



# Analysis of the particularities of Lusophone participation in a Nursing Knowledge Network

*Análise de particularidades da participação lusófona em uma Rede de Conhecimentos em Enfermagem*

*Análisis de las particularidades de la participación lusófona en una Red de Conocimientos de Enfermería*

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## ABSTRACT

**Objective:** To describe the conceptual exercise of reflecting on the possibilities and particularities of the participation of Lusophone schools of nursing in the Nursing Knowledge Network. **Method:** An analysis was conducted using information obtained from an environmental scan of institutional resources following the conceptual framework by Prug and Prusak on the knowledge networks. The learnings reported in the analysis are based on the collected information and reflections on the positive and negative aspects of participation, while proposing possible solutions for an action plan. **Results:** There is interest in the internationalization of research and collaborative work both as institutional actions to support nursing research and potential benefits due to participation in the Network. The collaborative work has potential to increase the impact of research, expedite dissemination and use of results both in education and in clinical practice, broadening the horizons of Lusophone nursing science. **Conclusion and Implications for practice:** Participation of these institutions in the Network offers numerous possibilities to demonstrate the originality, creativity and expertise of their teaching and research practice, encouraging the sharing of ideas and practices. The practice of scientific production in all its scenarios by educators and students can be improved through refined ways of thinking, creating, producing, and disseminating knowledge.

**Keywords:** Diffusion of Innovation; Nursing; Schools; Nursing; Nursing Research; Societies; Nursing.

## RESUMO

**Objetivo:** Descrever o exercício conceitual de reflexão sobre as possibilidades e particularidades da participação das Escolas de Enfermagem e Faculdades de Enfermagem lusófonas na Rede de Conhecimentos em Enfermagem. **Método:** Análise das informações obtidas em um levantamento de recursos institucionais de acordo com o marco conceitual proposto por Prug e Prusak sobre rede de conhecimentos. A ponderação de aspectos positivos e negativos - analisando o aprendizado com as informações - levou em consideração as possíveis soluções para um plano de ação. **Resultados:** Tanto nas ações institucionais para suportar a pesquisa em Enfermagem como nos benefícios almejados com a participação na Rede existe o interesse na internacionalização da pesquisa e no trabalho colaborativo. Com a ampliação dos horizontes da ciência da Enfermagem lusófona, este trabalho visa aumentar o impacto da pesquisa e agilizar a divulgação e a utilização dos resultados, tanto na educação como na clínica. **Conclusão e Implicações para a prática:** A participação das referidas instituições oferece inúmeras possibilidades de demonstrar originalidade, criatividade e perícia de sua prática docente e de pesquisa, favorecendo o compartilhamento de ideias e práticas. A prática de produção científica, por docentes e discentes, pode ser aprimorada pelo refinamento de modos de pensar, criar, produzir e disseminar.

**Palavras-chave:** Difusão de Inovação; Enfermagem; Escolas de Enfermagem; Pesquisa em Enfermagem; Sociedades de Enfermagem.

## RESUMEN

**Objetivo:** Describir el ejercicio conceptual de reflexión de las posibilidades y particularidades de la participación de facultades de Enfermería de lengua portuguesa en la Red de Conocimientos de Enfermería. **Método:** Análisis de datos obtenidos de un sondeo de recursos institucionales bajo el marco conceptual de Prug y Prusak sobre la red de conocimiento. El planteamiento de aspectos positivos y negativos del aprendizaje abarcó soluciones para elaborar un plan de acción. **Resultados:** En las acciones institucionales de apoyo a la investigación en Enfermería y los beneficios aspirados con la participación en la Red, existe un interés por la internacionalización de la investigación y el trabajo colaborativo –que tiene como objetivo aumentar el impacto de la investigación, estimular la divulgación y el aprovechamiento de los resultados en la enseñanza y la clínica, con la ampliación de los horizontes de la Enfermería de instituciones de habla portuguesa. **Conclusión e Implicaciones en la práctica:** La Red ofrece numerosas posibilidades para las instituciones participantes respecto a la demostración de originalidad, creatividad y experiencia en la práctica docente y de investigación, fomentando el intercambio de ideas y prácticas. La práctica de la producción científica por profesores y estudiantes puede verse mejorada por la reflexión, creación, producción y difusión de conocimientos.

