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Zdravotně sociální fakulta Faculty of Health and Social Science

XVII INTERNATIONAL SYMPOSIUM

Challenges Affecting the Strengthening of the Role of Nurses in Modern Society

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CONFERENCE ABSTRACT PROCEEDINGS

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Jihočeská univerzita v Českých Budějovicích University of South Bohemia in České Budějovice







The 17th International Symposium on the theme Challenges Affecting the Strengthening of the Role of Nurses in Modern Society opens a new cycle of nursing, scientific, and international meetings. This tradition of symposia began in 2001 as the annual South Bohemian Nursing Days with international participation, initiated by the then Head of the Department of Nursing, Prof. PhDr. Valérie Tóthová, Ph.D., dr. h. c. She launched cooperation with foreign partner universities and established a rotational system, whereby since 2008, each subsequent symposium has been organized by a different partner university.

The partner universities are: Constantine the Philosopher University in Nitra, Faculty of Social Sciences and Health Care (Slovakia); University of Pécs, Faculty of Health Sciences (Hungary); and the Faculty of Health Sciences and Psychology, Collegium Medicum of the University of Rzeszow (Poland).

So far, the evaluation of this symposium model confirms its significant benefits, especially through mutual meetings focused on addressing shared professional topics. The invitation is extended to representatives of education and practice in the fields of nursing, midwifery, and paramedicine, as well as to all who are involved in or interested in the development of these disciplines.

The aim of the symposium is to explore possibilities for further development and improvement of patient care, where the integration of theoretical knowledge and quality practice is regarded as a necessary foundation of a professional approach.

Thematic areas – three main areas – nursing, midwifery and emergency healthcare will focus on:

- Cancer prevention in people with intellectual disabilities
- Legislation, law and ethics in nursing
- Clinical and multicultural care
- Community care
- Past and current trends in education
- Evidence-Based Nursing examples of good practice
- Climate change and its impact on human health

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ABSTRACTS

Evidence-based use of SBAR tool in nursing practice

Muhammed Ahmed

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ABSTRACT

Introduction: Communication breakdowns continue to be a major cause of unfavourable healthcare outcomes, frequently leading to avoidable clinical problems, postponed treatment, or even death. A standardised method for improving structured communication between healthcare professionals, especially between nurses and doctors, is the SBAR framework (Situation, Background, Assessment, Recommendation).

Main text: This review explores the impact of SBAR implementation in both clinical and academic settings as one of the Evidence-Based Approaches in Nursing Practice. It examines its effectiveness in improving the clarity of communication, promoting teamwork, enhancing confidence during handovers, and ultimately contributing to safer patient care by reducing adverse outcomes such as unplanned ICU admissions and preventable deaths. Five peer-reviewed studies were reviewed, including a hospital-based intervention, systematic reviews on SBAR's effect on patient safety and education, and simulation-based training studies. These employed chart reviews, incident tracking, and communication assessments. The findings consistently support SBAR's positive impact on communication quality, teamwork, documentation, and early detection of deterioration. Its educational use also improved students' clarity, confidence, and preparedness.

Conclusion: SBAR is a proven communication strategy that enhances safe nursing practice and should be part of both training and clinical routines.

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The role of nursing in supporting ageing populations with special needs in Ghana: addressing cultural, ethical, and legal challenges

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ABSTRACT

Aim: Examine the critical role of nurses in supporting Ghana's ageing population with special needs, addressing cultural, ethical, and legal challenges. Highlight nursing care within Ghana and holistic approach.

Methods: Synthesise research, studies, and ethical frameworks relevant to healthcare in Ghana. Explore gerontological nursing, cultural competency, and legal considerations in the care of older adults with special needs.

Results: Key challenges: cultural resistance to advance directives, ethical dilemmas in balancing autonomy and best interests, and legal access barriers. Nurses provide culturally sensitive care, advocate for rights and access. Hurdles: inadequate training, resource constraints, need for tailored guidelines.

Discussion: Nurses and social workers are vital to Ghana's elder care ecosystem. Ethical norms require attention and a well-trained workforce is essential for dignified care.

Implications: Enhanced interprofessional education is needed. Advocate for culturally appropriate palliative care guidelines and reforms to empower nurses. Research: collaborative care models and the impact of interventions on outcomes.

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Health literacy of seniors aged 65 and over

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ABSTRACT

Objective: The research aimed to describe the level of health literacy among seniors in the South Bohemian Region aged 65+.

Design: Descriptive and cross-sectional.

Participants: 403 individuals selected by quota sampling were included in the study. The sample is representative in terms of gender, age, and region.

Methods: A quantitative strategy and guided interviews were used in the research. The data were collected through structured interviews conducted by trained interviewers. The interview structure was derived from a standardised questionnaire designed to measure health literacy in the European Union population, the HLS-EU-Q16 (European Health Literacy Questionnaire), and was supplemented by several socio-demographic questions assessing subjective health status and health behaviour.

Results: The level of health literacy among seniors was considered sufficient for 59.9%, problematic for 24.1% of respondents, and inadequate (insufficient) health literacy was found for 16.1% of respondents. Seniors who were measured to have inadequate health literacy were found to suffer from mild depression to a significantly great extent.

Conclusion: Research should focus on the role of low health literacy in people suffering from depression.

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Advanced practice nursing in Poland: opportunities and challenges

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ABSTRACT

Introduction: Advanced Practice Nursing (APN) is a globally acknowledged model aimed at enhancing the quality, accessibility, and sustainability of healthcare systems. In line with the EFN (European Federation of Nurses Associations) recommendations and the ICN (International Council of Nurses) 2020 guidelines, APN is seen as a strategic response to the growing healthcare demands across Europe.

Main text: Poland is among the countries currently initiating systemic efforts to introduce APN, including the need for legislative change, standardised master's-level education, and formal recognition of the role. According to the EFN's 2022 policy statement, APN is crucial for strengthening health system resilience, especially in the post-pandemic context. EFN calls for a unified European framework to facilitate regulation, cross-border recognition, and workforce mobility. In Poland, the Polish Nurses Association (PTP) has formed a working group developing national recommendations for APN, and educational and legal groundwork is ongoing. The EFN emphasises the importance of enabling nurses to work to the full extent of their competencies and education, ensuring patient safety and care quality.

Conclusion: The introduction of A PN r equires c oordinated efforts among policymakers, educators, and clinical leaders and will be essential to realise the full potential of APN in strengthening healthcare delivery.

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Prenatal care for women in the South Bohemian region

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ABSTRACT

Introduction: Adequately provided prenatal care leads to a healthy course of pregnancy and a reduction in maternal and perinatal mortality and morbidity. The midwife has an important role to play and should guide women through the antenatal clinic so that pregnancy, birth and the six-week period are free of problems and serious complications. *Goal:* The aim of this paper is to report partial data and examine correlations related to the experience of the pregnancy period and the care provided by midwives in antenatal clinics within the South Bohemia region.

Methods: The research was carried out using a quantitative method. The data were processed using SPSS and SASD software. The research sample consisted of a total of 361 women.

Results: In total, 90.3% of pregnant women in the South Bohemia Region attended antenatal clinics, 30.7% of respondents were cared for jointly by a gynaecologist and a midwife, and 3.6% of women were interested in the care of a community midwife alone. 17.7% of women received information about pregnancy from a midwife. Regarding healthy nutrition, 22.7% of women received information exclusively from the midwife and 34.6% of women received information about the antenatal clinic process.

Conclusion: The study revealed that the majority of women participated in antenatal care in antenatal clinic. It was also found that midwives do not use their competencies much in prenatal counselling in educating women during pregnancy.

The project is supported by institutional funding for the long-term conceptual development of the research organization of the Faculty of Health and Social Sciences, University of South Bohemia, as part of the Internal Multidisciplinary Research Project No. MPŽD2021-001, titled Multidisciplinary care for women and children during pregnancy, childbirth and the puerperium.

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Technology-enhanced learning in nursing education: a systematic review study

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ABSTRACT

Introduction: Nursing education is evolving and incorporating technology-enhanced learning methodologies such as artificial intelligence (AI), virtual reality (VR), high-fidelity simulation (HFS), and gamification.

Aim: This systematic review aims to synthesise findings from current literature about the effectiveness of these technologies on nursing students' educational outcomes and identify the barriers linked to their integration into nursing curricula.

Methods: A comprehensive systematic search was conducted across PubMed, Embase, EBSCO, ScienceDirect, and Cochrane Library, following the PRISMA guidelines. Studies published in English within the last 10 years were included if they evaluated the impact of AI, VR, HFS, or gamification on at least one learning outcome.

Results: Technology-enhanced learning methodologies generally improved knowledge acquisition, clinical skill development, self-confidence, satisfaction, critical thinking, and student engagement. Challenges in implementation included technical and logistical difficulties, usability issues, the need for faculty training, and financial constraints.

Conclusion: Technology-enhanced learning methodologies positively impact various educational outcomes for nursing students. Future research should explore challenges and opportunities for technology adoption in resource-constrained settings, focusing on infrastructure limitations, access to technology, and faculty preparedness.

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Work motivation: a wall that not even the COVID-19 pandemic could knock down

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ABSTRACT

The COVID-19 pandemic in 2020 imposed severe physical and psychological burdens on healthcare workers, increasing the risk of career abandonment. Our study aimed to identify motivating factors among nurses during the pandemic who still valued their profession despite stress. Conducted at the University of Pécs-Clinical Center from September to December 2022, it involved 196 health-care workers with at least three months' experience in COVID wards, recruited via purposive sampling. Data were collected through an anonymous online questionnaire, including sociodemographic items, the "Motivation at Work Scale", and a six-item self-edited survey. Results showed that nine participants (4.5%) planned to leave healthcare in five years, 27 (13.7%) were undecided, and 78 (39.7%) intended to stay. A weak, positive, but significant correlation existed between intrinsic motivation and the likelihood of leaving the profession (r = 0.281; p < 0.05). Additionally, a weak, negative correlation was found between the number of COVID waves revisited and fear of redeployment (r = -0.273; p < 0.05). In conclusion, despite pandemic challenges, only a small percentage of nurses considered leaving, with joy and fulfilment at work remaining key motivators.

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Health literacy in children aged 9-10 years in the South Bohemian Region

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ABSTRACT

Objective: The aim of the research was to describe the level of health literacy among children aged 9–10 with in the South Bohemian Region, with a focus on oral hygiene.

Design: Descriptive and cross-sectional.

Participants: The research study included 567 children aged 9–10 years, of whom 279 were boys (49.2%) and 288 were girls (50.8%).

Methods: A quantitative strategy was used in the research. The structure of the questions was based on a standardised questionnaire designed for assessing oral hygiene levels "Knowledge and Practices Regarding Oral Hygiene", supplemented by several questions of a sociodemographic nature.

Results: Almost half (44.4%) of children said they visit the dentist 1–2 times a year. Two-thirds of children brush their teeth twice a day (70.7%), and 97% of children use a toothbrush and toothpaste when brushing their teeth. Significantly fewer children use an interdental brush (40.6%), dental floss (23.8%), or an oral irrigator (14.6%) when brushing their teeth. More than half of the children surveyed said they were satisfied with the appearance of their teeth (63.1%), and one-third of children said they had not experienced tooth pain in the last year (33.9%).

Conclusion: Research should focus on the importance of improving children's health literacy in the area of dental hygiene.

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Assessment of nursing development during undergraduate studies

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ABSTRACT

Introduction: In the nursing education system, efforts are made to develop professional competencies. In nursing education, the development of competencies is considered to begin at the start of studies, while the end point is not strictly defined.

