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COMPREENDER AS BARREIRAS À PARTICIPAÇÃO DOS ENFERMEIROS NA INVESTIGAÇÃO: UMA EXPLORAÇÃO DE FATORES CONSTRANGEDORES NA LITUÂNIA

UNDERSTANDING THE BARRIERS TO NURSES' PARTICIPATION IN RESEARCH: AN EXPLORATION OF CONSTRAINING FACTORS IN LITHUANIA

COMPRENDER LAS BARRERAS A LA PARTICIPACIÓN DE LAS ENFERMERAS EN LA INVESTIGACIÓN: UNA EXPLORACIÓN DE LOS FACTORES LIMITANTES EN LITUANIA

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RESUMO

Introdução: Os enfermeiros enfrentam barreiras e desafios na participação em investigação científica, com enfoque no fosso entre a investigação e a prática clínica. Embora a investigação em enfermagem seja essencial para melhorar os cuidados aos doentes e reforçar a prática baseada na evidência (EBP), o envolvimento dos enfermeiros na investigação na Lituânia continua a ser limitado. **Objetivo:** O estudo pretende explorar as experiências dos enfermeiros em atividades de investigação, identificar os principais obstáculos à sua participação e analisar os fatores que limitam a integração da investigação científica na prática clínica.

Métodos: Foi realizado um estudo qualitativo através de entrevistas semiestruturadas com 22 enfermeiros de vários setores da saúde. Os dados foram analisados tematicamente, identificando os principais temas relacionados com a identidade profissional, os desafios institucionais e as limitações estruturais na investigação em enfermagem.

Resultados: Os resultados revelam que os enfermeiros enfrentam múltiplos obstáculos, incluindo falta de tempo, carga de trabalho excessiva, competências limitadas em investigação, apoio institucional insuficiente e a posição dominante dos médicos e administradores na investigação académica. Além disso, a fraca cultura de investigação e o baixo prestígio profissional dificultam ainda mais a sua participação.

Conclusão: A participação dos enfermeiros na investigação é limitada por barreiras sistémicas, incluindo políticas pouco claras, apoio institucional insuficiente e financiamento limitado. Restrições hierárquicas marginalizam a investigação em enfermagem, com os médicos a dominarem a academia, enquanto os enfermeiros carecem de papéis de liderança. A fraca integração da identidade profissional, a falta de competências e o baixo incentivo institucional reduzem ainda mais o envolvimento dos enfermeiros na investigação.

Palavras-chave: investigação em enfermagem; barreiras; barreiras institucionais; identidade profissional

ABSTRACT

Introduction: Nurses face barriers and challenges in participating in scientific research, with a focus on the gap between research and clinical practice. Although nursing research is essential for improving patient care and strengthening evidence-based practice (EBP), nurses' involvement in research in Lithuania remains limited.

Objective: The study aims to explore nurses' experiences in research activities, identify key barriers to their involvement, and analyse factors limiting the integration of scientific research into clinical practice.

Methods: A qualitative study was conducted using semi-structured interviews with 22 nurses from various healthcare sectors. Data were analysed thematically, identifying major themes. related to professional identity, institutional challenges, and structural limitations in nursing research.

Results: Findings reveal that nurses face multiple obstacles, including a lack of time, heavy workloads, limited research competencies, insufficient institutional support, and the dominance of physicians and administrators in academic research. Additionally, a weak research culture and low professional prestige further hinder their involvement.

Conclusion: Nurses' research participation is hindered by systemic barriers, including unclear policies, insufficient support, and limited funding. Hierarchical constraints marginalize nursing research, with physicians dominating academia while nurses lack leadership roles. Weak professional identity integration, limited competencies, and low institutional encouragement further reduce engagement.

Keywords: nursing research; barriers; institutional barriers; professional identity

RESUMEN

Introducción: Las enfermeras se enfrentan a barreras y retos a la hora de participar en la investigación científica, centrándose en la brecha existente entre la investigación y la práctica clínica. Aunque la investigación enfermera es esencial para mejorar la atención al paciente y reforzar la práctica basada en la evidencia (PBE), la participación de las enfermeras en la investigación en Lituania sigue siendo limitada.

Objetivo: El estudio busca explorar las experiencias de los enfermeros en actividades de investigación, identificar las principales barreras para su participación y analizar los factores que limitan la integración de la investigación científica en la práctica clínica. **Métodos:** Se llevó a cabo un estudio cualitativo mediante entrevistas semiestructuradas con 22 enfermeros de diversos sectores sanitarios. Los datos se analizaron temáticamente, identificando temas clave relacionados con la identidad profesional, los desafíos institucionales y las limitaciones estructurales en la investigación en enfermería.

Resultados: Los hallazgos muestran que los enfermeros enfrentan múltiples obstáculos, incluyendo falta de tiempo, sobrecarga laboral, competencias limitadas en investigación, apoyo institucional insuficiente y la posición dominante de médicos y administradores en la investigación académica. Además, una cultura de investigación débil y el bajo prestigio profesional dificultan aún más su participación.

Conclusión: La participación de los enfermeros en la investigación está restringida por barreras sistémicas, como políticas poco claras, apoyo insuficiente y financiación limitada. Las restricciones jerárquicas marginan la investigación en enfermería, con los médicos dominando los roles de liderazgo. La débil integración de la identidad profesional, las competencias limitadas y el bajo incentivo institucional reducen aún más su implicación.

Palabras clave: investigación en enfermeira; barreras; barreras institucionales; identidad profesional

INTRODUCTION

Scientific research is a fundamental element of evidence-based practice, playing a crucial role in improving the quality of healthcare services. Nursing professional research enables the critical evaluation of existing practices, the development of innovative interventions, and contributes to the advancement of healthcare policy while strengthening the professional role of nurses (Brunt & Morris, 2023; Sherwood, 2024; Ramón et al., 2022).

The significance of nursing scientific research becomes even more evident in the rapidly changing healthcare context, where new diseases, global pandemics, and the growing emphasis on patient-centered care present ongoing challenges (Musumadi et al., 2023). Evidence-based practice (EBP), which integrates clinical expertise with the latest scientific research data, helps enhance patient safety, reduce treatment errors, and improve the efficiency of healthcare services (Ramón et al., 2022; Brunt & Morris, 2023; Brooks et al., 2009; Yoder et al., 2014; Cline et al., 2017). However, for EBP to be successfully implemented, nurses must actively participate in research, contributing to the creation of new knowledge and its application in practice. While the importance of scientific research in nursing practice is unquestionable, nurses' involvement in research remains low (Musumadi et al., 2023; Rojaye & Netangaheni, 2023; Migowski & Migowski, 2022; González-García et al., 2020), and the key reasons behind this phenomenon are not fully understood (Khamisa Peltzer & Oldenburg, 2014).

