, although temporary improvement was observed during the pandemic period. Further efforts are needed to strengthen public awareness and recognition of nursing autonomy.

MATERNAL VITAMIN D STATUS AND RISK OF GESTATIONAL DIABETES MELLITUS: A SYSTEMATIC REVIEW

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Background. GDM affects 7-20% of pregnancies worldwide and is linked to preeclampsia, macrosomia, cesarean delivery, and future type 2 diabetes. Vitamin D has been implicated in glucose metabolism, insulin secretion, and inflammation regulation, yet deficiency affects 40-90 % of pregnant women in some regions. Identifying this modifiable risk factor supports evidence-based efforts to reduce the population level burden of GDM.

Methods. A systematic review of observational studies, cohort studies, and RCTs published from 2010 to 2026 was conducted using PubMed. Included studies assessed maternal serum 25(OH)D levels, supplementation interventions, and GDM related outcomes across singleton and high-risk pregnancies. Outcomes included GDM incidence, insulin resistance (HOMA-IR), fasting glucose, birth weight, APGAR scores, and NICU admissions. Studies were also evaluated for relevance to nursing and interdisciplinary prenatal care protocols.

Results. Low maternal vitamin D was consistently associated with increased GDM risk, higher fasting glucose, elevated insulin resistance, and adverse neonatal outcomes. Meta analyses indicated up to a twofold increased GDM risk in deficient women. Supplementation improved metabolic markers, though RCTs showed mixed effects on prevention. Proposed mechanisms include impaired β -cell function, reduced insulin secretion, and inflammatory pathway activation.

Conclusion. Maternal vitamin D deficiency may increase GDM risk and worsen neonatal outcomes. Early screening and supplementation targeting serum 25(OH)D \geq 30 ng/mL could support glucose regulation and neonatal health. GDM also carries a broader social burden raising long term type 2 diabetes risk in mother and child and increasing healthcare costs. Integrating vitamin D screening into interdisciplinary prenatal care involving nurses, midwives, and public health practitioners is a practical evidence based strategy for improving maternal and societal well-being. Further, large scale RCTs are needed to confirm causality.

EFFECT OF EXERCISE ON PSYCHOSOCIAL OUTCOMES AMONG BREAST CANCER SURVIVORS

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Background. Breast cancer is the most common cancer among women worldwide and is associated with significant psychosocial burden. It represents a growing public health concern. The rising number of survivors places increasing demand on healthcare systems. Studies report the global prevalence of depression among breast cancer patients, with anxiety, fatigue, sleep disturbances, and fear of recurrence further diminishing psychosocial well-being and long-term recovery. Exercise has been proposed as an accessible, non-pharmacological strategy to address these outcomes.

Methods. A narrative literature review was conducted to evaluate the effects of exercise on psychosocial outcomes in women with breast cancer. PubMed and Scopus were used to identify relevant studies published between 2010 and February 2026. Studies were included if they examined structured exercise programs and reported psychosocial outcomes. Extracted data included intervention type, duration, intensity, and psychosocial outcomes.

Results. Evidence from multiple studies indicated that exercise interventions—including aerobic training, resistance training, multicomponent exercise programs, and mind–body practices such as yoga and tai chi—were associated with improvements in psychosocial outcomes. Reported benefits included reductions in depression, anxiety, fatigue, perceived stress, and fear of cancer recurrence. Improvements in quality of life were reported across validated instruments including the Short Form Health Survey (SF-36), Functional Assessment of Cancer Therapy–General (FACT-G), Functional Assessment of Cancer Therapy–Breast (FACT-B), and the European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30). Multicomponent exercise programs combining aerobic and resistance training demonstrated the most consistent benefits.

Conclusion. Exercise is an effective non-pharmacological intervention for improving psychosocial health and quality of life among breast cancer survivors. Integrating structured exercise into interdisciplinary survivorship care may enhance psychological well-being and long-term recovery across healthcare systems.

NEUROVASCULAR CONFLICT PARADOX: EXPLAINING CLINICAL–RADIOLOGIC DISSOCIATION IN HYPERACTIVE CRANIAL NERVE SYNDROMES

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Background. Trigeminal neuralgia (TN), hemifacial spasm (HFS), and glossopharyngeal neuralgia (GPN) impose a profound social burden: over 60% of TN patients receive misdiagnoses before correct identification, frequently undergoing unnecessary dental procedures, HFS disrupts social life in approximately 90% of patients, and over one-third of TN patients report active suicidal ideation. These conditions are attributed to neurovascular compression (NVC), whereby a blood vessel contacts a cranial nerve at its root entry or exit zone, causing focal demyelination and abnormal excitability. MRI is used to identify vessel–nerve relationships, yet neurovascular contact is frequently detected in asymptomatic individuals, and bilateral contact is common despite unilateral symptoms indicating that contact alone does not determine clinical significance.

Aim. To identify which anatomical imaging features distinguish symptomatic from clinically silent NVC across TN, HFS, and GPN, and thereby establish an evidence-based imaging framework to guide surgical patient selection and reduce harm from diagnostic error.

Methods. A structured PubMed and Scopus search identified 81 studies, included in a qualitative synthesis, examining NVC imaging features, symptomatic versus asymptomatic comparisons, and intraoperative correlation. Representative images from Georgian neurosurgical cases are provided as illustrative examples.

Results. Simple contact showed limited diagnostic specificity given its frequent occurrence in asymptomatic individuals. Compression at the root entry or exit zone and structural nerve changes including indentation, displacement, or atrophy were consistently associated with symptomatic disease and correlated with intraoperative findings and MVD outcomes.

Conclusion. The clinical significance of NVC depends on contact location and structural nerve deformation, not vascular contact alone. Evidence-based patient selection guided by these structural imaging criteria offers a direct pathway to reducing diagnostic delay, unnecessary procedures, psychiatric comorbidity, and the social isolation and employment loss documented in this population directly translating neuroimaging evidence into measurable social well-being outcomes.

