

Constantine the Philosopher University in Nitra
Faculty of Social Sciences and Health Care
Department of Nursing



NURSING OF THE 21ST CENTURY
IN THE PROCESS OF CHANGES 2026

Book of Abstracts

Nitra, Slovak Republic
2026

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Electronic Edition

1st Edition

Published by:

Department of Nursing

Faculty of Social Sciences and Health Care

Constantine the Philosopher University in Nitra

Nitra, 2026

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ISBN 978-80-558-2426-0

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FOREWORD

Dear colleagues,

Book of Abstracts contains the abstracts from the International Symposium “Nursing of the 21st Century in the Process of Changes 2026” organised by the Department of Nursing, Faculty of Social Sciences and Health Care, Constantine the Philosopher University in Nitra, Slovak Republic in 2026. The history of the V4 symposia dates back to 2008.

The peer-reviewed Book of Abstracts provides information about the results of research activities, and new trends and methods in the fields of nursing, midwifery and other helping professions. The abstracts by the experts from the Slovak Republic, the Czech Republic, Hungary, Poland, Ireland and the USA are included.

Nitra 2026

Editor

VALIDATION STUDY OF NURSING DIAGNOSIS EXCESSIVE FEAR

Archalousová Alexandra, Spáčilová Zuzana

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Philosopher University of Nitra, Slovakia

Abstract

Introduction: One of the priorities in nursing research is the validation of the nursing diagnosis Excessive Fear within maternal and child health care. **Objective:** The study aimed to define and characterize the terminology of the standardized nursing diagnosis Excessive Fear (code 00390) using the NANDA International (NANDA-I 2024–2026) nursing language. The validation of this nursing diagnosis took place in Slovakia and the Czech Republic to verify which defining characteristics and related factors are considered major and minor by clinical experts/nurses. **Methods:** The Diagnostic Content Validity (DCV) model, modified by Fehring, was selected to validate the nursing diagnosis Excessive Fear. According to Fehring's methodology, 60 clinical experts/nurses evaluated the defining characteristics and related factors of the nursing diagnosis using a Likert scale. A questionnaire containing 26 items was used for data collection. **Results:** The experts/nurses identified 19 major defining characteristics (scores ranging from 0.50 to 0.72) out of the 26 total defining characteristics and related factors. The remaining 7 defining characteristics and related factors were discarded. **Conclusions:** The nursing diagnosis Excessive Fear can be applied generally across all areas of nursing care, for clients/patients of all ages, and their families. The initiative and erudition of clinical experts/nurses during the validation process are crucial for improving the accuracy of nursing diagnosis formulation. Implementing standardized nursing diagnostic terminology in maternal and childcare, along with its validation, enhances the quality of nursing care and fosters professionalism in the field. **Keywords:** Validation. Nursing diagnosis. Excessive Fear (code 00390). Maternal and childcare.

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POSITIVE COMMUNICATION FOR DECREASING BURNOUT IN INTENSIVE CARE: HEALTHCARE PROFESSIONALS' EXPERIENCES FROM THE HELLO TRIAL

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Abstract

Introduction: Healthcare professionals working in intensive care units (ICUs) face demanding working conditions and are at increased risk of burnout. Positive communication and supportive workplace relationships may help improve staff well-being. The HELLO intervention was developed to encourage positive interactions among ICU professionals and strengthen team cohesion. **Objective:** To explore healthcare professionals' experiences of the HELLO intervention and identify factors that supported or hindered its implementation in daily practice. **Methods:** A qualitative evaluation was undertaken as part of the HELLO trial. Data were collected from 1,155 pictures of messages shared through HELLO boxes and noticeboards, together with 26 semi-structured interviews involving 27 healthcare professionals from 18 intensive care units. Thematic analysis was used to identify recurring patterns and experiences across the dataset. **Results:** Messages frequently reflected appreciation, recognition, kindness, encouragement, teamwork, and motivation. Interview analysis identified six major themes: understanding of the intervention and initial reactions; facilitators and barriers to implementation; focus on messages; local adaptations; immediate positive outcomes; and long-term potential outcomes. Participants reported improved team cohesion, communication, workplace atmosphere, and mutual appreciation. Leadership engagement was identified as a key facilitator, while scepticism, workload, staff shortages, and pre-existing workplace tensions acted as barriers. Although many participants perceived meaningful short-term benefits, most reported that the effects diminished over time without ongoing reinforcement. **Conclusions:** Participants viewed the HELLO intervention as a simple and practical way to promote positive communication and strengthen teamwork in ICUs. Leadership support, local adaptation, and ongoing reinforcement may be important for maintaining its benefits over time.

Keywords: Positive communication. Intensive care unit. Burnout.

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NURSE-LED NUTRITION EDUCATION IN STABLE CORONARY ARTERY DISEASE

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Abstract

Introduction: Nutrition education is a key component of secondary prevention in patients with stable coronary artery disease (SCAD). **Objective:** To describe current practices in nutrition education for patients with SCAD and to identify factors associated with nurse-led nutrition education. **Methods:** A cross-sectional quota-based survey was conducted among 602 nurses working in cardiology-related inpatient settings across the Czech Republic. Data were collected using a structured questionnaire. Descriptive statistics, chi-square tests, and multivariable logistic regression analysis were used to examine factors associated with nurse-led nutrition education. **Results:** Nutrition education was most frequently provided by nurses; however, considerable variability in involvement and perceived adequacy of time was observed. In multivariable analysis, working in a cardiology ward (OR = 1.78; 95 % CI 1.22–2.61) and longer professional experience (>10 years; OR = 1.46; 95 % CI 1.03–2.08) were independently associated with higher odds of nurse-led nutrition education. **Conclusions:** The findings indicate that nurse-led nutrition education represents an important component of secondary prevention in SCAD. Organizational context and professional experience appear to be key factors influencing the provision of nutrition education, highlighting areas for targeted support in clinical practice.

Keywords: Nurse-led education. Nutrition education. Secondary prevention. Stable coronary artery disease. Cardiovascular nursing.

Acknowledgements

This study was supported by the Ministry of Health of the Czech Republic, grant no. NU23-09-00369.

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HEALTH LITERACY AS A CLINICAL SIGNAL OF DEPRESSION RISK IN OLDER ADULTS

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Abstract

Introduction: Health literacy (HL) is increasingly recognized as a determinant of health outcomes, yet its role in mental health—particularly in aging populations—remains underexplored. Identifying modifiable factors linked to depression in older adults is a pressing public health priority. **Objective:** To examine whether health literacy is associated with depressive symptoms in adults aged 65+. **Methods:** We conducted a population-based cross-sectional study in a representative sample of 403 seniors in the Czech Republic. Health literacy was assessed using HLS-EU-Q16 and depressive symptoms using the Geriatric Depression Scale. Associations were analysed using inferential statistics. **Results:** While 59.9 % of participants demonstrated sufficient HL, 40% had limited HL. Lower HL was strongly associated with higher prevalence of depressive symptoms ($\chi^2 = 22.890$, $p < 0.001$), with a clear gradient across HL levels. Higher education was associated with better HL, though with a modest effect size. **Conclusions:** Health literacy may function as a clinically relevant signal of vulnerability to depression in older adults. As a modifiable factor, HL represents a promising target for nurse-led and system-level interventions aimed at improving mental health outcomes in aging populations.

Keywords: Health literacy. Older adults. Depression. Ageing. Mental health.

Acknowledgements

Project reg. No. TQ01000591 is co-financed with state support from the Technology Agency of the Czech Republic under the SIGMA Program.

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**A MODEL FOR OUTPATIENT NURSING CARE AT THE PODKARPACKIE
ONCOLOGY CENTRE IN BRZOSÓW**
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Abstract

Introduction: Our own observations and scientific reports unequivocally point to a steadily growing need for specialized care for chronically ill patients with concomitant chronic wounds. This phenomenon necessitates a continuous expansion of the scope and improvement of the quality of procedures performed, in order to ensure comprehensive, effective, and continuous specialized care that encompasses both hospital discharge and outpatient treatment. **Objective:** The objective of this study is to analyse our own experiences in the field of wound treatment within the framework of outpatient care provided at the Podkarpackie Oncology Center in Brzozów, taking into account the services provided and the results of observations over the five-year period of the clinic's operation. **Methods:** The research material consisted of an analysis of patient visits for chronic wounds at the Chronic Wound Treatment Clinic of the Podkarpackie Oncology Center in Brzozów between 2020 and 2025. The data were obtained from the AMMS system, which includes records of services provided by an interdisciplinary team consisting of physicians and nurses. **Results:** Between 2020 and 2025, a total of 2,098 patients received care, during which 16,058 medical and nursing consultations and visits were provided. The mean age of the study participants was 70.91 ± 15.39 years, ranging from 3 to 101 years. The most common diagnosis was lower limb ulcers—48.4% of participants—followed by complications of diabetes (neuropathy and ulcers of mixed etiology)—23.0%. Pressure ulcers were present in 6.2% of patients, and ischemic ulcers in 5.3%. During the study period, 25,816 prescriptions were issued, of which 22,493 were nursing prescriptions and 3,323 were physician prescriptions. Active dressings were the most commonly prescribed—59.7% ($n = 15,398$). Antiseptic preparations accounted for 13.4% ($n = 3,452$), antibiotics for 6.7% ($n = 1,735$), analgesics for 4.5% ($n = 1,154$), and other preparations for 15.8% ($n = 4,077$). **Conclusions:** The growing demand for services and the development of competencies in the field of wound care are driving forces in wound prevention and treatment. There is a need to establish and expand outpatient specialty care services, develop the competencies of nursing staff, and improve the organization of care. This includes the implementation of clinical practice guidelines and tools to support clinical decision-making.

Keywords: Wound care. Outpatient specialist care. Chronic wound.

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TECHNOLOGY ENHANCED LEARNING IN NURSING EDUCATION: A SYSTEMATIC REVIEW

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Abstract

Introduction: Technology-enhanced learning (TEL), including artificial intelligence (AI), virtual reality (VR), high-fidelity simulation (HFS), and gamification, is increasingly used in nursing education to address limitations in clinical training and support the development of students' clinical reasoning skills. **Objective:** This review aimed to synthesize current evidence on the educational outcomes associated with AI, VR, HFS, and gamification in nursing education, and to identify the factors that facilitate or hinder their successful implementation.

Methods: A systematic review was conducted in accordance with PRISMA 2020 and registered in PROSPERO (CRD420251048860). Five electronic databases were searched for English-language studies published between 2015 and 2025. Studies were eligible if they involved undergraduate or postgraduate nursing students and evaluated AI, VR, HFS, or gamification in educational settings. Methodological quality was assessed using the Mixed Methods Appraisal Tool (MMAT 2018). **Results:** Forty studies met the inclusion criteria. HFS and VR were most frequently associated with improvements in knowledge, clinical judgment, and procedural skills. Gamification was associated with greater engagement, motivation, and knowledge retention. Evidence on AI suggested benefits for critical thinking, problem-solving, and personalized learning opportunities. Common barriers included technical problems, resource constraints, and inadequate faculty preparedness. **Conclusions:** TEL methods appear to improve student learning and provide safe environments for practice. Successful integration of TEL into nursing education requires institutional support, evidence-based teaching strategies, and continuous faculty development. TEL should complement rather than replace traditional educational practices. Future research should examine the long-term impact of TEL on learning outcomes, its cost-effectiveness, and its implementation in resource-constrained settings.

Keywords: Nursing education. Artificial intelligence. Virtual reality. High-fidelity simulation. Gamification.

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COMMUNICATION STRATEGIES OF NURSES IN THE CARE OF OLDER ADULTS WITH ALZHEIMER'S DISEASE

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Abstract

Introduction: Alzheimer's disease is a progressive neurodegenerative disorder associated with cognitive decline, behavioural changes, and impaired communication abilities, significantly affecting nursing care and increasing demands on nurses' communication competencies. As the prevalence of dementia continues to rise among older adults, effective communication has become a crucial component of person-centred nursing care. **Objective:** The aim of this study was to analyse the specific features of communication with older adults diagnosed with Alzheimer's disease, identify major communication barriers encountered in nursing practice, and explore opportunities for improving communication strategies. **Methods:** A mixed-methods design was employed. The quantitative phase consisted of an anonymous questionnaire comprising 15 statements focused on nurses' communication practices when caring for patients with dementia. A total of 72 nurses participated in the survey. The qualitative phase involved semi-structured interviews with four nurses working in a geriatric ward, based on six open-ended questions. **Results:** The findings revealed that communication aids were used by 16 nurses (22.23 %), while 22 nurses (30.56 %) reported employing an infantilising communication style. Patient understanding was routinely verified through feedback by 52 nurses (72.22 %). Qualitative data indicated that communication was most frequently hindered by time constraints, the necessity of repeated explanations, patient confusion, and challenging behaviours. Family members were perceived as having both facilitating and obstructive effects on communication. **Conclusions:** The study highlights the need for continuous education and professional support for nurses in the field of communication with older adults affected by Alzheimer's disease. Strengthening communication competencies may contribute to improved quality of nursing care, enhanced therapeutic relationships, and the preservation of patient dignity.

Keywords: Nursing Strategies. Communication. Older Adults. Alzheimer's disease. Dementia.

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SIMULATION EDUCATION FOR PARAMEDIC STUDENTS

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Abstract

Introduction: Simulation-based education is a relatively new form of education and ranks among the most widely used innovative methods in the training of future professionals.