Aim: To assess the development of nursing competencies during first-cycle undergraduate studies.

Methods: The study was conducted among first-cycle undergraduate nursing students at the Medical University of Lublin. It was a longitudinal study carried out from 2014 to 2016, spanning from the first to the third year of studies. The study was conducted at regular intervals with the same group. The research method used was a diagnostic survey.

Results: The development of professional and holistic nursing competencies among students varies depending on the stage of their studies. In the area of professional competencies related to "professional knowledge and skills", an increase in scores was observed over the three years of studies; the students scored M = 2.44 in the first year, M = 2.40 in the second year, and M = 2.51 in the third year.

Conclusion: The study illustrates the relationships between the development of professional and holistic competencies and the stage of studies among nursing students.

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Intelligent support for nursing education in the 21st century

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ABSTRACT

Introduction: Medical Simulation Centres, equipped with state-of-the-art technologies, along with intelligent support systems – including solutions based on artificial intelligence (AI), data analysis and advanced digital technologies – are redefining the modern approach to nursing teaching and learning.

Main text: Responding to the growing challenges of nursing education, it is becoming a smart educational support offered in modern CSM, where students have the opportunity to develop practical skills in conditions that faithfully replicate the clinical environment. Additionally, virtual and augmented reality (VR/AR) – allow nurses to practice rare or difficult clinical situations in an immersive environment. Analytical and recording systems (debriefing tools) enable the analysis of exercise recordings, identification of errors, evaluation of team communication and reflection on decisions made during scenarios. Artificial intelligence (AI), on the other hand, is becoming a useful tool, improving the process of finding, selecting and analysing written content.

Conclusion: While smart technologies offer tremendous benefits, they must be integrated thoughtfully. Educational technologies must complement, not replace, the human elements of nursing care and education. By combining smart support with human mentoring and ethical practice, nursing education in the 21st century can meet the challenges of tomorrow's healthcare.

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A discussion on cross-cultural empathetic behaviour in health care providers: insights from Ethiopia, the US, and Hungary

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ABSTRACT

This study examines empathetic behaviour among health care providers in three culturally distinct nations: the United States (highly individualistic), Hungary (moderately individualistic), and Ethiopia (strongly collectivistic). Empathy - defined as the capacity to identify with and understand the suffering of others – plays a critical role in patient-centred care and is integral to cultural competence and cultural humility. Despite its recognised value in improving health outcomes, empathy remains underemphasised as a formal competency in nursing and social work education. Drawing on comparative analysis, the paper explores how cultural orientation influences the expression of empathy in health care settings, with particular attention to the role of implicit bias, ethnocentrism, and structural inequities in shaping provider-patient interactions. Case examples highlight ethnic and rural-urban discrimination in Ethiopia, prejudice towards the Roma population in Hungary, and racial disparities in the United States. Findings reveal that although cultural contexts differ, barriers to empathic care - including resource scarcity, discrimination, and inadequate training - are common across settings. The paper introduces the Empathetic Care Process Model as a conceptual framework for integrating empathy into provider education, emphasising its potential to address health disparities and improve outcomes in both resource-rich and resource-limited environments. Further research is recommended to evaluate empathy-focused training interventions as a means to strengthen culturally competent care worldwide.

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Botulinum toxin treatment of spasticity in vegetative state patients and its impact on nursing care

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ABSTRACT

Vegetative state (VS) now known as unresponsive wakefulness coma (UWC) is characterised as a condition of wakefulness with a complete lack of discernible conscious awareness of self and environment. VS/UWC is caused by injury or damage to the brain in areas responsible for consciousness. Causes can be divided into traumatic brain injury (TBI), non-traumatic brain injury (non-TBI) and progressive brain damage/disease.

Spasticity is one of the symptoms which can develop during the course of the vegetative state. Up to 89% of VS/UWC patients manifest spasticity. Spasticity is a motor disorder marked by hypertonia and hyperreflexia. It is characterized by stiffness and tightness of the affected muscle groups. This can lead to many complications interfering with daily function, hygiene, comfort and nursing care. Chemodenervation with botulinum toxin is one of the other treatment options for spasticity. The toxin is injected into certain muscles under ultrasound control. It causes relaxation and weakness of the muscles, which increases patient comfort and reduces pain. Nursing care for patients in a vegetative state focuses on providing supportive care to maintain bodily functions and prevent complications. Effective muscle tone management facilitates regular repositioning that helps prevent pressure sores, and diligent skin care is essential to avoid inflammatory complications.

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Peripheral vascular access management in hospital: observational research

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ABSTRACT

Introduction: Peripheral venous access is a routine and essential procedure in healthcare settings, primarily used to administer fluids, medications, nutrients, and blood products directly into the patient's circulatory system. Management of peripheral vascular access can be also a critical component of patient care in the hospital setting. Preventing complications is a critical aspect of peripheral venous catheter management and is crucial to prevent complications such as infection, occlusions, and phlebitis.

Objective: The purpose of the research was to determine the use of peripheral intravenous catheter (PIVC) care procedures in accordance with modern guidelines.

Methods: The analysis of the observational study is presented descriptively. The observation took place over two days in 11 departments, and 73 observed events were performed, including 41 cases *in situ*, 11 insertions, 13 cases of care, and 8 cases of peripheral intravenous catheter removal.

Results: It was found that in 75% of the patients, appropriate devices were used according to the type and duration of the treatment. Adequate skin preparation was performed in 25% (including appropriate antiseptic and drying time). In 94% the condition of the skin at the insertion site was adequate, in 62% an appropriate distal site outside the joint area was selected. In 100% PIVC fuse was properly activated and removed. In 90% of insertion events, the appropriate PIVC setup and size were used. Adequate vascular lining was selected in 90%, PIVC was correctly attached in 17%. Best practices were observed in 50% of PIVC care (70% appropriate disinfection time and 46% appropriate disinfection site) and 83% of removals.

Discussion and conclusion: The results highlight the need for additional standardized education, adherence to current guidelines, evidence-based practices, and multidisciplinary collaboration in managing access to PIVC. Implementing educational programmes at regular intervals according to the number of insertions of PIVC aims to improve the management of peripheral vascular access.

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A multidisciplinary approach to prehabilitation of patients awaiting hip and knee arthroplasty – the nurse's role in coordinating care

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ABSTRACT

This paper presents preliminary results of an ongoing project focused on the prehabilitation of patients awaiting hip and knee arthroplasty. The project emphasises the importance of multidisciplinary collaboration and highlights the key role of the nurse as a care coordinator during the preoperative period.

The aim of prehabilitation is to optimize the physical and psychological condition of patients, which may contribute to improved postoperative outcomes and shorter recovery time. The research involved a questionnaire combining custom-designed questions, the standardised WOMAC questionnaire for assessing joint function, the Beck Depression Inventory, and the WHOQOL-BREF quality of life questionnaire. Initial data analysis reveals significant associations between pain intensity, functional limitations, psychological status, and overall quality of life. The findings indicate the potential of targeted prehabilitation interventions led by nurses as an effective tool in the care of this patient group.

The project is supported by the Internal Grant Agency of the University of South Bohemia in České Budějovice, Faculty of Health and Social Sciences, grant number 055/2024/H.

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Ethical and legal challenges in nursing care for individuals with intellectual disabilities

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ABSTRACT

Introduction: Nursing care for individuals with intellectual disabilities (ID) involves complex ethical and legal challenges. Nurses must balance clinical responsibilities with respect for the autonomy, rights, and dignity of individuals who often face barriers in accessing appropriate health care.

Main text: Ethical dilemmas arise when nurses must protect vulnerable individuals while respecting their autonomy, especially in decision-making and informed consent. The need to simplify communication, involve guardians appropriately, and promote equitable care reflects ongoing struggles for justice and inclusivity. Legally, nurses must navigate issues such as decision-making capacity, guardianship laws, the right to health, and safeguarding against abuse or neglect. Ensuring that care is legally compliant and ethically sound requires awareness of national legislation and international human rights standards. Nurses are critical in recognising mistreatment, advocating for policy changes, and promoting inclusive care environments.

Conclusion: To address these challenges effectively, nurses must be ethically informed, legally literate, and strong advocates. Through education, interprofessional collaboration, and systemic advocacy, they can ensure that individuals with ID receive respectful, personcentred care that upholds both ethical principles and legal protections.

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Examining career choice background and learning motivation among midwifery students in Hungary

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ABSTRACT

Introduction: Choosing the right career has a profound impact on all areas of life, and students in higher education often struggle to find their ideal career path. In recent years, human resource shortages have become an increasingly significant problem in the midwifery profession, one component of which is the lack of new recruits.

Objective: The research aimed to assess the factors that influence midwifery students' career choices and motivate them during their studies.

Methods: We conducted a cross-sectional study using the Academic Motivation Scale College Version (AMS-C28) questionnaire supplemented with questions on career choice and further education intentions (n = 384). We performed descriptive statistical procedures and correlation tests (p < 0.005).

Results: Existing information about the profession was a major factor in career choice. External motivational factors have the strongest influence on learning motivation. The degree of amotivation increases with age (r = 0.161, p = 0.002), but the internal motivating factor of knowledge (to know) is in close positive correlation with all learning motivation factors and shows a negative correlation with amotivation (r = -0.473, p = 0.00).

Conclusion: The motivation of the students must be maintained through programmes with independent activities and professional challenges to strengthen their desire for new knowledge and learning.

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Burnout, stress, and coping strategies among healthcare workers: a comprehensive review of national and international research

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ABSTRACT

Healthcare workers are exposed to considerable physical and psychological stressors, significantly impacting their well-being, job satisfaction, and patient care quality. Despite growing international recognition of burnout, there is little consensus on its definition and measurement. Studies show high burnout rates among emergency and intensive care staff, with emotional exhaustion, depersonalisation, and reduced personal accomplishment being prevalent. Risk factors include shift length, staffing shortages, job insecurity, lack of institutional support, and inadequate remuneration. Coping strategies vary by gender, education, and financial status, though maladaptive responses are common. Organisational factors – such as leadership, work-life balance, and a supportive environment – play a key role in mitigating burnout. Early identification, targeted interventions, and structural reforms are essential to preserve the mental health of healthcare professionals and maintain the quality of healthcare services.

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Sleep quality of nursing staff working in a medical and charitable center

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ABSTRACT

Introduction: Shift work, stress, and workload have a significant impact on the sleep quality of nursing staff. Sleep deprivation can negatively affect both physical and mental health, as well as the quality of patient care.

Aim: To assess the sleep quality of nursing staff working at a Medical and Charitable Centre and to identify factors contributing to its deterioration.

Methods: The study was conducted in the first quarter of 2025 among 102 participants. A diagnostic survey method was used, employing an original questionnaire and the standardised Pittsburgh Sleep Quality Index (PSQI). Statistical analysis was carried out using the Student's t-test, the Mann–Whitney U test, and Spearman's rank correlation. A significance level of p < 0.05 was adopted.

Results: The average PSQI score in the study group was 7.8, indicating reduced sleep quality. The most influential factors were occupational stress, shift work, the number of night duties, and lifestyle. Women scored worse in terms of sleep quality compared to men.

Conclusion: The overall sleep quality of nurses is average. Preventive and educational measures should be implemented to improve sleep hygiene and the conditions of shift work.

