



PROTOCOL PAPER

Doctoral dissertations in nursing – research protocols in a multicenter comparative study

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ABSTRACT

Introduction and aim. Nursing doctoral research is vital for advancing the field, improving patient care, and addressing complex healthcare challenges. It contributes to evidence-based practices, innovative interventions, and the development of skilled nurse researchers and leaders, shaping the future of healthcare through enhanced knowledge and informed policy decisions. This scoping review aims to map the landscape of PhD dissertations in the nursing domain.

Inclusion criteria: This scoping review will consider doctoral studies in nursing domain published in Dutch, English, Finnish, Hebrew, Portuguese, Polish, Slovak, Swedish, published between 2020–2023.

Material and methods. The search strategy was to find published literature in the following electronic databases: CINAHL, PubMed, SCOPUS, PsycINFO, Web of Science, Psychology & Behavioral Sciences Collection, and ERIC. Additionally, national repositories of several countries was explored, and contact established with universities represented by the members of this research team. The screening process entailed two steps carried out by two independent reviewers: firstly, screening by title and abstract and secondarily by full text. Data describes the literature according to the review research questions that were defined following the PPC mnemonic. Data will be presented graphically when possible and accompanied by a narrative that describes the Ph.D. dissertation characteristics.

Conclusion. Identifying areas of research in nursing contributes to the development of nursing as a science.

Keywords. doctoral dissertations, education, nursing, nursing science, nursing study

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Introduction

Nurses play a pivotal role in addressing the World Health Organization's (WHO) assertion that research is indispensable for resolving public health challenges. Their contribution involves addressing diseases of poverty, responding to the rise in chronic diseases, and ensuring access to safe delivery practices.^{1,2} This is achieved through substantial investment in their educational development, including pursuit of the doctorate degree.³ The importance of research conducted by nurses with doctoral preparation is indisputable, underscoring the necessity for a robust scientific education.^{4,5}

The global landscape of nurses' doctoral education reflects diverse traditions and varies based on the region where they develop professionally. For example, in the United States of America (USA), nurses began their doctoral path at the beginning of the 20th century, initially as Doctorates of Education (DEd) and later as Doctorates of Nursing Science (DNSc), followed by the Doctorates of Philosophy (PhD). Several decades later, European nurses started pursuing doctoral studies through the PhD degree. Due to the historical unavailability of a doctorate in nursing in Europe, nurses ended up seeking doctoral education in other disciplines, such as sociology, psychology, and education.^{6,7} Nursing-oriented doctoral programs began emerging in the 1970s^{8,9} and in some European countries the impulse was made by the redesign of the Bologna Process's educational cycle.¹⁰

In recent years, the professional doctorates as the Doctorates of Nursing Practice (DNP) has emerged in nursing as alternatives to the traditional PhD. The DNPs are often tailored to nurses in clinical or managerial roles, but is not too common in Europe.⁷ Although the DNPs increased significantly in the USA, compared to PhDs, and is established in USA and the United Kingdom (UK). The WHO (WHO, 2020) reports that the shortage of PhD prepared faculty internationally is an impediment to establishing higher degree nursing education programs.¹ Around the world, the research PhD is seen as the gold standard of doctoral education.^{8,9}

In Europe, earlier studies have scrutinized doctoral dissertations in nursing science, spanning the years 1990 to 2019. These reviews investigated dissertations published between 1982 and 2018, with the majority focusing on timelines ending in 2014 and 2015. Explored countries included Finland, Denmark, Norway, Portugal, Sweden, Turkey, and the United Kingdom.¹⁰⁻¹⁹ These studies predominantly delved into specific methodologies or themes, such as nursing education research, palliative care, geriatrics, treatment of postoperative pain and non-pharmacologic practices in nursing, research ethics, theoretical approaches, and phenomenology in nursing research.¹²⁻²⁰ Some studies aimed to identify general doctoral dissertation topics but in specific locations such as in Nordic countries, or in Finland, but lim-

ited to 1984–2015 or across countries until 2019, with a search conducted only in three databases and with data analyzed through a specific framework.^{11,14,21}