**Palabras clave:** Difusión de Innovaciones; Enfermería; Facultades de Enfermería; Investigación en Enfermería; Sociedades de Enfermería.

## INTRODUCTION

In recent decades, there has been a significant technological advance and collaboration between researchers from different countries, which has played an important role in the internationalization of science. Partnerships in the global scientific community have been strengthened in solidarity for knowledge sharing.<sup>1</sup> Relevant skills that promote building, consolidating, mobilizing, and connecting with partners and collaborators in groups is paramount to the advancement of internationalization projects, especially in research. The operationalization of such projects requires a coordinated strategy with defined actions, objectives, and results. Thus, there are multiple factors that contribute to challenges in the internationalization of research, such as, individual faculty commitment, the discipline in question, the university's support to the project, and other external factors, such as, funding, equipment, etc.<sup>2</sup>

On the other hand, the ethical considerations regarding the actions for internationalization involves the differences between collaborating higher education institutions (HEIs) in relation to academic freedom,<sup>3</sup> autonomy and operationalization of the country that hosts those actions.<sup>4</sup> In addition, the sharing of services, the exchange of material, human and technological resources in relation to the mobilization of constructivist values and disclosure of latent talents, can lead to success, collective engagement and unexpected rewards. This success can be expressed through recognition of the positive impacts of the innovation from an individual, institutional, national and global level.<sup>5</sup> The advantages of internationalization also include building research skills, joint development of expertise, and the opportunity for student-researchers to obtain international experience.<sup>5</sup>

In order to do so, collaborating HEIs need to provide long-term sustainability, establish a positive organizational culture and environment, promote leadership, innovation and adaptability to change, as well as, seek consistent global partnerships, among others.<sup>5</sup> Equally important is the investment in professional development and citizenship globally, considering the pressures of the labour market in relation to talent competition, provision of appropriate work equipment and resources, reputation of the respective organization, focus on the internationalization of research and publications, recruitment of scientists, as well as, the use of foreign language in teaching and research.<sup>3</sup>

Considering that nursing professional associations and knowledge networks function as a strategy of communication, linkage, cooperation, and synergy between nurses engaged in management, research, and education, they also promote the advancement of discipline and profession through the dissemination of scientific innovation. Nurses engage in this movement by strengthening intellectual and academic partnerships, as well as exploring new possibilities for national and international collaborations. It is known that international collaboration between nurses fosters relationships between potential partners, shares clinical and academic work, and enhances the critical understanding of national/international policies that guide clinical practices and procedures. Therefore, collaboration increases educational and

research activities - including greater access to scholarships for faculty and students.<sup>6-8</sup>

Networking is an essential tradition also in Lusophone Nursing. The emergence of the Nursing Knowledge Network (NKN) and the addition of the experience reported presented in this article was made deliberately to facilitate networking at an especially particular political moment. The Colleges of Nursing (CN) and Schools of Nursing (SN) represent different geographical locations, consist of varying reputation, and credibility, and are located within countries with different economic profiles and interests, whose interests include internationalization and networking, which is evident in their administrative management plans. From the perspective of HEIs, internationalization corresponds to the process of dialogue (joint work, cooperation, exchange, conflicts, and problems) with other HEIs/international organizations in the design, development or implementation of teaching, research, and additional functions.<sup>9</sup>

This article presents information of an environmental scan that was conducted to explore institutional resources (without personal identification of the informants) amongst Brazilian and Portuguese CN and SN, which contributed to the development of the NKN. Therefore, the information provided is based on a report hosted at the Toronto Metropolitan University Library and Archives and Library of Canada.<sup>10</sup> This article reports the authors' insights and reflections about the possibilities, particularities, and uniqueness of the participation of Lusophone CN and SN in the NKN.