The scientific literature identifies various organizational, cultural, systemic, and individual factors that may influence nurses' participation in research activities (Musumadi et al., 2023; Rojaye & Netangaheni, 2023; Migowski & Migowski, 2022; Brunt & Morris, 2023; Mulkey, 2021; González-García et al., 2020).

Some studies highlight the lack of time due to heavy workloads as one of the biggest barriers preventing nurses from engaging in research activities (UI Haq et al., 2020; González-García et al., 2020; Hagan & Walden, 2017; Alotaibi, 2023; Devrani et al., 2018). Nurses often do not have the opportunity to participate in scientific research during working hours, as their intense schedules require them to balance clinical and administrative tasks along with professional development. The demanding daily routine leaves little time for conducting research (González-García et al., 2020; Hagan & Walden, 2017).

In addition to a lack of time, nurses often lack the necessary research knowledge and experience (Mulkey, 2021; Rojaye & Netangaheni, 2023). They may feel insufficiently confident in their ability to conduct research. Moreover, nursing education programs often do not adequately emphasize the development of these skills, including academic writing, data analysis, and the significance of research. This issue has been highlighted in studies conducted in Spain (González-García et al., 2020), Nigeria (Rojaye & Netangaheni, 2023), Saudi Arabia (Musumadi et al., 2023; Alotaibi, 2023) and North America (Sun & Prufeta, 2019).

Nurses' involvement in research is also significantly constrained by institutional and organizational barriers, as well as a lack of organizational support (UI Haq et al., 2020). Studies conducted in North America (Sun & Prufeta, 2019) and Spain (González-García et al., 2020) have revealed that many healthcare institutions do not have clear policies for integrating nurses into research. Instead, they tend to prioritize nursing workflow and productivity over research activities.

Another barrier to conducting nursing research is the lack of funding (Alotaibi, 2023; Ul Haq et al., 2020). Without proper research infrastructure—such as access to databases and scientific journals—it becomes challenging to carry out high-quality studies (Alotaibi, 2023; Musumadi et al., 2023; Vaalburg et al., 2024).

Some studies highlight hierarchical and cultural barriers that hinder nurses' participation in research. A study conducted in Saudi Arabia revealed that nurses face challenges related to professional hierarchy, where physicians' decisions often dominate, and nurses' contributions to research are frequently overlooked (Musumadi et al., 2023). Hagan and Walden (2017) emphasized that most funded research projects in hospitals are initiated and led by physicians, who serve as the primary researchers, while nurses are often limited to technical research tasks. This hierarchical structure restricts nurses' opportunities to actively engage in research and, according to Scala et al. (2019), reinforces the perception that their primary responsibility is solely patient care. A study conducted in Spain by González-García et al. (2020) revealed that a cultural perspective persists in which nurses perceive themselves as subordinate to physicians and often lack leadership skills. Furthermore, Siles (2011), cited by González-García et al. (2020), argues that this is particularly characteristic of the Spanish context, where nursing has historically been regarded primarily as a supporting profession to physicians.

Similar cultural and historical challenges may have shaped the independence and scientific development of the nursing profession in Lithuania. After the 50 years of Soviet occupation following World War II, the prestige of the nursing profession in Lithuania grew very slowly. During that period, the nursing education curriculum primarily focused on technical skills and disease knowledge, with the duration of studies lasting only 2–2.5 years. As a result, methodological research skills, which are highly emphasized today, were not properly developed. It was only after the restoration of Lithuania's independence and the end of Soviet occupation in the early 1990s that changes occurred in nursing education: higher schools were transformed into colleges, bachelor's degree programs were introduced, and the duration of nursing education was extended to 3.5–4 years. Additionally, opportunities were created for nurses to earn a master's or doctoral degree at universities (Riklikienė, 2018).

In Lithuania, the importance of nursing scientific research is recognized in political documents, but its practical implementation remains limited. *The Lithuanian Medical Standard MN 28:2019* grants nurses the right to participate in research and mandates the possession of necessary scientific knowledge; however, it does not outline clear mechanisms for how this process should be organized in healthcare institutions (Ministry of Health of the Republic of Lithuania, 2019). The National Nursing Policy Guidelines for 2016–

2025 emphasize the need to strengthen nursing research but point to a lack of funding and insufficient collaboration between academic and practical healthcare institutions. This suggests that the legal framework is insufficient for integrating nursing research into practice (Ministry of Health of the Republic of Lithuania, 2016). Although documents adopted in Lithuania highlight the importance of nursing research competencies, there is a lack of studies analyzing nurses' participation in scientific research and the barriers to integrating it into clinical practice. Therefore, **the aim of this article** is to reveal the experiences and challenges faced by nurses participating in scientific research in Lithuania, in order to understand the factors limiting their involvement.

The data collected will be interpreted using Scott's (2008) Three Pillars of Institutions framework for discussion. This theoretical model will allow for a structured assessment of how regulatory, normative, and cultural-cognitive factors influence nurses' position in scientific research. Scott's (2008) Three Pillars of Institutions concept encompasses three key aspects of social structures that are crucial for the stability and functioning of organizations and institutions. *The regulatory pillar* refers to formal rules, norms, and regulations that govern behavior within organizations and society. This pillar will help understand how political decisions, funding mechanisms, and organizational structures influence nurses' involvement in scientific research. *The normative pillar* pertains to social norms and values that influence organizational members and determine how they should behave. This includes both professional norms (e.g., in nursing practice) and broader cultural and social values, such as academic values and the prestige of the nursing profession, which shape behaviour and practices. *The cognitive pillar* refers to shared understandings of reality and meaning held by members of an organization. These include beliefs, knowledge, and attitudes that form a collective understanding of what is important and how to behave within a particular organization or society. In this study, this will reveal how nurses' professional identity and their beliefs shape their approach to scientific research and their competencies in this area. This theoretical model has not been widely applied in healthcare, and particularly in nursing research. *Therefore, in this study, Scott's (2008) Three Pillars of Institutions theory will be applied to the interpretation of the results as a comprehensive model that allows for a detailed analysis and understanding of the factors influencing nurses' participation in research and their integration into clinical practice.*

2. METHODS

2.1 Sample

Twenty-two informants participated in the study, which was conducted in 2023. The sample was selected using a targeted approach, applying the "Snowball" method. All participating nurses had completed higher education at either the college or university level, equipping them with competencies in nursing research. Among them, eight held a Bachelor's degree, nine had a Master's degree, one was a PhD student, and four had earned a doctoral degree. The participants' practical experience in nursing ranged from two to thirty years, with an average of 11 years. The study included twenty women and two men, all work in different field of nursing. Additionally, two informants with a Master's degree and all informants with a PhD were engaged in academic career. More detailed characteristics of the informants are presented in Table 1.

