# BMJ Open Linguistically responsive learning and teaching for non-native speakers in undergraduate nursing education: a scoping review protocol

Florian Schimböck , <sup>1</sup> Göntje Erichsen , <sup>2</sup> Inger Petersen , <sup>2</sup> Wolfgang von Gahlen-Hoops 10 1

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<sup>1</sup>Faculty of Medicine, Kiel University, Kiel, Germany <sup>2</sup>Faculty of Arts and Humanities, Kiel University, Kiel, Germany

#### **Correspondence to**

Florian Schimböck; florian.schimboeck@ pflegepaedagogik.uni-kiel.de

#### **ABSTRACT**

**Introduction** Non-native-speaking nursing students as well as faculty, preceptors and mentors face specific issues related to language in undergraduate nursing education. A better understanding of the language experiences, needs, requirements, assessments and support activities will guide linguistically responsive learning and teaching and will direct future curriculum development. This scoping review aims to examine and map the extent of literature related to linguistically responsive learning and teaching for non-native speakers in undergraduate nursing education and to describe the lived experiences, barriers and facilitators, language needs, assessment tools and supportive interventions. Methods and analysis This scoping review will follow the Joanna Briggs Institute (JBI) methodology for scoping reviews and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews (PRISMA-ScR). In May 2023, a preliminary search was conducted. The comprehensive search will include MEDLINE (PubMed), CINAHL (EBSCO), ERIC (EBSCO) and MLA (EBSCO). OpenGrey (DANS) and reference lists of the included articles will be searched for grey literature and additional articles. Two independent reviewers will screen titles and abstracts, then review the full texts of articles. Data will be extracted using a data extraction form and will be presented in figures, tables and narrative syntheses, in line with the review questions. This review will include articles that describe the experiences of non-native-speaking nursing students, faculty or preceptors in undergraduate nursing education and clinical practice environment. Articles that report on language requirements, needs and assessment tools will also be considered as well as articles reporting on supportive activities and interventions within the study programmes. Articles related to exchange students or programmes will be excluded.

**Ethics and dissemination** No ethical approval is required. The findings of the review will be disseminated through peer-review publication as well as oral and poster presentations at scientific conferences.

#### INTRODUCTION

The current world situation is characterised by globalisation and diversity. Both aspects are

#### STRENGTHS AND LIMITATIONS OF THIS STUDY

- ⇒ A first strength of the study is the usage of the JBI methodology for scoping reviews, the methodological descriptions by Peters et al and the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews.
- ⇒ Second, four healthcare and education databases, reference lists and grey literature to identify relevant sources will be included.
- ⇒ And third, the team is of sufficient size to independently conduct the different stages of the review and to resolve any disagreement between the reviewers through discussion or consultation of a third reviewer.
- ⇒ A limitation of the study is that only English and German articles will be included.
- In addition, the review will not include a formal assessment of the study quality, as it is a scoping review

mirrored in the field of nursing. Most countries in the world report some type of nurse shortfall so various governmental workforce strategies are encouraging the recruitment of culturally and linguistically diverse (CALD) nursing students and nurse practitioners.<sup>1</sup> Even though diversity among nursing students, nurse educators and nurse practitioners is seen as important for the further enhancement of the nursing profession, it must be noted that there are still many challenges to be addressed. These include acculturation to new cultural beliefs and values,<sup>23</sup> adaption to different health and educational systems,<sup>2–4</sup> financial concerns,<sup>2–5</sup> discrimination and racism,<sup>2–6–7</sup> isolation and loss of social support, 8-10 intersections of gender, gender identity and sexual orientation,<sup>2</sup> and language barriers.<sup>2 3 7 11-13</sup> The nursing practice is characterised by communication that contributes to the building of trust and nurse-patient relationship. An important