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Wound care in patients hospitalised in psychiatric wards – challenges and specifics of nursing practice

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ABSTRACT

Wounds of various origins represent a significant risk for patients in any healthcare facility; however, in psychiatric patients, the issue of wound care takes on entirely specific dimensions. The mental state, perceptual and behavioural disorders, reduced ability to cooperate, as well as manifestations of self-harming behaviour or agitation, significantly affect both the development and the healing process of wounds. This paper focuses on the classification of the most common types of wounds in psychiatric settings, analyses risk factors specific to this population, and presents approaches to effective and safe nursing care. Special attention is given to interdisciplinary cooperation, prevention of complications, and ethical and communication aspects when working with patients who often refuse care or deliberately cause injury to themselves. The aim is to highlight the need for individualised care, the integration of somatic and psychological aspects of health, and the creation of a safe environment for healing physical and mental wounds.

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Enhancing emergency department care for individuals with autism spectrum disorder (ASD): a systematic review study

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ABSTRACT

Background: Autistic individuals face unique challenges in emergency departments (EDs), including sensory sensitivities, communication barriers, and behavioural difficulties. These factors often lead to distress and poor care experiences. This review aims to evaluate and synthesise literature on interventions to enhance ED care for individuals with autism spectrum disorder (ASD), with a focus on improving patient outcomes and satisfaction while addressing their unique needs.

Methods: Using predefined keywords, a comprehensive search was conducted, including PubMed, CINAHL, Scopus, and Web of Science. Studies published within the last decade were screened against rigorous inclusion criteria. The quality of the included studies was assessed via the Mixed Methods Appraisal Tool (MMAT).

Results: There are consistent barriers in ED care for ASD patients, including communication difficulties, sensory sensitivities, long waiting times, and inadequate staff training. Sensory overload and behavioural challenges further exacerbate patient distress, impacting care quality.

Conclusion: This review emphasises the urgent need for systemic reforms in ED care for ASD patients. Strategies such as sensory-friendly environments, enhanced staff training, and patient-centred policies can improve patient outcomes and satisfaction. Future research should focus on evaluating the long-term impacts of these interventions and identifying innovative solutions to meet the complex needs.

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Pain as a limiting factor of daily activities in patients awaiting hip or knee arthroplasty

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ABSTRACT

Patients with advanced hip or knee osteoarthritis often suffer from chronic pain that significantly impacts their daily lives. Pain typically occurs during physical activity and, in advanced stages, also at rest and at night, leading to sleep disturbances, fatigue, and reduced quality of life. It limits the ability to walk, stand up, dress, perform personal hygiene, and engage in leisure activities, thereby increasing dependency on others. In preparation for planned arthroplasty, prehabilitation within a multidisciplinary team consisting of a nurse, orthopaedic surgeon, physiotherapist, and nutrition therapist is essential. Its goal is to improve physical fitness, reduce pain, and educate patients for more effective postoperative recovery. To assess health status and the impact of pain on daily activities, a questionnaire was distributed to patients awaiting joint replacement, including the standardised WOMAC index. Preliminary results confirm that pain is the main limiting factor of everyday functioning, and its timely assessment combined with targeted prehabilitation can significantly influence the treatment course and improve patients' quality of life before and after surgery.

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Autonomy and decision-making of nurses in critical care

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ABSTRACT

The main aim of this paper is to summarise the thesis of my dissertation, which is titled: Autonomy and decision-making of nurses in critical care. Job autonomy is very important for nurses as it is a key factor in their professional satisfaction and psychological well-being, particularly in challenging environments such as ICUs. My dissertation compares the effects of limited autonomy on the psychological health of nurses working in this field in the Czech Republic and Austria. The mental health of overworked nurses has long been overlooked, but available studies and interviews suggest that low levels of professional autonomy can lead to increased stress, frustration and a sense of disconnection from one's work, ultimately resulting in burnout. It is crucial to promote the autonomy of general nurses in intensive care, as they work with critically ill patients and often have to make quick decisions for the benefit of the patient.

Research from both countries indicates that restricted autonomy can lead to psychological exhaustion, anxiety, frustration, and burnout. This is one of the main reasons why nurses leave the profession. Allowing intensive care nurses to make decisions independently improves the quality of care by enabling a flexible approach in crisis situations. At the same time, the moral pressure on nurses decreases, as does the risk of burnout. This increases professional satisfaction and reduces the turnover and absenteeism of general nurses.

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Environmental sustainability in intensive care units

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ABSTRACT

Introduction: Climate change is a major health threat, with healthcare generating 4.4% of global greenhouse gas emissions. Intensive Care Units (ICUs), as highly resource-consuming environments, significantly contribute to this footprint. The Green ICU concept aims to improve sustainability without compromising patient safety. The European Society of Intensive Care Medicine (ESICM) promotes this idea through its Green Paper and the 4P model – People, Planet, Products, Processes.

Main text: This study is based on a global literature review and critical analysis of publications from the past seven years. It examines environmental sustainability in ICUs, focusing on the Green ICU concept and the ESICM's 4P framework. Key strategies include reducing oxygen and pharmaceutical use, limiting single-use items, promoting reuse and recycling, staff education, and Life Cycle Assessment (LCA)-based procurement.

Conclusion: Implementing the 4P model supports sustainable ICU care. Its effectiveness relies on leadership, team involvement, and institutional commitment.

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Exploring the link between nurse competence and patient satisfaction: an evidence-based approach to enhancing care quality

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ABSTRACT

Introduction: Patient satisfaction is a key indicator of healthcare quality and reflects nursing competence. Understanding this relationship can inform improvements in care delivery and professional development.

Aim: This study aims to explore the relationship between nurse professional competencies and patient satisfaction, using validated assessment tools.

Methods: The study used the short-form Nurse Professional Competence (NPC) Scale and the PSNCQQ (Czech version). Data were collected from 250 nurses and 150 adult patients across three hospitals. Confirmatory Factor Analysis (CFA), known-group validity, and internal consistency (Cronbach's alpha) were applied to assess the NPC Scale. Cross-sectional analysis was used for the PSNCQQ.

Results: CFA supported the NPC model's validity, and internal consistency showed a Cronbach's alpha >0.70 for all factors. Known-group comparisons revealed significant differences in competence levels. Correlations were found between NPC factors and patient satisfaction scores on the PSNCQQ.

Conclusion: The Czech adaptation of the short-form NPC scale demonstrates acceptable construct validity and strong internal consistency, and the PNSCQQ Scale is valid and reliable tool to assess patient satisfaction. The study highlights the importance of nurse competencies in shaping patient satisfaction and supports the need for ongoing staff development and evidence-based training.

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Perceived patient safety competencies among nursing students in Slovakia: a cross-sectional study

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ABSTRACT

Introduction: Patient safety education is essential in healthcare training, yet its integration into nursing curricula is often inconsistent.

Objective: This cross-sectional study aimed to explore how nursing students in the Slovak Republic perceive their competencies in various dimensions of patient safety.

Methods: Data were collected using the Health Professional Education in Patient Safety Survey

(H-PEPSS) from February to December 2024. The sample included 1,017 undergraduate nursing students from nine Slovak universities.

Results: Students reported the highest confidence in Managing safety risks (4.01 ± 0.785) in academic settings and Recognizing and responding to harm (3.93 ± 0.760) in clinical practice. The lowest confidence was observed in Communicating effectively, both in academic (3.83 ± 0.785) and clinical settings (3.74 ± 0.805) . Statistically significant differences emerged between academic and clinical environments, with students consistently rating their competencies higher in academic settings $(p \le 0.05)$.

Conclusion: These findings highlight the need for education that bridges theory and practice through experiential learning. Strengthening communication, teamwork, and faculty support, along with academic-clinical collaboration, can help students apply patient safety principles effectively.

The study was supported by the project UGA IX/1/2024: Competencies of nursing students in patient safety.

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Accessible prevention? - Healthcare professionals' experiences with the participation of persons with disabilities in organized cancer screening programs: a qualitative focus group study

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ABSTRACT

Organized cancer screenings are key to early detection, yet persons with disabilities – especially those with communication or mobility impairments – often face significant barriers to participation. In our qualitative study, we conducted focus group discussions with general practitioners, screening center staff, and nurses/medical assistants to explore their experiences and perceived challenges regarding access for disabled patients.

Through thematic analysis, we identified recurring obstacles such as the lack of appropriate escorts, inadequate communication tools, physical inaccessibility of facilities, and limited disability-specific training for healthcare staff. We highlight the importance of empathetic, individualized care, and we recommend institutional-level improvements, including inclusive protocols and targeted training, to enhance access to preventive services for persons with disabilities.

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Importance of interpersonal relationships in healthcare teams for nurses: implications for interpersonal skills education

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ABSTRACT

Introduction: Nurses work within multidisciplinary healthcare teams, where effective collaboration is essential. However, interpersonal dynamics within teams are often overlooked, despite their critical role in job satisfaction and retention. This study aimed to examine how interpersonal relationships affect nurses' job satisfaction, turnover, and related outcomes. A secondary aim was to assess the importance of education in enhancing interpersonal competencies.

Main text: A literature search was conducted in 2025, using the PubMed, CINAHL, and Cochrane databases, with keywords such as nurses, interpersonal relationships, healthcare teams, teamwork, job satisfaction and education. A total of 21 peer-reviewed articles were selected for analysis. Results show that successful interdisciplinary teamwork depends on cooperation, trust, and communication – all of which rely on strong interpersonal relationships. These relationships are also key predictors of nurses' job satisfaction and are linked to turnover, mental health, and patient care quality. Studies consistently identified interpersonal skills as a modifiable factor that can be strengthened through targeted training and education.

Conclusion: Interpersonal relationships are crucial for effective team functioning and nurse satisfaction. Therefore, nursing education and professional development programmes should include more structured content on interpersonal skill development.

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The role of nurses in patient education on intermittent selfcatheterization: qualitative study

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ABSTRACT

Introduction: Intermittent self-catheterization requires individual patient education, often provided by nurses who play a key role in supporting patients through this sensitive process. Despite this, nurses often lack standardised, high-quality, digital training materials. Traditional materials rarely meet the diverse needs of patients, and the integration of interactive digital resources remains limited and under-researched.

Objective: This study examines nurses' experiences with digital and interactive educational materials for teaching intermittent self-catheterization, focusing on perceived challenges and needs for improvement.

Methods: A qualitative design using a purposive sample was used. Semi-structured interviews were conducted with five nurses from secondary and tertiary care. Data was collected using audio recordings and analysed using thematic analysis.

Results: We identified four key themes: (1) The role of the nurse in health education on self-catheterization, (2) Methods and materials used in health education work, (3) Challenges and barriers in health education on self-catheterization, (4) Needs for improvement and recommendations.

Conclusion: Nurses rely largely on verbal explanations and demonstrations, citing lack of time, low patient health literacy, and lack of institutional support as major barriers. Participants consistently emphasised the need for accessible, culturally sensitive digital tools and continuous professional development.

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Evidence-based good nursing practices – theory, tools and experiences in Polish education

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ABSTRACT

Introduction: Good practices focus on implementing Evidence-Based Nursing Practice EBNP in nursing, which means making clinical decisions based on the best available scientific evidence, clinical knowledge and patient preferences. The importance of EBNP for professional practice cannot be overestimated. Making decisions based on the best available scientific evidence not only increases the effectiveness of nursing interventions, but also directly translates into improved patient outcomes and their overall well-being. Main text: Contemporary, professional evidence-based nursing is the foundation for the future of health care, which provides high-quality, effective and safe care for patients. Practical use of scientific research results in professional work that positively translates into an increase in the quality of nursing care provided. The theoretical foundations of EBNP are introduced in curricula, but their effective translation into practice remains a challenge. EBNP tools, such as standardised procedures, clinical guidelines or scientific databases, are an important element. Experience gathered at Polish universities and medical facilities indicates that developing critical thinking skills, research analysis and the ability to implement research results into practice are of key importance.