## LITERATURE REVIEW

The contribution of nursing scientific knowledge, in relation to social transformation, has been in constant debate amongst various social actors who produce such knowledge and whose dissemination is strengthened in networks and partnerships. Such knowledge production is essential for nursing scientific advancement and the development of its various forms of knowledge, which has been recognized for decades: theory, research, common sense, philosophy, and practice.<sup>11</sup> The practice of caring emanates the personal, theoretical, cultural and reflective practical forms of knowledge.<sup>12</sup> This knowledge is imperative for overcoming barriers in continuing education, provision of job opportunities, adequate dimensioning of professionals, as well as, valorization of the nursing profession and their experience of professional leadership. Due to the identified barriers, this led to the formation of the political basis for the launch of the Nursing Now campaign by international stakeholders.<sup>13,14</sup> This campaign highlights the unquestionable contribution of nurses to improve health globally, especially when their potential is enhanced when more resources and support are provided to the profession.<sup>15</sup> In addition, there is further need for evidence to support the development of policies and the dissemination of effective and innovative nursing practice.<sup>16</sup>

In this decade, the National Academies of Sciences has proposed recommendations, with the focus on knowledge for nursing in North America.<sup>17</sup> Further recommendations include

partnerships with the community partners for the conceptualization of research; the development of new models for the provision of cost-effective care, and the development of institutional and public health policies. However, networking brings some global and contextual challenges, such as, the linguistic and cultural differences of the respondents CN and SN. Multidisciplinary experiences in knowledge networks highlight some benefits that can be experienced by nurses, including the opportunity to assume multiple academic roles (e.g., faculty and graduate student)<sup>18</sup> and, in relation to multimodal networks, the ability to engage in independent learning dependent of time and place by offering knowledge, skills and professional role development.<sup>19</sup>

A consolidated strategy that has already been established is the collaborative scientific writing group/network, which consists of nursing authors that engage in simultaneous writing and side-by-side writing, which has generated great impact in academia.<sup>20</sup> Responsible leadership organizes and combines different writing styles of different authors, their shared ideas and value nurses' perspectives, professional opinions and work-related experiences. It should also be emphasized that working with virtual networks promotes the profile of the faculty-researcher, their projects research/experiences, and allows them to maintain active profile, and socially promoting it in the academia context.<sup>21</sup> The international literature highlights other benefits for international networking, such as: (a) transverse objectives in multi research sites with shared information, knowledge, scientific evidence, methodologies and technological resources;<sup>22</sup> (b) encouragement of continuous collaboration between researchers over a long period of time;<sup>23</sup> (c) exposure to vast perspectives from different clinical, educational and research scenarios due to the exchange of ideas, strategies and content during learning exchange meetings with alternative contents;<sup>24</sup> (d) development fostered by the connection of academic and clinical contacts<sup>6,25</sup> by expanding perspectives based on the experiences and recommendations of those involved;<sup>26</sup> and, (e) favoring the unification of intellectual and material resources for the identification and resolution of problems crucial to the international community by multi-site groups promoting evidence-based practice and improvement of healthcare at the global level.<sup>27</sup>

Therefore, the reported experience in this article helps fill a gap in knowledge by reporting on the reasons, possibilities, mechanisms, and strategies for the participation of Lusophone CN and SN in the NKN. The reflections provided did guide the conception of an international research project aiming to design a research program and develop an action plan for faculty-student capacity building in which Lusophony CN and SN can participate.