Objective: To enable students, through interactive activities, to practice skills and develop critical thinking and decision-making abilities in a safe environment that resembles reality as closely as possible, using modern technologies.

Main text: Simulation-based training for paramedic students takes place at the Department of Clinical Disciplines in two parts. One part takes place during the winter semester of the academic year, where, in collaboration with practicing paramedics, training is conducted in the form of workshops on various topics and through the resolution of multiple simulated scenarios. As part of this activity, students have the opportunity to practice providing prehospital care, leadership, and teamwork. During the summer semester of the academic year, the department organizes a unique competition called the Constantine Cup in collaboration with several components of the integrated emergency response system. The competition is intended exclusively for students in the Emergency Medical Care program. Students participate either as competitors or as role-players, thereby gaining new experiences.

Conclusions: Simulation-based education offers numerous benefits, including a safe learning environment with no risk of harming patients, the opportunity for immediate reflection and repeated practice as well as training of non-technical skills. It is one of the most demanding teaching methods and requires a high level of preparation.

Keywords: Paramedic. Technical and non-technical skills. Scenario. Practical learning. Competition.

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SELF-CARE AMONG PATIENTS WITH TYPE 2 DIABETES – THE RESULT OF HEALTH EDUCATION

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Abstract

Introduction: Health education is a key foundation for treating type 2 diabetes. It directly translates into increased patient awareness, disease control, and effective prevention of complications. Monitoring the effects of education allows for the improvement of educational programs in both theoretical and practical dimensions. **Objective:** The aim of this study is to analyse the level of self-care and its determinants among patients with type 2 diabetes. **Methods:** The study was conducted among 175 patients with type 2 diabetes at four diabetes clinics in Rzeszów. A diagnostic survey approach was employed, utilizing the Self-Care of Diabetes Inventory (SCODI) and a proprietary questionnaire. In the statistical analysis, the significance level was $p < 0.05$. **Results:** Among the four self-care sections analysed, 81.1 % of respondents achieved a satisfactory level (≥ 70 points) in self-confidence in self-care (average 79.90 points) and 64.6% in maintaining self-care (average 73.11 points). In the remaining two sections, the scores were significantly lower: monitoring self-care (average 55.75 points) and managing self-care (average 47.07 points), with only 18.9 % and 6.9 % of respondents achieving a satisfactory level, respectively. Significant differences were observed in the level of competence across the sections ($p < 0.001$). Over the years, the level of self-confidence in self-care increased significantly ($p = 0.031$). The subjective assessment of self-care was mainly good and higher than in any of the sections analysed, but without statistical significance. **Conclusions:** Patients with type 2 diabetes generally believe that their level of self-care is good, which was confirmed in terms of self-confidence and maintaining self-care; however, in terms of monitoring and managing the disease, there are still significant deficits in skills and knowledge, requiring further monitoring and introducing necessary modifications in the educational process.

Keywords: Type 2 diabetes. Diabetes self-care. Patient. Treatment. SCODI inventory.

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CLIMATE CHANGE CONCERNS AND ENVIRONMENTALLY RESPONSIBLE DIET IN RELATION TO PERSONALITY

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Abstract

Introduction: Research increasingly suggests that both climate change concerns and personality traits are associated with pro-environmental behaviour. **Objective:** This study examined the associations between climate change concerns, environmentally responsible diet, and Big Five personality traits, and explored gender differences in climate change worry and environmentally responsible eating. **Methods:** The sample comprised 102 Slovak university students (71 women, 30 men, 1 other; M age = 22.34 years). Climate change concerns were measured using the Climate Change Worry Scale (Stewart, 2021), environmentally responsible diet using a self-constructed scale, and personality traits using the Mini-IPIP (Donnellan et al., 2006). **Results:** Climate change concerns were positively associated with an environmentally responsible diet. Climate change concerns showed a weak negative association with conscientiousness, whereas environmentally responsible diet was weakly positively associated with agreeableness. No significant associations were found for the remaining personality traits, and no gender differences emerged in climate change concerns or environmentally responsible diet. **Conclusions:** Greater climate change concerns were associated with healthier environmental dietary choices. The weak associations with conscientiousness and agreeableness suggest that personality may contribute modestly to environmentally responsible behaviour. In contrast, most Big Five traits showed no relationship with climate change concerns or dietary behaviour in this sample.

Keywords: Climate change concerns. Environmentally responsible diet. Personality traits. Big Five. University students.

Acknowledgements

APVV-24-0575 Adaptation to climate change in Slovakia: The role of cognitions and affective responses

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THE DEVELOPMENT OF PERSONAL PROTECTIVE EQUIPMENT

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Abstract

Introduction: Personal protective equipment (PPE) plays a crucial role during a pandemic of respiratory disease, as it interrupts the transmission route. It provides protection both to the wearer and to those around them by reducing the risk of infection. **Objective:** To analyse the development of PPE. **Main text:** The historical development of respiratory protective equipment has progressed from primitive fabrics and animal skins, through herbal-filled masks, to modern nano-respirators. In ancient times, cloth and animal hides were primarily used as protection against adverse weather conditions. During plague pandemics, physicians wore long beak-shaped masks filled with aromatic substances such as herbs, spices, and vinegar, based on the belief that disease was caused by contaminated air. These masks also featured glass eye coverings and formed part of a protective outfit. During the Spanish influenza pandemic, face masks became a common protective measure. They were made from several layers of gauze. Throughout the twentieth century, protective equipment continued to evolve and adapt, progressing from simple gauze masks to highly efficient respirators. **Conclusions:** The history of respiratory protective equipment is extensive and encompasses numerous advances, ranging from simple and primitive solutions in ancient times to the sophisticated technologies of the modern era.

Keywords: Pandemic. Personal protective equipment. Respirator. Route of transmission. Respiratory disease.

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THE ROLE OF NURSES IN INTERPROFESSIONAL COLLABORATION DURING RESUSCITATION IN CASES OF CARDIAC ARREST CAUSED BY THROMBOEMBOLIC EVENTS

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Abstract

Introduction: Cardiac arrest caused by thromboembolic disorders requires rapid and coordinated action by an interdisciplinary team comprising a nurse, a paramedic and a physician. The effectiveness of management depends on a clear division of roles, effective communication and close cooperation at every stage of care – from triage and diagnosis, through resuscitation, to transport and specialist treatment. The specific challenges associated with resuscitation of patients with pulmonary embolism or acute coronary syndromes highlight the importance of complementary skills among all team members in ensuring high-quality care.

Objective: The aim of the study is to present a model of interprofessional collaboration between a paramedic, a nurse, and a physician during resuscitation procedures in the context of acute thromboembolic disorders. **Main text:** The nurse is a crucial, equal pillar of collaboration with the paramedic and physician. Despite the differences in the competences between these three professions during working as a team, they play complementary roles in the resuscitation process. The effectiveness of emergency response depends not only on team members' skills, but also on high-quality communication, coordination, and interprofessional collaboration.

Conclusions: Interdisciplinary collaboration between a nurse, a paramedic and a doctor plays a key role in ensuring high-quality cardiopulmonary resuscitation. Drawing on the knowledge and skills of all team members, promotes more effective emergency care, reduces the number of medical errors and improves treatment outcomes for patients in life-threatening conditions.

Keywords: Cardiac arrest. Nurse. Paramedic. Physician. Interprofessional collaboration.

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APPLICATION OF THE MESI METHODOLOGY IN ASSESSING SOCIAL INTELLIGENCE AMONG NURSING AND HEALTH SCIENCES STUDENTS

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Abstract

Introduction: Social intelligence represents an important competence in healthcare education, influencing communication, interpersonal relationships, and professional performance.

Objective: The objective of this study was to compare selected attributes of social intelligence among nursing and health sciences students, with a particular focus on manipulation, empathy, and social irritability.

Methods: The research employed the MESI methodology as a psychometric tool for assessing social intelligence, focusing on the dimensions of manipulation, empathy, and social irritability. A total of 349 respondents participated in the study. Data were analysed using statistical methods, and the results were compared across individual study programmes.

Results: The findings revealed statistically significant differences in the manipulation factor ($p = 0.0029$), with the lowest level observed among nursing students. No statistically significant differences were identified in the empathy factor ($p = 0.6224$). In contrast, significant differences were found in social irritability ($p = 0.0076$), with the highest levels observed among Nursing students.

Conclusions: The results indicate that selected attributes of social intelligence vary across study programs. While empathy appears to be stable, differences in manipulation and social irritability highlight variations in interpersonal functioning among students. These findings emphasize the importance of targeted educational strategies aimed at developing social and emotional competencies in healthcare education.

Keywords: Social intelligence. MESI methodology. Manipulation. Empathy. Social irritability. Nursing and health sciences students.

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SUPPORTING BODY IMAGE ADAPTATION IN WOMEN AFTER MASTECTOMY: IMPLICATIONS FOR NURSING PRACTICE

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Abstract

Introduction: Mastectomy represents a significant intervention in a woman's physical integrity and may negatively affect body image, psychosocial well-being, sexuality and overall quality of life. Adaptation to changes after surgical breast removal is therefore an important area of nursing care. **Objective:** The objective of the research was to identify selected maladaptive manifestations in women after mastectomy, with a particular focus on body image adaptation, and to formulate implications for nursing practice. **Methods:** A quantitative research design was used. Data were collected from December 2024 to February 2025 using a questionnaire consisting of sociodemographic items and the validated BREAST-Q questionnaire. The research sample consisted of 100 women after surgical treatment for breast cancer. The data were analysed using descriptive and inferential statistical methods. **Results:** The findings showed that women after mastectomy experienced difficulties mainly in the areas of body image, psychosocial well-being and sexuality. A statistically significant relationship was found between age at diagnosis and satisfaction with body image after mastectomy, while younger age at diagnosis was associated with lower body image satisfaction. **Conclusions:** The results highlight the need for individualized nursing care focused on body image support, psychosocial adaptation and effective communication. Nurses play an essential role in the early identification of maladaptive manifestations and in supporting women in adapting to changes after mastectomy.

Keywords: Breast cancer. Maladaptation. Maladaptive symptoms. Mastectomy. Body image. BREAST-Q questionnaire.

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HEALTH AND PREVENTION IN THE CONTEXT OF THE UKRAINIAN COMMUNITY IN THE CZECH REPUBLIC – PREPARATION OF A RESEARCH STUDY

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Abstract

Introduction: Migration is currently having a major impact on healthcare systems across Europe and presents new challenges in the provision of culturally sensitive healthcare. In the Czech Republic, Ukrainian migrants constitute one of the largest groups of foreigners and may encounter language, cultural, and systemic barriers when accessing healthcare services. **Objective:** The aim of the planned sociological research is to explore the experiences, health-related habits, approaches to disease prevention, and experiences with the healthcare system in the Czech Republic from the perspective of Ukrainian patients. **Methods:** The research will be carried out using a questionnaire survey focused on respondents' experiences with healthcare professionals, communication, accessibility of healthcare services, and culturally conditioned expectations regarding health and illness. The study will also investigate the influence of cultural background on preventive behavior and the use of healthcare services. **Results:** The expected findings should contribute to a deeper understanding of the cultural specificities of Ukrainian patients and support the development of recommendations for effective health education interventions and culturally competent healthcare in the Czech Republic. **Conclusions:** The planned research is expected to contribute to a better understanding of the healthcare experiences and cultural specificities of Ukrainian patients living in the South Bohemian Region.

Keywords: Culturally sensitive healthcare. Migration. Ukrainian patients. Patient experiences. Health education. Czech Republic.

Acknowledgements

This work was supported by Grant Project No. KCZP2026-002, Culturally Sensitive Healthcare: Contemporary Challenges and Historical Contexts in the Context of Migration.

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PHYSICAL ACTIVITY AND ITS BENEFIT TO THE PREVENTION OF THE ISCHEMIC HEART DISEASE

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Abstract

Introduction: The ischemic heart disease means an enormous health and economic problem. Exercise has an important influence on health and quality of life. Regular exercise is indispensable for an optimal functioning of the body. Adequate exercise improves heart activity and blood circulation and affects blood pressure. **Objective:** To explore the general public's opinions of exercise as one of the important influenceable IHD factors. **Methods:** A combination of the standardized questionnaire for the assessment of the general health literacy (HLSQ – 16) and a non-standardized questionnaire relating to the IHD prevention was used for the data collection. The sample consisted of 1,391 respondents living in the territory of the Czech Republic. **Results:** 74.2% of the respondents exercised (walked) for at least 30 minutes a day for most (5 or more) days a week. The group aged 65 years and more spent walking significantly less time. 48.5% of the respondents went in for sports activities other than walking. Furthermore, the study shows that 37.7% of the respondents had never been educated on exercise. Even those who had already heard about the necessity of adequate exercise, had not been mostly educated by a doctor or a nurse. **Conclusions:** Ischemic heart disease can be prevented by control of risk factors. There is significant evidence that a higher level of exercise relates to a significantly lower risk of cardiovascular diseases. The general public's awareness of the benefits of adequate exercise for human health needs to be increased.

Keywords: Ischemic heart disease. Exercise. Risk factors. Prevention. Quality of life.

Acknowledgements

We would like to thank the Agency for Health Research of the Czech Republic for financing this study.