component of communication is linguistic competence, which includes the ability of nurses to speak clearly and correctly with patients, their relatives, other nursing professionals and other healthcare professionals. 12 Therefore, language seems to play a crucial role in this context and is described as a major theme in most studies. This is supported by the meta-synthesis by Starr who analysed 10 qualitative studies and concluded that language was a common thread through all included studies. Language affects cultural, resource, educational and academic issues and is differentiated by various modes of communication, for example, listening, reading, writing and speaking.<sup>14</sup> Furthermore, communication in undergraduate nursing education requires language skills that go beyond basic interpersonal communication skills (BICSs). BICSs are necessary for the social language people are using in faceto-face conversations to deal with everyday communication situations. Cognitively demanding oral and written language and interpretation of concepts and abstractions presented in textbooks or scientific articles are often required during lectures and group discussions. Tasks of assessing, analysing, planning, implementing and evaluating refer to higher levels of cognitive academic language proficiency as explained by the conceptual distinction by Cummins. 15 Various articles reported that most of non-native-speaking nursing students had only a conversational mastery of the instructional language and experienced difficulty achieving the higher levels of oral/ written proficiency required to understand traditional lectures, interact in discussion groups and learn the more technical language of nursing and healthcare. 10 14 Nonnative-speaking nursing students often face challenges like misunderstandings, inability to communicate and problems in writing professional texts, assignments and care plans. In addition to theoretical teaching, practical and clinical training is an important part of nursing education, and non-native-speaking nursing students may also experience challenges in simulation trainings and clinical placements. 16-18 On the other hand, nurse educators, preceptors and clinical mentors are not sufficiently prepared to provide the types of assistance that non-native-speaking nursing students need to successfully meet these challenges. 19-21 Therefore, it is not surprising that various studies showed that non-native-speaking students are still at higher risk to fail in undergraduate nursing education than native-speaking students.<sup>7</sup> <sup>14</sup>

A preliminary search of MEDLINE (PubMed), CINAHL (EBSCO), ERIC (EBSCO) and MLA (EBSCO) was conducted. A literature review from 2013 described language needs and the effectiveness of language support programmes. The article discussed and raised awareness of common themes such as the challenges of acculturation, communication in clinical practice and using the advanced and technical language of nursing and healthcare. Due to the sporadic compilation of the literature and the fact that the article was published 10 years ago, an updated review about language needs and support

interventions is needed. A scoping review from 2021 examined the challenges, coping responses supportive interventions for international and migrant nursing students with a gender lens. Language and communication barriers were described in their general overview of challenges but in a very abstract way. They highlighted that oral and written expression and comprehension were common issues described in the literature and that language barriers occur in academic and clinical settings as well as in social contexts. Detailed descriptions of the linguistic challenges described by nursing students, faculty or preceptors were not provided. They conclude in their discussion that the results of their scoping review raised several questions. For example, they mentioned language issues and what level of language ability should be required to gain access to nursing education. In addition, they noted in the limitations that the experiences were only focused on the challenges and did not provide general insights or even positive experiences of non-native-speaking nursing students.<sup>2</sup> A qualitative meta-synthesis from 2022 identified and synthesised data from 19 primary, qualitative studies of ethnic minority nursing students' experiences in nursing programmes. One of the four main themes was called 'to understand and to be understood' and described language challenges. Limited vocabulary, different dialects and written works were experienced as main language obstacles during students' entire nursing education.<sup>4</sup> Overall, the literature regarding the language experiences, language needs, language requirements, language assessments and language support activities is fragmented. Taking these perspectives into account, the objective of this scoping review is to examine and map the extent of literature related to linguistically responsive learning and teaching for non-native speakers in undergraduate nursing education.

#### **Review questions**

- ► What is the extent of the literature about linguistically responsive learning and teaching for non-native speakers in undergraduate nursing education?
- ► How do non-native-speaking nursing students experience their undergraduate nursing education?
- ► How do faculty and preceptors experience the teaching of non-native-speaking nursing students?
- What language needs and requirements are described or can be derived for non-native-speaking nursing students to participate in undergraduate nursing education?
- What assessments, scales or tools are reported to assess language abilities of non-native-speaking nursing students before, during and at the end of undergraduate nursing programmes?
- Which recommendations and/or activities for language support of non-native-speaking nursing



students are described in undergraduate nursing education?

#### **METHODS AND ANALYSIS**

A scoping review methodology has been chosen as this kind of review is less restrictive than a systematic review, thus allowing a broad scope to examine and map the extent of literature on linguistically responsive learning and teaching in undergraduate nursing education. The proposed scoping review will be guided by the Joanna Briggs Institute (JBI) methodology for scoping reviews and will be reported using the Preferred Reporting Items for Systematic Reviews and Meta-Analyses extension for Scoping Reviews checklist (PRISMA-ScR). The protocol is registered with the Open Science Framework (https://osf.io/4crbe).