## METHOD

This article focuses on the conceptual exercise performed by the authors in the analysis of the information previously obtained in an environmental scan of institutional resources inspired by the method of rapid participatory appraisal of community needs.<sup>28</sup> This analytical-reflective exercise was performed by Brazilian and Portuguese faculty from nursing and education

disciplines, whose information on their respective CN and SN is part of the aforementioned collection of information obtained in 42 universities located in 10 countries, in 2021.<sup>10</sup>

Rapid participatory appraisal is a method that collects and analyzes information in the field for a short period of time.<sup>28</sup> Benefits of this method includes minimal cost, low use of professional time, and high involvement of community members.<sup>28</sup> In addition, the information may allow the mapping of a situation explored without details being present.<sup>28</sup> To proceed to the analysis, it is relevant to know the application of the method of resources mapping that generated the institutional information, such as: (a) collect only necessary and relevant information; (b) choose the necessary information and acceptable means of obtaining it; and, (c) involve the community in the analysis of information.<sup>28</sup> The institutional information analyzed in this article refers to the identification of Lusophone CN's and SN's nursing research areas, specific strategies and settings for innovation production and dissemination in the area of research teaching, obstacles identified to the dissemination of scientific knowledge in nursing, as well as, possibilities for strengthening nursing research.

The analysis of the of the information consisted of intensive and reflective reading after it was extracted and summarized by the writing team responsible for the synthesis report.<sup>10</sup> The previous work was inspired by the qualitative methodology of reflexive analysis,<sup>29,30</sup> whose target was the conceptual focus of the formulated question (e.g., expected benefits, mode of contribution, etc.). The analytical work of information related to Lusophone CN and SN used a modified reflexive method proposed by Schon.<sup>31</sup> This method refers to reflexive professional practice whose central premise is that the efficient professional can recognize a particular event or a set of clues about an event, when it occurs, and reflect on it. Reflection always leads to a change of perspective regarding situations, while guiding the emergence of new ideas, and has the potential to reveal themes and possible solutions.<sup>29</sup>

The analysis of institutional information focused on the procedures of weighing positive and negative aspects, analysis of what was learned from them, and the possible solutions that could be the subject of a potential action plan.<sup>30</sup> Methodologically, some of Fook's recommendations were applied:<sup>31</sup> (a) definition of the analysis topic; (b) analysis through multidisciplinary perspectives; and, (c) recognition of the legitimacy of the researchers' experiences, in addition to the contributions made by other individuals to the reflexive process and to the proposed recommendations.

The critical dialogue established between the authors thus allowed the identification of the characteristics of Lusophone CN and SN in the NKN process of operationalization, while bringing relevant dividends to be equally shared among the institutions. It should be noted that this analysis consisted of the perspectives of a consolidated academic alliance between nursing faculty at Lusophone CN and SN.

The conceptual framework on knowledge networks proposed by Prug and Prusak<sup>32</sup> guided the analysis of information related

to Lusophone CN and SN. These authors define the knowledge network as “collections of individuals and teams that come together across organizational, spatial, and disciplinary boundaries to invent and share a body of knowledge.”<sup>32:79</sup>

This conceptual perspective inspires the NKN in its objective and central focus on “Learning and Innovation”, that is, “when learning and innovation are important objectives, the work committees of the knowledge network accumulate and distribute knowledge for the consumption of its members, or as a general public good. Some learnings are also focused on the inside: the network systematically learns about itself and its processes.”<sup>32:81</sup>

In the process of designing a knowledge network, these authors<sup>32</sup> recommend the observation of dimensions that encompass strategic, structural, and tactical issues. In the strategic dimension, there is the theory of change that the network leadership shares with members the clear definition of objectives, purposes, and results, in addition, the role of expertise and experiential learning, the principles of inclusion and participation. In the structural dimension, the operational model includes collectively accepted structures and infrastructures, the development of social norms and facilitation of meetings between members. In the tactical

dimension, issues of measures, evaluation comments and incentives are addressed. This article analyzes contents related to the above strategies.