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SATISFACTION WITH EDUCATION AMONG OSTOMY PATIENTS

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Abstract

Introduction: Patient satisfaction is an important indicator of the quality of healthcare. Its assessment in the context of stoma care is important, as it can influence the course of treatment and adherence to recommendations. The professional literature draws attention in particular to insufficient patient education as a factor reducing satisfaction. Systematic monitoring of these aspects is essential for improving clinical practice and supporting patients' adaptation to life with a stoma. **Objective:** The main aim of this study was to determine the level of satisfaction with education among outpatient and hospitalized patients with an ostomy. **Methods:** We conducted an analytical cross-sectional study using the standardized Satisfaction Concerning Stoma Care Questionnaire (SSCQ). The research sample consisted of 103 patients with ostomy. The reliability of the instrument was confirmed by a Cronbach's alpha of 0.947, indicating excellent internal consistency. Data were analysed using descriptive statistics, the Mann–Whitney U test, and Spearman's correlation. All ethical principles were fully respected. **Results:** The results showed no statistically significant difference in satisfaction with preoperative care between outpatients and inpatients. However, inpatients reported significantly higher satisfaction with postoperative care, contact with the stoma nurse, and overall satisfaction. Among outpatients, no significant association was found between overall satisfaction and gender, education, or waiting time for an appointment. In the inpatient group, patients undergoing planned surgery were significantly more satisfied with preoperative care than those admitted acutely. **Conclusions:** The results highlight the importance of education in the care of patients with ostomy and the need to monitor patient satisfaction as a key indicator of the quality of care provided. The results of this study may be beneficial for nursing practice and contribute to further improvements in the care of patients with stomas.

Keywords: Ostomy. Patient education. Patient satisfaction. Stoma care. Stoma nurse.

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IMPACT OF PATIENT EDUCATION ON SMOKING AND ALCOHOL CONSUMPTION HABITS FOLLOWING ACUTE MYOCARDIAL INFARCTION

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Abstract

Introduction: Acute myocardial infarction (AMI) remains a major cause of morbidity and mortality worldwide. Long-term prognosis is strongly influenced by modifiable cardiovascular risk factors, particularly tobacco smoking and excessive alcohol consumption. Patient education is a key component of secondary prevention, aiming to promote healthier lifestyle behaviours, improve adherence to medical recommendations, and reduce the risk of recurrent cardiovascular events. **Objective:** The study aimed to evaluate the impact of patient education provided after AMI on smoking and alcohol consumption habits one year after the index event. **Methods:** A follow-up study design was used to evaluate lifestyle changes among patients after AMI. During hospitalization, participants received structured education focused on cardiovascular risk reduction, including smoking cessation, responsible alcohol consumption, treatment adherence, and healthy lifestyle practices. One year after discharge, patients were re-evaluated to determine their smoking status, alcohol consumption patterns, and adherence to recommended lifestyle changes. **Results:** Preliminary findings indicate varying levels of adherence to recommended lifestyle modifications. While some patients reported smoking cessation or reduced tobacco use and alcohol consumption, others demonstrated limited behavioural change or relapse to previous habits. The final analysis will provide a more comprehensive understanding of the effectiveness of educational interventions and identify factors associated with sustained lifestyle modification following AMI. **Conclusions:** Patient education is a fundamental component of secondary prevention after AMI. Evaluating its long-term impact on smoking and alcohol-related behaviours may improve understanding of patient adherence and support the development of more effective educational strategies. Strengthening educational interventions may contribute to sustained lifestyle modification and reduce the risk of recurrent cardiovascular events.

Keywords: Acute myocardial infarction. Patient education. Secondary prevention. Smoking cessation. Alcohol consumption. Lifestyle modification.

Acknowledgements

Supported by the Ministry of Health of the Czech Republic, Grant No. NU23-09-00369.

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PATIENT SAFETY INCIDENTS REPORTED BY NURSING STUDENTS DURING CLINICAL PLACEMENTS: A SECONDARY ANALYSIS OF INTERNATIONAL DATA

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Abstract

Introduction: Patient safety remains an international priority, while clinical placements bring nursing students into contact with safety-related events. Nevertheless, little is known about how students interpret these incidents and explain their occurrence across care environments. **Objective:** To examine the categories of patient safety incidents identified by nursing students and the reasons they perceived across four European nations. **Methods:** Secondary qualitative content analysis was applied to narrative responses from a multinational cross-sectional investigation of undergraduate nursing students in Slovakia, the Czech Republic, Italy, and Türkiye. Overall, 287 incident accounts and 263 causal explanations were examined through an inductive–deductive strategy. Responses were coded, grouped into categories, and integrated into domains, with frequency distributions supplementing interpretation. **Results:** Medication-related incidents and falls were the leading event categories across countries. Other accounts concerned deficiencies in infection prevention and control, omitted nursing care, and communication breakdowns. Explanations were organised within three domains: patient-related and situational influences, organisational and system-level conditions, and human and professional influences. Patient-related and contextual influences emerged as dominant contributors, followed by organisational and system conditions; human and professional influences occurred less often, although they retained importance. **Conclusions:** Patient safety incidents generally arise from multiple interacting influences. Enhanced education, supervision, and organisational resources are fundamental to promoting safer care throughout clinical placements.

Keywords: Adverse events. Clinical placement. Nursing Students. Patient safety. Secondary analysis.

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DETERMINANTS OF KNOWLEDGE, ATTITUDES, AND THE USE OF EVIDENCE-BASED NURSING PRACTICE: A POLISH STUDY

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Abstract

Introduction: Evidence-based practice (EBP) involves integrating nurses' skills and knowledge with the best current clinical evidence derived from scientific research in making decisions concerning individual patients. Modern nursing should encompass an understanding of the purpose and process of evidence-based practice, the ability to formulate clinically relevant questions, and the competence to identify and access scientific evidence that may assist in answering them. The implementation of EBP and its related competencies in clinical settings is of crucial importance for patient safety, quality of care, and nursing staff satisfaction. **Objective:** The aim of this cross-sectional study was to assess the knowledge, attitudes, and behaviours of practicing nurses toward evidence-based professional practice and to identify the factors influencing them. **Methods:** The study was conducted from April to July 2024 and included 396 professionally active nurses from Poland recruited from various workplaces using snowball sampling method. The Polish version of the standardized Evidence-Based Practice Profile (EBP2) Questionnaire was used in the study. Data were analysed using descriptive and inferential statistics. **Results:** The mean score for attitudes toward expanding competencies was 54.19 ± 8.25 , for attitudes toward EBP 23.06 ± 3.69 , for knowledge of research terminology 44.23 ± 15.05 , for the frequency of EBP use 20.31 ± 6.56 , and for EBP-related skills 39.32 ± 6.07 . Multivariate linear regression analysis demonstrated that higher education, participation in EBP training, and employment in home long-term care significantly influenced attitudes toward expanding competencies ($p < 0.05$). Furthermore, participation in training was significantly associated with more positive attitudes toward EBP, greater knowledge of research terminology, more frequent use of EBP in professional practice, and higher EBP-related skills ($p < 0.05$). Place of residence significantly affected knowledge of research terminology and the frequency of EBP use in nursing practice ($p < 0.05$). Holding a doctoral degree was associated with more positive attitudes toward expanding EBP competencies and greater knowledge of research terminology ($p < 0.05$). **Conclusions:** Improving nurses' educational attainment and participation in EBP-oriented training programs are important for the implementation of EBP in nursing. Such educational initiatives should be particularly promoted among nurses working in areas with lower levels of urbanization.

Keywords: Evidence-based nursing. Evidence-based practice. Decision-making. Nursing.

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COMMUNICATION COMPETENCIES AND EMOTIONAL INTELLIGENCE AMONG HEALTHCARE PROFESSIONALS: IMPLICATIONS FOR NURSING PRACTICE

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Abstract

Introduction: Effective communication and emotional intelligence are increasingly recognised as essential components of high-quality healthcare and contemporary nursing practice. These competencies contribute to therapeutic relationships, patient safety, and person-centred care, particularly in emotionally demanding clinical situations. **Objective:** To assess the relationships between communication competencies, emotional intelligence, and attitudes towards delivering difficult information among healthcare professionals. **Methods:** A cross-sectional study was conducted among 929 healthcare professionals in Poland, including nurses, physicians, paramedics, midwives, and physiotherapists. The Health Professionals Communication Skills Scale (HP-CSS), Emotional Intelligence Questionnaire (INTE), and Breaking Bad News Attitudes Scale (BBNAS) were used. Statistical analyses included descriptive statistics, ANOVA, Pearson correlations, and multiple regression. **Results:** Nurses achieved significantly higher scores in informative communication and adherence to the SPIKES protocol compared with other professional groups. Positive relationships were observed between communication competencies, emotional intelligence, and attitudes towards delivering difficult information. Informative communication and the ability to use emotions in reasoning emerged as significant predictors of readiness to engage in difficult conversations with patients and their families. **Conclusions:** Communication competencies and emotional intelligence are important components of professional practice and may support effective communication in challenging clinical situations. Strengthening these skills through communication training and simulation-based education may enhance preparedness for difficult interactions and promote patient-centred care.

Keywords: Nursing. Communication skills. Emotional intelligence. Patient-centred care. SPIKES. Healthcare professionals.

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ADHERENCE TO BARRIER NURSING CARE FOR PATIENTS WITH MRSA

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Abstract

Introduction: Methicillin-resistant *Staphylococcus aureus* (MRSA) is a major cause of nosocomial infections. Due to its resistance to multiple antibiotics, it represents a significant challenge in healthcare facilities. Prevention of MRSA transmission relies on adherence to barrier nursing care, including hand hygiene, use of personal protective equipment, and adherence to isolation measures. **Objective:** To determine the level of reported adherence to barrier nursing care for patients with MRSA among nurses in clinical practice. **Secondary objectives** included assessment of nurses' knowledge, attitudes, organizational factors, and perceived barriers. **Methods:** Data were collected using an anonymous self-designed questionnaire with 23 items administered in three healthcare facilities. The results were analysed using descriptive statistics. **Results:** Nurses demonstrated a high level of awareness regarding the importance of barrier nursing care, isolation measures, and hand hygiene. Deficiencies were identified in the correct removal of personal protective equipment, with 71% of respondents answering incorrectly, and in adherence to the recommended duration of hand disinfection, where 32% reported shorter exposure times. Staffing shortages and time constraints were the most frequently reported barriers. Material resources were evaluated positively, while inconsistent adherence among physicians and unsuitable ward layouts were identified as organizational limitations. **Conclusions:** Nurses possess adequate theoretical knowledge and positively evaluate workplace resources; however, implementation of barrier nursing care is influenced mainly by staffing and organizational factors. Recommended measures include increasing staffing levels, improving infrastructure for isolation care, and introducing practical training workshops focused on barrier nursing techniques.

Keywords: Barrier nursing care. MRSA. Methicillin-resistant *Staphylococcus aureus*. Nosocomial infection. Hand hygiene.

Acknowledgements

This article was supported by the project "Training in Practical Skills for Students in Non-Medical Health Care Fields in the Context of the Latest Trends and Requirements for Multidisciplinary Collaboration at the Simulation Center of the TnUAD Faculty of Health Sciences, project code ITMS21+: 401101B920".

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STRESS AMONG NURSING STUDENTS AND COPING STRATEGIES

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Abstract

Introduction: Stress is one of psychological problems among nursing students. During their studies students face academic and clinical stressors resulting from demanding educational requirements, clinical practice and their responsibility for providing health care. **Objective:** To analyse the most common sources and manifestations of stress in nursing students and identify coping strategies they use to deal with stress. **Methods:** The data were collected using the self-constructed questionnaire based on the standardised instruments: Perceived Stress Scale (PSS) and Coping Behaviour Inventory (CBI). The sample consisted of 91 nursing students. Descriptive statistics was used for data processing. **Results:** The most significant source of stress were exams (74.5 %). Other stressors included lack of time (38.3 %), financial issues (24.5 %), and clinical practice (21.3 %). To cope with stress, the respondents used mainly physical and leisure activities (33.0 %), including sport, listening to music, and watching television. Up to 42.6 % of the respondents did not use psychotherapy or psychological counselling. **Conclusions:** Academic requirements, mainly exams, are a dominant source of stress among nursing students. To cope with stress, they mainly prefer adaptive strategies based on physical and leisure activities. Some respondents reported using maladaptive strategies, such as alcohol consumption and smoking. The results suggest that mental health promotion and development of programmes focused on effective coping with stress during studies are necessary.

Keywords: Student. Stress. Coping strategies. Coping with stress.