Especially since 2020, after the most destructive and life-altering global pandemic in modern history and its far-reaching consequences on individuals, groups, and societies, there may have been changes in the guidelines shaping health research within nursing doctoral dissertations. Mainly because nurses were called upon to highlight their importance in the fight for equality in the health of populations that takes place in practice, in academia, in science and in politics.^{22,23}

In our initial review, no studies were found specifically focusing on nurses' PhD dissertations in Europe since 2020. Consequently, we deem it essential to summarize and analyze PhD dissertations in nursing between 2020–2023 in Europe. Through this systematic examination of the doctoral landscape in nursing, we aim to pinpoint the primary areas of research undertaken by nurses in their doctoral journey, identify their targeted populations and settings where they occur, discern prevalent scientific methodologies, and, if feasible, comprehend the principal outcomes of each dissertation. Thus, this scoping literature review aims to describe an overview of the nursing research in PhD dissertations in nursing domain.

Aim

The aim was established by following the Participants Concept Context (PCC) mnemonic as recommended by the Joanna Briggs Institute for scoping reviews.²⁴ In December 2023, a preliminary search of the Cochrane Database of Systematic Reviews, the JBI Evidence Synthesis, OFS, PubMed and CINAHL, was conducted and no current or in progress reviews on the topic were identified in the contexts in which the authors propose.

Review questions

What are the current research interests in PhD dissertations within nursing science?

This review will seek to describe PhD by answering the following sub-questions:

- What are the most prolific research themes in PhD nursing dissertations?
- What is the main target population in the PhD nursing dissertations?
- What methodologies have been used in the PhD nursing dissertations?
- What settings are the dissertations focused on?
- What are the main conclusions of the PhD nursing dissertations?

Eligibility criteria

Population

This review encompasses literature on PhD dissertations conducted by nurses throughout their doctoral journey,

encompassing diverse populations without limitations. For the purpose of this study, dissertations authored by nurses or midwives will be included, but the term ‘nurses’ will be consistently used throughout this document to maintain terminological uniformity.

We will include studies involving all type of target populations, including but not limited to patients, clients, healthcare professionals or systems, nursing students, etc. Only in countries where there is no PhD in Nursing and nurses must obtain their PhD degree in other scientific areas, their dissertations will be included in this study. The PhD dissertations without an explicit positive opinion from an accredited ethics committee will be excluded.

Concept

This review focuses on PhD dissertations that seek to enhance nursing sciences. As explained in the previous point, in the countries where nurses cannot pursue the PhD in Nursing, we will consider PhD dissertations made by nurses in other scientific areas if they seek to enhance nursing sciences.

For the purposes of this review, PhD dissertations constitute the literature reporting on doctoral theses within the realm of intervention or research, regardless of the methodologies employed which contribute to the development or improvement of the nursing sciences domains. Mapping and analyzing the identified PhD dissertations will serve as the foundation comprehending their characteristics, including domains, research themes, target populations, settings, methodologies employed, and outcomes, thereby informing the nature of doctoral dissertations.

Context

This review considered PhD dissertations in nursing or made by nurses that enhance nursing sciences irrespective of the settings, including but not limited to academia, clinical practice, etc. This study will be focused but not limited to in the following countries: England, Finland, Israel, The Netherlands, Poland, Portugal, Slovakia and Sweden. In this group, Poland is the only country where there is no PhD in nursing, Polish nurses obtain a PhD in health sciences or other disciplines. The selection of countries is based on the nationalities of the authors involved in this study, who are members of the Research Committee of Sigma Theta Tau – European Region, an internationally recognized top honor society for nursing dedicated to advancing global health. Although Israel is not geographically located in Europe, it is a member in many European transnational federations, frameworks and takes part in many European events and associations such as Sigma. Literature will be included irrespective of geographic location without a specific racial- or gender-based criteria.

