

FACULTY OF HEALTH SCIENCES

Institute of Emergency Care, Pedagogy of Health and Nursing Sciences

#### THESIS TOPICLIST

Advanced Practice Nurse

Academic year 2024/2025

Supervisor:	Prof. Dr. József Betlehem
Workplace:	UP FHS, Department of Health Pedagogy and Basic Emergency Skills
Title (1)	Knowledge of modern care tools among nurses
Introduction:	Recently, more and more care support tools have appeared, both in healthcare institutions and in patients' homes. The professional application of these tools in practice is not always effective, which is partly due to the lack of theoretical knowledge and partly of practical experience. The purpose of the study is to assess the habits of nurses using modern nursing devices in departments with different profiles.
Applicable data collecting methods:	Questionnaires
Necessary and applicable statistical analysis:	Descripitves and mathematical statistics
Estimated number of theses can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Patrik Bogdán
Workplace	UP FHS Department of Nursing Sciences
Title: (2)	The impact of workplace stress on the mental health and workplace motivation of nurses
Introduction:	Nurses have to cope with numerous sources of stress during their nursing activities. These collectively affect their mental health, performance, and workplace motivation. The aim of the study is to detect the stress factors and their sources that affect nurses in their daily patient care.
Applicable data collecting methods:	Questionnaire survey
Necessary and applicable statistical analysis:	Descriptive statistics (mean, standard deviation, frequency) and mathematical statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within the theme:	3
Major/specialization:	Advanced practice nurse



#### FACULTY OF HEALTH SCIENCES

Supervisor:	Éva Horváth
Workplace	UP FHS Department of Nursing Sciences
Title: (3)	Choosing Nursing as a career: motivational study among young people choosing a career.
Introduction:	The nursing profession and career are currently not among the popular career choice areas in Hungary. Thus, in Hungary, due to several factors, there is a significant human resource deficit in the field of nursing. In contrast, interest in the nursing profession is significantly higher in several other countries. The aim of the research is to assess the external-internal motivational factors that influence precareer choices to choose nursing profession.
Applicable data collecting methods:	Questionnaire
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (chi-square test, t-test, ANOVA, linear regression)
Estimated number of theses can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (4)	The Importance of Screening Examinations in the 21st Century
Introduction:	Health awareness closely involves participation in various screening examinations (such as those related to age, gender, and the prevention of certain diseases like cardiology, dental, oncology, psychiatric disorders, and malnutrition). These screenings help in the timely detection of diseases that are significant from a public health perspective. Despite this, unfortunately, many people in Hungary lose their lives due to treatable health problems. Objective: The aim of the study is to explore the population's attitudes, motivations, and reasons for non-participation in screening examinations based on their socio-demographic data. Additionally, it seeks to assess their knowledge about responsible risk factors and the practice of self-examination in the context of specific diseases. Another goal is to measure the prevalence of these diseases using validated measurement tools.
Sample size:	100 individuals
Research methods used in the processing:	Self-constructed questionnaire, validated questionnaire, document analysis
Required and applicable stat	Descriptive (mean, standard deviation, frequency) and mathematical statistics ( $\chi^2$



# FACULTY OF HEALTH SCIENCES

methods:	test, t-test, analysis of variance, confidence intervals for mean and frequency)
Estimated number of theses can be submitted within the	
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (5)	Examination of Attitudes and Knowledge Levels Regarding Vaccinations
Introduction:	Vaccinations play a significant role in the prevention of infectious diseases worldwide. Objective: The aim of the study is to explore the population's attitudes, motivations, and knowledge regarding various (mandatory and non-mandatory) vaccinations.
Sample size:	100 individuals
Research methods used in the processing:	Self-constructed questionnaire, validated questionnaire, document analysis
Required and applicable stat methods:	Descriptive (mean, standard deviation, frequency) and mathematical statistics ( $\chi^2$ test, t-test, analysis of variance)
Estimated number of theses can be submitted within the	2
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (6)	Incidence of Needlestick Injuries in Everyday Practice
Introduction:	Annually, more than 3 million healthcare workers suffer needlestick injuries. Research Objective: The aim of the study is to assess the frequency of injuries caused by sharp or pointed instruments among healthcare workers and students in healthcare training during their clinical practice, and to examine the effectiveness of training aimed at preventing these injuries. A secondary objective is to explore the knowledge level of the designated population regarding the health risks caused by potential injuries.
Sample size:	100 individuals
Research methods used in th processing:	Self-constructed questionnaire, validated questionnaire, document analysis