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ADHERENCE IN PATIENTS WITH HYPERTENSION

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Abstract

Introduction: Adherence is the extent to which a patient cooperates with a health care provider and follows medical advice. It includes taking medication accurately, adjusting lifestyle (diet, exercise) and going to check-ups. It is a key prerequisite of successful treatment, especially for chronic diseases, including hypertension. **Objective:** To find out prevalence and incidence of hypertension, which areas of treatment are more and less accepted by patients, and the reasons for problems in adherence with treatment in the published studies. **Methods:** A review study was used. A total of 15 studies from the PubMed® and ScienceDirect were analysed. The keywords were adherence, patient, pharmacotherapy, and diet. **Results:** The highest prevalence rates were in South Asian cities, 30.8 % if the men and 26.8 % of the women. The lowest prevalence of hypertension (19.6 %) was in Canada. The highest level of adherence (82 %) was in Canada. The lowest adherence (19.4 %) was in China. From 2010 to 2025, the incidence of hypertension increased by 2.6 % in countries with good economic situations and by 7.7 % in countries with poor economic situations. In treatment, there was a decrease of adherence from 55.6 % to 44.5 % of the patients; in blood pressure monitoring the decrease was from 28.4 % to 17.9 %. The highest adherence to pharmacotherapy (70 %) was in the patients in the USA, the lowest adherence (11.7 %) was in Vietnam. The highest adherence to diet (38.97 %) was in South Korea, the lowest adherence was in the USA. Pharmacotherapy was accepted more than diet therapy. The factors affecting adherence to pharmacotherapy include social insurance, age, consultations with a physician, other diseases, lifestyle, alcohol and tobacco consumption, and economic situation. Diet adherence is affected by factors such as knowledge, eating habits and diet duration. **Conclusions:** The issue of adherence in hypertension is a significant problem in healthcare. Good adherence can reduce the risk of complications and mortality; therefore, it is important to focus nurses' attention on it.

Keywords: Adherence. Patient. Hypertension. Diet. Pharmacotherapy.

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DIETARY HABITS OF CHILDREN IN RELATION TO ORAL HEALTH
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Abstract

Introduction: Dietary and drinking habits significantly affect oral health status. Excessive consumption of sweets and sugar-sweetened beverages increases the risk of dental caries. **Objective:** The study aimed to map dietary habits in connection to oral health among children aged 9–10 years in selected regions of the Czech Republic. **Methods:** A quantitative research design was employed for this study. It was a multicentre cross-sectional study. The research sample consisted of 1,333 (100 %) respondents, 666 (49.96 %) girls, and 667 (50.04 %) boys. **Results:** Consumption of sugar-sweetened beverages was reported by 1,323 (99.25 %) respondents, sweet foods by 1,316 (98.72 %) respondents, and candies by 1,323 (99.25 %) respondents. 990 (74.27 %) respondents reported oral pain during the previous 12 months. Statistically significant associations were identified between gender and the consumption of sugar-sweetened beverages ($p < 0.001$), oral pain and the consumption of sweet foods ($p < 0.05$), and oral pain and the consumption of sweets ($p < 0.001$). **Conclusions:** Education of children in the field of oral health should focus on appropriate and inappropriate foods and beverages.

Keywords: Children. Dietary habits. Drinking regimen. Pain. Oral health.

Acknowledgement

Supported by the Ministry of Health of the Czech Republic in cooperation with the Czech Health Research Council under project No. NW24-09-00302.

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MULTIDISCIPLINARY PAEDIATRIC PALLIATIVE CARE COURSE

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Abstract

Introduction: According to the WHO, paediatric palliative care is an active and comprehensive approach addressing the bio-psycho-social and spiritual needs of children and their families. Within the School as the Foundation of Care project supported by the Vlček Family Foundation, an elective course entitled Paediatric Palliative Care was introduced for students of all study programmes at the Faculty of Health and Social Sciences, University of South Bohemia. **Objective:** To evaluate the benefits of teaching formats, assess students' acquired knowledge and skills, and determine their overall evaluation of the course. **Methods:** A quantitative research design was employed using an anonymous questionnaire. The sample consisted of 32 students who completed the course. The perceived benefits of teaching formats and acquired competencies were assessed using a five-point Likert scale (1=not beneficial, 5=highly beneficial). Data were analysed using descriptive statistics. **Results:** Lectures achieved a mean rating of 4.2, while seminars received 4.8. Students reported the greatest benefits in understanding the needs of children and families (4.8), the importance of ethics and empathy in care (4.8). Overall, 90.6 % of respondents rated the course as excellent or very good. **Conclusions:** The course contributed significantly to the development of students' professional competencies. All respondents would recommend the course to other students.

Keywords: Paediatric palliative care. Students. Education. Competencies. Knowledge.

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HEALTH LITERACY IN ORAL HYGIENE AMONG YOUNGER SCHOOL-AGE CHILDREN

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Abstract

Introduction: Oral hygiene in children is an essential component of preventing dental caries and oral diseases. During younger school age, children acquire hygiene habits that may significantly influence their health in adulthood. **Objective:** The aim of the study was to assess health literacy related to oral hygiene among children aged 9–10 years in selected regions of the Czech Republic. **Methods:** A quantitative multicentre cross-sectional study design was used. The research sample consisted of 1,333 (100%) children, 666 (49.96 %) girls and 667 (50.04 %) boys. **Results:** Most children reported visiting a dentist two or more times/y 929 (69.69 %), attending dental hygiene appointments at least once/y 512 (38.4 %), and brushing their teeth twice or more times/d 1,154 (86.57 %). Statistically significant associations were identified between gender and attendance at dental hygiene visits (< 0.05), as well as between gender and frequency of tooth brushing (< 0.001). The girls achieved better results in all monitored areas compared to the boys. **Conclusions:** The findings indicate differences in oral health literacy and hygiene behaviour according to gender. Greater emphasis should therefore be placed on targeted education and prevention programmes, particularly among boys.

Keywords: Children. Oral hygiene. Health literacy. Oral health. Paediatric dentistry.

Acknowledgement

Supported by the Ministry of Health of the Czech Republic in cooperation with the Czech Health Research Council under project No. NW24-09-00302.

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COMPETENCY DEVELOPMENT IN PAEDIATRIC PALLIATIVE CARE: RESULTS OF THE “SCHOOL AS THE FOUNDATION OF CARE” PROJECT

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Abstract

Introduction: Paediatric palliative care aims to improve the quality of life of children with life-limiting conditions and their families. Its provision requires interdisciplinary collaboration and appropriate education of healthcare professionals. **Objective:** To strengthen competencies in paediatric palliative care among academic staff and students, integrate the topic into non-medical healthcare curricula, and increase awareness. **Methods:** A qualitative content analysis of the final project report and related documents was conducted, focusing on educational activities, curriculum changes, and outcomes. **Results:** Six academic staff members participated. Five completed basic and advanced paediatric palliative care training, three attended a perinatal palliative care course, and two completed a professional well-being course. The project resulted in a new course, Paediatric Palliative Care, and the expansion of Palliative Care and Psychology courses. Twenty-four teaching hours were added to the curriculum, reaching 68 students. A multidisciplinary conference attended by 120 healthcare professionals, academics, and students was organised. **Conclusions:** Targeted educational interventions effectively strengthened competencies in paediatric palliative care. Integrating this topic into undergraduate education supports the preparation of professionals able to provide comprehensive care to children and their families.

Keywords: Paediatric palliative care. Child. Family. Curriculum. Education.

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**THE SAFE-ICU COST ACTION: BUILDING A EUROPEAN RESEARCH
NETWORK FOR PATIENT SAFETY IN INTENSIVE CARE UNITS (SAFE ICU
COST ACTION CA24107)**

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Abstract

Introduction: Patient safety in intensive care units (ICUs) remains a major global healthcare challenge due to the complexity of critical care, increasing technological demands, and the need for multidisciplinary collaboration. The SAFE ICU COST Action (CA24107) was established to create a European network that brings together multiple stakeholders including researchers, clinicians, and patient and family representatives to address these challenges through collaborative research and knowledge exchange. **Objective:** The SAFE ICU COST Action is structured around five Working Groups that address key priorities to ensure patient safety in ICUs: pressure ulcers, delirium, healthcare-associated infections, ICU nurse education, and policy, impact, and dissemination. The SAFE ICU COST Action aims to strengthen interdisciplinary collaboration, identify research priorities, harmonise definitions and build capacity to improve patient safety, quality of care, and sustainability in ICUs across Europe. **Main text:** This presentation will provide an overview of the SAFE ICU COST Action network, highlighting its multidisciplinary structure, collaborative framework, and key achievements to date. It will also showcase the projects and initiatives being undertaken within the COST Action, including the activities of the Working Groups, Training Schools, Short-Term Scientific Missions, and collaborative research efforts that support knowledge exchange, capacity building, and the development of future European partnerships. **Conclusions:** By sharing expertise across disciplines and countries, the SAFE ICU COST Action is establishing a strong foundation for collaborative research, innovation, and capacity building that will contribute to improving patient safety and outcomes in ICUs while strengthening the European critical care research community.

Keywords: Patient Safety. Pressure Ulcers. Delirium. Healthcare Associated Infections. Research Network. Education.

Acknowledgements

This publication is based upon work from COST Action (SAFE ICU CA24107), supported by COST (European Cooperation in Science and Technology).

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NURSES' ATTITUDES TOWARD THE ROLE OF MENTOR IN NURSING

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Abstract

Introduction: Mentoring in nursing represents an important tool for supporting professional development of nurses and effective preparation of students for clinical practice. Despite its importance, several barriers affecting its implementation and quality are present in practice.

Objectives: The aim of the study was to identify nurses' attitudes towards the mentor role in clinical practice, evaluate their preparedness and competence, determine motivational factors and barriers, and assess the perceived impact of mentoring on professional development and quality of nursing care. **Methods:** A quantitative research design was used. Data were collected by self-designed questionnaire and analysed using descriptive statistics (absolute and relative frequencies, mean, median, mode). The research sample consisted of 57 nurses working in clinical practice. **Results:** The results showed that most nurses perceived the mentor role as important and mentoring as a key component of student preparation. Approximately two-thirds of respondents considered themselves competent to perform this role; however, a large proportion of them had not completed any formal education in mentoring. The main motivational factors included responsibility for educating future nurses, professional development, and financial compensation. The most significant barriers were lack of time and high workload. At the same time, mentoring was perceived by the majority of respondents as a factor that supports professional development and improves the quality of nursing care. **Conclusions:** Mentoring is perceived as an important but demanding component of nursing practice. The findings highlight the need for systematic mentor education, improved working conditions, and stronger organizational support. Implementing these measures may enhance the quality of mentoring and consequently improve the quality of nursing care.

Keywords: Mentoring. Nurse. Clinical practice. Professional development. Nursing care.

Acknowledgements

This article was supported by the project "Training in Practical Skills for Students in Non-Medical Health Care Fields in the Context of the Latest Trends and Requirements for Multidisciplinary Collaboration at the Simulation Center of the TnUAD Faculty of Health Sciences, project code ITMS21+: 401101B920".

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PROMOTING HEALTH LITERACY AMONG OLDER ADULTS THROUGH THE NESTOR+ EDUCATIONAL PLATFORM

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Abstract

Introduction: The Czech population is steadily aging, with adults aged 65 years and over representing nearly 21% of the population by the end of 2025. At the same time, healthcare and social services are becoming increasingly digitalized, creating new challenges for older adults with limited health, digital, social, and financial literacy. **Objective:** To present the development and content of the NESTOR+ educational platform designed to support literacy and independent living among older adults. **Main text:** The NESTOR+ project, implemented by the Faculty of Health and Social Sciences, University of South Bohemia, with the support of the Technology Agency of the Czech Republic, applies a participatory approach. Educational modules were developed based on a literature review and assessment of the target population's needs. The platform includes educational texts, videos, presentations, worksheets, interactive scenarios, games, and quizzes covering health, digital, social, and financial literacy. Expert review, pilot testing, public educational lectures, and evaluation of platform usability and users' knowledge are integral parts of the project. A comprehensive web-based educational platform has been developed to improve older adults' orientation in healthcare, digital technologies, and everyday life. The platform provides accessible educational resources and interactive learning tools tailored to the needs of adults aged 65 years and over. **Conclusion:** NESTOR+ represents an innovative educational tool that combines modern technology with evidence-informed learning resources to promote active aging, strengthen independence, and support healthy and socially engaged lives among older adults.

Keywords: Active aging. Seniors. Health literacy. Digital literacy. Education for seniors. Online educational platform.

Project reg. no. TQ01000591 is co-financed with state support from the Technology Agency of the Czech Republic under the SIGMA Programme.

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THE RELATIONSHIP BETWEEN CLIMATE CHANGE SOCIAL NORMS AND CLIMATE CHANGE-RELATED EMOTIONAL EXPERIENCE

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Abstract

Introduction: The impacts of the climate crisis are extensive and affect the health, ecological, and economic dimensions of individuals' lives. Their mitigation represents an important area of public interest, leading to an increasing need to promote pro-environmental behaviour. **Objective:** The present study aimed to examine the relationships between social norms regarding climate change and emotional experiences related to climate change. **Methods:** A total of 583 adult Slovak men and women ($M_{age} = 50.88$, $SD_{age} = 15.53$) completed scales measuring descriptive and injunctive social norms, as well as a scale assessing climate-related emotions (enthusiasm, guilt, contempt, and powerlessness). Cronbach's alpha for the descriptive norms scale ($\alpha = 0.785$) and the injunctive norms scale ($\alpha = 0.915$) indicated good reliability. Similarly, the Cronbach's alphas for the individual climate-related emotions, namely enthusiasm ($\alpha = 0.918$), guilt ($\alpha = 0.907$), contempt ($\alpha = 0.864$), and powerlessness ($\alpha = 0.827$), demonstrated good reliability. **Results:** Analyses revealed that women experienced climate-related emotions more intensely than men, with the exception of climate contempt, for which no significant gender difference was found. Bivariate correlation analyses indicated that descriptive norms were positively associated only with climate enthusiasm. In contrast, injunctive norms showed positive associations with all climate-related emotions. Notably, both forms of social norms were linked to higher levels of enthusiasm regarding potential solutions to climate change. Furthermore, whereas descriptive norms (i.e., the belief that others engage in prosocial behaviour) were not significantly related to guilt, injunctive norms (i.e., the perceived expectation that one should behave prosocially) were significantly and positively associated with this emotion. **Conclusions:** The findings suggest that communicating different types of social norms may evoke distinct emotional responses to the climate crisis, which may, in turn, differentially influence pro-environmental behaviour.