TEMPORAL DYNAMICS OF INTERLEUKIN-6 IN ACUTE ANEURYSMAL SUBARACHNOID HEMORRHAGE: AN EVIDENCE-BASED SYSTEMATIC REVIEW FOR PUBLIC HEALTH APPLICATIONS

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Background. Aneurysmal subarachnoid hemorrhage is a major cause of stroke-related mortality and disability in Europe, contributing significantly to the public health burden. Interleukin-6 is a key proinflammatory cytokine involved in post-hemorrhagic neuroinflammation. Elevated cerebrospinal fluid and serum levels have been associated with delayed cerebral ischemia and poor outcomes; however, their temporal profile and clinical applicability remain incompletely defined. Objective: To systematically synthesize evidence on the temporal dynamics of interleukin-6 in acute aneurysmal subarachnoid hemorrhage and evaluate its relevance for evidence-based risk stratification and clinical decision-making.

Methods. PubMed, Embase, and Web of Science were systematically searched for studies reporting interleukin-6 levels in cerebrospinal fluid or serum. Clinical and experimental studies addressing temporal, mechanistic, or prognostic aspects were included. Data extraction focused on biomarker kinetics, peak time windows, and associations with outcomes. Due to heterogeneity, findings were synthesized narratively, with meta-analysis considered where appropriate.

Results. Evidence demonstrates stage-dependent interleukin-6 dynamics, with early elevation linked to initial brain injury and later peaks associated with delayed ischemic complications.

Conclusion. These findings support the potential of interleukin-6 as a stage-specific biomarker and highlight its role in bridging the gap between evidence and clinical practice, contributing to improved risk stratification, optimized resource allocation, and public health strategies in stroke care.

ANALYSIS OF PATIENT NEEDS AFTER SPINAL SURGERY

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Spinal cord injury, caused by strong and rapid movements of the whole body, significantly changes a person's usual lifestyle, worsens quality of life, and is one of the most common nursing problems. Objective – to analyze patient needs after spinal surgery.

Methods. A questionnaire survey was conducted in 2022. The study included 121 participants. The following were assessed: independence, physical activity, and well-being using 5-point Likert scales.

Results. It was found that 63.4% of those performing physical (dynamic, mixed) work and 74.0% of those performing physical (static, sedentary) work experience spinal injury. In the group of participants over 60 years old, compared to those under 60, the number who had experienced back injuries was 89.3% higher ($p < 0.01$). For 45.4% of respondents, movement was more often impaired due to pain intensity in the buttocks compared to those who felt pain in that area less frequently ($p = 0.001$). Pain intensity affected independence when performing light spinal movements (76.9%) and movements requiring greater muscle tension (67.8%) ($p < 0.05$). Before hospitalization, decreased independence and poor well-being (score of 1) were associated with impaired mobility. A total of 66.9% of participants rated their well-being as satisfactory (2 points), which was worsened by limb weakness and increased pain. After surgery, the majority (69.4%) experienced improved well-being due to reduced pain intensity to moderate levels (4–5 points) and changes in pain localization. Greater physical activity opportunities were observed in 80.0% of participants after lumbar spine surgery, while 63.3% of those after thoracic spine surgery did not have such opportunities ($p < 0.05$). It was found that 21.6% of male participants were more motivated, increased their physical activity, performed exercises with minimal assistance, had better well-being, and experienced lower pain intensity.

Conclusions

1. Patient needs include mobility, maintaining independence, and postoperative pain management. Pain intensity and location determine changes in well-being.
2. After spinal surgery, one-third of patients experienced temporary reductions in independence due to mobility limitations.

CORRELATION BETWEEN SERUM IMMUNOGLOBULIN E LEVELS AND GRADE III ADENOTONSILLAR HYPERTROPHY IN CHILDREN

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Adenoid and Adenotonsillar hypertrophy are common causes of upper airway obstruction in childhood. Although allergic inflammation has been suggested as a contributing factor, the relationship between clinical allergy and immunoglobulin E (IgE)-mediated sensitization remains unclear, particularly in regions with limited epidemiological data.

Objective. To evaluate the association between clinical allergic manifestations and total serum IgE levels in children with adenoid and/or adenotonsillar hypertrophy in the Adjara region of Georgia, thereby informing evidence-based diagnostic and management strategies in pediatric ENT practice.

Methods. This retrospective observational study included 17 children aged 3–12 years who underwent adenoidectomy or adenotonsillectomy between 2024 and 2025. All patients had clinically and instrumentally confirmed hypertrophy. Clinical allergy was determined based on medical history and parental reports. Preoperative total serum IgE levels were measured and interpreted using age-adjusted reference ranges. Descriptive statistical analysis was performed.

Results. Of the 17 children, 11 (64%) were male and 6 (36%) were female. Clinical allergic manifestations were identified in 8 children (47%), predominantly respiratory allergy (75%). Elevated total serum IgE levels were detected in 12 children (71%), while 5 children (29%) had IgE levels within normal limits. Among children with clinical allergy, 62.5% had elevated IgE, compared with 66.6% of children without clinically apparent allergy. The mean elevated total serum IgE level was 278.16 IU/mL. Increased IgE occurred at a similar frequency regardless of overt allergic manifestations.

Conclusion. Elevated total serum IgE is frequent in children with adenoid and adenotonsillar hypertrophy and is not restricted to those with clinically evident allergy. These findings suggest a possible role of subclinical IgE-mediated sensitization in adenoid hypertrophy and support consideration of allergic evaluation in pediatric patients with upper airway obstruction. Further studies with larger cohorts are needed to confirm these associations and strengthen the methodological basis.

THE ROLE OF NURSES IN PATIENT EDUCATION ON THE IMPORTANCE OF STATIN THERAPY IN CARDIOVASCULAR DISEASE PREVENTION: A LITERATURE REVIEW

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Introduction. Cardiovascular diseases (CVD) remain the leading cause of mortality in Europe, accounting for approximately 32% of all deaths. Statins represent a cornerstone in both the prevention and management of CVD, with evidence demonstrating that adequate adherence to statin therapy can reduce cardiovascular risk by up to 45%. Despite their proven effectiveness, medication adherence remains a significant challenge in clinical practice. Studies indicate that 11–53% of patients discontinue statin therapy within the first year after initiation. The most frequently reported reasons include concerns about adverse effects, often influenced by the placebo effect, as well as widespread misinformation in online sources. In this context, nurses play a pivotal role in patient education, support, and motivation to maintain long-term adherence to prescribed therapy.

Aim. To examine the role of nurses in educating patients about the importance of statin therapy in CVD prevention and to assess the impact of educational interventions on patients' knowledge, attitudes, and treatment adherence.