Conclusion: Evidence-based practice allows nurses to build greater self-confidence in their clinical decisions.

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Practices and challenges in foetal heart rate monitoring: a case study of a County referral hospital in Kenya

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ABSTRACT

Introduction: Inadequate foetal heart rate monitoring contributes to poor birth outcomes, including perinatal mortality from birth asphyxia.

Objective: To identify gaps in foetal heart rate monitoring and suggest improvements to reduce birth asphyxia-related mortality.

Methods: A descriptive cross-sectional study using mixed methods was conducted. Simple random sampling selected 127 medical records; 17 midwives were recruited via convenience sampling. Data collection tools included a data abstraction form, observation checklist, and interview guide. Quantitative data were analysed using descriptive statistics; qualitative data were thematically analysed.

Results: All women observed (100%) were monitored, but timing and frequency varied: 46% were monitored four times, 36% twice, and 18% once, with intervals of 30 minutes to 4 hours. Monitoring mostly occurred during active labour (88%) and was absent in the second stage. Only 70.1% of medical records documented monitoring. Challenges included understaffing, poor documentation, non-adherence to guidelines, cultural factors, women's reluctance, peer pressure, and lack of accountability.

Conclusion: Foetal heart rate monitoring practices fell short of standards, especially during the latent and second labour stages. Gaps stemmed from systemic and cultural challenges.

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Knowledge, attitudes and perceptions of palliative care among students of non-medical health sciences at Faculty of Health and Social Sciences of University of South Bohemia in České Budějovice

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ABSTRACT

Introduction: Palliative care is a specialized approach in medicine aimed at the quality of life of patients and their families facing life-threatening or terminal illness.

Objective: To map the level of knowledge, attitudes, and perceptions of non-medical students in the field of palliative care.

Methods: The research was conducted through an online questionnaire in 2025. The questionnaire was distributed to non-medical health students (n = 211).

Results: 53.1% of respondents indicated that palliative care can parallel curative treatment, but 43.6% still perceived it as care for the dying. The reflection on palliative care teaching showed that 3/4 of students had not yet taken the course. Among those who had already the majority rated it as rather informative. The majority of students understood this care as focused on pain relief, psychological well-being, and quality of life. Students recognised the importance of soft skills. 3/4 of students had practical experience of caring for the dying. More than 1/2 of respondents expressed interest in the course Children's Palliative Care.

Conclusion: The research confirms the need for systematic education in palliative care for health professionals. Emphasis should be placed on a holistic approach, interdisciplinary collaboration, and supporting students in coping with emotionally challenging situations.

Project: Children's Palliative Care – the basis for multidisciplinary education (VIček Family Foundation).

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Pediatric nursing students' perceptions and evaluation of pediatric palliative care education

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ABSTRACT

Paediatric palliative care (PPC) is a specialised approach aimed at improving the quality of life of children with life-limiting or life-threatening illnesses. The research aimed to assess the perceptions of teaching the subject of Palliative Care, their experience of PPC, what they expected from the teaching, what they gained from it, and how they rated its contribution to their future professional practice. The research took the form of an electronic questionnaire survey during May–June 2025. The questionnaire was distributed to third-year students of the Paediatric Nursing programme (n = 20).

Results: Students' expectations included expanding their knowledge of PPC principles, roles of team members, and communication with families at the end of life. Teaching provided a deeper understanding of the meaning and principles of PPC, and the specifics of care. Missing elements were: a lack of time, practical field trips, focus on communication, and perinatal palliative care. Seminars with a nurse from the neonatology department, videos, case studies, children's books on death, and the sensitivity of the teachers were evaluated positively. Conditions for deciding to work in PPC included the need for practical experience, education, bedside experience, and emotional readiness. The results of the survey show that Paediatric Nursing students perceive teaching palliative care as a beneficial part of their professional training.

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Intervention program "Correct technique of tooth brushing in children" – pilot study

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ABSTRACT

Objective: The purpose of the pilot study was to evaluate the reliability of the proposed methodology of an observational intervention program focused on the correct technique of brushing teeth in preschool-age children.

Methods: A qualitative research design was chosen for the observational intervention study using a structured participant-centred observation method and the observation technique used was photo documentation and videotaping. The sample consisted of 10 preschool children aged 5 to 6 years. The intervention program had four phases: phase 1 was observation (technique, tools, brushing time), phase 2 was education on prevention of disease related to inadequate diet, drinking and dental hygiene, education was done through practical instruction using play therapy, phase 3 was done after education, and phase 4 was repeated observation (after 4th–6th week) to assess the sustainability of skills in brushing technique.

Results: The children and the kindergarten management found the intervention program interesting and liked it very much. Children showed improvement in tooth brushing technique after education. Based on data analysis, we found that it would be more reliable to record only the individuals in the mirror to evaluate a proper brushing technique for evaluating quality data.

Conclusion: In conclusion, our proposed methodology for the observational intervention program "Proper Teeth Brushing Technique" is reliable and valid after minor modifications in observation.

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Association of workplace psychosocial factors with musculoskeletal symptom clusters among midwives

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ABSTRACT

Introduction: MSDs are common among midwives and may be linked to psychosocial stress. This study examined the association between workplace psychosocial factors and MSD symptom clusters.

Methods: A cross-sectional study was conducted (November 2023 – June 2024) in 38 Hungarian hospitals. Midwives in inpatient obstetric care completed standardised questionnaires: DMQ, NMQ, COPSOQ II, and PSS. 73 valid responses were analysed using SPSS 23.0 with descriptive statistics, Wilcoxon and Fisher's exact tests.

Results: The most reported pain sites were neck (44%), shoulder (41%), and lower back (40%). Median age was lower in neck pain cases (45.5 vs. 50.5 years). Significant associations were found with high workload (p = 0.027), emotional demands (p = 0.031), and low social support (p = 0.048). Age was not a significant factor for most symptoms. Conclusion: Psychosocial stressors significantly contribute to MSDs among midwives. Interventions addressing both mental and physical workload are needed to protect their health and professional longevity.

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Bridging healthcare disparities: a systematic review of healthcare access for disabled individuals in rural and urban areas

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ABSTRACT

Objective: This review examines existing research to compare the differences in healthcare access for people with disabilities in rural versus urban areas. The goal is to identify common obstacles and helpful factors that affect their ability to get healthcare, which can inform the creation of specific programs to close these gaps.

Methods: This systematic review was pre-registered with PROSPERO (Registration No. CRD42025648258). A comprehensive search was conducted across databases including PubMed, Scopus, Web of Science, and the Cochrane Library, for peer-reviewed articles published between January 1, 2010, and December 31, 2024. Studies were included if they addressed healthcare access for disabled individuals and made comparisons between rural and urban settings. Data extraction was performed using standardized forms, and quality assessment was conducted using the Mixed Methods Appraisal Tool (MMAT). Data synthesis involved a narrative synthesis and thematic analysis to identify key barriers and facilitators to healthcare access in rural and urban areas. The reporting of this review follows the PRISMA guidelines.

Results: Eight studies from Peru, China, the United States, Mozambique, and South Africa were included in the final review. A clear distinction emerged between the barriers to healthcare access in rural and urban areas. Rural settings were defined by infrastructure-related challenges, such as transportation difficulties, a lower number of healthcare facilities, and limited provider availability. Meanwhile, urban areas presented different barriers, including overcrowded facilities and extended wait times. Both settings struggled with socioeconomic disparities, but the specific barriers and facilitators varied. In rural areas, telemedicine and mobile clinics were identified as key facilitators, while in urban areas, specialized healthcare services and better public transportation were the most helpful in bridging access gaps.

Conclusion: This systematic review confirms that disabled individuals face significant, yet distinct, healthcare access disparities depending on their location. In rural areas, the primary barriers are transportation and a lack of facilities, which necessitates the development of community-specific solutions such as mobile clinics and expanded telemedicine. In urban settings, access is hindered by system overcrowding and socioeconomic divides, calling for interventions that improve public transportation access and address systemic inequalities. Ultimately, addressing these disparities requires a dual

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approach: empowering rural communities with technological and logistical support while simultaneously optimizing urban healthcare systems to be more accessible and equitable.

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SO-NUTS mobile application as a tool for the prevention of sarcopenic obesity in seniors after retirement

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ABSTRACT

Introduction: Sarcopenic obesity is a significant health issue among the elderly, especially after retirement when physical activity declines and dietary habits change. The combination of muscle loss and increased fat raises risks of loss of independence, falls, and chronic diseases.

Objectives: This project aimed to promote a healthy lifestyle, maintain physical fitness, and prevent sarcopenic obesity using a modern, accessible tool. Another goal was to develop and pilot test a mobile application supporting physical activity, nutrition, and education for seniors.

Methods: A prototype mobile application was created, translated, and adapted for seniors. It was pilot tested among individuals aged 65+, owning and using mobile phones, with basic digital literacy and consent to participate.

Results: Users mostly rated the app positively for addressing senior needs and motivating physical activity. It was seen as a helpful tool for supporting a healthy lifestyle. Some users found it difficult to use, while others felt it lacked advanced features.

Conclusion: Pilot testing showed the app's potential in preventing sarcopenic obesity in seniors. Results highlighted the need for personalized adjustments, IT support, and the importance of direct contact with healthcare professionals as a key motivator.

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What is the evidence telling us: Why wellness matters to nursing

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ABSTRACT

Background: Achieving improved patient outcomes, enhancing the quality of care, and building a sustainable healthcare system capable of meeting future demands all rely on a resilient and well-supported workforce. Across Europe, the healthcare sector is facing a critical crisis due to high workloads and pervasive systemic challenges, resulting in a significant and growing shortage of nurses. This situation is further exacerbated by an ageing workforce, declining interest in the profession, and increasing attrition rates. Addressing these issues requires urgent prioritization of the health and well-being of nurses.

Objectives and methods: This presentation synthesises recent research on the health and well-being of nurses across Europe, identifying key contributing factors to current workforce challenges. Evidence-based strategies to enhance nurse well-being will be outlined. Participants will gain an understanding of the importance of prioritizing their own health and well-being and learn to identify components of a healthy and supportive work environment.

Results or expected outcomes: The findings underscore the strong link between nurse well-being and critical workforce metrics such as burnout, mental and physical health, job satisfaction, staff retention, patient care quality, and organizational performance. The presentation will highlight the impact of initiatives such as the EU-funded "Nursing Now" and "Nursing Action" programs. Practical recommendations for promoting wellness across settings will be shared, along with a discussion of how fostering nurse well-being contributes to long-term healthcare sustainability.

Conclusion and implications: Sustaining high-quality patient care across Europe is intrinsically tied to the well-being of its nursing workforce. Nursing leaders gathered at this conference are uniquely positioned to lead evidence-informed initiatives that promote both personal and professional well-being among nurses. Attendees will leave equipped with actionable strategies to support wellness at individual, team, and organizational levels, contributing to a stronger, more resilient healthcare system.

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The CARE-EMS model: a holistic framework for enhancing the wellbeing of prehospital emergency nursing staff

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ABSTRACT

Introduction: Employees in prehospital emergency medical services are regularly exposed to highly stressful, physically and mentally demanding conditions, which directly affect their well-being.

Objective: The aim of the research was to develop a comprehensive well-being model for nursing staff in prehospital emergency services, considering all key influencing factors.

Methods: An explanatory mixed-methods design was used. In the qualitative phase, 11 EMS employees participated in semi-structured interviews. A quantitative study followed, with 323 participants, leading to the development of the "WB-EMS" scale with six well-being constructs.