Identification code	Work experience (years)	Level of education	Field of activity	Gender
Nurse 1	2	Bachelor	General surgery	Female
Nurse 2	6	Bachelor	Ambulance service	Female
Nurse 3	6	Master	Primary health care	Female
Nurse 4	30	Master	Cardiology	Female
Nurse 5	5	Master	Ambulance service	Male
Nurse 6	7	Master	Surgery	Female
Nurse 7	2	Bachelor	Haemodialysis	Female
Nurse 8	20	Master	Operating theatre	Female
Nurse 9	2	Bachelor	Anaesthesiology	Male
Nurse 10	2	Bachelor	Therapeutic department	Female
Nurse 11	2	Bachelor	Anaesthesiology	Female
Nurse 12	5	Master	Cardiac Surgery	Female
Nurse 13	6	Bachelor	Plastic-aesthetic surgery	Female
Nurse 14	3	Bachelor	Operating theatre	Female
Nurse 15	22	Master	Primary health care/academic	Female
Nurse 16	8	Doctor	Academic career	Female
Nurse 17	29	Doctor	Intensive care/academic	Female
Nurse 18	24	Master	Pediatric/academic	Female
Nurse 19	18	Doctor	Operating theatre/academic	Female
Nurse 20	20	Master	Therapeutic department	Female
Nurse 21	13	Doctor	Academic career	Female
Nurse 22	7	PhD student	Academic career	Female

Table 1 - Sociodemographic characteristics of research participants

2.2 Data collection instruments and procedures

A qualitative study was conducted using the semi-structured interview method to explore nurses' attitudes toward the implementation of nursing research in their professional practice. The longest interview lasted 30 minutes, while the shortest lasted 15 minutes. Data collection was carried out through semi-structured interviews, allowing participants to express their perspectives on incorporating nursing research into their professional activities. The interview protocol included four open-ended questions to guide participants in sharing their opinions.

Ethical Considerations. This study was conducted in accordance with ethical research principles, ensuring participant anonymity, confidentiality, and voluntary participation. All ethical guidelines for qualitative research were strictly followed. Participants were informed about the study's purpose, methods, and their right to withdraw at any stage without any consequences. Written or verbal informed consent was obtained from all participants before the interviews. The study did not involve any interventions or procedures that could affect participants' health or well-being. No personally identifiable information—such as names, ages, dates of birth, or the names of healthcare institutions—was collected. Audio recordings of the interviews were transcribed, and the original recordings were permanently deleted to ensure participant privacy. All informants were anonymized and assigned identification codes to maintain confidentiality.

2.3 Data analysis

The resulting data were analysed using Clarke's and Braun (2017) inductive qualitative research analysis. Meaningful codes were extracted and classified into subthemes, and similar subthemes were grouped into themes.

3. RESULTS

After the interviews, three main topics were formulated: "Nurses' position in the research ecosystem: "Invisible researchers" and "objects of research" and "research subjects"; "Nurses' professional identity and research activity" with 3 subtopics and "Organizational and structural barriers to nurses' participation in research" with 7 subtopics. All topics and subtopics are analyzed in the following sections.

3.1 Nurses' position in the research ecosystem: "Invisible researchers" and "Objects of research"

Nurses' participation in scientific research remains fragmented and is often limited to passive roles (Musumadi et al., 2023; Rojaye & Netangaheni, 2023; Migowski & Migowski, 2022). The results of the study show that most nurses are not active participants in research – their involvement is restricted to data collection, filling out surveys, and they often become "objects of research" when their experiences, working conditions, and professional challenges are analyzed. However, they rarely initiate or lead research projects. This situation indicates that nursing science in Lithuania has not yet become an integral part of clinical practice, and nurses are often not seen as active researchers.

"The reality today is that nurses primarily contribute to scientific research by filling out surveys or participating in research conducted by students for their bachelor's or master's studies". (Nurse 1)

According to nurses, studies at higher education institutions are often the only opportunity to engage in research activities, where nurses themselves conduct research rather than participating as respondents. However, this is only a brief episode in a nurse's professional career.

"Nurses do not engage in research unless they participate in surveys conducted by other researchers or continue their studies at universities". (Nurse 21)

In the research ecosystem, nurses often act as "invisible researchers." The informants have encountered situations where they are asked to help collect research data, perform assessments of patients' physical conditions, prepare summaries, etc., in studies conducted by doctors. However, it is noted that nurses do not receive due recognition, as the leadership of the research, the final analysis, and the dissemination of results are attributed to the doctors. As a result, their contribution to the academic space remains invisible, and scientific activity is not regarded as equal to the research conducted by doctors.

"Nurses are involved in physician-led research for oncology patients. As research is medical, nurses collegially help to collect data". (Nurse 3)

"We conduct a lot of research related to cardiovascular insufficiency. Nurses have completed special training in that area. Those who work in this field conduct a lot of research, patient surveys, and physical condition assessments. Nurses perform analyses and prepare summaries, while doctors present results in their lectures. From the point of view of science, all the glory goes to the doctors". (Nurse 4)

The research participants shared the experiences of other countries, stating that in Scandinavian countries, nursing science is strongly integrated into both academic and healthcare practice. Nurses actively participate in research as equal scientists, research initiators, or collaborators, and healthcare institutions allocate funding for their scientific studies. This creates favorable conditions for nurses to balance clinical and academic activities, allowing them to become initiators of research.

"While attending an international conference, I met a colleague from Finland who is the Nursing Director for Research at a hospital in a Finnish city. Scandinavia can already take pride in the involvement of clinical nurses in research, where nursing studies are conducted not only during nursing education—especially while preparing master's or doctoral theses—but also in clinical practice. I remember they presented a study on the prevention of venous catheter infections and pressure ulcers. In my opinion, this is a great opportunity to apply scientific and methodological knowledge in clinical nursing practice and use it to improve nursing care". (Nurse 19)

3.2. Nurses' professional identity and research activity

3.2.1 Weak integration of research into nursing professional identity

The research participants note that many nurses still do not consider scientific research an integral part of their profession, instead assigning this activity to the competence of doctors or academics. As a result, nurses do not engage in research even when conditions are provided for them to do so. The study also revealed that nurses focus primarily on direct patient care, viewing scientific research as an additional or even unnecessary activity. Furthermore, this attitude is reinforced by the discouraging environment within healthcare institutions, but this aspect will be discussed more thoroughly in other themes.