## RESULTS

Among the Brazilian HEIs (88%; n=21) are 19 public CN and SN located in the states of Ceará, Espírito Santo, Goiás, Mato Grosso, Minas Gerais, Paraná, Pernambuco, Piauí, Rio de Janeiro, Rio Grande do Sul, São Paulo, and the Federal District; and 2 private HEIs from the states of Pernambuco and Rio de Janeiro. The Portuguese HEIs included in the environmental scan are the largest nursing SN in relation to the number of faculty and students (12%; n=3). As for languages utilized in teaching, all reported that they teach primarily in Portuguese (50%). Other languages utilized in teaching include Spanish, English and Portuguese (29.2%), English and Portuguese (16.7%) and French, English and Portuguese (4.2%).

In regard to the presentation of nursing research areas (Table 1), the analysis shows that the nursing research themes in these Lusophone CN and SN are concentrated in areas such as women’s, child health, mental health, elderly, and occupational

**Table 1.** Areas of nursing research.

Areas of research	(%)
Women’s health	93.3
Public health	93.3
Adult health	90
Child’s health	90
Mental health	90
Senior health	83.3
Teaching and nursing research	76.7
Occupational health	70
Health services administration and management	63.3
Nursing teaching, learning processes and techniques	56.7
Nursing leadership	46.7
Health of ethnic, social and gender minorities	33.3
Global nursing	30
Men’s health	26.7
Nursing informatics	23.3
Health of Indigenous people	16.7
International mobility	13.3
Health of immigrants and refugees	10
Other: Accessibility, Neonatal nursing, Oncology nursing, Infection prevention and control, Patient safety, Educational-caring technologies and Technology in nursing.	3.3 (each one)

**Source:** Zanchetta MS, Medeiros M, Munari DB, Gouveia MTO, Albarracin DGE, Aguilera-Serrano C, Santos WS, Metersky K, Fredericks S, Costa E, He SZ. Environmental scan of resources for the creation of a Nursing Knowledge Network - Summary Report. ISBN- 978-1-77417-040-3. 63p. Toronto Metropolitan University, 2022. <https://doi.org/10.32920/19908994.v1>

health. However, other priority populations and emerging themes are gradually evident in the Brazilian intellectual production, as described in the review study on the working conditions and health of immigrants.<sup>33</sup> Although most Latin American studies on health of immigrants are conducted in Brazil,<sup>33</sup> it is emphasized that some research areas remain underdeveloped.<sup>33</sup> Some gaps in the contextualization of the research objectives seem intriguing, for example, to address local community health without considering global nursing; assist a woman in the pregnancy-puerperal cycle and not consider her condition as a migrant, refugee or stateless individual, among others.

A possible strategy to bring different themes to research, community outreach projects and courses without having to change them frequently, would be to adopt an approach that addresses health literacy from the perspective of the individual and/or community. Thus, students would be able to develop their skills to deal with the meanings of health information by the client and, thus, focus the actions on (re)emerging themes. It is noteworthy that, although the resources environmental scan questionnaire did not ask questions about natural environmental issues, whose increase has raised different situations of illness and destruction, no information on the topic was presented by the informants as a research theme.

The areas of research with results less than 50% requires attention, since nursing cannot assume a strong position in the research and production of knowledge without addressing current and global political, philosophical, social, and human issues. For example, indigenous, immigrant and refugee populations, ethnic, gender and social minorities, and men are epidemiological priorities. The high mortality rates in the male population due to community violence and the impairment of men's mental health, which impacts rates of interpersonal violence, make them a population of research interest. In addition, there is opportunity to learn about the longevity of Portuguese men, the role of the Mediterranean diet and aspects of healthy aging - another World Health Organization's priority theme.<sup>34</sup> These issues represent important knowledge gaps to be addressed in addition to the health issues of migrants, refugees, and stateless individuals.