Results: Based on the integrated data, the CARE-EMS model was developed, which includes four key elements: (1) sociodemographic indicators, (2) six dimensions of well-being (personal satisfaction, emotional stability, recognition and professional development, psycho-physical health, interpersonal support, and institutional support), (3) strategies for improving well-being, and (4) expected outcomes at both individual and organisational levels. In addition, a new definition of well-being for nursing staff in EMS was formulated. Conclusion: The CARE-EMS model provides a holistic view of well-being in EMS nursing staff. As such, it represents a valuable scientific and practical contribution, providing a foundation for the development of effective health promotion strategies.

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The impact of simulation-based training on nursing students' readiness to provide care in life-threatening situations

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ABSTRACT

Introduction: Early intervention in life-threatening conditions is a key determinant of patient outcomes. In Poland, a standardized nursing curriculum is in place; however, implementation factors – such as access to simulation centers, frequency of refresher training, student-to-mannequin ratios, and faculty preparedness – may influence students' practical readiness.

Methods: We conducted a multicenter cross-sectional study comparing students from universities with simulation centers (SIM+) and without them (SIM-). Only cohorts and modules formally covering emergency medicine and critical care were included: Bachelor's degree, Year I (Fundamentals of Emergency Medicine), and Master's degree, Year I, Semester II (Emergency Medicine and Emergency Nursing). All participants completed a standardized, mobile OSCE across three stations: (1) adult cardiac arrest – BLS/AED (compression fraction, rate/depth, hands-off time, time to first defibrillation); (2) massive extremity hemorrhage – tourniquet application (time to application, accuracy, bleeding control effectiveness); (3) anaphylaxis – intramuscular adrenaline (time to administration, dose and site accuracy). Secondary outcomes included non-technical skills (TEAM-mini), self-efficacy (8-item Likert scale), and a knowledge test (15 MCQs). Examiners were blinded to site status; identical equipment and timeframes were used. Additional covariates were recorded, including prior BLS/first aid training, experience in rescue organizations (e.g., volunteer fire service, water rescue), and year of study. These variables were included in the statistical analyses to adjust for potential confounding.

Results: SIM+ students achieved significantly higher overall OSCE scores, with shorter times to defibrillation and adrenaline administration, higher compression fractions, and greater accuracy and effectiveness of tourniquet use. They also demonstrated better non-technical skills and higher self-efficacy. These differences remained significant after controlling for covariates and were consistent across both cohorts.

Conclusion: Access to simulation-based training in emergency medicine and critical care is associated with higher readiness of nursing students to provide care in life-threatening situations. These findings support the standardization and broader implementation of simulation components within nursing curricula.

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Investigation of factors influencing participation in colorectal screening

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ABSTRACT

The aim of our study was to explore public knowledge related to CRC, the motivations and barriers influencing participation in screening, and to evaluate the results in an international context. This quantitative cross-sectional study was conducted between February and December 2023 in Vas County, Hungary, and the city of Dubai. Using nonrandom, purposive sampling, a total of 250 men and women over the age of 45 from Hungary and the United Arab Emirates were included. Individuals previously diagnosed with CRC were excluded. Data collection was carried out using a self-developed, anonymous questionnaire available in both Hungarian and English. Descriptive statistical methods, along with the χ^2 -test and t-test, were used to process the data (p < 0.05). Half of the respondents were Hungarian, and half were foreign nationals. Among those who participated in screening, a significantly higher proportion were men (p = 0.002), foreigners (p < 0.001), over 50 years old (p = 0.004), married (p = 0.016), and financially better off (p = 0.011). Those who did not attend screening were less informed (p < 0.001), and fear played a greater role in this group (p < 0.001). Participation in CRC screening and the level of knowledge in Hungary lag behind those of developed countries. Based on our findings, the implementation of educational, target group-specific prevention programs, along with a more active role of general practitioners, is crucial to increase the willingness to participate in CRC screening.

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Educating students from different countries

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ABSTRACT

Objective: The Faculty of Health Sciences of the University of Debrecen started nursing training in English in 2021. A long preparatory process preceded the launch. An English-language curriculum had to be written. But an even bigger task was to provide English-speaking teachers. For this, the instructors had previously completed special courses. Finally, the training started with 11 students in September 2021.

Introduction: The University of Debrecen has been offering medical training in English for foreign students since 1987, which is very popular. They pay for their studies. The English-language training is primarily advertised to foreign students. The opportunity to offer nursing training in English came much later, only 34 years later. Students from foreign cultures had to be prepared. But perhaps an even bigger challenge was finding accommodation. Many of them arrived with 20–25 kg suitcases for four years and four seasons that were unfamiliar to them.

Methods: We prepared a self-made questionnaire and asked the students to answer it. It was surprising that some of them showed a refusal attitude.

Conclusion: It is very important for applicants to receive comprehensive information during the domestic recruitment process. The school infrastructure should be made friendlier for them, since the school is their family. Greater support is needed for organising life outside school hours.

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Exploring postgraduate nursing students' perspectives on safe clinical practice: a qualitative descriptive study

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ABSTRACT

Introduction: Ensuring patient safety is fundamental to nursing, yet its systematic inclusion in postgraduate nursing education remains uneven. Postgraduate students require more than technical proficiency; they must develop critical awareness of safety issues and the skills to reflect on and manage potential risks.

Objective: To understand how postgraduate nursing students make sense of and navigate patient safety challenges in real-world clinical placements.

Methods: Employing a descriptive qualitative methodology, the study was conducted in 2024. Nine postgraduate nursing students who had completed hospital-based clinical placements participated in semi-structured interviews. Data were analysed using reflective thematic analysis.

Results: The analysis generated themes: From barriers to professionalism in nursing practice; From theory to safe practice; Nursing under pressure: resources, communication, and individualised care; Ensuring patient safety in nursing practice – the role of students. Conclusion: Postgraduate nursing students encounter a range of obstacles when striving to maintain patient safety during clinical training. Strengthening mentorship, integrating academic preparation with clinical realities, and cultivating an environment that supports open dialogue and shared responsibility are crucial to advancing patient safety within postgraduate nursing education.

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The significance of the Erasmus+ program from the perspective of a midwifery student

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ABSTRACT

The Erasmus+ program is the largest educational program of the European Union that supports mobility and cooperation in the field of education and vocational training. It provides opportunities for studying and internships to develop professional and language skills.

From the perspective of a midwifery student, Erasmus+ is of vital importance. Practical internships abroad allow for familiarization with different healthcare systems, contributing to a broader understanding of professional standards and cultural differences in the care of mothers and newborns. From my own experience gained at the university hospital in Nitra under the Erasmus+ program, I am firmly convinced that it makes great sense to go beyond the borders of my study city, as well as my home country. A two-month internship in Nitra not only enriched my theoretical knowledge but also strengthened my practical skills, especially in communication with patients and managing challenging situations during childbirth.

In conclusion, I would add that the Erasmus+ program is an invaluable tool for my academic and professional development. I recommend that students participating in this programme step out of their comfort zones as much as possible, because the benefits for their professional and personal growth are enormous. I believe that thanks to these experiences, we will be better equipped to face the challenges of modern healthcare during our studies and beyond in our work.

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Telemedicine - the invisible assistant of nurses

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ABSTRACT

Digital technologies are fundamentally transforming modern healthcare. From electronic health records and mobile apps to telemedicine, new possibilities are emerging to deliver care faster, more accurately, and more accessibly. These innovations benefit not only patients – who can receive professional medical assistance from the comfort of their homes – but also healthcare professionals. Nurses, doctors, and other staff gain improved access to information, can collaborate more efficiently, and devote more time to patient care rather than administrative tasks. Thus, the digital transformation of healthcare is not only about technology but also about providing higher-quality, safer, and more human-centred care.

For nurses, telemedicine offers significant benefits by enabling them to deliver care more effectively and safely. Through technologies such as video calls, online consultations, and remote patient monitoring, nurses can track a patient's condition remotely. This saves time and reduces administrative burdens so nurses can focus more on professional care and personal interactions with patients. Telemedicine also supports better collaboration among healthcare professionals. Nurses have easier access to medical records, test results, and specialist recommendations, allowing them to respond more quickly to changes in a patient's condition. Telemedicine provides nurses with greater flexibility, decision-making support, and the ability to better coordinate patient care.

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Developing competencies for specialized health care for patients with psychological trauma

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ABSTRACT

Introduction: In their everyday practice, nurses often care for patients who have experienced psychological trauma.

Aims: This study aims to examine the development of competencies necessary for delivering specialised trauma-informed care.

Methods: The study was conducted at the Medical University of Plovdiv during the summer semester of the 2023/2024 academic year. It is part of the Erasmus+ international project Safe4Child, 2021-1-FI01-KA220-HED-000032106. Participants in the pilot phase were assessed using the standardised ARTIC v.10 questionnaire, administered twice – before and after a blended training programme. The training consisted of theoretical modules delivered via the Moodle platform and practical training using virtual reality headsets at the Medical Simulation Training Centre of MU-Plovdiv.

Results: The pilot phase involved 34 participants, divided into two groups: nursing students and nurse educators. The preferred approach to caring for trauma-affected patients was one that followed established procedures with predictable outcomes, rather than one focused on building therapeutic relationships during care (pre-training score: 4.40 ± 2.160 ; post-training score: 4.36 ± 2.160 ; p > 0.05; t = 0.69).

Conclusion: High-quality health care is essential to ensure that patients can live well beyond the traumatic experience, rather than continue to suffer its psychological consequences (pre: 4.84 ± 1.491 ; post-training score: 5.20 ± 1.500).

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Integrating nurses into pharmaceutical care teams: overcoming barriers to interprofessional collaboration

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ABSTRACT

Introduction: In an era of growing polypharmacy and healthcare complexity, pharmaceutical care requires genuine interprofessional collaboration. Yet, cooperation among nurses, pharmacists, and physicians often remains fragmented due to structural, communication, and educational barriers. This study explores how nurses can act as key integrators in pharmaceutical care based on the perspectives of healthcare professionals and international experts.

Methods: The study combines findings from two qualitative studies in Slovenia: a secondary analysis of 24 semi-structured interviews with nurses, pharmacists, and physicians and a thematic analysis of 5 interviews with international experts. Both datasets were analysed using inductive thematic content analysis.

Results: Each analysis identified five core themes. Nurses play a vital role in monitoring therapy, detecting adverse reactions, educating patients, and promoting adherence. Experts support expanding nurses' roles in pharmaceutical decision-making due to their close patient contact. Barriers include limited interprofessional education, unclear roles, hierarchical structures, and insufficient digital integration. Enablers include shared electronic health records, defined competencies, and regular multidisciplinary meetings. Conclusion: Nurses hold untapped potential in pharmaceutical care. Strengthening their roles through clearer responsibilities, better digital tools, interprofessional education, and systemic support can transform fragmented efforts into effective collaboration, ultimately improving patient outcomes.

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Care of non-healing wounds in the home setting

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ABSTRACT

Introduction: The topic of non-healing wound care in hospital settings has been the subject of countless publications and scientific papers. However, valid information discussing the care of non-healing wounds in the home setting is only a fraction.

Main text: The aim of this systematic review was to summarize the findings of relevant publications pertaining to non-healing wound care in the home setting in the years 2015–2020. Based on keywords, with the use of Boolean operators, databases were systematically searched PubMed, SCOPUS and Web of Science. The primary file contained 404 retrieved publications. These were then studied and reduced to the final 10 publications, which were analysed in detail.