"Research is more the responsibility of doctors or academics. We work with patients. " (Nurse 7)

"Somehow we don't really think that research belongs to us - it seems to be the concern of PhDs or scientists. We are expected to take care of the patients, and I think how to do these researches....when to do them? That maybe there is someone else doing it without us". (Nurse 2)

The research data shows that the perception of professional identity and the level of education among nurses have a significant impact on their motivation and confidence to engage in scientific research, creating different conditions for participation in research. Nurses with a bachelor's degree who participated in the study do not identify with the researcher role and view scientific research as an optional aspect of their professional career. Moreover, they feel insufficiently competent and confident to conduct independent research and more often limit themselves to auxiliary roles. This situation leads to low motivation among bachelor-level nurses to actively engage in research activities, especially if they are not encouraged by institutions or lack support from colleagues and supervisors.

"I have gone through all three levels of education and I can definitely say that only after completing the first level do you come into nursing practice not to do research. There was not even such a thought. It was important to perform your activities and no one even looked at you as someone who could do any research. Moreover, there was no understanding of why it was necessary. Perhaps they do not emphasize it in studies. But later, studying at higher levels, you start to see the value of research, and you also gain experience. And if you happen to participate in a project and find yourself among academic people, other opportunities open up, which really motivates you to pursue research competencies. Besides, doctoral scientists are most often associated with scientific institutions, collaborate with other scientists, and truly have much greater opportunities to conduct research". (Nurse 16)

Master's studies are often the step where nurses gain a deeper understanding of research methodology. However, the study shows that even after completing their master's degree, nurses still do not engage in scientific research activities and focus on clinical practice, as the prospects for nursing research within healthcare institutions are limited.

"Masters degrees give you a broader understanding of research, but the majority of graduates still stay in the clinic and don't do research." (Nurse 21)

Furthermore, the research highlights the challenge of balancing clinical and academic nursing careers. Nurses who obtain a doctoral degree often leave clinical practice to pursue academic careers in higher education institutions. According to them, healthcare institutions do not recognize or value their scientific competencies as essential. As a result, a vacuum emerges between nursing science and practice—research fails to address real-world nursing challenges, and its findings remain largely unimplemented in clinical settings.

"Those who choose a PhD usually go to the academic sector. In clinical practice, there are very few PhD students. In Lithuania, nurse-scientist and practitioner do not combine, because in the perception of your colleagues you are either a nurse (working with the patient) or a lecturer or a scientist. Although changes are already taking place in university hospitals, with the emergence of nursing research officers, the impact on practice is not yet felt". (Nurse 16)

"I see the problem that nursing research is being done out there somewhere, in universities, and here in practice we somehow don't see the results of that research or that anything new is being introduced on the basis of that research. Somehow science is for itself, practice is for itself". (Nurse 2)

This creates another issue – a lack of leadership. Nurses who remain in clinical practice, even with the necessary competencies, do not initiate research, claiming that the healthcare institution does not require it. As a result, this group of competencies remains underutilized. According to the study participants, the presence of a leader or mentor would provide nurses with methodological support, offer the much-needed encouragement, and motivate them to explore nursing professional practice.

"I think that most of the nurses in healthcare institutions have a basic methodological education, so there is a lack of a guide, a mentor who could motivate them to participate in research activities, to share their experience, to generate ideas etc. Such nurse

leaders could change the established research culture in health care institutions and empower their younger colleagues". (Nurse 19)

3.2.2 The impact of the prestige of the nursing profession on participation in scientific activity

The nursing profession has long been perceived as an auxiliary field of healthcare, which has resulted in its scientific potential being undervalued both in society and within the academic community. The study participants pointed out that in Lithuania, nursing is still considered a lower academic-level profession, lacking equal recognition alongside other healthcare fields. This is illustrated by a statement made by one of the participants: "...nursing research is not considered serious. Medicine dominates, and our field often remains in the background..." (Nurse 16). Although nursing science is constantly evolving, there remains a stereotype in society that nurses lack scientific competence or academic opportunities. This perception reduces the status of nurses as researchers, limits their motivation to participate in research, and clearly shows that their academic potential has not yet been fully recognized. As the study participants note, many members of society are not even aware that nurses can obtain a master's or doctoral degree, which keeps their scientific status low in the eyes of the public.

"Patients don't even imagine that a nurse can complete both master's and doctoral studies <...> we would gain more public trust if we carried out even more scientific research in nursing". (Nurse 6)

"Further raising the awareness of nurses in society, because today society still has a hard time understanding what the competencies of nurses are". (Nurse 10)

One of the study participants, reflecting on the low prestige of the nursing profession, draws attention to the historical development of the profession and states that "During the Soviet era, nursing was seen as an assistant to doctors, not as a profession in its own right. And I think that this is still partly the case today <...>nurses were trained in medical schools, where they received advanced education, and where the emphasis was on practical skills. <...> And it was only after Lithuania regained its independence in the early 1990s that bachelor's degree programmes in nursing were established. However, this was not immediately linked to the development of research, as there was an attitude that nursing was a practical rather than an academic discipline. If I remember correctly, it was only after 2000 that master's and doctoral studies in nursing were launched in Lithuania, but their scope remained limited. So, this is the Soviet cultural legacy<...>". (Nurse 16). This partially explains why the tradition of nursing research in Lithuania developed more slowly than medical sciences, and why the public perception of nursing remained quite narrow. Historically, the nursing profession was often devalued and stigmatized (Ghowaidi et al., 2022). A study by Lopez-Verdugo and colleagues (2021) emphasizes that throughout the history of nursing, there have been persistent stereotypes portraying nursing as a feminine profession, subordinate to medicine, and lacking a clearly defined scope of competencies.

According to the study participants, the development of nursing science could become an important factor in increasing the professional prestige of nurses. They believe that participation in research projects would not only contribute to the creation of new, evidence-based nursing methods but also strengthen the role of nurses in the healthcare system and society.