Types of sources

This scoping review will encompass primary studies employing all kind of designs, including, for instance, the publication of project protocols, a practice that is increasingly common among PhD students. These studies will be considered for inclusion across the databases outlined in the search strategy section. Additionally, national repositories will be explored, and data will be gathered or verified directly through email with universities of the selected countries, when it is not possible to obtain the information through previous means.

Material and methods

The proposed scoping review will be conducted in accordance with the JBI methodology, chapter 11, for scoping reviews, which encompasses the work of Arksey and O’Malley with refinements by Levac, Colquhoun and O’Brien.²⁴ The development of the protocol for the current review complies with the Extension for Scoping Reviews of the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA-ScR).²⁵ A detailed timeline of the research steps and planned work is provided in Table 1.

Table 1. Timeline and planned work

Phase	Date	Activities
Preliminary search and protocol development	December 2023 – February 2024	– Conduct preliminary searches in databases. – Develop and refine the search strategy. – Finalize the review protocol in accordance with the PRISMA-ScR guidelines.
Comprehensive literature search	March 2024 – April 2024	– Execute the search strategy across selected databases. – Identify and compile PhD dissertations from national repositories in the selected countries. – Contact universities directly if necessary to obtain missing data.
Study selection	May 2024 – July 2024	– Screen titles and abstracts by two independent reviewers. – Conduct full-text reviews to assess eligibility against inclusion criteria – Resolve disagreements through discussion or with a third reviewer.
Data extraction and analysis	July 2024 – September 2024	
Reporting and dissemination	October 2024 – March 2025	

Search strategy

The search strategy will aim to locate PhD dissertations in the open-access national repositories and databases, as well, if necessary, with the universities in the eight selected countries.

To identify the focus, timelines, and the principal articles about PhD dissertations in the earlier reviews concerning nursing doctoral dissertations, a preliminary search was conducted in December of 2023 to the databases PubMed, CINAHL, Google Scholar and Science Direct. The text keywords contained in the titles and ab-

stracts of relevant articles, and the index terms used to describe the articles, were used to develop a full search strategy CINHAL, PubMed, SCOPUS, PsycINFO, Web of Science, Psychology & Behavioral Sciences Collection, and ERIC (Table 2). Articles published in Dutch, English, Finnish, Hebrew, Polish, Portuguese, Slovak, Swedish, with a time range 2020–2023, will be included.

Table 2. Search strategy

Search	Query	Records retrieved
#1	"doctor* dissertation*" or "PhD dissertation*"	
#2	"nurs*"	
#3	#1 AND #2	
Limited to 2020–2023: Dutch, English, Finnish, Hebrew, Polish, Portuguese, Slovak, Swedish		

The terms will also be used in the national repositories search provided by each author of this protocol. For example, in Portugal theses are available in the open-access digital repositories of the University of Lisbon (<https://repositorio.ul.pt>), the Catholic University of Portugal (<https://repositorio.ucp.pt>), the University of Porto (<https://repositorio-aberto.up.pt>) and University of Coimbra (<https://estudogeral.uc.pt>). In Finland, all the dissertations can be found in repository Tiedejatutkimus.fi.²⁶

Despite searching through databases and national repositories in the eight countries previously proposed within this study, if obtaining the required information proves challenging, universities offering doctoral programs in nursing or related scientific fields where nurses pursue their doctorates will be contacted via email to acquire the necessary data. In instances where information is unclear or inconsistent, direct outreach to universities will also be considered to confirm and share the PhD dissertations completed between 2020–2023.

Study/Source of evidence selection

All the identified records will be collated and uploaded into EndNote™ X8 (Clarivate Analytics, PA, USA) and duplicates removed. From the national repositories and/or information from direct contacts with universities, a list will be generated for each country, organizing PhD dissertations alphabetically by title. All information will be analyzed to check if there are duplicates between databases, national repositories or information from universities, and these will be removed.