Conclusion: The prerequisite for achieving the most effective care of non-healing wounds in home care is, above all, continuous education of clients and nursing staff and the use of modern medical and nursing procedures. Publications show that collaboration between home care nurses and the hospital is cost-effective, improves the clinical effectiveness of home care work and reduces the need for face-to-face consultations in the hospital.

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Association between screen time and sociodemographic factors, physical activity, and BMI among children in 6 European countries: Feel4Diabetes study

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ABSTRACT

Introduction: In most European countries, children have a very high level of screen time, which is influenced by a number of sociodemographic and other factors. The aim of our study was to investigate the association between parents' sociodemographic, socioeconomic, body mass index (BMI), physical activity and status as a risk group for type 2 diabetes, and children's BMI, physical activity and screen time. The data were derived from the 2016 Feel4Diabetes survey.

Sample and methods: A total of 12,280 parents and 12,211 children aged 6–9 years (mean age 8.21 years) participated in the cross-sectional study. The main aim of our study was to investigate the sociodemographic and lifestyle factors influencing the screen time among children aged 6–9 years, using data from six European countries participating in the Feel4Diabetes study. A logistic regression model was used to identify potential factors associated with screen time.

Results: Mothers with tertiary education (OR = 0.64; p < 0.001), middle age group (45–54 years) (OR = 0.81; p < 0.033) and higher income families (middle – OR = 0.85; p < 0.014; high – OR = 0.8; p < 0.003) had lower screen time, while maternal overweight/obesity (OR = 1.15; p < 0.013) and low physical activity of children increased the odds of >2 hours/day screen time. Lower physical activity levels in children were associated with increased screen time.

Conclusion: Targeted interventions should be developed to reduce screen time, especially for low socioeconomic families.

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How simulation transformed nursing education

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ABSTRACT

Nursing education is rapidly evolving, with simulation-based learning becoming a cornerstone of modern training. As a first-year nursing student, I experienced firsthand how simulation labs transformed theoretical knowledge into real-world readiness. This presentation explores how simulation bridges the gap between classroom learning and clinical practice, offering students a safe environment to develop technical skills, critical thinking, and confidence before encountering actual patients. Drawing from personal experience, I will highlight how practicing procedures in a simulated setting helped ease the transition into clinical placements. I will also reflect on how debriefing sessions after simulations enhanced self-awareness and decision-making. While challenges exist, the benefits of simulation-based learning are clear: better preparation, deeper understanding, and greater student engagement. Through this lens, I aim to emphasize why simulation is not just a teaching tool – but a transformation in how nurses are trained.

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Quality of life and life satisfaction of a parent of a child treated for type 1 diabetes

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ABSTRACT

Introduction: Type 1 diabetes is one of the most common metabolic diseases in children and adolescents, with a rising incidence. Untreated, it can lead to serious complications. Diagnosis in a child causes significant stress and psychological burden on the parent.

Objective: To assess the quality of life and life satisfaction of parents of children with type 1 diabetes hospitalized in a selected hospital in Rzeszów.

Methods: The study used a diagnostic survey and literature analysis. Tools included an original questionnaire, the Satisfaction with Life Scale (SWLS), and the Polish version of the Caregiver Burden Scale. The study involved 130 parents.

Results: The diagnosis negatively affected the quality of life in 71.5% and reduced life satisfaction in 69.2% of parents. Over 60% lacked time to rest, and 71.5% gave up personal interests. Chronic stress (67.7%) and anxiety about the child's health were the main difficulties. More than half (56.2%) rated their mental state as average. Lower knowledge of the disease correlated with reduced quality of life and satisfaction.

Conclusion: Type 1 diabetes in a child lowers the caregiver's quality of life and satisfaction. Greater knowledge improves well-being, reduces stress, and increases a sense of control.

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Prepared to care: pre-departure training in nursing study abroad

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ABSTRACT

Introduction: Undergraduate nursing study abroad programs expand global healthcare perspectives and cultural competence. However, the foundation for a successful experience begins well before departure, through intentional and structured preparation. *Main text:* For over 15 years, a nursing study abroad program in Provo, Utah, has integrated rigorous pre-departure training into its global and domestic clinical experiences. Students serve in countries such as Ghana, India, and Spain, and with refugee and veteran populations locally. Faculty-led preparation includes cultural research, presentations, clinical briefings, and ethical discussions. These activities equip students with the knowledge and cultural awareness needed to engage confidently in diverse healthcare settings. Faculty also coordinate logistics, establish clinical partnerships, and foster peer collaboration in advance of travel.

Conclusion: Comprehensive pre-departure preparation is key to fostering cultural sensitivity, professionalism, and global awareness. It transforms the study abroad experience from a trip into a deeply educational and personal journey, ensuring students are ready to serve and learn across cultures in a meaningful, impactful way.

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Preparing baccalaureate nursing students for study abroad: using the intercultural development inventory and development plans to foster cultural awareness and sensitivity

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ABSTRACT

Introduction: Cultural competence is essential for nursing students providing care in diverse settings. Short-term study abroad programmes offer immersive experiences, but structured preparation is needed to enhance learning outcomes.

The Intercultural Development Inventory (IDI) and its companion Intercultural Development Plan (IDP) are effective tools for assessing and guiding intercultural growth. Fitzgerald et al. (2018) found that nursing students showed measurable gains in intercultural sensitivity after IDI-informed preparation for study abroad. Emerson et al. (2024) demonstrated how customised IDPs promoted reflection, goal-setting, and deeper cultural understanding during a senior practicum. Students reported increased self-awareness and insight into cultural influences on care.

Integrating the IDI and IDP into study abroad preparation enhances nursing students' cultural competence. These tools foster meaningful engagement, reflection, and readiness for both global experiences and culturally responsive practice.

References

- 1. Emerson C, Keen D, Barnett K, Wade-Berg JA (2024). Intercultural competence development: A qualitative case study. Nurse Educ Pract 79: 104082. DOI: 10.1016/j.nepr.2024.104082.
- 2. Fitzgerald EA, Marzalik PR, Kue J (2018). Assessing intercultural development pre- and post education abroad. Nurs Educ 57(12): 747–750. DOI: 10.3928/01484834-20181119-08.

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Understanding determinants of immunization hesitancy in Manila: a comprehensive analysis

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ABSTRACT

Introduction: Immunization is essential to public health, but obtaining and sustaining herd immunity is seriously threatened by immunization hesitancy.

Objective: This research examined the complex factors (e.g. sociocultural beliefs, healthcare access constraints, the lack of understanding) influencing immunization hesitancy in Manila, Philippines.

Methods: This cross-sectional study used an adapted questionnaire and was conducted among 325 parents and caregivers from three elementary schools in Manila, Philippines in 2024. The statistical analysis was carried out using the Stata Version 17.

Results: The study found that concerns over vaccine safety and efficacy increase the chance of not getting vaccinated (OR = 1.2; 95% CI (0.68–1.75). In contrast, there was a negative correlation between vaccine reluctance and difficulties in accessing healthcare (OR = 0.94; 95% CI (0.38–1.49). Interestingly, there was a strong correlation between a lower likelihood of vaccine hesitation and lower reported life pressure (OR = 0.76; 95% CI (0.22–1.29). Although vaccine safety concerns remain a major obstacle, the results also point to the possible impact of healthcare access and, most significantly, the important role that social and community factors play in vaccination choices.

Conclusion: A multifaceted strategy that addresses safety concerns, public health literacy, access to immunization services is required to allay remaining concerns and raise immunization rates.

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Barriers to access and quality of T2DM treatment in Syria: insights from healthcare providers

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ABSTRACT

Background: Type 2 diabetes mellitus (T2DM) is a significant global health challenge, with Syria facing exacerbated barriers due to prolonged conflict. This study explores healthcare providers' perspectives on the challenges of delivering quality T2DM care in Syria.

Methods: A qualitative study was conducted using semi-structured interviews with 15 healthcare providers (doctors and pharmacists) from Karm Allouz Hospital in Homs, Syria. Thematic analysis was employed to identify key barriers to T2DM management.

Results: Three major themes emerged: (1) limited access to medications and diagnostic tools due to high costs and supply chain disruptions; (2) healthcare infrastructure deficiencies and workforce shortages worsened by conflict; and (3) financial and cultural barriers hindering patient adherence. Participants emphasized the psychological toll on patients and providers, as well as the need for specialized clinics and community education. Discussion/Conclusion: The study highlights systemic and socioeconomic barriers to effective T2DM care in Syria, underscoring the urgent need for policy reforms, international collaboration, and integrated care models. Recommendations include stabilizing medication supplies, expanding healthcare infrastructure, and implementing culturally sensitive education programs to improve diabetes management in conflict-affected settings.

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Cancer prevention in adults with intellectual disabilities: a literature review of caregiver perspectives

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ABSTRACT

Background: This review explores caregiver perspectives on cancer prevention for adults with intellectual disabilities within institutional and home care settings. The study aims to understand the roles, knowledge, and challenges faced by caregivers in supporting individuals with intellectual disabilities through cancer prevention measures.

Methods: Thirteen articles were analysed through thematic synthesis. Five overarching themes emerged from the data: Breast Cancer Screening Perspectives, Educational Interventions, Barriers and Opportunities for Cancer Screening, Healthcare Professionals' Perspectives, and Cultural Context and Decision-Making.

Results: Caregivers are central to facilitating breast cancer screening for individuals with intellectual disabilities. However, they face significant challenges: difficulty in explaining procedures to individuals with limited comprehension, lack of awareness about screening benefits, and practical obstacles such as transportation or scheduling. These barriers highlight the need for targeted educational interventions. Disparities in access to screening emphasize the urgency of comprehensive caregiver training.

Conclusion: This review offers valuable insights into the challenges and opportunities in cancer prevention for individuals with intellectual disabilities, providing a foundation for inclusive practice and policy.

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Enhancing patient safety: development of e-learning modules for nursing education

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ABSTRACT

Introduction: Nursing students are actively involved in nursing teams during practical training and should therefore be prepared to respond adequately to the risks associated with providing nursing care. The goal of educational institutions is to help nursing students reflect on their knowledge and competencies in patient safety and to prepare them to deliver quality and safe care in various clinical settings.

Objective: As part of the project, e-learning modules were developed to educate on key areas of patient safety, based on a literature review, cross-sectional study findings on unfinished care, teamwork, and safety culture, and thematic analysis of interviews with nursing students and educators.

Main text: The developed e-learning modules focus on patient safety and the safe delivery of nursing care, specifically tailored for the following clinical settings: internal medicine, surgery, paediatrics, psychiatry, and intensive care. The modules contain a total of 16 specific topics aimed at supporting competencies related to the safe provision of care. These modules include test tasks designed to assess students' knowledge, skills, and specific competencies.

Conclusion: The e-learning modules can be used in undergraduate, postgraduate, and specialist nursing education to strengthen the competencies of nursing students in the area of patient safety in clinical practice.

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Comprehensive education coordinated by nurses for patients with stable ischemic heart disease after cardiac surgery

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ABSTRACT

Introduction: Due to the increasing incidence of lifestyle diseases and poor lifestyles, we are increasingly encountering patients in clinical practice who are urgently admitted for cardiac surgery in connection with stable ischemic heart disease.

Aim: The aim was to highlight the effectiveness of a short intervention coordinated by a nurse after the patient's discharge to the home environment, using digital education methods to ensure comprehensive prevention for patients with stable ischemic heart disease.