Methods. A systematic literature review was conducted in accordance with PRISMA guidelines. The search was performed in the PubMed, Scopus, Web of Science, Cochrane Library, and European Society of Cardiology (ESC) databases, covering sources published between 2021 and 2026. The following keywords were used: “statin,” “nursing interventions,” “medication adherence,” and “elderly.” Inclusion criteria comprised articles published within the last five years, with freely available full texts, examining the role of nurses in patient education on the importance of statin use. Study quality was assessed using the NOS and SIGN methodologies, and the level of evidence was determined according to the GRADE system. A total of 10 sources were included in the final analysis.

Results. Nurses act as information mediators, translating complex medical information (often presented at an 11th-grade level) into a level understandable at approximately the 6th-grade level. Effective interventions include individual consultations, telephone follow-up, and reminder systems. Education on the pleiotropic effects of statins (e.g., protection against venous thromboembolism and potential neuroprotective effects) increases patient motivation. Additionally, simplifying treatment regimens through the use of fixed-dose combinations has been shown to be effective.

Conclusions. Nurses play a significant role in reducing the gap between clinical recommendations and actual patient behavior. The integration of standardized educational protocols and the promotion of interdisciplinary collaboration can improve treatment continuity and contribute to the reduction of CVD mortality.

NURSING NEEDS OF PATIENTS AFTER LUMBAR SPINE SURGERY

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Surgical patients often face physical difficulties, pain, and limited mobility, which increase the likelihood of complications.

Objective – to identify patients’ nursing needs after lumbar spine surgery.

Methods. The study was conducted in 2025. A patient survey was distributed on the social media platform in the group “Spinal Herniation.” A total of 156 respondents participated in the study. Patients’ nursing needs related to mobility and physical activity, pain management, and self-care were assessed. Pain intensity was assessed using the Visual Analogue Scale. Aspects of self-care, mobility and physical activity were assessed using a 5-point Likert scale.

Study results. It was found that patient gender had no effect on clinical indicators or the reason for surgery, nor on the frequency of postoperative complications ($p = 0.598$). Subjects older than 55 years rated their pain higher ($p = 0.008$). About half of the operated subjects reported pain in the lumbar region, one-third felt pain around the postoperative incision site, and one-eighth in the thighs and buttocks. A correlation was found between age and nursing care needs after surgery among subjects older than 65 years; these needs were more frequent in daily activities: during physical activity (changing body position, starting to move), and during hygiene procedures ($p = 0.002$). The frequency of complications increased with age. Participants over 65 years of age experienced them in 25% of cases, while those under 45 years of age experienced them in 12% of cases ($p = 0.042$). The level of independence varies depending on education. Upon discharge, participants with a higher education level more frequently reported lower nursing care needs than those with a lower education level.

Conclusions

1. The nursing needs of operated subjects are multifaceted and include pain and physical aspects. Most subjects reported more frequent nursing needs as they regained mobility and independence.
2. A need for pain management was identified in most of the operated subjects, regardless of the location of the pain.

THE ROLE OF THE NURSE IN POLYPHARMACY AND MEDICATION MANAGEMENT IN OLDER ADULTS: A LITERATURE REVIEW

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Introduction. With the rapid aging of the population, polypharmacy (≥ 5 medications used concurrently) is observed in approximately 40–45% of individuals aged 65 years and older. According to B. Neuman’s systems model, it is considered a complex stressor that increases the risk of destabilization of the patient’s system. When ≥ 7 medications are used, the risk of adverse drug reactions (ADRs) can reach up to 82%, thereby increasing the frequency of hospitalizations and medication-related problems (MRPs). A particularly vulnerable period is transitional care (hospital-to-home), during which discrepancies in medication lists may occur.

Aim. To analyze the role of the nurse in polypharmacy and medication management among older adults.

Methods. A systematic literature review was conducted in accordance with PRISMA guidelines. The search was performed in the PubMed, CINAHL Ultimate, and EBSCO Host databases, covering publications from 2021 to 2026. The following keywords were used: “polypharmacy,” “nursing interventions,” “medication management,” “medication adherence,” and “elderly.” Inclusion criteria were articles published within the last five years, with freely available full texts, examining the role of nurses in medication management among older adults. A total of 17 sources were included in the analysis.

Results. The prevalence of polypharmacy is associated with multimorbidity and fragmented care. Nurses play a coordinating role by performing medication reconciliation, providing patient education, improving treatment adherence, and facilitating early identification of risks. Effective interventions include individual consultations, regimen simplification, and technological solutions. Automated dosing systems (e.g., Apodos) increase adherence (up to 98%) and reduce the likelihood of errors. Nurses also play an important role in recognizing prescribing cascades. However, the effectiveness of these interventions is limited by non-integrated electronic systems and unclear distribution of responsibilities.

Conclusions. Nurse involvement is a key factor in ensuring safe medication management and reducing the prevalence of MRPs. Coordinated care, standardized interventions, and the integration of technologies improve continuity of treatment and patients’ quality of life.

UV FILTERS IN SUNSCREENS AS EMERGING POLLUTANTS: ENVIRONMENTAL AND HUMAN HEALTH IMPACTS

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The increasing use of sunscreen products leads to the release of ultraviolet (UV) filters into the environment, which are increasingly recognized as emerging contaminants. These substances enter aquatic ecosystems through recreational activities and wastewater, raising concerns about their environmental persistence, bioaccumulation, and potential toxic effects.

The theoretical framework of this study is based on principles of environmental chemistry and human health risk assessment, specifically aiming to evaluate the toxicological pathways of these contaminants to ensure evidence-based environmental safety. The research focuses on three organic UV filters: butyl methoxydibenzoylmethane (CAS 70356-09-1), octocrylene (CAS 6197-30-4), and benzophenone-3 (CAS 131-57-7). These compounds were selected for analysis because they have been included in the mandatory monitoring of water bodies since 2022, reflecting their status as priority substances of environmental and public health concern.

The research design is based on a systematic review and analysis of environmental monitoring data, covering the 2022–2026 period. Data were collected from peer-reviewed sources reporting the occurrence, environmental distribution, and ecotoxicological effects of these compounds. Applied methods include comparative analysis and synthesis of scientific data, considering analytical techniques such as HPLC and LC-MS/MS.