#### **Inclusion criteria**

The eligibility criteria for this scoping review are based on the participants, concept, context framework as follows.<sup>22</sup>

#### **Participants**

To be included, articles need to focus on undergraduate non-native-speaking nursing students, nursing faculty/educators and/or nurse mentors/preceptors facilitating classroom and clinical learning experiences for non-native-speaking nursing students. Publications will be excluded if they focus on international students who only participate in an exchange programme and do not participate in the entire nursing education. Articles will also be excluded if they examine internationally trained nurses completing a transition, bridge or integration programme.

#### **Concept**

This review will consider articles that explore non-nativespeaking nursing students and linguistically responsive nursing education. In this context, many different terms are described in the literature (eg, second, additional or foreign language learning). The students themselves are usually referred to as second, additional or foreign language students, as international students, migrant students, foreign-born students, minority or nontraditional students or CALD students. For the purposes of this review, no distinction will be made between these terms so they are used as synonyms in the search strategy. The focus will be on nursing students, who complete the entire undergraduate nursing education in another language than their first language. In this article, the concept of linguistically responsive learning and teaching is defined as instructional approaches that aim to facilitate the language and literacy acquisition of multilingual learners while ensuring that these learners' cultural and linguistic identities are maintained.<sup>24</sup>

#### Context

This review will focus on articles that examine undergraduate nursing education programmes preparing graduates for initial entry into nursing practice regardless of whether they are 3-year or 4-year bachelor programmes or accelerated second-degree programmes. These students face many different challenges. They must study in a foreign language, orient themselves in an unfamiliar educational programme, deal with different teaching and learning strategies and adapt to a new culture. Therefore, master and doctoral programmes as well as internationally educated nurse bridging programmes will be excluded.

### **Types of sources**

This scoping review will consider quantitative, qualitative and mixed-methods studies of any design or approach. Quantitative studies include experimental, quasi-experimental, analytical observational and descriptive cross-sectional studies. Qualitative studies include but are not limited to designs such as grounded theory, ethnography, phenomenology and action research. In addition, literature reviews, discussion papers, programme evaluations, quality improvement reports, unpublished studies and grey literature will be considered, depending on the research question.

#### Search strategy

As recommended, a three-step search strategy will be used.<sup>22</sup> In May 2023, a preliminary search of MEDLINE (PubMed), CINAHL (EBSCO) and ERIC (EBSCO) was undertaken to identify articles on the topic (see online supplemental file 1: search strategy). Keywords used in titles, abstracts and index terms (MeSH headings) were used to develop a full search strategy. In the second step, a comprehensive search will be conducted across MEDLINE (PubMed), CINAHL (EBSCO), ERIC (EBSCO) and MLA (EBSCO). In the third step, OpenGrey (DANS) will be searched for grey literature. Furthermore, the archives of German second/foreign language journals and the reference lists of all included full-text sources will be screened for additional articles. If the full text of an article cannot be accessed, the corresponding author will be contacted. Historical trends and different usage of terms are considered interesting so no limits on publication dates will be set. The review will only consider articles with available abstracts and published in the languages spoken by the reviewers: German and English.

## Study/source of evidence selection

Following the search, all identified articles will be collated and uploaded into Rayyan (Rayyan Systems, Cambridge, USA), which will remove duplicates and facilitate blinded screening. To ensure consistency in study selection, the first 100 sources will be screened by 2 independent reviewers (FS and GE) to assess reviewer agreement regarding the relevance of titles and abstracts. Following this pilot test, titles and abstracts will be screened by the same two reviewers for assessment against the inclusion criteria. Selected sources will then undergo a detailed full-text screening. Full-text articles that do not meet the inclusion criteria will be removed and reasons for exclusion will be recorded and reported in the final scoping

review. Any disagreement between the reviewers at any stage of the selection process will be resolved through discussion between the reviewers or, if necessary, through consultation with a third reviewer (IP and WvG-H). The results of the search and the study selection process will be reported in full detail in the final scoping review using a PRISMA-ScR flow diagram.<sup>23</sup>

#### **Data extraction**

The included articles will be imported to MAXQDA (VERBI Software, Berlin, Germany) for data extraction and analysis. Data will be extracted by two independent reviewers (FS and GE) using a data extraction tool developed by the reviewers (see online supplemental file 2: data extraction instrument). For a better overview, the entities from the data extraction tool are generated in MAXQDA as deductive themes and subthemes. An initial pilot test of five articles will be conducted to ensure that all reviewers know how to use the tool. The data extraction form may be modified and revised as necessary during the process. Modifications will be reported in the final scoping review. The basic data will be extracted for every article and include details about the publication (authors, year, country of origin, document type), methods (if applicable), participants, concept and context. For specific data, the review questions will be used as framework to organise the articles and their specific findings. In addition to deductive coding, inductive coding is also used to structure the findings of the research questions. Any disagreement between the reviewers (FS and GE) will be resolved through discussion or consultation with a third reviewer (IP and WvG-H). Authors will not be contacted for missing information as this is beyond the time resources of the project.