#### FACULTY OF HEALTH SCIENCES

Required and applicable stat	Descriptive statistics (mean, standard deviation, frequency) and inferential
methods:	statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within the	
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai, Miklós Lukács
Supervisor's workplace:	UP FHS
Topic title: (7)	The Importance of Hospice and Palliative Care in the 21st Century
Introduction:	In our country, the mortality rate from malignant tumors is extremely unfavorable, ranking second only to cardiovascular causes. In Hungary, early mortality caused by malignant tumors far exceeds the European Union (EU) average, being 1.8 times higher. Data from the International Cancer Registry and the Hungarian Central Statistical Office (KSH) show that approximately 30-35 thousand people die annually from various malignant tumors in Hungary. Research Objective: The aim of the study is to assess: The quality of life of patients receiving palliative care The loss experiences of healthcare workers and relatives The significance of psychological, spiritual, and social aspects
Sample size:	100 individuals
Research methods used in th processing:	Document analysis, standard questionnaire
Estimated number of theses can be submitted within the	2
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (8)	Examination of Quality of Life Among Patients with Various Conditions
Introduction:	The aim of quality of life studies is to standardize, quantify, and characterize the impact of a disease or therapeutic procedure on a patient's health using scientifically analyzable parameters. Research Objective: The goal of the research is to assess the quality of life among patients suffering from various conditions (e.g., internal medicine, surgery, orthopedics, gynecology, neurology, oncology, palliative care) depending on the severity of the disease. It aims to examine how medication and diet influence the



#### FACULTY OF HEALTH SCIENCES

	development of their own quality of life. Additionally, it seeks to assess how a specific disease (e.g., stoma) affects relationships and sexual life.
Sample size:	100 individuals
Research methods used in th processing:	Self-constructed questionnaire, validated questionnaire, document analysis
Estimated number of theses can be submitted within the	
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (9)	Fall Prevention Among the Elderly
Introduction:	<ul><li>Falls are a common and serious problem in the lives of the elderly, affecting about one-third of those over 65 years old annually, with many experiencing recurrent falls. As a result of falls, the elderly can suffer various minor or major health damages, necessitating healthcare services. Additionally, complications arising from falls increase the risk of early mortality.</li><li>Research Objective: The aim of the study is to assess knowledge about falls and their prevention, as well as the interventions taken by the elderly.</li></ul>
Sample size:	100 individuals
Research methods used in th processing:	Self-constructed questionnaire, validated questionnaire, document analysis
Required and applicable stat methods:	Descriptive statistics (mean, standard deviation, frequency) and inferential statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within the	2
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (10)	Examination of Career Choices, Motivations, and Further Education of Graduating Students in Health Vocational Schools
Introduction:	The aim of the research is to assess the factors influencing career choices in healthcare, motivations, and the students' intentions for further education.
Sample size:	100 individuals



# FACULTY OF HEALTH SCIENCES

Research methods used in th processing:	Self-constructed questionnaire, validated questionnaire, document analysis
Estimated number of theses can be submitted within the	
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (11)	Factors Influencing the Effectiveness of Breastfeeding
Introduction:	The World Health Organization recommends exclusive breastfeeding until 6 months of age. However, some mothers do not always provide this for their children for various reasons. The aim of the research is to understand mothers' knowledge and difficulties related to breastfeeding. Research Methods Applicable During Processing: Self-constructed questionnaire, validated questionnaire, document analysis
Sample size:	100 individuals
Research methods used in th processing:	Self-constructed questionnaire, validated questionnaire, document analysis
Required and applicable stat methods:	Descriptive statistics (mean, standard deviation, frequency) and inferential statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within the	2
In which majors can be adve	Advanced practice nurse

Name of the supervisor:	Dr. Annamária Karamánné Pakai
Supervisor's workplace:	UP FHS
Topic title: (12)	Examination of Access to Healthcare for Foreign Students
Introduction:	We have little information about the health status of foreign students studying at the Faculty of Health Sciences at the University of Pécs who do not speak Hungarian. Objective: The aim is to assess the healthcare-seeking habits, barriers, language difficulties, and satisfaction with healthcare among foreign BSc students.
Sample size:	100 individuals
Research methods used in th processing:	Questionnaire
Estimated number of theses can be submitted within the	2