Keywords: Climate change. Social norms. Descriptive norms. Injunctive norms. Climate change-related emotional experience.

Acknowledgements

This study was supported by the APVV grant agency under the project "Adaptation to Climate Change in Slovakia: The Role of Cognitions and Affective Responses" (No. 24-0575).

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CLIMATE CHANGE PERCEPTION AND CLIMATE CHANGE-RELATED EMOTIONAL EXPERIENCES

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Abstract

Introduction: Although climate change is one of the most significant challenges facing humanity, perceptions of climate change and the emotions associated with it remain insufficiently explored within the Slovak population. **Objective:** The aim of this study was to examine the relationships between individuals' beliefs about climate change and climate change related emotions. **Methods:** A total of 586 Slovak adults ($M_{\text{age}} = 52.12$ years, $SD_{\text{age}} = 14.80$) participated in a survey, in which they completed measures assessing beliefs regarding the reality of climate change, its anthropogenic origin, and its perceived negative and positive impacts across temporal and spatial dimensions. They also completed a scale measuring climate change-related feelings of hopelessness, sorrow, and enthusiasm. **Results:** One of the most important findings revealed by the bivariate correlation analyses was that stronger beliefs in the reality of climate change, its anthropogenic origin, and its temporal and spatial proximity were associated with more intense feelings of climate change-related sorrow. These associations were of moderate magnitude. In contrast, feelings of hopelessness showed only very weak or non-significant associations with climate change perceptions. Enthusiasm demonstrated weak to moderate associations with climate change perceptions. Overall, the findings indicate that perceptions of climate change are associated with climate change-related emotional experiences among the Slovak population. **Conclusions:** These results contribute to the growing body of knowledge on the psychological aspects of climate change, an area that has received limited attention in Slovakia. Furthermore, they provide a foundation for future research on the cognitive and emotional dimensions of climate change perception in the Slovak context.

Keywords: Climate change. Climate change perceptions. Climate change-related emotions. Environmental psychology. Correlation analysis.

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SOCIAL PERCEPTION OF THE NURSING PROFESSION: GENERATIONAL DIFFERENCES

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Abstract

Introduction. Social perceptions of the nursing profession are shaped by cultural, historical, and healthcare-related experiences. These factors may contribute to differences in how nursing is perceived across generations. **Objective.** To assess opinions on the nursing profession among different age groups and identify generational differences in its perception. **Methods.** A cross-sectional survey was conducted between November 2025 and March 2026 among 150 patients attending the *Dynmed* Medical Center in Dynów, Poland. Data were collected using an author-designed questionnaire. Respondents were divided into four age groups (18–29, 30–44, 45–59, and ≥ 60 years). Statistical analyses included the chi-square test, ANOVA, and the Kruskal–Wallis test ($p < 0.05$). **Results.** Most respondents perceived nursing as a profession requiring a vocation (98.7 %). Overall, the profession was evaluated positively, particularly regarding nurses' knowledge, practical skills, trustworthiness, and social respect. The mean overall evaluation score was 17.17 out of 20 points. Significant differences between age groups were observed in the assessment of nursing as a field of study ($p = 0.0002$). Respondents aged 60 years and older expressed the most positive attitudes and rated nursing as more attractive than younger participants. More than 72 % of respondents considered nurses' appearance important for the professional image of the profession. No significant age-related differences were found in knowledge of nurses' competencies. **Conclusions.** Age significantly influences perceptions of the nursing profession. Older respondents demonstrate more favourable attitudes toward nursing and view it as a more attractive educational pathway. Knowledge of nurses' competencies appears independent of age. Public education and promotion of the professional role of nurses may strengthen the profession's social image.

Keywords: Nursing. Nursing profession. Social perception. Generational differences.

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FACTORS DETERMINING HEALTH LITERACY OF PATIENTS WITH DIABETES MELLITUS IN SKIN CARE

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Abstract

Introduction: Patients with diabetes mellitus should be aware of the need for skin care, possible skin problems, and be prepared to seek professional medical care in a timely manner. The issue of health literacy and patients' knowledge of skin manifestations, associated with diabetes, is insufficient in research. **Objective:** To identify factors determining health literacy of patients with diabetes mellitus in relation to skin care. **Methods:** The health literacy assessment tool HLS-EU-Q16 was used. Normality of distribution was tested using the Shapiro-Wilk test, groups were compared using the Kruskal-Wallis test (K-W); correlations were using Fisher's exact test, ordinal dependencies were using Kendall's tau, statistical significance was set at $p < 0.05$. **Results:** The sample consisted of 102 patients with diabetes mellitus aged 54.8 ± 16.5 years. A significant finding was that more than 98 % of respondents were below the sufficient health literacy threshold. The determining factors of insufficient health literacy included low frequency of visits to a diabetologist ($p = 0.049$), insufficient study of professional publications as a source of information ($p = 0.045$) or searching for information about skin problems on the Internet ($p = 0.049$). Factors such as the age of the patients, type and duration of diabetes mellitus, higher education, frequency of skin checks, interest in information on the prevention of skin problems, and availability of health information did not affect the level of health literacy. **Conclusions:** The patients with higher education or longer disease duration did not show better health literacy. It was confirmed that the level of formal education or experience with the disease alone is not sufficient. Active, targeted education by healthcare professionals is needed. **Keywords:** Diabetes mellitus. Health literacy. Prevention skin complication. Skin care.

Acknowledgements

The project was supported by KEGA 051UK-4/2024: Health literacy of nursing students.

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THE IMPACT OF MICROCURRENT INTERVENTION ON STRESS, COGNITIVE LOAD, AND CLINICAL TASK PERFORMANCE AMONG NURSING STUDENTS IN MEDICAL SIMULATION SETTINGS

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Abstract

Introduction: Stress associated with performing clinical procedures in medical simulation settings may negatively affect cognitive functioning, decision-making, and the quality of task performance among healthcare students. Microcurrent interventions have been used to regulate psychophysiological tension, improve well-being, and reduce symptoms of stress. The aim of this study was to evaluate the effects of a brief microcurrent intervention on stress levels, cognitive load, and clinical task performance among nursing students compared with mindfulness meditation. **Methods:** A randomized pilot crossover study was conducted involving 38 nursing students participating in educational activities at a Medical Simulation Center. Each participant completed two experimental conditions: a 20-minute microcurrent-based intervention and a 20-minute guided mindfulness meditation session. Stress levels were assessed before and after each intervention using a Visual Analogue Scale (VAS) and heart rate measurements. Following completion of a clinical task, cognitive load was evaluated using the NASA Task Load Index (NASA-TLX). Clinical performance was assessed using a standardized task checklist, procedure completion time, and self-efficacy ratings. **Results:** Following the microcurrent intervention, a significant reduction in stress levels measured by the VAS was observed (mean decrease from 6.8 ± 1.4 to 3.9 ± 1.5 points; $p < 0.001$), whereas the reduction following mindfulness meditation was smaller (from 6.7 ± 1.3 to 4.9 ± 1.5 points; $p = 0.02$). Mean heart rate before the clinical task was lower after the microcurrent intervention (78 ± 9 bpm) compared with mindfulness meditation (84 ± 10 bpm; $p = 0.01$). Students exposed to the microcurrent-based intervention demonstrated lower NASA-TLX scores, indicating reduced cognitive load (42.3 ± 11.8 vs. 51.7 ± 13.2 points; $p = 0.004$). They also achieved higher clinical performance checklist scores (89.4% vs. 83.1%; $p = 0.02$) and committed fewer critical errors (0.3 vs. 0.8 errors per participant; $p = 0.04$). Additionally, participants reported higher self-efficacy following the microcurrent intervention (8.1 ± 1.2 points on a 0–10 scale) compared with mindfulness meditation (6.9 ± 1.5 points; $p = 0.01$). **Conclusions:** The microcurrent intervention administered prior to the clinical task was associated with a significant reduction in stress levels and cognitive load among nursing students. Compared with mindfulness meditation, improvements were also observed in the quality of clinical procedure performance, a lower number of critical errors, and higher perceived self-efficacy. These findings suggest that microcurrent-based interventions may be a promising approach for enhancing psychophysiological readiness among healthcare students performing clinical tasks in medical simulation settings. Further studies involving larger participant groups and multicentre validation are needed to confirm and expand upon these preliminary findings.

Keywords: Microcurrent therapy. Cognitive load. Stress. Mindfulness. Nursing education. Medical simulation. Simulation-based education. NASA-TLX.

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INTERPROFESSIONAL NURSING COLLABORATION IN THE HEALTH CARE TEAM

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Abstract

Introduction: Interprofessional collaboration within healthcare teams is an essential prerequisite for ensuring the continuous, high-quality, and safe delivery of nursing care. Collaboration between nurses and other healthcare professionals facilitates the timely and accurate exchange of information, promotes continuity of care, and supports patient-centered healthcare delivery. Furthermore, it enhances the professional autonomy of individual healthcare disciplines and contributes to the effectiveness of healthcare services. **Objective:** To map the available evidence within the framework of the SZU 04/2025 SVG project and to identify instruments used to assess interprofessional collaboration. **Methods:** This scoping review was conducted in accordance with the Joanna Briggs Institute (JBI) methodology and reported according to the PRISMA Extension for Scoping Reviews (PRISMA-ScR). A systematic search of the literature was conducted in the Web of Science and Scopus databases. In the second phase, a content analysis of the included studies was performed. A total of 134 studies were identified, of which 72 studies published between 2010 and 2025 met the inclusion criteria and were included in the review. The identified evidence consisted of literature reviews, systematic reviews, meta-analyses, and cross-sectional studies. **Results:** Studies assessing interprofessional collaboration within healthcare teams were included in the analysis. Content analysis focused on the use of the Assessment of Interprofessional Team Collaboration Scale (AITCS) and the TeamSTEPPS Teamwork Perceptions Questionnaire (TTPQ), as well as their applicability for assessing collaboration between nurses and other healthcare professionals. The review also identified the Interprofessional Collaboration Scale (ICS) as an appropriate instrument for assessing interprofessional collaboration in healthcare settings, particularly from the nursing perspective. **Conclusion:** Future research should focus on exploring factors that influence interprofessional collaboration, measuring its effectiveness, and developing strategies to strengthen communication and conflict resolution within healthcare teams. The application of emotional intelligence, together with the promotion of open-mindedness and a team-oriented approach, may further enhance effective interprofessional collaboration within healthcare teams.

Keywords: Nurse. Interdisciplinary collaboration. Healthcare team. Collaboration assessment scales.

Acknowledgements

This work was supported by the SZU 04/2025 SVG project.

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THE ROLE OF ADVANCED PRACTICE NURSES IN PRIMARY HEALTH CARE DEVELOPMENT: INTERNATIONAL EXPERIENCE AND HUNGARIAN PERSPECTIVES

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Abstract

Introduction: Primary health care systems worldwide are facing increasing challenges due to population ageing, the rising prevalence of chronic diseases, shortages of healthcare professionals, and the growing demand for high-quality healthcare services. **Objective:** to highlight the role of Advanced Practice Nurses (APNs) in strengthening primary health care by reviewing international experience and discussing opportunities for their integration into the Hungarian healthcare system. **Main text:** International evidence consistently demonstrates that APNs improve access to healthcare services, enhance the continuity and quality of care, support the management of patients with chronic diseases, and contribute to improved patient safety and satisfaction. Owing to their advanced clinical competencies, APNs working in community settings are qualified to independently perform patient assessment, obtain medical histories, conduct physical examinations, make clinical decisions, develop management plans, participate in the management of pharmacological and non-pharmacological therapies, initiate and interpret diagnostic investigations, coordinate patient pathways, utilise telemedicine technologies, and contribute to the long-term follow-up of patients with chronic conditions. These competencies promote the more efficient use of healthcare resources, reduce physicians' workload, and strengthen interprofessional collaboration. In Hungary, the introduction of Advanced Practice Nursing education and the continuously evolving regulatory framework provide a favourable basis for expanding the role of APNs in primary health care. Further development of competency-based practice, supported by appropriate organisational, legal, and financial frameworks, will facilitate the successful integration of APNs into routine healthcare services. **Conclusions:** Based on international experience, Advanced Practice Nurses have the potential to become key contributors to sustainable, patient-centred, and evidence-based primary health care.

Keywords: Advanced practice nurse. Primary health care. Chronic disease management. Interprofessional collaboration.