#### **Data analysis and presentation**

For each review question, the extracted data will be summarised qualitatively and quantitatively in relation to the document type. In addition, the extracted data will be presented in figures and tables depending on what seems appropriate for the data. All team members will also regularly engage in reflexive meetings to discuss and minimise biases, resolve disagreements and reach consensus. The findings of the scoping review will be presented in line with the review questions. The final report will follow the PRISMA-ScR guidelines. <sup>17</sup>

#### Patient and public involvement

Patients and/or the public were not involved in the design, or conduct, or reporting, or dissemination plans of this research.

#### **Ethics and dissemination**

As this is a scoping review, no ethical approval is required. The dissemination strategy includes peer-review publication in an international journal. Furthermore, the results of the review will also be presented in the form of oral and poster presentations at scientific conferences.

Contributors FS, GE, IP and WvG-H conceptualised and designed this study. FS and GE developed the research questions and the methods. IP and WvG-H contributed to methods design. FS drafted and edited the manuscript and GE, IP and WvG-H provided critical revisions. The final version was read and approved by all authors. WvG-H serves as guarantor and accepts full responsibility for the work and/or the conduct of the study, had access to the data, and controlled the decision to publish.

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#### ORCID iDs

Florian Schimböck http://orcid.org/0000-0002-4834-0114 Göntje Erichsen http://orcid.org/0009-0009-5835-8201 Inger Petersen http://orcid.org/0009-0009-5835-8201 Wolfgang von Gahlen-Hoops http://orcid.org/0000-0002-8011-9006

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# **Appendix I: Search strategy**

Preliminary search in May 2023

MEDLINE via PubMed				
Search	Query	Records retrieved		
#1	(((((education, nursing[MeSH Terms]) OR (education, nursing, associate[MeSH Terms])) OR (students, nursing[MeSH Terms])) OR (faculty, nursing[MeSH Terms])) OR (mentors[MeSH Terms])) OR (preceptorship[MeSH Terms])	,		
#2	((((((((language) OR (linguistic*)) OR (multilingu*)) OR ("second language")) OR ("foreign language")) OR ("additional language")	410,106		
#3	#1 AND #2	3,078		

CINAHL via EBSCO				
Search	Query	Records retrieved		
#1	("nurs* student*" OR "nurs* assistan*" OR mentor* OR preceptorship OR "nursing faculty" OR "nursing education") AND (multilingu* OR "second language" OR "foreign language" OR "additional language" OR linguistic* OR language)			

ERIC via EBSCO			
Search	Query	Records retrieved	
#1	("nurs* student*" OR "nurs* assistan*" OR mentor* OR preceptorship OR "nursing faculty" OR "nursing education") AND (multilingu* OR "second language" OR "foreign language" OR "additional language" OR linguistic* OR language)		

# **Appendix II: Data extraction instrument**

Source details	Authors/year	
	Country	
	Document type	
	Participants/sample	
	Design	
	Purpose/aim/research questions	
	Methods	
	Theoretical frameworks	
Research question 1:	Feelings	
How do non-native speaking nursing students	Challenges/barriers	
experience their undergraduate nursing education?	Facilitators/motivators	
	Situations/scenarios	
Research question 2:	Feelings	
How do faculty and preceptors experience the	Challenges/barriers	
teaching of non-native speaking nursing students?	Facilitators/motivators	
	Situations/scenarios	
	Exams/material	
Research question 3:	Language needs	
What language needs and requirements are described or can be derived for non-native speaking nursing students to participate in an undergraduate nursing education?	Language requirements	
Research question 4:	Name/aim	
What assessments, scales or tools are reported to assess language abilities before, during and at the	Number of items	
end of the undergraduate nursing programs?	Type of questions/tasks	
Research question 5:	Recommendations	
Which recommendations and/or activities for language support are described before and during undergraduate nursing education?	Support activities/interventions	