"<...>the involvement of nurses in research will increase their self-confidence and help raise the prestige of nurses in society. (Nurse 20)

This situation indicates that nursing scientific research is a crucial factor that can not only improve patient care but also enhance the visibility and academic status of the nursing profession. By developing nursing research and promoting its dissemination both within the academic community and society, the perception of nursing can be shifted from being seen merely as a practical profession to being recognized as an academic one as well.

3.2.3 Internal nursing professional culture: scepticism and resistance to research

The study highlighted that the involvement of nurses in scientific research is also limited by the internal culture within the nursing community, where competition, scepticism towards research activities, and even resistance to scientific development often prevail. Study participants noted that there is a group of nurses who not only show no interest in scientific research but also critically assess the efforts of colleagues to engage in academic activities, as such activities seem unnecessary for daily practice.

"<...> what's the benefit to you of playing a doctor, you seem to have too much free time, nursing is not a science <...> what's the point of doing it if no one is interested?" (Nurse 9)

The study results revealed that there is a significant lack of a research culture within the nursing profession—nurses show little interest in scientific research, its results, and rarely engage in discussions about its applicability in practice. The nurses who participated in the study acknowledge that a more active interest in scientific research and discussions about its results could change perceptions of research and the image of nursing. However, currently, such active dissemination of scientific knowledge is neither practiced nor encouraged, which in turn hinders the integration of research into nursing practice.

"Even during work, if nurses found a free minute, they could read a scientific article and share it in virtual groups of nurses. The information about the new pickling of cucumbers spreads as quickly as Facebook can share information about the latest research results <...>. (Nurse 17)

"After reading an interesting scientific study, share the knowledge with colleagues. The following phrase is more and more often being used, "During the most recent study, it was found that <...>.(Nurse 5)

Older nurses who lack academic education often fail to recognize the value of scientific research, as their professional training was focused on practical skills rather than academic development. As a result, they are often sceptical of younger colleagues pursuing higher education and do not always support their efforts to integrate scientific research into nursing practice.

"Today, more than half of my workplace consists of senior nurses, most of them have graduated from medical schools, which means that they have not graduated from universities or colleges <...> first of all, they are not interested in it and do not have the necessary competencies to conduct methodological research <...> they are not motivated to change something in nursing and improve the prestige of nurses <...> Many of them say that they will "retire" soon anyway. (Nurse 1)

The research results indicate that there is also internal competition and resistance in the academic development process of nurses. When nurses began studying at universities, their academic ambitions were often seen as a competitive threat, leading some to face disapproval, ridicule, or even administrative pressure from their colleagues.

"Not so long ago, I remember, when nurses started to be educated at university, there were nurses who had graduated from medical schools and went on to university. They faced a lot of resistance in the nursing community, they were not supported by their colleagues, they were even ridiculed and pressured by the nursing administration. And especially from those who did not have higher education themselves". (Nurse 7)

Resistance to academic activities also manifested in the work conditions for studying nurses. Some administrative representatives deliberately created unfavourable work schedules, hindering the ability to balance studies with work, as they feared that nurses with higher education might become more competitive in the labor market and displace them from their positions.

"I have experienced this myself - the senior nurse deliberately set up my work schedule so that I could not work and study at the same time. They were afraid of the competition, that nurses with a university degree would force them out of their jobs". (Nurse 7)

Thus, it becomes clear that the internal professional culture of nurses is characterized by scepticism, competition, and clear resistance to the integration of scientific research into professional practice. In the nursing community, there is a dominant norm that the nurse's primary role is patient care, not conducting research. These research findings indicate that there is still a lack of internal support and openness to scientific research as a natural part of professional growth, which colleagues often perceive as a competitive threat.

3.3 Organizational and structural barriers to nurses' participation in research

3.3.1 Lack of time and workload as a limiting factor in nurses' participation in research

Nurses' participation in research is significantly limited not only by the lack of time but also by the heavy workload. According to the informants, most nurses' work schedules are organized in such a way that there is neither time nor opportunity to engage in research. This is especially true given that such activities are not officially included in job descriptions or evaluation systems, and as a result, they are often seen as additional tasks that require personal initiative.

"There is no time to do research during work, the work is intense...there is no time for doing research, so we should do it only after work". (Nurse 15)

The majority of study participants emphasized that the shortage of nursing staff further exacerbates the situation. Nurses constantly face an increased workload, which prevents them from dedicating time to academic activities, even for those who would genuinely like to engage in them. In such circumstances, scientific research becomes difficult to carry out, as priority is given to clinical care rather than research activities or the improvement of practice through scientific studies.

"<...> working with a double workload leaves no time and energy for nursing research". (Nurse 14)

These data indicate that the organizational system does not provide clear mechanisms that would allow nurses to conduct scientific research during working hours. The lack of time and an intense work schedule become key factors limiting the development of nursing science and the strengthening of nurses' scientific identity.

3.3.2 The dominant position of doctors and nursing administrators in academic research

Scientific research in the healthcare sector is most often initiated and conducted by doctors. Study participants who have taken part in research led by doctors note that they frequently encounter situations where decisions regarding research directions, methods, and dissemination of results are made by doctors. This hierarchical relationship may contribute to the perception that nurses' insights and scientific interests are not always considered equal, acting as a limiting factor in the development of nurses' research activities.

"Even when we try to get involved, doctors make the final decisions. We feel that our insights are less important". (Nurse 9) Besides the dominant position of doctors, the study data indicate that nursing administrators are most often the ones who initiate or conduct nursing research. However, these studies are typically focused not on clinical nursing innovations or scientific advancements but rather on managerial and organizational aspects.

"< Most research is conducted by nursing administrators, mainly researching microclimate or other managerial topics. They do not encourage any clinical nursing research, nor do they seek solutions to practical problems by initiating nursing research". (Nurse 10) The study revealed that nursing research in healthcare institutions is not considered a priority, and the research conducted by nursing administrators is mostly limited to managerial rather than clinical or academic issues. This, in turn, may contribute to the lack of strong research traditions focused on improving clinical practice, further reducing nurses' involvement in research activities.

3.3.3 The lack of support for research activities by doctors and nursing administrators

It became evident that not only the nursing community but also healthcare institution administrators and doctors view nurses' efforts to engage in scientific research with skepticism. Study participants encountered attitudes where doctors do not believe that nurses can conduct research on an equal footing, and their aspirations to participate in academic activities are often perceived as a competitive threat to the established medical hierarchy.