Results indicate that these UV filters are frequently detected in surface waters and sediments, with octocrylene demonstrating significant bioaccumulative properties in aquatic biota. Furthermore, these substances may act as endocrine-disrupting compounds, with benzophenone-3 specifically linked to potential risks to human health through dermal absorption and long-term exposure.

The findings emphasize the need for improving legal regulations and developing advanced wastewater treatment technologies to protect public health and ecological integrity.

IN MATERNAL AND PERINATAL HEALTHCARE SETTINGS, HOW DOES THE IMPLEMENTATION OF CONTINUOUS QUALITY IMPROVEMENT (CQI) INITIATIVES UTILIZING STANDARDIZED EVIDENCE-BASED SAFETY BUNDLES COMPARE TO STANDARD CARE IN REDUCING THE INCIDENCE OF PREVENTABLE SEVERE MATERNAL MORBIDITY (SMM) AND MORTALITY?

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Background: Severe maternal morbidity and mortality remain critical global public health challenges. Despite a 40% global decline in the maternal mortality ratio between 2000 and 2023 from 328 to 197 deaths per 100,000 live births progress has stalled since 2016, leaving many countries at risk of failing to meet SDG targets. Most complications remain preventable through improved obstetric care. Continuous quality improvement (CQI) initiatives and standardized maternal safety bundles represent key evidence-based strategies to enhance maternal outcomes.

Objective: To evaluate the impact of CQI initiatives using standardized maternal safety bundles on preventable severe maternal morbidity and maternal mortality.

Methods: A structured literature search was conducted across PubMed and Scopus databases for studies published between 2010 and 2026. PubMed yielded 297 results and Scopus yielded 965 records. After removing duplicates and screening titles, abstracts, and full texts using predefined criteria, 20 studies on maternal safety bundle implementation within CQI frameworks were included.

Results: Studies focused on major maternal complications, particularly postpartum hemorrhage and hypertensive disorders. In a large state perinatal quality collaborative of 99 hospitals encompassing 256,541 annual births, implementation of a national hemorrhage safety bundle was associated with a 20.8% reduction in severe maternal morbidity among women with hemorrhage, compared with only a 1.2% reduction in non-participating hospitals ($P < .0001$). A systematic review further confirmed that postpartum hemorrhage treatment bundles reduced composite severe morbidity with a risk ratio of 0.40 (95% CI: 0.32–0.50). CQI strategies including staff training, standardized protocols, audit feedback, and emergency preparedness consistently improved adherence to evidence-based practices and early recognition of emergencies.

Conclusion: CQI initiatives combined with maternal safety bundles significantly improve evidence-based obstetric care and maternal outcomes, offering practical value for interdisciplinary efforts to strengthen health systems and promote social well-being.

EXPRESSION OF SELF-REGULATION AND SOCIAL INTERACTION THROUGH THE USE OF ART THERAPY METHODS FOR CHILDREN WITH ACTIVITY AND ATTENTION DISORDERS

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Theoretical basis: Self-regulation plays a very important role in child development, as the ability to recognize and regulate one's feelings and emotions and understand how they affect one's behavior is one of the most important skills for successful social and academic development. Children with attention deficit and hyperactivity disorder (ADHD) often experience difficulties with self-regulation and social interaction. Art therapy can help strengthen these skills.

Research objective: to reveal the peculiarities of social interaction and self-regulation in children with attention deficit hyperactivity disorder using art therapy methods.

Research design: the theoretical part is analyzed from a systemic perspective. Based on scientific sources, the relationship between self-regulation, social interaction, and ADHD is revealed. It is presented how art therapy improves a child's ability to concentrate and create cooperative relationships in a social group.

Research methods: analysis of scientific sources.

Description of experience: The researcher's experience shows that only by analyzing, comparing and systematizing scientific experience about the characteristics of self-regulation and social interaction expression in children with ADHD can further assumptions be made for practical research.

Results: Scientific literature and various scientific studies reveal the problems of self-regulation and social expression characteristic of attention deficit hyperactivity disorder, as well as the consequences that arise in various social spaces of the child. Systematic analysis of scientific literature sources expands the social worker's theoretical field of knowledge and practical possibilities to apply the art therapy method as a possible intervention in social work practice.

ORGANIZATIONAL SUPPORT AND JOB SATISFACTION AS PROTECTIVE FACTORS AGAINST PROFESSIONAL BURNOUT AMONG EMPLOYEES WORKING WITH INDIVIDUALS WITH INTELLECTUAL DISABILITIES

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Theoretical background and relevance. It has been established that professional burnout is particularly common of representatives of professions that involve constant interpersonal communication, including those working with individuals with intellectual disabilities (Diržytė, Berniūnienė, 2010). In an effort to protect themselves from emotional stress, employees begin to distance themselves from the people they serve and from their pain and suffering, thus becoming insensitive, inhumane, indifferent, cynical, and harsh (Maslach, 2011), Social support in the organization is considered an important protective factor in the fight against burnout (Jusic, 2021; Irhanu et al., 2026; Lindblom et al.; Halbesleben, 2006). The following factors of job satisfaction are most commonly analyzed: salary, career opportunities, working conditions, job characteristics, intrinsic satisfaction from performing work, and appropriate authority (Parker & Wall, 2012; Sharma & Bajpai, 2011; Deshwal, 2011; Mehboob, Arif & Jalal, 2013).

Aim of the study. To examine occupational burnout among employees working with individuals with intellectual disabilities and its associations with job satisfaction and organizational support.

Study sample. The study involved 169 respondents working with people with intellectual disabilities in institutions providing social services.

Study instruments and methods. A questionnaire was used in the study, consisting of the professional burnout scale from the long version (LONG COPSOQ II questionnaire, 2007), a scale measuring supervisor support in the organization (Eisenberger, Huntington, Hutchison & Sowa, 1986), and questions designed to assess aspects of job satisfaction. A correlational research strategy was selected for the study.

Conclusions. The results revealed the importance of supervisor support and job satisfaction, as well as its individual aspects, in reducing professional burnout.