Methods: A monocentric, randomized, prospective, observational intervention study was chosen to collect data. The research sample consisted of 50 patients being treated for stable ischemic heart disease who underwent cardiovascular surgery at the Department of Cardiac Surgery, Thoracic Surgery, and Vascular Surgery at České Budějovice Hospital, a. s. Results: Based on selected case studies, it can be said that patients perceive guided education by nurses as an opportunity to acquire additional knowledge and skills, such as surgical wound care, household management, nutrition, smoking, pain, physical activity, and changing their attitude towards life.

Conclusion: The results clearly show that patients perceive the comprehensive educational activities of nurses in cooperation with physiotherapists positively and at the same time as an opportunity to support their return to normal daily activities and self-care.

The contribution is supported by the project Nurse-Coordinated Comprehensive Education of Patients with Stable Ischemic Heart Disease (NU23-09-00369).

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Changes in taste and food preferences related to the coronavirus disease in Hungary

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ABSTRACT

Introduction: Many studies have supported the claim that – among other symptoms – viral diseases often affect the ability to smell and the sense of taste, possibly affecting taste and food preferences as well.

Objective: The aim of the present study was to shed light on the impact of COVID-related smell and taste dysfunction or loss on the food and taste preferences of COVID-19 patients with different symptoms, pre-existing conditions and demographic backgrounds.

Methods: A descriptive, cross-sectional survey was conducted. Our calculations were based on the answers of 501 participants. Descriptive statistics, Chi-square test and *t*-test for correlation, were performed.

Results: The most common long COVID symptom was fatigue/weakness (53.1%) followed by anosmia (50.9%) and tachycardia (33.5%). Many participants reported dysgeusia/ ageusia during the acute phase of the disease, which sometimes prevailed as a long COVID symptom. A high percentage of participants reported that they rejected all kinds of meat of animal origin except cold cuts after the acute phase, which proved to be the most common dietary change during the post-COVID period.

Conclusion: A high percentage of cases of the disease indeed had a marked effect on taste and food preferences after the acute phase. A second phase of this research is currently ongoing to evaluate the possible long-term effects.

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The occurrence of pressure ulcers in the heel area in critically ill patients – a study report

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ABSTRACT

Introduction: The occurrence of pressure ulcers in the heels of critically ill patients is a global problem. Comorbidities, distal perfusion disorders, multiple organ failure, pharmacotherapy, and immobilisation associated with mechanical ventilation affect the quality of microperfusion in the heels. The presence of friction, shear and simple pressure contributes directly to local tissue hypoxia and secondary tissue destruction in the heels. Aim: To assess the impact of selected risk factors on the occurrence of pressure ulcers in the heels of patients treated in intensive care.

Methods: A prospective observational study using controlled observation and estimation. A review of the literature discussing the incidence of pressure ulcers in critically ill patients was performed.

Results: Infusion of catecholamines determines a high risk of pressure ulcers in critically ill patients (p < 0.001). Distal perfusion dysfunction assessed using the ankle-brachial index (ABI-PAD) significantly increases the risk of pressure ulcers in the heels of critically ill patients (p = 0.026).

Conclusion: Critically ill patients are at high risk of developing pressure ulcers in the heels. Distal perfusion disorders, invasive therapeutic techniques and specific pharmacotherapy determine a high risk of pressure ulcers. Early prevention can reduce complications of deep tissue destruction, even in critically ill patients undergoing life-saving procedures.

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Decision-making processes, the nurse as an initiator of changes in the development of nursing

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ABSTRACT

Introduction: Decision-making processes are an indispensable part of nursing. These are processes without which nursing would not be feasible, but the research focused on the extent, where, when, how and why they intervene.

Objective: The objective was to determine how much nurses are allowed to make decisions within their competences and to what extent they want to make decisions. Are they interested in making decisions? If so, under what conditions?

Methods: The research was carried out as part of quantitative research using a questionnaire survey. The questionnaire was completed online. The questionnaire was completely anonymous and was sent to selected hospitals in all regions of the Czech Republic. After completing the data collection, the data was processed in the SPSS program.

Results: Based on the collection of 315 questionnaires, it was found that a managerial position plays a significant role in decision-making for nurses. At the same time, it was found that even when nurses are left to make decisions at the bedside/ambulance, nurses are more motivated at work.

Conclusion: In conclusion, it can be stated that in today's modern era, it is necessary to leave a certain autonomy in decision-making to nurses. This makes their work more effective and they are more motivated than in the case of directive management.

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Memory-shaping leadership: behavioral science interventions for nurse retention

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ABSTRACT

Introduction: Hungarian healthcare is struggling with a severe nurse shortage, driven in part by high turnover. While financial causes are well-known, emotional and psychological factors – especially how nurses remember their workdays – are underexplored. Behavioural science offers tools to shape these experiences intentionally.

Objective: This study develops a leadership training program that improves nurse retention by positively influencing workplace memory, using the Peak-End Rule as a guiding principle. *Methods:* A pilot study using the Experience Sampling Method (ESM) confirmed the Peak-End Rule's relevance in nursing contexts. These findings informed a training for nurse managers emphasizing low-cost, emotionally impactful behaviours such as end-of-shift gratitude and personal recognition. Evaluation includes ESM, an "Intent to Stay" questionnaire, and post-intervention interviews.

Results: Expected findings suggest that these interventions improve retrospective evaluations of workdays and correlate positively with nurses' intent to stay.

Conclusion: This behavioural science-based, cost-effective intervention supports long-term nurse retention and healthcare workforce sustainability.

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Specifics of nursing procedures in patients after transapical transcatheter heart valve implantation

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ABSTRACT

In my dissertation, I focus on the specific nursing procedures used for patients undergoing transapical transcatheter aortic valve implantation (TA-TAVI). This is a complex and highly specialized type of care, particularly due to the advanced age of the patients and their frequent comorbidity. The TA-TAVI method represents a less invasive approach to the treatment of aortic stenosis, which brings new challenges for nursing care.

The dissertation includes the definition and specification of key terms related to transapical transcatheter heart valve implantation (TA-TAVI), as well as a characterization of aortic stenosis and the rationale for choosing TA-TAVI as a therapeutic approach.

The study results will be used to optimize nursing procedures. Specific nursing protocols designed based on the findings will be implemented in clinical practice at centres performing TA-TAVI, leading to improved quality of care and enhanced patient self-sufficiency.

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Translation, adaption, and validation of the self-assessment of nursing informatics competencies scale in Hungary

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ABSTRACT

Introduction: The application of information technology is increasingly becoming a part of healthcare. According to current surveys, by 2040, healthcare will be approximately 80–90% digitalized. The key players in healthcare digitalization are undoubtedly nurses.

Aim: The aim of this research is to assess the IT competencies of nursing students using the Self-Assessment of Nursing Informatics Competencies Scale (SANICS), which is internationally accepted but has not yet been adapted into Hungarian or integrated into the educational structure.

Sample and methods: Within the framework of this study, the validation of the SANICS scale was carried out according to ISPOR translation principles. The content elements of the scale were examined along the knowledge-attitude-application categories to assess the opportunities, advantages, and disadvantages of applying IT competencies.

Results: Based on the analysis, the scale demonstrated notable reliability, with a Cronbach's alpha of 0.890. The construct validity was average, with a global Kaiser–Meyer–Olkin index of 0.718, indicating that the SANICS scale functions as a reliable measurement tool for assessing the digital competencies of nursing students.

Conclusion: Based on the findings, we recommend the use of the SANICS scale for assessing IT competencies in as many countries as possible. It could help reduce waiting lists, expand telemedicine, and increase patient satisfaction.

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Inclusive nursing for neurodiverse populations

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ABSTRACT

Health care provision for individuals with intellectual disabilities and autism remains a pressing issue requiring targeted nursing strategies and systemic improvements. People with intellectual disabilities and/or autism spectrum disorder frequently experience fragmented care, diagnostic overshadowing, and reduced access to preventive services. Nurses often act as gatekeepers, yet according to Cashin et al. (2022), many report insufficient training and low confidence when caring for these populations. Evidence from André et al. (2025) shows that effective nursing strategies include environmental, sensoryfriendly and communication adaptations, use of visual aids, time management, and family collaboration. In emergency settings, as reported by Mannenbach et al. (2021), children with autism required longer care episodes, underwent more diagnostic procedures, and were more frequently admitted, especially when presenting with psychiatric concerns. Bollard et al. (2025) underline the need for advanced practice roles and specialised clinical pathways to ensure equity in care. To address these challenges, health systems must implement structured training, establish care protocols informed by autism and intellectual disability, and strengthen interprofessional collaboration. Nursing education should integrate mandatory content on neurodiversity, while care models should embed flexibility, continuity, and dignity.

References

- André TG, Moreira NG, Lucca M, Dutra HS, Carlos DM, Fernandez-Garcia AO, Nascimento LC (2025). Strategies used by the nursing team in the care of autistic children and adolescents: An integrative review. J Pediatr Nurs 82: e134–e141.
 DOI: 10.1016/j.pedn.2025.04.006.
- 2. Bollard M, Appleby B, Kempson S (2025). Investigating advanced practice for people with intellectual disability and autism: A mixed methods study. J Clin Nurs 34(8): 3146–3159. DOI: 10.1111/jocn.17696.
- 3. Cashin A, Pracilio A, Buckley T, Kersten M, Trollor J, Morphet J, et al. (2022). A survey of registered nurses' educational experiences and self-perceived capability to care for people with intellectual disability and/or autism spectrum disorder. J Intellect Dev Disabil 47(3): 227–239.

DOI: 10.3109/13668250.2021.1967897.

4. Mannenbach MS, Passe RL, Lovik KK, Larson EM, Laudon SM, Naeve A, Bellolio MF (2021). Caring for children with autism in an emergency department setting. Pediatr Emerg Care 37(12): e977–e980. DOI: 10.1097/PEC.00000000001844.

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Quality of information transferred when transferring a patient between healthcare providers

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ABSTRACT

Introduction: Patient handover between healthcare providers is a key process that can have a profound impact on the quality of care and patient safety. This process involves the transfer of important information about the patient's health status, treatment, allergies, medications, and other relevant data. Effective communication and accurate transfer of information are essential to ensure continuity of care and minimize the risk of errors that can lead to adverse events. Today, health systems around the world face challenges related to the transfer of information between different care providers.

Aim: To analyse the quality of information transferred during patient transfer between healthcare providers.

Methods: Quantitative research using the standardised Agency for HealthCare Research and Quality (AHRQ) questionnaire, which provides valuable information on the current state of information transfer among nurses working in acute care hospitals in the Czech Republic. The data obtained were processed in SPSS software.

Results: 221 questionnaires were analysed to identify areas of teamwork, perceptions of process settings leading to the provision of safe care and support from line manager and management.

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Management of nursing care for aggressive patients in intensive care

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ABSTRACT

Aggressive behaviour in patients remains a significant challenge in intensive care settings, affecting both the quality of healthcare and the psychological well-being of non-medical healthcare professionals. This study aimed to evaluate the preparedness of non-medical healthcare professionals in managing aggression in intensive care, assess the use of the Brøset Violence Checklist (BVC), and investigate the role of training, protective equipment, and de-escalation techniques. A mixed-methods approach was employed between 2024 and 2025, comprising quantitative data from a non-standardised questionnaire (n = 118) and qualitative data from semi-structured interviews (n = 5). Quantitative findings revealed no statistically significant relationship between the use of BVC, participation in training, or use of protective tools and a reduced occurrence of aggression. Qualitative analysis, however, highlighted that individual experience, quality of education, and institutional support play a crucial role in handling aggressive behaviour. The study highlights the importance of regular, practical, and context-sensitive training, as well as the integration of validated predictive tools into clinical workflows. Systematic post-incident debriefing and continuous psychological support are recommended to ensure both staff safety and ethical patient care.