The latter issues have been debated in Portugal, and it was established that the migratory movement is a phenomenon that greatly impacts social transformations constituting a public health challenge. Thus, requires updating policies and programs that address access to healthcare with particular attention to reducing inequalities and barriers accessing health services.<sup>35</sup> This global crisis has also recently made Brazil a host country for refugees and migrants<sup>36</sup> and the impact of health services and social determinants of health are documented through the experiences of Venezuelan refugees<sup>37</sup> and on Haitian migrants' health.<sup>38</sup>

Moreover, the political moment requires more tenacity from nursing leadership in Brazil and Portugal to revolutionize the teaching, administrative and managerial practice of care, including experts in health informatics. Innovations such as artificial intelligence, use of apps, which is commonly used in individuals' lives and is increasingly being used in health systems,

require us to know how best to identify new creators and inventors among our faculty and students. Among those who explore new technologies and knowledge are faculty and students engaged in international mobility. The inexpressive mention of this theme from the respondents also generated questions due to the constant movement between Brazil and Portugal, which should be of interest to research and publications due to the high financial investment in the development and improvement of nursing human resources. Without considering mobility as an object of scientific interest, little can be known about its impact on Brazilian and Portuguese society and nursing. Figure 1 identifies institutional information regarding settings commonly used by Lusophone CN and SN utilizing specific pedagogical strategies aiming at innovation and the dissemination of innovation in research teaching.

Institutional information related to barriers to the dissemination of scientific knowledge in nursing (see Table 2) strategically offers some architectural clues for a collaborative plan of action. The most cited obstacles are essentially explained due to the scarcity of financial resources or institutional policies to support various costs associated with publication in foreign journals. However, the NKN may adopt the exchange of intellectual resources/assets (e.g., ability to write in a foreign language) and facilitate access to material resources. Mostly, those resources are partially available in research groups holding operational funding from research funding agencies. In particular, the creation of peers and mentors among authors in the NKN seems feasible due to the approximation of culturally compatible ideas between the Lusophone CN and SN.

Among the less frequent obstacles was the need for training to develop and consolidate scholarly writing skills. This information provides the unique opportunity for the creation and implementation of online training initiatives for faculty and students. Consequently, we pondered on the evaluation strategy of the social impact of medium-long term initiatives including the expansion of *curriculum vitae* of participants and the overall productivity of graduate programs. Another characteristic of the Lusophone group, with solid relations of scientific cooperation



**Figure 1.** Specific strategies and spaces to produce innovation in research teaching.

**Source:** Zanchetta MS, Medeiros M, Munari DB, Gouveira MTO, Albarracín DGE, Aguilera-Serrano C, Santos WS, Metersky K, Fredericks S, Costa E, He SZ. Environmental scan of resources for the creation of a Nursing Knowledge Network - Summary Report. ISBN- 978-1-77417-040-3. 63p. Toronto Metropolitan University, 2022. <https://doi.org/10.32920/19908994.v1>

**Table 2.** Obstacles to the dissemination of scientific knowledge in Nursing.

Most cited obstacles (%)	Less cited obstacles (%)
Cost of publication in a scientific journal - 96.6	Difficulty establishing a partnership with an experienced author - 43.5
Translation cost - 93.1	Mastery of scientific writing - 27.6
Submission cost- 79.3	Difficulty finding an experienced mentor / collaborator - 24
Language revision cost - 65.5	

**Source:** Zanchetta MS, Medeiros M, Munari DB, Gouveia MTO, Albarracin DGE, Aguilera-Serrano C, Santos WS, Metersky K, Fredericks S, Costa E, He SZ. Environmental scan of resources for the creation of a Nursing Knowledge Network - Summary Report. ISBN- 978-1-77417-040-3. 63p. Toronto Metropolitan University, 2022. <https://doi.org/10.32920/19908994.v1>

and differentiated presence in the NKN, refers to the strategies of approximation of colleagues due to the established trust. Thus, this group can act as a model for the NKN in the process of offering concrete help in the difficulty of finding a mentor or collaborator more experienced in research and scholarly writing, in the same city or country.