#### FACULTY OF HEALTH SCIENCES

Institute of Emergency Care, Pedagogy of Health and Nursing Sciences

In which majors can be adve Advanced practice nurse

Supervisor:	Dr. Zsolt Káposztás
Workplace	UP FHS Department of Nursing Sciences
Title: (13)	The effect of exercise on the quality of life and survival amongst patients with gastrointestinal cancer
Introduction:	The incidence of gastrointestinal cancer is rising worldwide. Most of the patients suffers from depression and these patients tend not to perform physical exercise, although there are a few studies to support the positive impact of exercise on survival and also it is thought to reduce the recurrence rate and improve the quality of life. The aim of this study is to analyse the impact of exercise amongst patients who had operation for GI malignancy from the recurrence and quality of life point of view.
Applicable data collecting methods:	Questionnaire, data collection
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (chi-square test, t-test, ANOVA)
Estimated number of theses to can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Dr. Zsolt Káposztás
Workplace	UP FHS Department of Nursing Sciences
Title: (14)	The effect of nutritional status and its impact on patients who undergo radical resection for gastrointestinal cancer
Introduction:	Malnutrition is prevalent in patients undergoing gastrointestinal (GI) surgery for cancer and has a negative impact on the postoperative outcomes. It is relatively simple to analyse the preoperative nutritional status of patients with basic measurements and laboratory parameters. It is recommended to improve preop nutritional status with the help of a dietitian to encourage exercise and introduce the intake of nutritional supplements as part of prehabilitation in the preoperative period. The aim of this study to assess the preop nutritional status of patients and to analyse its effect on the postoperative outcomes.
Applicable data collecting methods:	Questionnaire, data collection
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (chi-square test, t-test, ANOVA)



# FACULTY OF HEALTH SCIENCES

Estimated number of theses t can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Krisztina Mondovits
Workplace	UP FHS Department of Nursing Sciences
Title: (15)	Examination of the risk factors of a post-infarction patient related to laboratory value
Introduction:	Cardiovascular disease are still among the leading causes of death. By examining the laboratory parameters of patients who have suffered a heart attack, it can be verified that the majoritz of patients still do not follow the therapeutic instructions.
Applicable data collecting methods:	Application of assessment scale, data analysis, document analysis
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (chi-square test, t-test, ANOVA, linear regression)
Estimated number of theses can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Dr. Dorina Simon-Pusztai
Workplace	UP FHS Department of Nursing Sciences
Title: (16)	Nurses' role in pharmaceutical care
Introduction:	Nurses have significant responsibilities in pharmaceutical care. However, nurses' roles are not always explicit, distinct and clear to other professionals, which can complicate multidisciplinary working. Medication management requires a multidisciplinary approach and interprofessional communication is essential to reduce medication errors. Therefore, nurses' roles cannot be over-emphasized. Nurses' role in pharmaceutical care differs worldwide (legally and in practice). The aim of the study is to examine the nurses' role in everyday's medication administration in Hungary and abroad.
Applicable data collecting methods:	Questionnaire
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (Chi-square test, t-test, linear regression)
Estimated number of theses to can be submitted within	2



# FACULTY OF HEALTH SCIENCES

the theme:	
Major/specialization:	Advanced practice nurse

Supervisor:	Dr. Dorina Simon-Pusztai
Workplace	UP FHS Department of Nursing Sciences
Title: (17)	Examination of health behaviour and mental health
Introduction:	Sleep, which is directly associated to health and quality of life, is a basic need for a human being to continue his or her bio-psycho-social and cultural functions. Sleep affects the quality of life and health is also perceived as an important variable. Sleep quality has significant effects on cognitive performance and physical power and is influenced by multiple factors including stress. Contrary to the ideal, students suffer from sleep deprivation and stress at times when they should achieve the greatest amount of learning. However, poor sleep quality may have negative impact test performance as well thus creating a vicious circle. The aim of the research is to analyze the sleep quality and habit among foreign university students in Hungary. We would also like to draw attention to the effect of health status and health behaviour on sleep habit and sleep quality of foreign students in Hungary.
Applicable data collecting methods:	Questionnaire
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (Chi-square test, t-test, linear regression)
Estimated number of theses to can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Miklós Sugár
Workplace	UP FHS Department of Nursing Sciences
Title: (18)	<b>Telehealth in Nursing Practice:</b> Evaluating the benefits and challenges of remote patient monitoring and virtual care.
Introduction:	Telehealth has revolutionized the field of nursing, offering new ways to deliver care that transcend traditional boundaries. Through remote patient monitoring and virtual care, nurses can now provide timely and efficient health services to patients regardless of their geographical location. This innovation promises numerous benefits, including improved access to healthcare, enhanced patient engagement, and reduced healthcare costs. However, the adoption of telehealth also brings forth several challenges, such as issues of technology accessibility, patient privacy, and the need for specialized training for healthcare providers. This study aims to evaluate the advantages and obstacles associated with telehealth in nursing