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Nepal: Medicine in extreme conditions

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ABSTRACT

An international internship at Dhulikhel Hospital in Nepal provided a unique perspective on the delivery of acute care in resource-limited settings. Despite being one of the country's best hospitals, staff face major shortages in essential equipment such as functional bagvalve masks, defibrillators, ventilators, and transport monitors, which significantly impacts the quality of CPR and patient monitoring. During the two-and-a-half-month internship, the author worked in the emergency department, paediatric and medical ICUs, and post-anaesthesia care unit. Visits to rural outreach centres added deeper cultural and systemic context. Frequently encountered conditions included organophosphate poisoning, tetanus, and leprosy – diseases rarely seen in European practice. Cultural expectations, such as the need for family consent for intubation or the requirement for family presence during hospitalization, often delayed urgent interventions. Nevertheless, the local staff demonstrated extraordinary adaptability, ingenuity, and professionalism. The experience emphasized both technical and ethical challenges and underscored the importance of international cooperation and targeted support for global emergency medicine development.

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The role of advance practice nurses in the prevention of cardiovascular disease in primary care

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ABSTRACT

Background: Prevention of cardiovascular disease, identification and analysis of risk factors are key public health issues.

Methods: The aim of the present study was to investigate the risk factors and outcomes of patients who attended cardiovascular screening. An additional aim was to understand the role of the extended duty nurse in cardiovascular prevention in primary care. The study was a cross-sectional study using GP software, JASP statistical software.

Results: The sample consisted of 368 people, with a majority of women (60.4%) compared to men (39.6%). The average age was 72.39 years. At the time of the in-office measurement, 41% of the sample (151 persons) were classified as having abnormal or hypertension with a value above 140/90 mm Hg. 95.6% of the patients (352 persons) were taking antihypertensive medication. 42% of the participants were overweight, 61% had high blood fat levels and 36% (132) had high blood sugar levels. 35% of the patients were taking blood glucose lowering medication, the mean blood glucose level for the group not taking blood glucose lowering medication was 5.338 mmol/l, while the mean for the group taking blood glucose lowering medication was 7.315 mmol/l, the difference was statistically significant (p < 0.001).

Conclusion: There is a need to strengthen prevention activities in primary care, regular screening, emphasis on individual risk factors, complex assessment of risk factors when developing prevention and treatment strategies.

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Intensions to leave the job and nursing profession among nurses in Kenya's referral hospitals: exploring the effects of organizational culture, work-related stress and job satisfaction

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ABSTRACT

Background: Kenya's healthcare system, like many in Low- and Middle-Income Countries, is grappling with a severe shortage of nurses, yet experiences continuous mass exodus and high turnover.

Aim: To explore the effects of organizational culture, work-related stress and job satisfaction on nurses' job and professional turnover intentions in Kenya.

Methods: This cross-sectional study surveyed 429 nurses in Kenya's major referral hospitals. Validated tools were used to assess organizational culture (OC), Work-Related Stress (WRS), job satisfaction (JS), job Turnover Intention (TI) and Profession Turnover Intention (ProfTI).

Results: Our analysis revealed that 81.4% and 31.4% of Kenyan nurses intend to leave their jobs and the nursing profession respectively. The overall organizational culture was largely neutral with a slight inclination to positive (M = 2.54, SD = 0.62), work-related stress was moderately high (M = 2.92, SD = 0.51), and job satisfaction was low, with only 56.6% of nurses reporting satisfaction.

Conclusion: Kenya's major referral hospitals are facing a crisis, marked by high rates of both TI and ProfTI. Urgent action is required from hospital managers and administrators, policymakers, the Kenyan government, and all other key stakeholders to enhance job satisfaction, reduce work-related stress, foster a strong positive organizational culture, and improve salaries.

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Reclaiming time for care: a nurse-centered innovation story from ICU practice

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ABSTRACT

Introduction: In an era of digital transformation and algorithmic decision-making, nursing faces an urgent need to innovate without losing its human core. Drawing a parallel with Kodak's failure to adopt the digital camera it had itself invented, this presentation examines how the reluctance to embrace disruptive innovation can lead to systemic stagnation, even in healthcare. In modern intensive care units (ICUs), nurses still manually record hourly urine output using pen and paper, a task both error-prone and time-consuming. This reality persists despite widespread awareness of staff shortages and the mental burden carried by overworked ICU teams.

Objective: To showcase an example of evidence-based nursing innovation developed through close collaboration between frontline ICU nurses and a MedTech startup, with the goal of automating urine output monitoring while improving data accuracy and clinical usability.

Methods: Using human-centred design and iterative prototyping, the team behind HTG Program engaged over 50 healthcare professionals across Czech and Slovak ICUs to map current workflows, identify pain points, and co-create a solution that could be deployed with minimal disruption. Time trials and shadowing studies were conducted to benchmark manual processes and validate time savings.

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Climate change and its impact on human health

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ABSTRACT

Introduction: Ongoing climate change exerts a profound impact on human health and life. Rising temperatures, extreme weather events, and environmental degradation not only threaten health and survival but also damage infrastructure and destabilize healthcare systems.

Main text: This study is based on a global literature review and a critical analysis of publications from the past five years. It examines the effects of climate change on the cardiovascular, respiratory, and infectious disease systems, as well as on mental health and food and water security. Heat waves increase the risk of heart attacks and strokes, particularly among the elderly and those with chronic diseases. Deteriorating air quality caused by ozone, pollen, and smoke exacerbates symptoms of asthma and COPD. Climate conditions also facilitate the spread of disease vectors, including malaria, dengue, and Lyme disease. Furthermore, heat, natural disasters, and climate uncertainty contribute to higher rates of depression, anxiety, and PTSD, particularly among younger populations. Conclusion: The escalating climate crisis necessitates integrated political, healthcare, and

educational interventions. Strengthening healthcare systems, developing early warning systems, and investing in climate-resilient infrastructure are essential. Promoting sustainable lifestyles and conducting further research on the interrelations between climate change and human health are crucial for designing effective intervention strategies.

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Attitudes of healthcare professionals and students towards the use of artificial intelligence in education and professional practice

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ABSTRACT

Introduction: Artificial intelligence (AI) is becoming an increasingly integral part of modern medicine and healthcare education. It is a key innovation of the 21st century but the successful implementation of AI technologies depends not only on technical capacity but also on the readiness and acceptance of its users.

Objective: Analysis of the attitudes of students and healthcare workers towards the use of artificial intelligence in education and professional work.

Methods: The study was conducted in 2025 in the city of Rzeszów (Poland) and included 154 participants (90 medical students and 64 healthcare workers). Statistical analyses were performed using the chi-square tests, proportion tests and bag-of-words analysis.

Results: Among students, 38.9% of respondents indicated contact with AI technology and 31.3% healthcare workers. Both groups expressed a lack of preparedness to work with AI. The largest percentage of healthcare workers indicated "I have no opinion" (75.8%), which may indicate significant uncertainty or a lack of knowledge about the use of AI in everyday practice. A high percentage of responses indicated openness to new technologies, which may be significant for future education and development, as well as for the implementation of innovative solutions in the healthcare sector.

Conclusion: Healthcare workers and students require training in artificial intelligence to gain knowledge and more effectively use the potential of AI in education and work.

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Evidence-based teaching strategies to integrate EBP into education

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ABSTRACT

Integrating Evidence-Based Practice (EBP) into the nursing curriculum is a global imperative for preparing graduates who can address issues across the healthcare continuum to improve quality, safety, and outcomes for all. However, faculty often face challenges in helping students move beyond a theoretical understanding of EBP to its practical application in healthcare. The traditional lecture format is frequently insufficient for developing the complex skills of EBP from clinical inquiry through implementation and dissemination. This presentation addresses this critical gap by providing nursing faculty with a toolkit of practical, evidence-based teaching strategies designed to seamlessly embed EBP competencies across the curriculum at all levels.

This session will explore several high-impact, active learning methodologies based on the Melnyk et al. (2014) EBP Competencies for Practicing and Advanced Practice Nurses. The presentation will detail appropriate leveling of EBP across academic programs and explore the flipped classroom model, where students engage with foundational content independently, reserving class time for hands-on activities that develop competency of critical EBP skills from clinical inquiry through implementation, evaluation, and dissemination. We'll also explore the use of problem-based learning (PBL), which challenges students to apply their knowledge and skills in the context of unfolding case studies that emulate real-world settings and address real-world issues. Furthermore, we will examine the role of structured journal clubs and integrated clinical assignments that require students to connect their patient care experiences directly to the current body of evidence.

By adopting these strategies, faculty can help raise the next generation of nurses to become evidence-based clinicians, providers, and leaders. Participants will leave the session equipped with concrete, adaptable techniques to transform their teaching and empower their students to become confident EBP champions, mentors, and leaders across healthcare. This shift in pedagogy is crucial for advancing the nursing profession and enhancing healthcare outcomes in Central Europe and worldwide.

Reference

1. Melnyk BM, Gallagher-Ford L, Long LE, Fineout Overholt E (2014). The establishment of evidence-based practice competencies for practicing registered nurses and advanced practice nurses in real-world clinical settings: Proficiencies to improve healthcare quality, reliability, patient outcomes, and costs. Worldviews Evid Based Nurs 11(1): 5–15. DOI: 10.1111/wvn.12021.

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Quality of life and satisfaction in patients with schizophrenia

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ABSTRACT

Introduction: Schizophrenia is a serious mental illness that deeply affects patients' lives: their mental health and abilities to perform everyday activities, maintain relationships, and perform various roles.

Objective: To assess the quality of life in patients with schizophrenia and analyse the factors affecting their subjective well-being.

Methods: A descriptive cross-sectional study. The sample consisted of 228 patients with schizophrenia. The Quality of Life Enjoyment and Satisfaction Questionnaire – Short Form was used. The study was conducted from January 2024 to February 2025.

Results: A statistically significant relationship was found between age and quality of life assessment (r = 0.279; p = 0.005). A higher quality of life was found in the older patients. The differences in quality of life assessment between men and women were statistically insignificant (t = 0.203; p = 0.841). The statistically significant better quality of life assessment was in the patients with higher education than those with lower education (r = 0.253; p = 0.003).

Conclusion: Improving quality of life in patients with schizophrenia requires collaborative efforts from both healthcare professionals and lay people. Support, understanding and fight against stigmatisation related to mental disorders are key steps towards better life for patients with schizophrenia.

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Anxiety levels in post-stroke patients before and after head magnetic resonance imaging

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ABSTRACT

Introduction: Patients with stroke undergoing magnetic resonance imaging (MRI) may experience varying anxiety levels. Several factors can help reduce it.

Objective: To assess anxiety levels in post-stroke patients before and after MRI of the head. *Methods:* Conducted in Jan–Feb 2024 at the COM Diagnostic Imaging Department in Jarosław, Poland, the study included post-stroke patients referred for head MRI. Data were collected via a self-designed questionnaire and the standardised State-Trait Anxiety Inventory (STAI), which patients completed both before and after the exam. Statistical analysis used distribution and correlation tests, with a significance level set at p < 0.05. *Results:* Patients showed moderate anxiety before MRI, which decreased significantly during the procedure. Multimorbidity was linked to higher pre-exam anxiety. Staff presence did not significantly affect anxiety reduction, but smiling, positive attitude, and providing information helped lower anxiety. Earplugs and a hand-held alarm also reduced anxiety. *Conclusion:* Post-stroke patients experience anxiety before MRI. Factors increasing anxiety include multimorbidity, while positive staff attitude, information, supportive equipment, and communication help reduce it.

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