Following a pilot test, titles and abstracts will then be screened by two independent reviewers for assessment against the inclusion criteria for the review to redefined, if necessary, any criteria. The full text will be assessed in detail against the inclusion criteria by two independent reviewers. Reasons for exclusion of full-text documents that do not meet the inclusion criteria will be recorded and reported in the scoping review. Any disagreements that arise

between the reviewers at each stage of the selection process will be resolved through discussion or with a third reviewer. The results of the search will be reported in full in the final scoping review and presented in a Preferred Reporting Items for Systematic Reviews and Meta-analyses for Scoping Reviews (PRISMA-ScR) flow diagram.²⁵

Table 3. Data extraction instrument

Study ID	1. Study Number	
	2. Author	
	3. Year	
	4. Title	
	5. Country	
	6. Source	
Reason for inclusion or exclusion	7. PhD dissertation in nursing	1: Yes (proceed to question 9) 2: No – (proceed to question 8)
	8. PhD dissertation made by a nurse or a midwife.	1: Yes 2: No – exclude
	9. Are there other reasons for exclusion?	1: Yes – exclude (proceed to question 9.1) 2: No (proceed to question 10)
	9.1. Specify other reason for exclusion	Specify in own words reason for exclusion
Characteristics of the PhD dissertation abs	10. Research Themes/Topics	Specify
	11. Target populations	Specify
	12. Methodologies used (use the information on the abstract)	Specify
	13. Settings	
	13.1. Academia	
	13.2. Clinical practice	
13.3. Other	Specify the setting	
14. Main Conclusions	14.1. Results	Specify briefly
	14.2. Future Studies	
Comments to review from reviewers	Describe them.	

Data extraction

Data will be extracted by one or two reviewers and accordingly the language limitations were overcome with a data extraction tool developed by the reviewers. The data extracted will include specific details about PhD dissertations including all kind of populations, regarding all the research in nursing domain, irrespectively of settings, where dissertations focus their development and other relevant findings to the review question. The data will be exported to Microsoft Excel® (Redmond, Washington, USA). A draft extraction tool is provided (Table 3). The draft data extraction tool will be modified and revised as necessary during the process of extracting data from each included dissertation. Modifications will be detailed in the full scoping review. Any disagreements that arise between the reviewers or doubts that emerge in the process will be resolved through discussion or with a third reviewer. Authors of papers will be contacted to request missing or additional data, where required.

Data analysis and presentation

Results will be reported graphically with tables when possible. Tables will be developed and refined throughout the data extraction to reflect the purpose and objective of the review. The results will be classified under the following categories: study identification (ID); reasons for inclusion or exclusion; characteristics of study population/paper, regarding the research themes, target populations, methodologies used, settings, and main outcomes of the PhD dissertations made by nurses in nursing or other scientific areas in countries where it is not possible to pursue PhD in nursing.

A narrative will accompany the result tables and will describe the characteristics of the body of literature and data collected related to PhD dissertations in any context.

Conclusion

Identifying the topics in nursing doctoral dissertations will be helpful for identifying areas of research in nursing science in the future. It will also allow future research to be directed towards strictly nursing topics.

Declarations

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Author contributions

Conceptualization, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Methodology, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Software, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Validation, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Formal Analysis, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Investigation, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Resources, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Data Curation, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Writing – Original Draft Preparation, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Writing – Review & Editing, L.T-S.; M.C.; M.N.; H.P.; S.S.; S.W.; J.S. and M-L.L.; Visualization, L.T-S.; M.C.; M.N. and M-L.L.; Supervision, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; and M-L.L.; Project Administration, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; J.S. and M-L.L.; Funding Acquisition, L.T-S.; M.C.; D.C.; M.N.; H.P.; S.S.; S.W.; J.S. and M-L.L.;

Conflicts of interest

The author asserts that they have no conflicts of interest.

Data availability

Not applicable.

Ethics approval

Not applicable.

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