#### FACULTY OF HEALTH SCIENCES

	practice, providing a comprehensive analysis of its impact on both patients and healthcare professionals.
Applicable data collecting methods:	Review
Necessary and applicable statistical analysis:	Descriptive statistics (mean, standard deviation, frequency) and mathematical statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses to can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Miklós Sugár
Workplace	UP FHS Department of Nursing Sciences
Title: (19)	Managing Polypharmacy in Elderly Patients: Strategies for nurses to optimize medication management and reduce adverse effects.
Introduction:	Polypharmacy, the simultaneous use of multiple medications, is a common and complex issue in the care of elderly patients. As the aging population grows, nurses are increasingly confronted with the challenges of managing polypharmacy to ensure patient safety and therapeutic efficacy. Elderly patients are particularly vulnerable to adverse drug reactions and interactions due to age-related physiological changes and the presence of multiple chronic conditions. This study explores effective strategies for nurses to optimize medication management in elderly patients, emphasizing the importance of comprehensive medication reviews, patient education, and interdisciplinary collaboration. By addressing the risks associated with polypharmacy, nurses can play a crucial role in improving health outcomes and enhancing the quality of life for elderly patients.
Applicable data collecting methods:	Review
Necessary and applicable statistical analysis:	Descriptive statistics (mean, standard deviation, frequency) and mathematical statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Supervisor:	Miklós Sugár
Workplace	UP FHS Department of Nursing Sciences
Title: (20)	<b>The Role of Nurses in Preventing Healthcare-Associated Infections:</b> Best practices and interventions to reduce infection rates in hospitals.



#### FACULTY OF HEALTH SCIENCES

Introduction:	Healthcare-associated infections (HAIs) represent a significant concern in hospital settings, posing serious risks to patient safety and public health. Nurses, being at the forefront of patient care, play a crucial role in the prevention and management of these infections. Effective prevention of HAIs requires adherence to best practices and the implementation of evidence-based interventions, including hand hygiene, aseptic techniques, and environmental sanitation. This study aims to explore the vital contributions of nurses in reducing infection rates in hospitals, highlighting key strategies and interventions that can be apploved to minimize the
	highlighting key strategies and interventions that can be employed to minimize the incidence of HAIs. By focusing on the role of nurses, this research underscores the importance of rigorous infection control measures and continuous education to ensure optimal patient outcomes and enhance the overall quality of care.
Applicable data collecting methods:	Review
Necessary and applicable statistical analysis:	Descriptive statistics (mean, standard deviation, frequency) and mathematical statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within the theme:	4
Major/specialization:	Advanced practice nurse

Supervisor:	Miklós Sugár
Workplace	UP FHS Department of Nursing Sciences
Title: (21)	The role of the advanced practice nurse in different healthcare settings
Introduction:	Advanced Practice Nurses (APNs) are pivotal in the evolving landscape of healthcare, bringing a high level of expertise and expanded responsibilities across various settings. These highly skilled professionals are equipped to provide comprehensive care that bridges the gap between nursing and medicine. Their roles extend beyond traditional nursing duties to include diagnosis, treatment, and management of patient care, often with a focus on prevention and education. This study examines the diverse functions of APNs in different healthcare environments, such as hospitals, primary care clinics, and community health settings, highlighting their contributions to improving patient outcomes, enhancing access to care, and fostering interdisciplinary collaboration. By exploring the unique impact of APNs across these settings, this research aims to underscore their essential role in addressing contemporary healthcare challenges and advancing the quality of care delivery.
Applicable data collecting methods:	Review
Necessary and applicable statistical analysis:	Descriptive statistics (mean, standard deviation, frequency) and mathematical statistics (chi-square test, t-test, analysis of variance)
Estimated number of theses can be submitted within	7