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COMMUNITY NURSING – EDUCATION, WORKFORCE CHALLENGES, AND FUTURE DIRECTIONS

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Abstract

Introduction: Population ageing, the increasing prevalence of chronic diseases, workforce shortages, and the growing influence of social determinants of health are placing significant pressure on healthcare systems across Europe. Community nursing has become an important approach to providing sustainable, person-centred, and integrated care. Evidence suggests that community-based nursing interventions improve chronic disease management, reduce hospital admissions, enhance treatment adherence, increase patient satisfaction, and decrease healthcare costs. **Objective:** To examine the current state of community nursing in Slovakia and to compare selected challenges and future development needs with those identified in the Czech Republic, Poland, and Hungary. It also seeks to identify the key competencies required for future community nurses. **Main text:** The theoretical paper is based on a review and analysis of scientific literature, European health policy documents, OECD statistics, and recent evidence related to community nursing, population health trends, and workforce development in Slovakia, the Czech Republic, Poland, and Hungary. The analysis revealed several common challenges, including population ageing, increasing multimorbidity, workforce shortages, and the limited development of community care services. Five priority competency areas for future community nurses were identified: chronic disease management, digital health literacy, integrated care coordination, population health assessment, and addressing social determinants of health. The findings highlight the need for curriculum modernisation, expanded community-based clinical placements, advanced nursing roles, stronger digital competencies, interprofessional education, and lifelong learning opportunities. **Conclusions:** Strengthening community nursing is essential for improving population health, promoting health equity, and ensuring the sustainability of healthcare systems in Slovakia, the Czech Republic, Poland, and Hungary. Nursing education should adapt to prepare graduates for the complex health and social needs of communities in the coming decades.

Keywords: Community nursing. Nursing education. Workforce challenges. Healthcare sustainability. Population health.

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THE ROLE OF COMMUNITY NURSES IN THE PREVENTION OF LIFESTYLE DISEASES IN MARGINALIZED COMMUNITIES

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Abstract

Introduction: Community nursing represents a strategic component of public health in the context of preventing non-communicable diseases. The prevention of non-communicable diseases requires a comprehensive and coordinated approach. **Objective:** To present research findings focused on the prevention of non-communicable diseases in marginalized communities and to highlight the importance of collaboration between community nurses and social work professionals. **Methods:** A non-standardized questionnaire developed by the authors was used as the research instrument for respondents aged 18 years and older. The collected data were processed using Microsoft Excel and statistically analysed. **Results:** The findings revealed low health literacy a high prevalence of risk factors and insufficient uptake of preventive health examinations and preventive interventions. The results demonstrated that collaboration between community nurses and social workers significantly facilitates the implementation of preventive interventions. Effective communication among these professionals contributes to more efficient resolution of social issues, a better understanding of patients' needs. Furthermore, the establishment of a multidisciplinary team comprising a doctor, social worker, physiotherapist, psychologist, and community health worker is essential for the effective implementation of evidence-based preventive strategies into clinical and community practice. **Conclusions:** This publication highlights the need to community-based nursing practice, develop the interdisciplinary competencies of nurses, and implement national strategies oriented preventive care.

Keywords: Community nursing. Prevention. Non-communicable diseases. Social work. Multidisciplinary care.

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VALIDATION OF THE NURSING DIAGNOSIS EXCESSIVE LONELINESS IN OLDER ADULTS

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Abstract

Introduction: Loneliness represents a serious psychosocial problem that is associated with an increased risk of health complications in older adults and may contribute to a decline in their overall quality of life. **Objective:** To identify the clinically valid defining characteristics and related factors of the nursing diagnosis Excessive Loneliness (00475) in older adults. The partial objectives were to assess which defining characteristics and related factors of the nursing diagnosis were clinically valid as major and which as minor indicators in older adults. **Methods:** The research had a quantitative design. In the study, we applied the patient-centred Clinical Diagnostic Validity (CDV) model. The sample consisted of 38 older adults living in a social care facility who assessed the relevance of the individual defining characteristics and related factors using a measurement tool that included the aforementioned items. **Results:** The defining characteristics Physical discomfort and Longing for meaningful connections were validated as major indicators. The minor defining characteristics included Altered sleep–wake cycle, Fatigue, Psychological discomfort, Decreased social interaction, and Altered appetite. None of the related factors were identified as major by the older adults; the minor factors included Impaired physical mobility, Inadequate emotional support, and Inadequate positive social interaction. **Conclusions:** The findings of the study expand the current knowledge on the clinical validity of the diagnosis Excessive Loneliness and may support more effective interventions for older adults at risk of loneliness.

Keywords: Loneliness. Nursing diagnosis. Older adult. Validation.

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THE WORK OF NURSES OUTSIDE HOSPITAL SETTINGS IN INTERWAR CZECHOSLOVAKIA

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Abstract

Introduction: Interwar Czechoslovakia was a period of development in public health and social care, during which forms of care provided directly in households and local communities emerged alongside institutional health care. While historiography has devoted considerable attention to the development of medicine and health care institutions, the role of nurses working outside hospital settings remains relatively understudied. **Objective:** The objective of this paper is to analyse the status and activities of nurses working outside hospital facilities in interwar Czechoslovakia and to assess their significance for the development of health and social care provided in households and local communities. **Methods:** This paper is based on historical research involving the analysis of archival sources, legislative documents, reports from healthcare and charitable organizations, contemporary professional publications, and relevant historiographical literature. The sources are interpreted within the context of social and health developments in interwar Czechoslovakia. **Results:** Nurses working outside hospitals were involved in home nursing, maternal and childcare, health education, preventive activities, and assistance to socially disadvantaged families. Their work bridged health and social care and reflected the era's efforts to improve the health of the population through activities carried out directly in households and local communities. Nurses thus served as an important link between health and social services. Institutions that developed forms of health and social care extending beyond the hospital setting played a significant role in this process. **Conclusions:** The work of nurses outside hospital settings represents a significant but as yet little-known part of the history of Czechoslovak healthcare and social care. Although the term "community care" was not used during the interwar period, some forms of nurses' work exhibited characteristics that are today associated with community-oriented care. Studying this topic contributes to a better understanding of the historical context of current efforts to integrate health and social care.

Keywords: History of nursing. Public health. Social care. Home nursing. Interwar Czechoslovakia. Nurses.

Acknowledgements

This contribution was created as part of the grant project GAJU 071/2024/S, funded by the Grant Agency of the University of South Bohemia in České Budějovice.

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BRIDGING CLINICAL SKILL AND CULTURAL COMPETENCE: INTEGRATING IDI PRINCIPLES INTO CARDIOVASCULAR AND RESPIRATORY ASSESSMENT

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Abstract

Introduction: Effective cardiovascular and respiratory assessment requires not only technical proficiency but also cultural competence to ensure accurate, patient-centred care. **Objective:** This project examines the use of the Intercultural Development Inventory (IDI) framework as a guiding approach for teaching professional nurses how to conduct heart and lung assessments across diverse patient populations. **Main text:** Emerson et. al. (2024) found that the IDI model, which measures and supports progression along a continuum of intercultural sensitivity—from monocultural to intercultural mindsets—provides a structured lens for integrating cultural awareness into clinical skill development. In this approach, nurses are guided to recognize how cultural beliefs, communication styles, and health practices influence patient presentation, symptom reporting, and responses to physical examination. Instruction incorporates culturally responsive communication strategies alongside traditional assessment techniques such as inspection, palpation, percussion, and auscultation. Active learning strategies, including case-based scenarios and interactive activities such as 4-corners discussions, are used to help nurses identify and address layered patient barriers—such as language differences, health literacy, sensory impairments, and socioeconomic limitations—while adapting communication and discharge teaching to ensure safe, individualized care. **Conclusions:** Integrating IDI principles into nursing education fosters cultural humility, challenges assumptions, and strengthens clinical judgment, ultimately improving communication, reducing preventable errors, and enhancing outcomes in cardiovascular and respiratory care. This framework supports the development of nurses who are both clinically competent and culturally responsive, ultimately contributing to more equitable healthcare delivery and improved patient outcomes.

Keywords: Cultural competence. Intercultural Development Inventory (IDI). Cardiovascular and respiratory assessment. Nursing education. Patient-centred care.

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ANXIETY AND STRESS LEVELS AMONG PATIENTS WITH BREAST CANCER

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Abstract

Introduction: Breast cancer is one of the most common malignancies in women and is associated with a substantial psychological burden. Fear of an unfavourable histopathological diagnosis, surgical treatment, and its possible consequences may increase anxiety and stress levels. **Objective:** To assess the levels of anxiety and perceived stress among women diagnosed with breast cancer. **Methods:** A cross-sectional study was conducted among 125 women with breast cancer using a diagnostic survey method. Data were collected with an original questionnaire, the Beck Anxiety Inventory (BAI), and the Perceived Stress Scale (PSS-10). **Results:** The participants were aged 20–84 years (mean 54.34 ± 13.49 years). The most common sources of anxiety and stress were concerns about an unfavourable histopathological result (67.2 %) and anaesthesia-related complications (47.2 %). Low anxiety levels were observed in 56.8 % of the participants, moderate anxiety in 35.2 %, and high anxiety in 8.0 %. Moderate perceived stress was reported by 57.6 % of women, while 40.0 % experienced high stress levels and only 2.4 % reported low stress. Among the analysed sociodemographic variables, only place of residence was associated with stress levels. **Conclusions:** Women with breast cancer awaiting surgery most frequently experienced low anxiety and moderate stress. The main factors contributing to psychological distress were fear of an unfavourable histopathological result, possible perioperative complications, and concerns about breast loss or body disfigurement.

Keywords: Breast cancer. Anxiety. Perceived stress. Women. Surgery. Diagnosis.

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MENTAL HEALTH IN THE DIGITAL AGE: EFFECTS OF SOCIAL MEDIA USE ON DEPRESSION, ANXIETY, AND SLEEP QUALITY AMONG FOREIGN HEALTH CARE STUDENTS

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Abstract

Introduction: The increasing use of social media among university students has raised significantly and it has a potential impact on mental health and sleep quality. **Objective:** This study aimed to evaluate the relationship between social media use, depression, anxiety, and sleep quality among foreign health care students. **Methods:** A quantitative cross-sectional study was conducted, involving 217 students at the Faculty of Health Sciences, University of Debrecen in 2026. Data were collected using a structured questionnaire, incorporating standardized instruments including the Patient Health Questionnaire-9 (PHQ-9), Generalized Anxiety Disorder-7 (GAD-7), and the Pittsburgh Sleep Quality Index (PSQI). The Chi-square (χ^2) test was applied to examine associations between variables. **Results:** The findings revealed that the majority of participants engaged in moderate to high levels of daily social media use (28 % reporting 5–6 hours, and 21 % reporting more than 6 hours per day). Regarding mental health outcomes, PHQ-9 results indicated that 42% of students experienced mild depression, while 15.5 % reported moderate and 15.5 % moderate-to-severe depression, with 5 % classified as severe. Similarly, GAD-7 results showed that 30 % of participants had mild anxiety, 25 % moderate anxiety, and 11 % severe anxiety. Sleep quality assessment using the PSQI indicated that a considerable proportion of students experienced poor sleep quality. Statistically significant association was found between daily social media use and depression severity ($\chi^2 = 34.266$, $p = 0.005$), as well as sleep quality ($\chi^2 = 21.361$, $p = 0.045$). Nighttime social media use was also significantly associated with sleep quality ($\chi^2 = 22.921$, $p = 0.028$). Additionally, perceived effects of social media on mood were significantly associated with both depression ($\chi^2 = 34.814$, $p = 0.004$) and anxiety ($\chi^2 = 21.921$, $p = 0.038$). **Conclusions:** These results highlight the need for targeted interventions to promote healthy digital behaviours and improve mental health outcomes among students.

Keywords: Health care students. Depression. Anxiety. Sleep quality. Social media use.

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ASSESSMENT OF NUTRITIONAL STATUS IN PATIENTS WITH VASCULAR WOUNDS IN THE CONTEXT OF EVIDENCE-BASED PRACTICE

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Abstract

Introduction: The wound healing process is a complex physiological reaction of the body that begins as soon as an injury occurs. The diagnosis of malnutrition should be one of the pillars of comprehensive patient care, especially for patients with large-surface wounds, prolonged healing, or comorbidities. Based on evidence-based practice, a reliable and accurate nutritional diagnosis requires integration with nutritional status assessment parameters at both the basic level (clinical assessment) and the advanced level (biochemical tests and bioelectrical impedance analysis). **Objective:** To assess the nutritional status of patients with coexisting wounds in the course of diabetic foot disease (DFD) and chronic venous insufficiency (CVI) using selected markers, scales, and tools. **Methods:** A prospective study involving 106 patients with chronic wounds of vascular etiology (DFD/CVI). An assessment was conducted using a questionnaire (MNA), biochemical blood analysis (albumin, haemoglobin, CRP, NRI index), and bioelectrical impedance analysis (BIA). **Results:** The mean MNA score was 21.54 ± 3.18 points. Malnutrition was observed in 7.5% of patients, and was significantly more common in the DFD group (14.0 %). In patients with CVI, a larger wound area correlated with lower albumin ($p = 0.0126$) and haemoglobin ($p = 0.0095$). In the DFD group, a larger wound area was associated with significantly lower albumin ($p < 0.0001$), haemoglobin ($p < 0.0001$), and higher CRP. Greater tissue destruction in patients with DFD corresponded to lower levels of albumin, NRI, and MNA, as well as higher CRP ($p = 0.0021$). Additionally, the phase angle (PhA) showed strong positive correlations with albumin, haemoglobin, NRI, and MNA, particularly in the DFD group ($R = 0.540$; $p = 0.0001$). **Conclusions:** The NRI, PhA, and MNA indices, as well as blood parameters (albumin, haemoglobin, and CRP), show a strong correlation with wound characteristics. Greater tissue damage is associated with a higher risk of malnutrition, as confirmed by the study results.

Keywords: Chronic wound. Nutritional status. Evidence-based practice.