"I don't think the administration, especially the doctors, would look at us positively if we did research. Only a few see us as equal members of the team, many still tend to look down on us". (Nurse 4)

"<...> doctors don't consider us on the same level, and if we started doing research, they would look at us as competitors". (Nurse 8) "<...> the work of nurses is evaluated according to whether they inject drugs or connect the drip system". (Nurse 3)

The study data reveal that neither doctors nor healthcare institution leadership encourage nurses to participate in scientific research, and in some cases, this activity is even considered inconvenient. Institution or department heads do not create opportunities for conducting nursing research. Influential individuals who could support research initiatives through managerial decisions simply do not do so. According to some study participants, leaders may have an unfavorable view of nursing research due to potentially inconvenient findings that expose existing problems within the hospital. This also reflects a reluctance to acknowledge and address practical nursing issues.

"Nursing investigations are of little value to the administration, they do not allow nursing investigations to be carried out, to uncover problems that may be related to problems that exist in the hospital <...>". (Nurse 6)

3.3.4 The lack of nursing research priorities in the organization's policy

Nurses' participation in scientific research is limited by unclear organizational priorities in this area. The study data reveal that healthcare institutions do not have a clearly defined policy highlighting the importance of research in nursing. Nurses who participated in the study note that there are neither strategic guidelines nor discussions about how nurses could engage in research activities. As a result, nurses do not feel that their involvement in scientific research is a priority for the organization or a supported direction for professional development.

"Research doesn't seem to be on anyone's agenda - it's just not talked about. Everyone emphasises clinical practice, but how to improve it on the basis of evidence remains unclear". (Nurse 10)

Since the organization's policy is primarily focused on clinical nursing practice, study participants observe that the potential for nursing research remains underutilized. Although evidence-based nursing practice is a global standard today, this principle is not sufficiently supported by institutional measures in healthcare institutions in Lithuania. Organizational strategies often do not include scientific research as a systematic approach to improving the quality of nursing.

"We face problems in practice every day, but there is no system in place to encourage the search for scientific answers. We make decisions based on experience rather than evidence". (Nurse 7)

The current situation reveals that the development of nursing research is not an organizational goal, which is why nurses are not encouraged to develop a scientific identity or evidence-based practice. To bring about change, it is necessary not only to create structural mechanisms but also to clearly define the organization's policy, in which scientific research would hold an important place in the nursing profession.

3.3.5 Insufficient institutional regulation and encouragement of research

Nurses' participation in scientific research in Lithuania is still not a systematically organized and clearly regulated practice. The study results reveal that healthcare institutions lack a clear strategy for how nurses could engage in scientific research, how this activity should be encouraged, and how it could be integrated with clinical practice. Study participants point out that nurses do not have procedures or clear guidelines set by the organization to understand how they can initiate or participate in research activities, and leadership typically does not prioritize this area. As a result, conducting scientific research for nurses often becomes a personal initiative rather than an activity supported by the organization.

"There is no time for research and no clear guidelines on what we should do and how we should do it. It is more of a personal initiative than an institution's attitude". (Nurse 2)

"We have neither clear attitudes nor incentives to participate in research. Most colleagues just think that it is not part of their job, but an extra activity". (Nurse 5)

One of the key challenges is that scientific activity is not included in official job descriptions or evaluation systems. Nurses emphasize that they do not have clearly defined time or resources for conducting research, so this process often takes place outside of working hours or at the expense of personal leave.

"If we want to do research, we have to do it on our own time, because it's simply not possible during working hours. Research is nowhere included in the calculation of the post as a direct function of the nurse's job". (Nurse 11)

"There is no time to do research during working hours, <...> there is no scheduled time to do research, so we should only do it after work". (Nurse 15)

This situation reflects a broader lack of institutional support for nursing science. Unlike medical sciences, which have clear structures for funding, publishing, and career development, nursing research in Lithuania is not sufficiently established as a systematically encouraged activity. There is a risk that the lack of institutional support may lead to academic segregation between nurses and other healthcare professionals.

"There seems to be a lack of focus on nursing research across the system. Doctors are clear - if they want to do research, they can get funding, they can pursue an academic career - but for nurses, the opportunities are not as clearly presented. There is no funding, no guidelines on how to do research<...> It's like a closed circle: there are no mechanisms, so no one expects nurses to do research". (Nurse 9)

"<...> the experience nurses accumulate during their work experience is not transferred to anyone. Imagine the accumulated knowledge, in other words, scientific information over 30 years that simply "sinks" or dies with that person. Nurses work individually, as "swimmers swim in their swimming lanes <...> nurses would feel very honoured if we took knowledge from them, included them in research". (Nurse 19)

3.3.6 Lack of research competencies

One of the major barriers to nurses' participation in research projects is the lack of research competencies. This is caused both by gaps in nurse training and by limited opportunities to acquire or improve these competencies in a practical work environment. According to the study data, it is evident that the academic culture of nursing in Lithuania is still not strong enough to foster a scientific nursing identity from the beginning of studies. Although nursing education programs increasingly emphasize the importance of scientific research, it is rarely highlighted as a core part of professional training. From the informants' perspective, study programs lack practical courses on research methodology, data analysis methods, and the understanding that these skills will be important in practice. As a result, students often learn to conduct research independently, without consistent academic support.

"There is little emphasis on research in study programmes. There is no clear training on how to do research, how to analyse data, and we mostly learn on our own". (Nurse 15)

"During our studies, nobody explained to us why these studies are necessary if I am going to work as a nurse. It was like it was only necessary to write a thesis". (Nurse 1)

Study participants also identified the lack of academic mentors as one of the barriers to developing and strengthening research skills in the workplace. They argue that the overall system does not provide enough opportunities to develop scientific abilities within the work environment. There is a shortage of courses, internships, seminars, and similar opportunities through which nurses could acquire or improve their knowledge on how to conduct research and apply it in practice. As a result, nurses who wish to actively participate in scientific research often face methodological gaps and insufficient support, as well as a lack of confidence to initiate research themselves. "When it comes to improving knowledge on how to conduct research for practicing nurses, I haven't heard of any courses like that. When you only have the basics, and that was a long time ago when I was still studying, I don't even know, I'd be afraid to start researching anything. <...> First of all, there needs to be help for beginner researchers, advice, and knowledge about the research process." (Nurse 13) "I have an idea to research the topic of 'X' related to nursing and, at the same time, improve patient care in healthcare institutions. Since I'm not studying and have little experience – it would be really helpful to have someone assigned with scientific experience who could advise <...> I tried to propose a research idea and prepare an article – the response was the same – 'there's no time,' 'what do I get out of it?" (Nurse 9)

The study revealed that the lack of research competencies is one of the major barriers for nurses to participate in scientific research, stemming from gaps in the educational process and the practical work environment. Study programs still lack practical training and methodological support, while the work environment lacks mentors, courses, or seminars that could strengthen nurses' abilities and confidence in conducting research.