THROUGH COLORS, CONNECTION, AND MOVEMENT: THE POWER OF THERAPEUTIC EXPERIENCES IN WORKING WITH INDIVIDUALS WITH DISABILITIES

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Theoretical background. Canine-assisted therapy, hippotherapy and art therapy are increasingly recognized as evidence-based complementary interventions in rehabilitation for individuals with disabilities. Research highlights their positive effects on psychological well-being, social functioning, and physical outcomes.

Aim. To present the integration of canine-assisted therapy, hippotherapy and art therapy in practice when working with individuals with disabilities.

Methods / Practical experience. The study is based on practical experience implemented at the Varėna Social Services Centre. Canine-assisted therapy is used to enhance social interaction and emotional regulation. Lithuanian research demonstrates improved emotional and social functioning following animal-assisted interventions (Ustilaitė et al., 2018), while international evidence confirms benefits for individuals with autism spectrum disorder (O’Haire, 2013). Hippotherapy is applied to improve balance, coordination, and functional mobility. Lithuanian studies report positive effects on motor function and motivation (Grockienė et al., 2018), and international research shows improved balance and functional independence in children with Down syndrome (Kaya et al., 2023). Art therapy is used to promote emotional expression and self-regulation. Lithuanian research highlights its relevance in rehabilitation contexts (Jurgėlaitė, 2023), while international meta-analyses demonstrate reduced anxiety and improved psychological well-being (Reynolds et al., 2000).

Results. The application of these methods shows increased client engagement, improved emotional well-being, enhanced social interaction and observable improvements in motor and communication skills, consistent with empirical research.

Conclusions. The integration of these therapies provides a holistic approach addressing physical, emotional, and social needs. These methods have significant practical value in social care and contribute to improving the quality of life of individuals with disabilities.

EVIDENCE-BASED COGNITIVE BEHAVIORAL THERAPY METHODS IN SOCIAL WORK PRACTICE

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Theoretical Framework. Cognitive Behavioral Therapy (CBT) is a widely applied and empirically supported psychotherapeutic approach, emphasizing the interrelationship between thoughts, emotions, and behavior. According to the CBT model, emotional and behavioral responses are determined not by situations themselves, but by their cognitive appraisal. This perspective is highly relevant to social work practice, which focuses on enhancing clients' psychosocial functioning and supporting adaptive change. Empirical evidence indicates that negative automatic thoughts and cognitive distortions contribute to emotional distress and are strongly associated with depression and anxiety.

Objective. The aim of this paper is to present evidence-based CBT methods and to examine their applicability in social work practice.

Methods. The study is based on a theoretical analysis of scientific literature and a review of practice-oriented interventions. It focuses on key CBT techniques, including cognitive reappraisal, identification of cognitive distortions, and the application of the cognitive cycle.

Results / Insights. The findings suggest that these methods can be effectively integrated into social work practice as structured psychosocial interventions. They facilitate clients' understanding of cognitive, emotional, and behavioral interactions, promote the identification of dysfunctional thinking patterns, and support the development of more adaptive interpretations.

Conclusions. The integration of CBT methods into social work practice enhances intervention effectiveness, strengthens self-awareness and emotional regulation, and contributes to improved psychological well-being and long-term resilience.

ANALYSIS OF THE AGEING SITUATION IN KUPIŠKIS DISTRICT: DEMOGRAPHIC CHALLENGES AND THE NEED FOR SOCIAL SERVICES

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Theoretical background. Population ageing is one of the most significant contemporary demographic processes, directly affecting social service systems and community life. Drawing on the World Health Organization's (WHO) concept of healthy and active ageing, ageing is understood as a multidimensional process of biological, psychological and social change, rather than a pathological condition. This concept emphasises the maintenance of functional capacity, social inclusion and independence as essential determinants of quality of life in older age.

Aim and methods. The aim of this presentation is to share the findings of an analysis of the ageing situation in Kupiškis district, revealing demographic trends and their impact on the need for social services. The following methods were applied: analysis of scientific literature and documents, analysis of statistical data.

Main findings. Clear population ageing trends are observed in Kupiškis district: the total number of residents is steadily declining, while those aged 65 and over account for approximately one quarter of the district's population, exceeding the Lithuanian national average of around 21 per cent. Negative natural population change and the migration of young, working-age residents are accelerating these processes, particularly in rural areas, where older residents make up nearly one third of the population. The main systemic challenges are limited accessibility of social services, a shortage of qualified specialists and insufficient financial resources.

Conclusions. The rapidly ageing population of Kupiškis district calls for differentiated social policy, stronger inter-institutional collaboration and the development of preventive community-based services. Particular attention should be directed towards rural areas, where ageing processes are most intense and access to services remains most limited.

USE OF ARTIFICIAL INTELLIGENCE IN MEDICAL EDUCATION: STUDENT AND FACULTY PERSPECTIVES ON ITS ROLE IN DEVELOPING EVIDENCE-BASED PRACTICE

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The development of artificial intelligence (AI) tools is transforming higher education, including medicine. Although AI can support learning, its increasing use in academic writing raises concerns related to academic integrity, critical thinking, and evidence-based clinical decision-making. Previous studies suggest that relying on AI tools reduces students' ability to independently write and critically synthesise academic text. Usage of AI and academic honesty are particularly significant in medicine, as inaccurate or misinterpreted information may impact future clinical practice.

This study aimed to explore medical students' and faculty members' perspectives on the use of AI tools in academic writing and their impact on evidence-based practice. A mixed-method approach was used between January-March 2026 at Vilnius University, involving a student survey (N=162) and faculty interviews (N=35), all being members of Faculty of Medicine, completing academic writing tasks, familiar with AI. Students were surveyed anonymously about their AI usage, awareness of institutional guidelines, and perceived benefits and risks. Faculty participated in semi-structured interviews discussing their experiences evaluating student work, identifying AI-generated content, and ensuring academic integrity.

Preliminary results show that AI tools are widely used for information searching, text structuring, and language editing, with 61% of students using them in the past quarter. Faculty members acknowledge AI tools benefits but express concerns about inaccurate information, fabricated references, and reduced critical engagement with scientific sources. While many respondents emphasize the need for clearer institutional guidelines and educational strategies for responsible use of AI, 69% of students did not attend AI tool training organised by the University.

Therefore, while AI tools can be leveraged to supplement one's work at the planning and outlining stages, they should not be used for text and reference generation as it is prone to errors. The findings highlight the importance of integrating AI literacy into medical education to support evidence-based practice while maintaining academic integrity.