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ATTITUDES OF NURSING STUDENTS AND REGISTERED NURSES TOWARD THE CARE OF PATIENTS IN PALLIATIVE CARE

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Abstract

Introduction: Caring for patients in palliative care is both professionally and emotionally demanding. The formation of attitudes toward providing nursing care to dying patients and the processing of experiences with death are shaped by multiple determinants. **Objective:** We analysed which factors play a key role among students of nursing in forming a positive attitude toward caring for dying patients. The aim was to map the experiences of students of nursing and nurses with patients' death and palliative care. **Methods:** We approached a sample of Bachelor-level students of nursing and nurses enrolled in Master's-level nursing studies; the study sample consisted of 202 respondents. We analysed published literature sources and used the questionnaire developed by Frommelt, Form B, the Slovak version FATCOD-B-SK. **Results:** A positive attitude toward caring for dying patients does not depend on age, $p = 0.570$. There is no statistically significant difference in the level of positive attitude toward caring for dying patients between nurses with secondary and higher education, $p = 0.335$. We confirmed that there is a statistically significant difference in the level of positive attitude toward caring for dying patients between respondents with work experience and those without it, $p = 0.001$. **Conclusions:** To support the formation of a positive attitude among students of nursing as well as practicing nurses toward caring for patients in palliative care, we recommend implementing group sessions with a psychologist, using relaxation techniques, stress-reduction strategies, and methods for managing one's own emotions.

Keywords: Students of nursing. Nurse. Palliative care. Experience with patients' death. FATCOD-B-SK questionnaire.

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NURSES AS LEADERS OF CHANGE: ENVIRONMENTAL SUSTAINABILITY AS AN EMERGING COMPETENCY IN MODERN NURSING

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Abstract

Introduction: Environmental challenges, including climate change and the growing ecological burden of healthcare systems, are creating new demands on healthcare professions. International professional organizations and contemporary nursing research emphasize the need to develop competencies related to environmental sustainability and planetary health. **Objective:** To discuss environmental sustainability as an emerging competency and a new dimension of the professional identity of modern nurses. **Main text:** The presentation outlines current evidence regarding the role of nurses in environmentally responsible healthcare and explores the concept of sustainability competencies in nursing. Particular attention is given to critical thinking, leadership, professional accountability, systems thinking, and the ability to identify and address inefficient clinical practices. These competencies enable nurses to contribute to the delivery of high-quality, safe, and sustainable care while actively participating in organizational change. Selected findings from a recently completed institutional research project focusing on the use of single-use personal protective equipment are presented to illustrate how everyday clinical decisions influence patient safety, resource utilization, and environmental outcomes. The findings demonstrate that sustainability is closely linked to patient safety, quality improvement, and responsible resource stewardship. **Conclusions:** Environmental sustainability should therefore not be regarded as an additional responsibility but rather as an integral component of contemporary nursing practice. Strengthening sustainability competencies may enhance nursing leadership, support professional autonomy, and increase the contribution of nurses to the transformation of healthcare systems towards greater sustainability.

Keywords: Nursing Leadership. Environmental Sustainability. Professional Identity. Sustainability Competencies. Planetary Health.

Acknowledgements

The authors acknowledge the financial support provided by the Internal Grant Agency of Tomas Bata Hospital in Zlin (IGA KNTB, a.s.) through project No. 25-1-006, *Sustainable Efficiency in Hospital Practice: Optimization of Resource Consumption and Waste Management*.

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ADAPTATION TO CLIMATE CHANGE IN SLOVAKIA: PSYCHOLOGICAL AND NURSING PERSPECTIVES

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Abstract

Introduction: Climate change represents an escalating challenge that affects daily functioning, health, and socio-economic stability. Research distinguishes between proactive adaptation strategies, focused on preparation for anticipated impacts, and reactive strategies responding to ongoing climate events. Addressing these processes requires interdisciplinary perspectives. **Objective:** This project integrates psychological and nursing approaches to examine how climate-related cognitions and emotional responses shape adaptation in the Slovak population, with particular attention to vulnerable groups such as patients and students, including nursing students. **Main text:** Previous systematic review synthesized evidence on how climate change affects patient health outcomes from a nursing perspective. It highlights nurses' growing encounters with climate-related conditions, including respiratory, cardiovascular, infectious, and mental health issues, and the disproportionate burden on vulnerable communities. The review also stresses the need for stronger education and institutional support for healthcare students. Building on these insights, the project examines how climate-related cognitions (awareness, knowledge, perception) and affective responses (anxiety, worry, helplessness, perceived threat) shape adaptation. The conceptual model is grounded in Lazarus and Folkman's transactional theory of stress and coping, integrating cognitive, emotional, and behavioural dimensions. **Conclusions:** By developing an integrative theoretical framework, the project highlights adaptation to climate change. This foundation will guide future empirical work and support targeted interventions for vulnerable groups in Slovakia.

Keywords: Climate change adaptation. Cognitions and affective responses. Coping. Vulnerable groups. Patients. Students.

Acknowledgements

This work was supported by the Slovak Research and Development Agency under Contract no. APVV-24-0575.

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ECO-FRIENDLY HEALTH CARE: MANAGING DISPOSABLE RESOURCES

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Abstract

Introduction: The healthcare sector is currently facing a number of challenges related to sustainability and waste management. With the increasing emphasis on green practices and waste reduction, it is essential to increase the competences of healthcare professionals in the field of segregation and sustainability, especially when using disposable materials. **Objective:** The aim is to describe the competences in the field of sustainability and waste segregation when using disposable materials and to highlight the importance of their implementation within healthcare. **Main text:** The paper deals with various aspects of waste management, including the correct separation of waste (infectious, chemical, recyclable), as well as legislative requirements and hospital policies. The advantages and disadvantages of disposable and reusable materials are discussed, while highlighting their environmental impact. The study also includes the results of surveys on healthcare professionals' attitudes towards waste management and their practical skills in this area. Recommendations for improving systems thinking and designing sustainable solutions are also important. **Conclusions:** Improving competencies in the area of sustainability and proper waste segregation has the potential to significantly contribute to changing healthcare practices. Education and awareness measures in this area are key to supporting responsible behaviour of healthcare professionals and reducing negative environmental impacts. Implementation of these principles can lead to more sustainable practices and more efficient healthcare waste management.

Keywords: Sustainability. Healthcare sector. Environmental responsibility. Competencies.

Acknowledgements

This work was supported by the Slovak Research and Development Agency under Contract no. APVV-24-0575.

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PREDICTORS OF MORAL DISTRESS IN NURSES

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Abstract

Introduction: Investigating factors influencing moral distress is crucial for the protection of mental health and professional satisfaction of nurses. **Objective:** To identify predictors of moral distress in nurses. **Methods:** The research was conducted using a cross-sectional design. The sample consisted of 412 nurses from 11 Slovak hospitals with a mean age of 40.48 years (SD = 10.92). The Modified Moral Distress Scale (MDS-11) was used to assess moral distress. Predictors of moral distress were analysed using linear regression analysis. **Results:** The internal consistency of the MDS-11 was acceptable for the frequency ($\alpha = 0.779$) and intensity ($\alpha = 0.832$) dimensions of moral distress. Personal performance, maladaptive self-distraction strategy, continuous operation and emotional burnout were identified as significant predictors of the frequency of moral distress ($\text{AdjR}^2 = 0.155$). In the case of the intensity of moral distress, the same variables proved to be significant, while the adaptive strategy of religiosity and spirituality ($\text{AdjR}^2 = 0.140$) was also added, which functions as a coping mechanism with the intensity of moral distress. **Conclusions:** A systematic analysis of predictors of moral distress in nurses can contribute to the creation of interventions and programs to support nurses in order to improve their professional satisfaction.

Keywords: Moral distress. Predictors. Nursing, Ethics.

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PSYCHOLOGICAL ADAPTATION TO ENVIRONMENTAL THREATS AND CLIMATE CHANGE: AN INTERVENTION PROGRAM

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Abstract

Introduction: Climate change poses a major global challenge, highlighting the need for educational interventions that foster young people's psychological adaptation and pro-environmental action. Previous research indicates that climate education programs primarily increase knowledge, with limited effects on behaviour. Effective interventions should therefore make climate change personally relevant, encourage emotional reflection, and strengthen adaptive coping and pro-environmental action. **Objective:** This study presents the development and pilot evaluation of an intervention designed to promote adaptive coping with climate change. **Methods:** The intervention program *Psychological Adaptation to Environmental Threats and Climate Change* was tested with 35 master's students in psychology during the 2025/26 academic year. It comprised five 4-hour sessions addressing major environmental issues related to climate change (biodiversity loss, deforestation, ocean acidification, overpopulation, waste and plastic pollution, and air and water pollution). Students presented the topics, while instructors facilitated their cognitive, emotional, and behavioural processing. **Results:** A mixed-methods pre-post design assessed perceived environmental stress, coping strategies, eco-emotions, environmental self-efficacy, and pro-environmental behaviour. Preliminary findings indicate a developmental shift in participants' perceptions of climate change from viewing it as a distant problem, through increased personal relevance, to a new understanding characterized by cognitive, emotional, and behavioural transformation. **Conclusions:** The program shows promise as an educational approach to promoting psychological adaptation to climate change and strengthening young people's engagement in climate action.

Keywords: Climate change. Psychological Adaptation. Intervention Program. Emotional Reflection. Pro-environmental Behaviour.

Acknowledgements

APVV-24-0575 Adaptation to climate change in Slovakia: The role of cognitions and affective responses

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HEART FAILURE SELF-CARE BEHAVIOUR IN PATIENTS OF SLOVAK AND CZECH NATIONALITY – PRELIMINARY RESULTS

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Abstract

Introduction: Accumulating evidence indicates that self-care (SC) behaviours positively influence health outcomes and quality of life in patients with heart failure (HF). Nevertheless, SC in this population remains suboptimal. Therefore, systematic identification and monitoring of factors associated with effective SC are essential. **Objective:** To examine the relationships among HF SC behaviour, self-efficacy, and illness perception in adult patients of Slovak and Czech nationality. **Methods:** A cross-sectional correlational design was used. Data were collected with the European Heart Failure Self-Care Behaviour Scale (EHFScBS-9), the Cardiac Self-Efficacy Questionnaire (CSEQ), and the Brief Illness Perception Questionnaire (B-IPQ). Associations among variables were analysed using analysis of variance. **Results:** No significant differences were found between Slovak (N = 122) and Czech (N = 130) patients in terms of HFSC and self-efficacy regarding heart disease. In the area of cognitive and emotional representations, Slovak patients reported a higher perceived threat and a better subjective understanding of the disease. **Conclusions:** The results indicate the need to implement holistic care aimed at improving HFSC, self-efficacy, and the analysis of patients' perceptions of their illness in relation to SC in clinical practice.

Keywords: Self-care. Heart failure. Self-efficacy. Illness perception.

Acknowledgements

The Slovak Ministry of Education, Science, Research and Sport under grant VEGA 1/0445/26 and the Pavol Jozef Šafárik University under grant VVGS-2024-3391 supported the research.

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THE USE OF MOTIVATIONAL ELEMENTS IN THE PREVENTION OF CARDIOVASCULAR DISEASES

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Abstract

Introduction: Despite significant advances in medicine, cardiovascular diseases remain one of the leading causes of morbidity and mortality. In the context of preventive programs, the role of nurses in primary care is emphasized, as they play an irreplaceable role in educating, motivating, and supporting patients in the area of cardiovascular prevention. **Objective:** To examine selected sociodemographic characteristics and their impact on patient motivation regarding the prevention of heart and vascular diseases. **Methods:** A non-standardized questionnaire designed by the authors was used to collect data. The sample consisted of nurses working in inpatient facilities in internal medicine, cardiology, and cardiac surgery departments. The sample comprised 602 nurses. This was a quota sample. **Results:** We examined the relationships between education, sociodemographic characteristics, type of hospital facility, and specific motivational elements, such as praise and recognition, and the use of open-ended questions, advice, reflection, offering options, and active listening. A statistically significant relationship was identified between the use of praise or recognition and the nurses' level of education. In the case of using open-ended questions as a motivational element in patient education, the use of this technique is statistically significantly influenced by whether the nurse has specialized training and by the type of hospital in which the nurse works. A statistically significant association was confirmed between the use of advice and the nurses' education. No statistically significant correlation was confirmed between the observed sociodemographic characteristics and the use of summarization and reflection or the use of offering options. The use of active listening in patient education is statistically significantly influenced by whether a nurse has specialized training and the type of hospital in which the nurse works. **Conclusions:** The results of the study indicate that, among the various motivational elements, nurses most frequently use active listening and providing advice when educating patients. They use presenting options and summarizing—reflection—the least.

Keywords: Coronary artery disease. Prevention. Motivation. Education. Nurse.