3.3.7 The lack of nursing policy and funding priorities for nursing science

The development of nursing research in Lithuania is limited by the lack of clear policy priorities, resulting in limited funding for this field. Most funds are allocated to medical research, while nursing science often remains secondary. Study participants emphasized that health sector policymakers focus mainly on doctor-initiated research, and nursing scientific activities lack sufficient financial and institutional support.

"There is still a lack of an integrated approach to research, with calls for medical research being the most common, and no focus on nursing research or research combining medicine and nursing. There is a need for targeted funding for nursing research". (Nurse 16) "<...>there are countries that have established nursing research support funds to encourage research, for example, in the US there is the American Nurses Foundation, which supports nursing science and innovation, or in the UK the Royal College of Nursing, which also gives grants to conduct nursing research. <...> But in Lithuania there is no specialised fund for nursing science and we compete with doctors and biomedical scientists in joint research project competitions. It is a very unequal competition". (Nurse 16).

This situation reveals unequal conditions for the development of nursing research. As a result, nurses face difficulties in finding financial opportunities that would allow them to conduct scientific research. Study participants emphasized that there are no scholarships or special projects that encourage nurses' involvement in nursing research or the dissemination of results. For these reasons, the execution of research and the dissemination of results largely depend on nurses' personal efforts and their own financial resources.

"All the tools needed for the investigation should be purchased by the individual, be it printing or other tools <...> the financial situation remains the individual's responsibility". (Nurse 17)

"<...> I think you often come across financial issues when doing research". (Nurse 12).

"I think nurses working at university-level medical institutions should have sufficient resources to conduct the research. They should get financial support to attend conferences and pay the participation fee". (Nurse 7).

Study participants also expressed the opinion that the development of nursing research could be more actively encouraged at the policy level, but currently, this area is not a priority in healthcare policy strategies. They emphasized the need to focus on the conditions for the development of nursing science so that nurses could participate more actively in scientific activities.

"There are many nurses who have not only a bachelor's degree but also a master's degree. The Ministry of Health should be talking about how to improve the conditions for nursing research, how to help reconcile practical and research activities". (Nurse 1)

These data show that policy decisions can have a direct impact on the development of nursing scientific research. The lack of clear strategies and priorities, along with limited funding, hinders the growth of nursing science and reduces nurses' motivation to engage in research activities. Due to limited resources, many nurses choose to remain in clinical practice, as scientific research requires additional investments that institutions do not provide. This situation indicates that nursing scientific research is often conducted without systematic support, and financial challenges become a significant barrier to its development.

4. DISCUSSION

Systemic analysis of barriers to nurses' participation in research according to Scott's (2008) Three Pillars Theory

Nurses' participation in research activities is essential for the improvement of nursing practice and the development of evidencebased practice (Ramón et al., 2022; Brunt & Morris, 2023). However, the results of our study reveal that nurses face institutional, organizational, and professional identity barriers that systematically limit their involvement in research and its implementation. Analyzing these barriers using Scott's (2008) Three Pillars Theory allows for a systematic assessment of the regulatory, normative, and cultural-cognitive factors that shape the environment for nurses' scientific activity. These pillars not only operate independently but also interact with one another, creating systemic constraints that need to be understood in order to drive effective changes in the development of nursing science in Lithuania and enhance nurses' engagement in research activities.

The regulatory pillar includes rules, policies, and official mechanisms that determine nurses' opportunities to conduct research (Scott, 2008). The study revealed that there are insufficient political and legal foundations for integrating nursing research into practice. Lithuanian nursing policy documents, such as *the Lithuanian Medical Norm MN 28:2019* and *the National Nursing Policy Guidelines for 2016–2025*, emphasize the importance of research in nursing, but these provisions remain largely declarative. *MN 28:2019* grants nurses the right to participate in scientific research and requires knowledge of the basics of statistics and the principles of biomedical research; however, there are no clear mechanisms for how this activity should be organized and evaluated in the professional environment (Ministry of Health of the Republic of Lithuania, 2019). *The National Nursing Policy Guidelines for 2016–2025* highlight the lack of integration of nursing science into practice, limited collaboration between research and healthcare institutions, and insufficient funding (Ministry of Health of the Republic of Lithuania, 2016), which aligns with international research findings that emphasize that without clear regulations, nurses' scientific activities remain informal and dependent on personal initiative (González-García et al., 2020; Hagan & Walden, 2017; Ul Haq et al., 2020).

This systemic lack of regulation also extends to the organizational level. The study's results show that the organizational environment of healthcare institutions does not encourage nurses' participation in research—there are no clear mechanisms or priorities promoting nurses' involvement in scientific research. Similar findings were reported in previous studies, which revealed that healthcare institutions rarely include nursing research in their strategic plans (UI Haq et al., 2020), prioritizing workflow and productivity over research (Rojaye & Netangaheni, 2023; Sun & Prufeta, 2019). On the other hand, the qualitative study revealed that nursing research is not clearly regulated in healthcare institutions' operational documents, and this activity is not officially included in job functions or evaluation systems. As a result, nurses essentially have neither a formal obligation nor the opportunity to dedicate time to research. This trend is also confirmed by studies from other countries, which indicate that nurses' involvement

in research often depends on the policies of individual institutions and is not a systematic phenomenon (Rojaye & Netangaheni, 2023).

The lack of funding further intensifies these limitations. It has become apparent that institutions do not have dedicated funds to support nursing research, and the general health research funding policy is more focused on biomedicine and physician-initiated projects. This aligns with the findings of previous studies, which emphasize that health sciences research funding is typically allocated to physicians and biomedical science projects, while nursing research receives an disproportionately small share (Hagan & Walden, 2017). As noted in the National Nursing Policy Guidelines for 2016-2025, current funding sources do not specify targeted funding for nursing research, and there is no separate funding mechanism for nursing science projects. As a result, clinical nurses have no incentives to participate in research since this activity is neither compensated nor beneficial for career advancement. International studies also reveal that nurses' research activities are not financially incentivized (Alotaibi, 2023). Nurses often lack access to appropriate scientific resources and research infrastructure (Musumadi et al., 2023), and insufficient funding restricts their access to training and conferences where they could gain necessary research skills (Alotaibi, 2023; Devrani et al., 2018). This means that without formal guidelines and financial support, nursing research remains a personal initiative rather than an institutionally supported activity.