FROM GLYCEMIC CONTROL TO PSYCHOSOCIAL WELL-BEING: CONTINUOUS GLUCOSE MONITORING AS AN EVIDENCE-BASED DIGITAL HEALTH INNOVATION

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Theoretical Background. Continuous Glucose Monitoring (CGM) constitutes a digital health innovation that transforms type 1 diabetes management from episodic glucose testing into continuous, data-driven self-regulation. Within the framework of evidence-based practice and innovation impact assessment in public health, digital technologies should be evaluated not only for their biomedical efficacy but also for their psychosocial and societal implications. Although randomized controlled trials have demonstrated improvements in glycemic control associated with CGM use, the broader influence of CGM on diabetes-related distress, psychological well-being, and social functioning remains insufficiently explored, particularly in national population-based contexts.

Study Design and Methods. The study draws on data from a national cross-sectional survey of adults with type 1 diabetes in Lithuania. Validated psychometric instruments were used to assess diabetes-related distress and psychological well-being. Participants were stratified according to CGM use. Comparative statistical analyses and multivariate regression models were employed to examine associations between CGM utilization and psychosocial outcomes while controlling for sociodemographic and clinical variables.

Results and Implications. CGM use was significantly associated with lower levels of diabetes-related distress and higher well-being scores. These findings suggest that CGM functions not only as a monitoring technology but also as an evidence-based digital self-management intervention that enhances perceived control, reduces emotional burden, and supports adaptive coping. By linking improved psychosocial outcomes with potential gains in social participation and quality of life, the study contributes to the broader discourse on how digital health innovations may strengthen both individual health outcomes and societal well-being within national public health systems.

THE ROLE OF DIGITAL COMMUNICATION AND ARTIFICIAL INTELLIGENCE TOOLS IN SHAPING A CULTURE OF EVIDENCE-BASED PRACTICE IN HIGHER EDUCATION INSTITUTIONS

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Theoretical Background Evidence-based practice (EBP) is defined as the integration of the best available scientific evidence, professional expertise, and service users' needs in decision-making processes (Sackett et al., 1996). In higher education, the development of EBP competencies is closely associated with active learning approaches, critical thinking, and the ability to systematically analyze information (Biggs & Tang, 2011). Theories of digital communication highlight that knowledge creation and dissemination increasingly occur through interactive, technology-mediated environments that shape learning processes and decision-making. The rapid development of artificial intelligence (AI) tools further expands these possibilities by enabling personalized, data-driven, and adaptive learning (Holmes et al., 2022; Garzón et al., 2025). Based on constructivist learning theory and innovation diffusion theory (Rogers, 2003), this paper aims to analyze the role of digital communication and AI tools in fostering an EBP culture in higher education.

Research design and methods. The study adopts a theoretical and conceptual research design based on a structured literature review and comparative analysis of EBP education, digital communication processes, and AI applications in higher education. Conceptual synthesis and analytical modeling are applied to develop an integrated theoretical framework.

Results. The study proposes a conceptual model explaining how digital communication platforms (e.g., learning management systems, scientific databases, collaboration tools) and AI-based solutions (e.g., adaptive learning systems, data analytics, decision-support systems) enhance students' abilities to communicate, interpret, and apply scientific evidence. The integration of these tools strengthens critical thinking, data literacy, and reflective communication practices as key components of an EBP culture.

Practical implications. The findings highlight the importance of integrating digital communication and AI tools into curricula and teaching strategies to systematically develop EBP competencies among future health and social care professionals.

BRIDGING ERGONOMIC EVIDENCE AND PRACTICE IN MANUAL HEALTH PROFESSIONS: EDUCATIONAL AND ORGANISATIONAL GAPS IN PREVENTION

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Background. Work-related musculoskeletal disorders (WMSDs) are still one of the most common health issues in manual health professions. Most authors agree that awkward/static postures, repetitive movements, forceful tasks, high workload, and insufficient recovery contribute most to the ergonomic burden. However, physical loading cannot explain why problems persist despite prevention efforts to date. Evidence is mounting that insufficient knowledge integration during vocational education, fragmented prevention concepts in the workplace, and a lack of organizational support are key barriers to prevention.

Methods. This study reviewed the scientific literature of the last ten years, using databases such as PubMed, Scopus, Web of Science and other officially approved databases. Only articles published in peer-reviewed journals that are ranked at Q1 or Q2 level were used in the analysis. A literature review was conducted to assess ergonomic risk factors and prevention strategies in hand health professions. The articles were analyzed according to three related aspects: recurring physical risk factors, reported prevention strategies and gaps in knowledge transfer for professional training and work organization. The **aim** was to review not only what is known about ergonomic burden, but also why it has not been sufficiently applied in practice to date.

Experience in practice. Professionals helping others with their movement and wellbeing are often working under conditions that might cause cumulative overload themselves. Posture correction or individual efforts to manage pain/discomfort often seem to be the last resort in prevention efforts seen in practice. Time constraints, repetitive tasks, lack of space, an intense workload, and organisational climate dominate the reality of most work settings. This mismatch might be the cause of the gap between what professionals know and what they can apply in daily work.

Main results. The review showed that physical ergonomic risk factors in manual health professions are no longer poorly understood. However, studies also suggest that prevention that focuses solely on one component does not lead to sustained improvements. Combining ergonomics education, exercise/stretching programs, worker participation in prevention planning, and objective assessment techniques (e.g., wearables) showed greater promise. Psychosocial and organizational factors are still rarely considered, although they likely affect both the accumulation of risk and the sustained success of prevention efforts.

Conclusion. In summary, the problem does not seem to be a lack of knowledge about the risks, but a gap between this knowledge and its application in daily work and education. About the author. With a background in physiotherapy and therapeutic massage, as well as a career in vocational training and management, she brings an interdisciplinary approach to manual labor professions. Her research interests also include work ergonomics, prevention of physical fatigue, professional sustainability, and organizational measures that can protect the health of professionals.

MINDFULNESS AS A STRATEGY FOR NURSES' AND SOCIAL WORKERS' SELF-CARE AND PROFESSIONAL VALUES DEVELOPMENT

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Introduction. Scientific research indicates that mindfulness-based interventions contribute to psychological resilience, stress management, and work effectiveness among healthcare and social service professionals. Mindfulness also has an educational dimension that fosters self-awareness, self-care, and the development of professional values.