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METHODS AND DETERMINANTS OF CRITICAL THINKING DEVELOPMENT IN NURSES: A SCOPING REVIEW

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Abstract

Introduction: Critical thinking is a fundamental prerequisite for safe decision-making and the delivery of high-quality nursing care in clinical practice, education, and research. Consequently, current research is increasingly focused on identifying effective educational strategies to foster critical thinking. **Objective:** To map the available evidence on methods for development of critical thinking among nurses and nursing students, identify factors influencing its development, and examine tools used for its assessment. **Methods:** In the first phase of this scoping review, 131 studies were identified. Following the application of scoping review eligibility criteria, 18 relevant studies published between 2020 and 2025 were included in the final analysis. The identified sources comprised literature reviews, systematic reviews, meta-analyses, and cross-sectional studies. Evidence related to the application of critical thinking among nurses across various nursing specialties, including acute, intensive, and psychiatric care, was considered. **Results:** The analysis revealed that key methods for developing critical thinking include simulation-based learning, case-based learning, team-based learning, social problem-solving training, and the implementation of active learning strategies by educators. Regarding determinants, both personal and organizational factors emerged as significant. Critical thinking dispositions were found to be strongly influenced by the clinical practice environment, mentoring support, length of professional experience, as well as nurses' self-confidence and perceived competence. **Conclusions:** Effective development of critical thinking in nursing requires the integration of modern interactive teaching methods with a supportive organizational environment and targeted mentoring in clinical practice.

Keywords: Nursing. Critical Thinking. Nursing Education. Educational Strategies. Determinants.

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THE EFFECTIVENESS OF TOOLS FOR ASSESSING THE RISK OF PRESSURE ULCER DEVELOPMENT IN INTENSIVE CARE UNIT PATIENTS—A NARRATIVE REVIEW

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Abstract

Introduction: The occurrence of pressure ulcers in the intensive care unit poses a serious clinical problem, as it reduces quality of life, prolongs the length of hospital stay, and poses a real risk of complications such as infection, sepsis, or amputation in the case of deep pressure ulcers in the heel area. Critically ill patients are particularly vulnerable to the development of skin lesions due to limited mobility, impaired perfusion, and the use of advanced life-sustaining therapies. **Objective:** The objective of this study was to review the tools used to assess the risk of pressure ulcer development in patients hospitalized in the ICU. **Methods:** A narrative review of the available literature from 2015 to 2026 was conducted using the Termedia, PubMed, Scopus, and Google Scholar databases, employing the keywords: “pressure ulcer assessment tools” and “pressure ulcer assessment scales in intensive care”. Publications concerning tools for assessing the risk of pressure ulcers in adults hospitalized in the intensive care unit were included. **Results:** The most commonly used tools are the Braden, Norton, and Waterlow scales. The literature points to the limitations of these scales with regard to the profile of critically ill patients hospitalized in the intensive care unit. The literature review indicates higher effectiveness and predictive power of scales specifically designed for patients in the intensive care unit. As indicated in the literature, tools specifically designed for critically ill patients include the Cubbin-Jackson Scale and EVARUCI, which account for parameters characteristic of critically ill patients, including hemodynamic status and mechanical ventilation. **Conclusions:** The selection of appropriate tools for assessing the risk of pressure ulcers in the ICU, taking into account specific aspects of the patient’s general condition, is crucial for effective prevention. Further research is needed on the standardization and validation of scales recommended for intensive care patients.

Keywords: Pressure ulcers. Department of Anaesthesiology and Intensive Care. Pressure ulcer risk. critically ill patient. Pressure ulcer prevention.

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CLINICAL COMPETENCIES OF NURSING STUDENTS (PILOT PROJECT)

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Abstract

Introduction: Clinical competence is a core outcome of undergraduate nursing education, yet its assessment remains challenging because competence extends beyond technical performance and includes clinical judgement, communication, professional attitudes, and ethical responsibility. **Objective:** The aim of this contribution is to present the theoretical background and preliminary findings relevant to a pilot project focused on the assessment of nursing students' clinical competencies in the Slovak context. **Methods:** A scoping review of domestic and international literature was conducted to identify how clinical competence is conceptualized, which domains are most frequently assessed, and what limitations are reported in currently used assessment approaches. **Results:** Preliminary findings indicate that clinical competence is most often understood as a multidimensional and developmental construct integrating knowledge, practical skills, clinical judgement, interpersonal abilities, and professional responsibility. The review also shows substantial variability in assessment methods and a persistent lack of sufficiently objective, transparent, valid, and context-sensitive tools applicable to clinical education. **Conclusions:** These findings provide a rationale for a pilot project aimed at developing and testing a more standardized approach to the assessment of nursing students' clinical competencies in Slovak nursing education.

Keywords: Clinical competence. Nursing students. Nursing education. Scoping review. Assessment. Pilot project.

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EDUCATION OR INFORMATION? LIMITS OF MOTIVATIONAL ELEMENTS IN CARDIOVASCULAR DISEASE PREVENTION

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Abstract

Introduction: Ischemic heart disease is one of heart and vascular diseases caused by atherosclerosis. Healthy lifestyle remains to be the main preventive intervention. It needs to be reminded that the complex process of patient education develops the patient's knowledge, skills and attitudes. **Objective:** To describe the state of education in the prevention of modifiable risk factors of cardiovascular diseases (further CVD) from the point of view of patients. **Methods:** A non-standardized questionnaire relating to the ischemic heart disease was used for the data collection. The sample of respondents was chosen using a quota selection corresponding with the composition of all CR citizens within terms of regions, sex and age. The total sample consisted of 1,391 respondents. **Results:** The results showed a significant correlation between gender and the education on exercise (< 0.001). Furthermore, a significant correlation was identified between sex and the education on smoking. (< 0.001). A significant correlation was identified between sex and alcohol abusing (< 0.001). In respect of the age, nurses most participate in the education on nutrition, (< 0.001), cessation of smoking (< 0.001). Furthermore, the study proved that the motivation elements in the education on modifiable risk factors were not sufficiently used. 47.5 % of respondents answered that nurses used open-ended questions in the education, 37.3 % of respondents meant that nurses always and often used reflection. **Conclusions:** Shortcomings were identified relating to the low use of motivation elements. Therefore, it can be judged that in practice, the education has just an informative character.

Keywords: Ischemic heart disease. Modifiable risk factors. Awareness. Nurse.

Acknowledgements

Supported by the Ministry of Health of the Czech Republic, grant nr. NU23-09-00369. All rights reserved.

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**NURSING CARE BETWEEN CUSTODIAL CARE AND EDUCATION: THE
PROVINCIAL INSTITUTE FOR FEEBLE-MINDED CHILDREN IN OPAŘANY,
1918–1938**

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Abstract

Introduction: During the First Czechoslovak Republic, the Provincial Institute for Feeble-Minded Children in Opařany was an important institution in which care for children with mental disorders stood between traditional custodial care, nursing supervision, and education. Its everyday operation depended not only on medical and pedagogical leadership but also on nurses and attendants who provided direct care, supervision, hygiene, meals, discipline, and guidance in self-care and work. **Objective:** This paper analyses nursing and custodial care in the Provincial Institute in Opařany between 1918 and 1938 and shows how supervision, protection, everyday care, education, and vocational preparation overlapped within institutional practice. **Methods:** The paper is based on a historical analysis of archival sources relating to the Opařany Institute. These sources are interpreted in the context of contemporary ideas about care for children with mental disorders and the development of institutional nursing. **Results:** The analysis shows that nursing and custodial care in Opařany was not merely a technical service but part of a broader therapeutic-educational regime. Staff ensured safety, order, hygiene, and supervision, while also guiding children towards cleanliness, self-care, simple work habits, and adaptation to institutional life. The sources reveal tension between the ideal of kind and patient treatment, the demands of a large institution, staffing conditions, and the need for everyday organisation of care. **Conclusions:** The Opařany Institute makes it possible to view the transformation of nursing care in the interwar period as a process in which an older custodial model was gradually connected with educational, occupational, and administratively organised concepts of care.

Keywords: Nursing care. First Czechoslovak Republic. Children with mental disorders. Institutional care. Education.

Acknowledgements

This study is part of research project number KCZP2026-002, which is being carried out with financial support from the Faculty of Health and Social Sciences at the University of South Bohemia in Ceske Budejovice.

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MANAGEMENT OF CARDIOVASCULAR RISK FACTORS AND PRACTICAL CHALLENGES IN THE CARE OF HYPERTENSION IN PRIMARY AND SPECIALIZED CARE IN HUNGARY, WITH A FOCUS ON APN COMMUNITY NURSES

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Abstract

Introduction: Cardiovascular diseases are among the leading causes of death worldwide, and this is also true in Hungary. **Objective:** The aim of this research is to review the theoretical background of cardiovascular risk factors and to explore the practical challenges of hypertension care in Hungary. Particular attention is paid to collaboration between primary care and specialty care. To examine the role, effectiveness, and acceptance of advanced practice nurses (APNs) in hypertension care, taking into account the latest international and national professional guidelines. Additionally, to identify factors that hinder treatment adherence in everyday care. **Methods:** This is an inductive, exploratory study consisting of two parts. **Primary research:** A qualitative research strategy using semi-structured interviews. **Secondary research:** Analysis of relevant Hungarian and international literature, statistical data, and professional guidelines. **Results:** The interviews revealed that although theoretical protocols are well known, achieving target blood pressure levels for patients with hypertension faces significant obstacles in practice. Based on the results, it can be concluded that the integration of advanced practice nurses into primary care is of key importance. **Conclusions:** Modern drug therapy alone is not sufficient to reduce cardiovascular mortality; lifestyle counselling, patient education, communication to improve adherence, and dedicated quality time for these purposes are essential. As part of the RRF-8.1.1-25 primary care project, a nursing program and curriculum for hypertension disease management were developed during the continuing education course titled “The Role of Healthcare Professionals in the Chronic Disease Management Program,” with the aim of enhancing nurses’ professional knowledge and improving the effectiveness of hypertension care in Hungary.

Keywords: Hypertension. Cardiovascular risk. Patient collaboration. Primary and specialized care. APN nurse.

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SAFE ADMINISTRATION OF INJECTABLE MEDICATIONS IN NURSING PRACTICE: PRELIMINARY RESULTS OF A SURVEY ON THE KNOWLEDGE OF GENERAL NURSES

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Abstract

Introduction: The safe administration of injectable medications is an essential part of a nurse's work. A key prerequisite for this activity is, above all, adherence to standards and recommended procedures for the administration of injectable medications. **Objective:** To present partial results of a research study focused on the level of knowledge and adherence to the principles of safe administration of injectable medications among general nurses in a selected healthcare facility. **Methods:** The research study was conducted using an anonymous questionnaire. The total study population consisted of general nurses from hospitals in South Bohemia. This paper presents only partial results obtained from 77 respondents from a single selected department of a pre-selected healthcare facility. The collected data were processed using SASD software and subsequently analysed. **Results:** The partial results of the questionnaire survey indicated a good level of knowledge among respondents regarding the safe administration of injectable medications. Most respondents correctly identified the principles of hand hygiene, disinfection, and safe procedures for administering subcutaneous, intramuscular, and intravenous injections. Respondents also demonstrated sufficient knowledge of anatomy regarding the correct identification of the injection site. In the conclusion of the questionnaire, the most common suggestions emphasized the need for practical instruction and regular training focused on the correct administration of injections. **Conclusions:** The preliminary results presented here indicate a good level of knowledge and adherence to recommended practices regarding the administration of injectable medications among healthcare personnel in the selected department. At the same time, they highlight the importance of continuing education on the safe administration of injections and the prevention of potential complications.

Keywords: Patient safety. Injectable medications. Prevention of complications. Healthcare personnel knowledge.

Acknowledgements

I would like to thank my supervisor for her expert guidance and valuable advice.

The contribution is connected with the research grant project number GAJU 071/2024/S, which is realized with financial support from the Grant Agency of the University of South Bohemia in Ceske Budejovice.

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SELF-CARE OF DIABETES IN RELATION TO SELECTED PATIENT SOCIODEMOGRAPHIC CHARACTERISTICS

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Abstract

Introduction: Self-care of diabetes mellitus is a complex process affected by many factors, including sociodemographic characteristics. **Objective:** To analyse how sociodemographic characteristics relate to the SCODI subscale scores. **Methods:** The sample consisted of 349 patients with diabetes mellitus. The nonparametric methods the Mann-Whitney U test, the Kruskal-Wallis test, and the Spearman correlation were used for difference analysis. Substantive significance was calculated using Cohen's d and eta-squared. **Results:** Age was the most consistent predictor of self-care – higher age was statistically related to lower scores in all the SCODI subscales. In terms of gender, a statistically significant difference was found in the Maintaining Health and Wellness subscale. The females had higher scores than the males. There was not a statistically significant relationship between education and marital status and the SCODI subscale scores. In terms of occupation, statistically significant differences were found in the Maintaining Health and Wellness subscale and the Confidence in Coping with Diabetes subscale. There was a relationship between place of residence and some SCODI subscales. The respondents living in a village or a municipality of up to 2,000 inhabitants had higher scores in maintaining health and wellness, blood sugar management, and confidence in coping with diabetes. **Conclusions:** Self-care levels measured by the SCODI can be partially affected by sociodemographic characteristics; however, these factors do not explain differences in self-care significantly. Age had the most significant, albeit weak, effect, while other variables showed only limited differences. The results support the need for an individualised approach in patient education that considers a broader context than just basic sociodemographic indicators.

Keywords: Self-care. Diabetes mellitus. SCODI. Sociodemographic factors.

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NURSING OF THE 21ST CENTURY IN THE PROCESS OF CHANGES 2026

Book of Abstracts

Editor

Mgr. Mária Semanišínová

Technical editor

Mgr. Mária Semanišínová

Electronic Edition

Published by
Department of Nursing
Faculty of Social Sciences and Health Care
Constantine the Philosopher University in Nitra
Nitra, Slovakia
2026

This publication is not for sale.

ISBN 978-80-558-2426-0