The normative pillar is related to social and professional norms that determine what activities are considered appropriate for a specific profession (Scott, 2008). The results of the study show that the perception of the nursing profession is still strongly associated with clinical practice, and scientific research is often viewed as a secondary or even unnecessary activity. These findings align with those of other studies, which show that the nursing profession is often perceived through the lens of practical activity, with academic involvement not being considered a priority (Rodríguez-Pérez et al., 2022).

The limited role of the nursing profession is particularly evident in organizations where scientific research is not prioritized, and academic activities are considered the responsibility of doctors or university staff. This suggests that professional norms shape a restricted role for nurses in research activities, even if they would like to be more actively involved.

Moreover, the results of our study indicate that the prestige of the nursing profession remains low, and there is a limited understanding of nurses' academic opportunities in society. According to the study participants, some people cannot even imagine that nurses can hold master's degrees or even doctoral titles, and their role is often perceived solely through the lens of clinical practice. Other studies also reveal that in certain healthcare systems, nurses are valued more as assistants to doctors rather than independent specialists, which means that their involvement in scientific research does not receive the same support as doctors' academic initiatives (González-García et al., 2020; Aljezawi et al., 2019). This limited perception reinforces the organizational culture's belief that research is not part of the nursing profession. As a result, nurses face additional barriers not only at the institutional level but also within the broader context of their professional identity.

The study results reveal that nurses face a professional hierarchy that limits their participation in research. The hierarchical relationships in healthcare institutions lead to decisions regarding scientific research being primarily made by doctors, with nurses often participating only as auxiliary assistants—data collectors, survey fillers, or technical staff. This situation diminishes their motivation to undertake independent research projects. Additionally, nurses who wish to engage in scientific research often do not receive support from colleagues. Scientific activity may be viewed skeptically or as unnecessary because the organizational culture values practical experience over academic achievements. International studies confirm that the prevailing hierarchy in healthcare institutions limits nurses' involvement in research, as decisions are usually made by doctors (Musumadi et al., 2023), their leadership skills in research remain underdeveloped (González-García et al., 2020), research is considered a separate academic activity (Rojaye & Netangaheni, 2023), and nurses' contributions are seen as secondary (Scala et al., 2019). Furthermore, the study highlighted the trend that healthcare institutions lack a clear role for nurses in scientific activities, resulting in a lack of career prospects for them as researchers. Additionally, the emerging academic career model in nursing shows that nurses who earn doctoral degrees often leave clinical practice and transition to academic work in higher education institutions, thus distancing nursing science from practice. The collaboration between universities and hospitals is often weak, which limits the practical application of nursing research. González-García et al. (2020) also confirm that the insufficient connection between healthcare institutions and universities is a major issue in this field.

The cultural-cognitive pillar is based on shared beliefs and understandings of what is considered natural practice within an organization. The study revealed that nurses often do not identify themselves as researchers, as their professional identity is oriented towards patient care. This aligns with international studies showing that nurses often lack confidence in their ability to initiate or conduct scientific research, and their research competencies are not systematically developed (Rojaye & Netangaheni, 2023; Musumadi et al., 2023). This suggests that professional identity may be a key factor limiting nurses' engagement in research activities, as their beliefs shape their attitude towards scientific research and their perceived competence in this area (González-García et al., 2020). Furthermore, the lack of research competencies reinforces the fear of engaging in scientific projects— even if the organizational environment were more favorable, many nurses would still refrain from participating in academic activities because they lack confidence in their ability to initiate or coordinate scientific research (González-García et al., 2020).

In summary, it can be stated that all three pillars of Scott's (2008) theory are interconnected and form a cyclical barrier mechanism. Regulatory, normative, and cultural-cognitive factors create a closed system that limits nurses' opportunities to participate in and conduct research projects. *Regulatory constraints*, such as funding, time, and administrative limitations, determine organizational

decisions that do not encourage the integration of nursing research into professional practice. This aligns with international research findings, which show that nursing research is conducted without systemic and financial support (Migowski & Migowski, 2022). Without clear policies, nurses cannot allocate work time for research, as this activity is not formally recognized within their duties. Additionally, limited funding opportunities reduce their motivation to participate in academic events and internships. *Normative factors* further reinforce this situation, as professional nursing norms and hierarchical relationships limit the importance of academic activity in nursing practice. Even if institutions provide opportunities to participate in research, organizational culture can act as an invisible barrier. Research initiatives are often controlled by doctors, with nurses participating only as "invisible researchers" or support staff. Furthermore, academic achievements are not considered important in evaluating nurses' careers, meaning that nurses interested in research face a skeptical attitude from their colleagues. *The cultural-cognitive pillar* acts as the final link, further restricting nurses' involvement in scientific research. Professional identity is still oriented toward practical activities, and research is perceived as secondary or even unnecessary. Even when given opportunities to conduct research, nurses lack self-confidence because they do not identify as researchers. Furthermore, the academic nursing community and the practice field remain separate scientists mostly work at universities, while there is a lack of scientific collaboration in the clinical environment.

CONCLUSION

Nurses' participation in research in Lithuania is limited by a complex, interacting system of barriers. This study reveals that unclear policies, lack of institutional support, and limited funding prevent the systematic integration of research into nursing practice. Nursing research remains marginalized due to hierarchical constraints, where physicians dominate academic research, and nurses lack leadership roles. Additionally, nurses' professional identity does not strongly incorporate research, reinforcing low engagement. Limited research competencies and weak institutional encouragement further discourage participation. To bridge this gap, clearer policies, stronger academic-practice collaboration, and research competency development are essential. Without systemic changes, nursing research in Lithuania will remain fragmented, limiting its contribution to evidence-based practice.

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AUTHORS' CONTRIBUTION

Conceptualization, V.P., I.M., D.M. and L.N.; data curation, V.P., I.M., D.M. and L.N.; formal analysis, V.P., I.M., D.M. and L.N.; funding acquisition, V.P., I.M., D.M. and L.N.; investigation, V.P., I.M., D.M. and L.N.; methodology, V.P., I.M., D.M. and L.N.; project administration, V.P., I.M., D.M. and L.N.; resources, V.P., I.M., D.M. and L.N.; software, V.P., I.M., D.M. and L.N.; supervision, V.P., I.M., D.M. and L.N.; validation, V.P., I.M., D.M. and L.N.; visualization, V.P., I.M., D.M. and L.N.; writing-original draft, V.P., I.M., D.M. and L.N.; writing-review and editing, V.P., I.M., D.M. and L.N.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

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