The aim of this study is to examine the applicability of mindfulness practices for self-care and the development of professional values among nurses and social workers.

Methods. This study adopts an integrative literature review design, combining literature analysis with conceptual and philosophical analysis. Peer-reviewed articles were included based on the following criteria: publication within the last ten years; focus on the application and effects of mindfulness in relation to self-care among nurses and social workers; trainings lasting at least eight weeks. A total of 19 articles meeting these criteria were analysed. Philosophical analysis was employed to provide a theoretical foundation for linking the value-based principles of mindfulness with the professional values of social workers and nurses.

Results. The analysis of selected studies indicates that mindfulness training contributes to positive changes in present-moment awareness, professional functioning, and self-care. The reviewed studies consistently report reductions in burnout and work-related stress among both nurses and social workers. In addition, mindfulness-based interventions are associated with improved emotional regulation and more reflective professional practice. The conceptual and philosophical analysis further reveals that mindfulness values support the development of core professional values shared by these professions, including empathy, compassion, and respect for human dignity.

Conclusions. No significant differences were found between social workers and nurses in the application of mindfulness strategies. Although mindfulness is widely recognized as an evidence-based practice for self-care, a narrow focus on its psychological effects risks overlooking its broader ethical significance in shaping professional values and guiding reflective practice in nursing and social work.

RECENT ADVANCES IN ARTIFICIAL INTELLIGENCE FOR ULTRASOUND DIFFERENTIATION OF UTERINE LEIOMYOMA AND SARCOMA: A LITERATURE REVIEW (2019–2025)

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Introduction. Uterine leiomyomas are the most common benign tumors of the female reproductive system, whereas leiomyosarcomas are rare but aggressive malignancies. Preoperative differentiation remains challenging due to overlapping clinical and imaging features. Ultrasound, as the first-line and most accessible imaging modality, plays a key role in evidence-based and equitable diagnostic pathways.

Aim. To evaluate ultrasound-based differentiation of uterine leiomyoma and sarcoma and assess the added value of artificial intelligence (AI) in improving diagnostic accuracy and supporting evidence-based decision-making.

Methods. This review was conducted using a structured and reproducible approach informed by established principles of evidence synthesis. A systematic literature search was performed in PubMed and Google Scholar for studies published between January 2019 and March 2025. The search strategy combined controlled vocabulary and free-text terms, including “uterine leiomyoma,” “leiomyosarcoma,” “ultrasound,” “Doppler,” “artificial intelligence,” and “machine learning,” using Boolean operators (AND/OR).

Study selection was performed in two stages: title/abstract screening followed by full-text review, based on predefined eligibility criteria. Included studies comprised original research evaluating ultrasound morphology, Doppler characteristics, diagnostic performance, or AI-assisted analysis in differentiating uterine masses. Reviews, case reports, non-English publications, and studies lacking relevant imaging or outcome data were excluded.

Data extraction included study design, imaging features, diagnostic metrics, and AI methodologies. Findings were synthesized qualitatively with emphasis on clinical applicability, reproducibility, and contribution to evidence-based practice.

Results. Leiomyosarcomas more often present as heterogeneous masses with irregular margins, necrotic areas, and increased vascularity, although overlap with leiomyomas persists. Ultrasound shows moderate accuracy, with higher specificity than sensitivity. AI approaches demonstrate potential to improve risk stratification, though evidence remains limited.

Conclusion. Ultrasound remains fundamental but limited in differentiating uterine masses. AI integration may improve diagnostic accuracy, support evidence-based care, and contribute to better patient outcomes and broader health and social well-being.

MATHEMATICAL MODELS FOR CARDIOVASCULAR RISK ASSESSMENT AND REMOTE MONITORING IN PRIMARY CARE

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Background. Cardiovascular diseases remain the leading cause of mortality and disability worldwide, making early risk assessment and longitudinal follow-up essential in primary care. Telemedicine can expand access to care, but its effectiveness depends on clinically interpretable algorithms that support screening, monitoring, and timely escalation of care.

Objective. To assess the role of mathematical models in cardiovascular risk assessment and remote monitoring in primary care and to define the practical contributions of logistic regression, Markov modeling, and decision-tree analysis within an integrated telemedicine pathway.

Methods. This study was based on a structured review of publications on telemedicine, predictive analytics, cardiovascular risk assessment and remote monitoring in primary care. The framework integrated logistic regression for initial risk stratification, a Markov model for transitions between low-, intermediate-, and high-risk states, established cardiovascular disease, and death, and a decision-tree model for escalation of care according to clinically interpretable thresholds. Variables included age, blood pressure, body mass index (BMI), low-density lipoprotein cholesterol (LDL-C), oxygen saturation, sex, cardiac troponin I, and creatine kinase-myocardial band (CK-MB).

Results. Logistic regression was most suitable for initial assessment, the Markov model for longitudinal monitoring, and the decision-tree model for translating threshold-based findings into continued telemonitoring, scheduled clinical review, or urgent face-to-face assessment.

Conclusions. Sequential integration of these models may improve risk stratification, optimize telemonitoring intensity, support timely intervention, reduce preventable hospitalizations, and improve continuity and cost-effectiveness of care in resource-constrained primary care settings. The proposed sequence supports individualized probability estimation, dynamic state tracking, and operational triage, thereby linking predictive modeling with practical clinical decision-making in telemedicine-supported primary care. This framework is particularly relevant for settings with limited specialist access, fragmented follow-up, and high demand for scalable preventive care at scale.

THE ROLE OF MANAGEMENT IN FOSTERING SOCIAL INNOVATIONS IN SOCIAL SERVICE ORGANIZATIONS

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Theoretical background. The growing complexity of social problems, including inequality, poverty, and health-related needs, has increased the importance of social innovation in social service organizations. Traditional service delivery models are often insufficient to meet the diverse and changing needs of service users, especially those belonging to vulnerable social groups. In this context, social innovation is understood as an important means of improving service quality, accessibility, and responsiveness, while management plays a central role in creating organizational conditions for innovation. The theoretical background of the study is based on the concepts of social innovation, transformational leadership, and emotional intelligence, which emphasize trust-based relationships, employee empowerment, collaboration, and reflective professional practice.