# FACULTY OF HEALTH SCIENCES

the theme:	
Major/specialization:	Advanced practice nurse

Supervisor:	László Szabó
Workplace	UP FHS Department of Nursing Sciences
Title: (22)	Stigma and prejudice against people with mental disorders from the perspective of carers and society
Introduction:	Patients with mental disorders often suffer discrimination from society, which is also a major challenge in their care. Our research aims to assess the levels of stigma experienced by patients and attitudes of carers.
Applicable data collecting methods:	Survey, structured interview
Necessary and applicable statistical analysis:	Univariate analyses, One-, two-sample T-test, Chi-square test, Correlation analysis
Estimated number of theses can be submitted within the theme:	3
Major/specialization:	Advanced practice nurse

Supervisor:	László Szabó
Workplace	UP FHS Department of Nursing Sciences
Title: (23)	Ethical and technological dilemmas in patient education today and in the near future - based on a survey of patients' prior knowledge
Introduction:	The research investigates the extent to which the younger generation - current and near future patients - change their level of prior knowledge compared to older patients during client education. How the amount of lay and professional information available at home affects the knowledge level of clients and how can this be used by the nurse in patient education.
Applicable data collecting methods:	Survey, structured interview
Necessary and applicable statistical analysis:	Univariate analyses, One-, two-sample T-test, Chi-square test, Correlation analysis
Estimated number of theses can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse



#### FACULTY OF HEALTH SCIENCES

Supervisor:	László Szabó
Workplace	UP FHS Department of Nursing Sciences
Title: (24)	Healthy lifestyle or eating disorder? Assessing symptoms of orthorexia nervosa in young adults
Introduction:	Today's society encourages consumption, yet we are motivated by an ideal that requires a healthy, muscular, lean physique to achieve personal happiness. This is the environment that determines the development of eating and body image disorders. Eating and body image disorders are becoming a fashionable disease, with new types emerging, frequent overlap between syndromes and even more frequent sub-clinical manifestations. The emergence of orthorexia nervosa (ON) (a compulsive eating disorder used to achieve a healthy appearance) has therefore only recently become a reality. In our study, we explore the prevalence of ON symptoms in different young adult social groups, their correlation with group demographics and factors that may influence their occurrence.
Applicable data collecting methods:	Observation, survey, interview
Necessary and applicable statistical analysis:	Descriptive (mean, standard deviation, frequency) and mathematical statistics (Chi-square test, t-test, Analysis of variance)
Number of theses:	3
Major/specialization:	Advanced practice nurse

Supervisor:	László Szabó
Workplace	UP FHS Department of Nursing Sciences
Title: (25)	Examining workplace stress and coping strategies among nurses
Introduction:	In different areas of the nursing profession, stress levels vary according to the nature of the activity, but staffing levels, job insecurity and career image can also expose workers globally. The aim of this research is to assess the stressors affecting nurses and to explore coping strategies in relation to psychological and somatic complaints caused by stress.
Applicable data collecting methods:	Survey, structured interview
Necessary and applicable statistical analysis:	Univariate analyses, One-, two-sample T-test, Chi-square test, Correlation analysis
Estimated number of theses can be submitted within the theme:	3
Major/specialization:	Advanced practice nurse



#### FACULTY OF HEALTH SCIENCES

Institute of Emergency Care, Pedagogy of Health and Nursing Sciences

Supervisor:	Lívia Tóth
Workplace	UP FHS, Department of Nursing Sciences
Title: (26)	Digitalization in Health Care
Introduction:	The healthcare system is increasingly technology-dependent and proficiency in informatics skills is essential for health professionals to efficiently operate in the contemporary clinical environment. Nurses are major users of digital health technologies and graduates need to be well-prepared and confident to use the different available clinical systems competently as they transition from education to practice. Our aim to explore undergraduate nursing students' self-perceptions of informatics competence, set within a larger research project.
Applicable data collecting methods:	Questionnaire, interview
Necessary and applicable statistical analysis:	Descriptive statistics, mathematical statistics (chi-square test, t-test, ANOVA, linear regression)
Estimated number of theses can be submitted within the theme:	2
Major/specialization:	Advanced practice nurse

Pécs, 12<sup>th</sup> August, 2024

Prof. Dr. József BETLEHEM full professor, director of institute