Aim and methods. The aim of the study was to explore how management contributes to fostering social innovation in social service organizations. A qualitative research design was employed. Data were collected through interviews with five managers of social service organizations between September and October 2025. The data were analyzed using thematic analysis to identify key themes related to leadership practices, innovation processes, and organizational change.

Main findings. The findings revealed that management fosters social innovation by strengthening psychological safety, encouraging employee participation, supporting continuous learning, and promoting open communication. Innovation was more likely to emerge in organizations where leadership was collaborative, relational, and empowering rather than hierarchical and control-oriented. The results also showed that trust, shared responsibility, and supportive communication are important conditions for the development of innovation-oriented organizational cultures.

Conclusions. The study highlights the practical importance of leadership in strengthening the effectiveness of social services and promoting innovation-oriented organizational cultures. Management in social service organizations should therefore be understood not only as an administrative function, but also as a relational and value-based practice that enables sustainable innovation and organizational development.

CASE MANAGEMENT ANALYSIS OF UNEMPLOYED PERSONS IN THE UTENA DISTRICT: CHALLENGES, ISSUES, AND CASE MANAGER EXPERIENCES

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Scientific literature identifies social, economic, and psychological factors that determine long-term unemployment (Gutiérrez, Guill, 2000). The most common subjective causes include addictions, a passive lifestyle, health problems or limited participation, stigmatizing attitudes, indebtedness, and low mobility (Beržinskienė et al., 2010). Long-term unemployment increases the risk of social exclusion and dependency on social assistance (Pohlan et al., 2019).

Since 2022, Employment Promotion and Motivation Services have been included in and provided through Municipal Employment Promotion Programs. The aim of these services is to combine employment promotion services with the provision of financial social assistance and to ensure individualized support for persons who have been unemployed for a long time. In the Utena district, these services have been provided since 2022. The target group of service recipients includes beneficiaries of long-term unemployed persons, individuals experiencing social risk, persons with addictions, and individuals returning from correctional institutions. In the Utena district, within the framework of this program, 33% of participants (out of 70) were employed in 2023; 32% (out of 94) in 2024; and 20% (out of 116) in 2025. These indicators suggest the relevance of the implemented program and the need for its continued implementation.

The activities of case managers working with unemployed persons are regulated by Order. The case manager assesses clients' needs, develops an individual assistance plan, coordinates services at the municipal level, forms a team of service providers, and is not an employee of the Employment Service. In professional practice, the case manager's professional status remains undefined, as this position is not included in the list of social service workers. Moreover, working with unmotivated clients who face complex problems and whose inclusion in employment activities is difficult continues to present significant challenges.

PREREQUISITES AND BARRIERS TO THE INTEGRATION OF PERSONS WITH DISABILITIES INTO THE LABOUR MARKET

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Theoretical background. The labour market inclusion of persons with disabilities remains an important issue in the context of social justice, equal opportunities, and sustainable employment. Despite growing attention to inclusive employment, persons with disabilities continue to face multiple barriers, including stigma, discrimination, limited access to education and training, inaccessible transport, and insufficient workplace adaptation. The theoretical background of the study is grounded in the principles of social inclusion and equal participation in employment, emphasizing that labour market integration is shaped not only by individual capacities but also by social, organizational, and structural conditions.

Aim and methods. The aim of the study was to explore the main factors influencing the integration of persons with disabilities into the labour market and to identify the barriers and support mechanisms shaping this process. A qualitative research design was applied. Empirical data were collected through semi-structured interviews with five employees of social service organizations working with persons with disabilities. The participants were selected because of their professional knowledge and practical experience in supporting labour market integration.

Main findings. The findings revealed that social stigma and employer reluctance remain major barriers to inclusion. Limited opportunities for skills development, transport inaccessibility, and insufficient awareness of financial support measures also reduce employment opportunities. At the same time, the results highlight the importance of flexible working conditions, better information for employers, targeted training opportunities, and the role of social workers in providing practical and emotional support.

Conclusions. The study confirms that successful labour market inclusion of persons with disabilities requires coordinated efforts at individual, organizational, and policy levels. Greater attention should be paid to reducing structural barriers, improving access to support measures, and strengthening inclusive employment practices in order to promote sustainable participation in the labour market.

PROMOTING HEALTHY AND ACTIVE AGING IN A SOCIAL CARE INSTITUTION THROUGH GREEN SOCIAL WORK

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Theoretical background. Population aging is a global process, particularly rapid in Lithuania, where the proportion of older adults is continuously increasing due to rising life expectancy and declining birth rates. This phenomenon creates a need to fundamentally change the perception of old age, shifting from a passive model to the concept of active aging, in which this stage of life is viewed as an opportunity to remain physically and socially active. One of the innovative strategies to achieve this goal is green social work, which emphasizes the relationship between humans and the environment in pursuit of ecological and social justice.

Aim and methods of the presentation. The aim of the presentation is to demonstrate how green social work contributes to the promotion of healthy and active aging in a social care institution. The methods applied include analysis of scientific literature and documents, as well as statistical data analysis.

Key results. Scott, Masser, and Pachana (2020) reveal that gardening and horticulture have a positive impact on older adults' physical activity, psychological health, and promote active aging. Cremer, Rosteius, and Zwakhalen (2024) analyzed the application of green social work practices in social care institutions for older adults, as well as their effects on active aging. The results showed that green social work has a positive impact on the daily lives of older people living in care institutions, their physical activity, psychological well-being, and active aging. Meaningful opportunities to participate in activities such as gardening, horticulture, and animal care encourage engagement, increase physical activity, and have a positive effect on mental health. The researchers found that the impact directly depends on the environment and the conditions created for engaging in various green social work activities. Rivadeneira et al. (2021) found that appropriate infrastructure and conditions for engaging in green social work activities positively affect the quality of life of people with dementia and contribute to active aging.

Conclusions. The analysis revealed that initiatives such as gardening, horticulture, and animal care have a strong and direct impact on healthy and active aging, changing the behavior and attitudes toward life of care home residents, providing greater meaning and encouraging engagement. The analysis of best practices highlights the importance of creating appropriate infrastructure in care homes, enabling older adults to safely participate in green social work initiatives.