**Possibilities for strengthening nursing research**

The strengthening of nursing research in Lusophone CN and SN should be focused on national and international strategies and relations. In order to do so, potential recommendations mentioned in the report was to create a network composed of national and international researchers from CN and SN; increase inter-institutions and international partnerships; operationalize internationalization with faculty and student mobility plus encourage postdoctoral studies for students and national and international visiting professors. Moreover, scientific meetings to promote dialogue and feedback on research results between interested groups and society itself could lead to the establishment of consolidated and productive research networks. Other recommendations presented in Figure 2 refer to actions in the institutional scope to support nursing research.

**Potentialities of the contribution of nursing faculty and researchers**

The creation of the NKN represents a special opportunity for faculty and researchers, not only for those in the nursing field but equally for those working in health policy management and education of health professionals, both in the interinstitutional and operational spheres. Gathered institutional information indicates possibilities for inter-institutional policy management, such as: (a) collaboration in the areas of knowledge transfer; (b) contribution to the discussion of transversal of common themes in Latin America context; (c) strengthening partnerships in development call for scientific proposals and technological scientific products, and (d) exchange between CN and SN to expand the network of contacts for the creation of international projects. For operational management, the information suggests the following possibilities: (a) collaboration and support in the development and submission of research projects for national



**Figure 2.** Actions in the institutional scope to support nursing research.

**Source:** Zanchetta MS, Medeiros M, Munari DB, Gouveia MTO, Albarracin DGE, Aguilera-Serrano C, Santos WS, Metersky K, Fredericks S, Costa E, He SZ. Environmental scan of resources for the creation of a Nursing Knowledge Network - Summary Report. ISBN- 978-1-77417-040-3. 63p. Toronto Metropolitan University, 2022. <https://doi.org/10.32920/19908994.v1>

and international calls; (b) stimulating national and international mobility; (c) sharing experiences for coordinating teaching/research/outreach; (d) strengthening and producing knowledge in support of evidence-based nursing, as well as, (e) contribution to continuing education in research methodologies and nursing epistemology.

Since the first phase of analysis of institutional information provided by the informants of the 42 international CN and SN, one main difficulty was acknowledged. From the perspective of innovation, it seemed difficult for them to identify actions, processes, initiatives, and methods, both in teaching and in the practice of nursing research. It was identified that research leadership is crucial for the general understanding of the concept of innovation in nursing research teaching, therefore, it deserves special effort and investment. However, Table 3 highlights the desired benefits for the institution and Lusophone researchers, calling attention to the following: “Improve knowledge in research methodologies” and “Innovate areas of nursing research streams”, both cited by 56.7% of the informants. It is interesting to consider that some innovative research methodologies may be unknown to the Lusophone researchers. Furthermore, the interest in methodological innovation in research was not reported as much, despite the high expectation of benefits related to “Consolidate internationalization activities in nursing” and “Establish national

**Table 3.** Expected benefits for the institution and researchers.

Expected benefits	(%)
Consolidate internationalization activities in nursing.	93.3
Establish national and international research partnerships.	93.3
Increase the institutional visibility of nursing.	86.7
Advance the insertion of Ibero-American nursing in the context of Global nursing.	86.7
Establish multiple inter-institutional partnerships.	86.7
Expand possibilities for student mobility in undergraduate and graduate courses.	80
Participate in networking and expanding contacts.	80
Enable partnerships for publishing articles.	80
Expand possibilities for professional development for faculty and researchers.	76.7
Expand possibilities for post-doctoral partnerships.	76.7
Strengthen the submission of projects for the calls for national and international research.	76.7
Implement knowledge exchange activities.	70
Operationalize the training of a new generation of researchers in nursing.	70
Organize international scientific events in nursing.	70
Enable partnerships for publishing books and book chapters.	66.7
Demonstrate the level of excellence and expertise achieved in specific areas of knowledge in nursing.	63.3
Strengthen the submission of projects for national and international calls for social development.	63.3
Increase knowledge exchange activities.	60
Link foreign researchers to the graduate programs.	60
Improve knowledge in research methodologies	56.7
Strengthen the political posture of Ibero-American teachers and researchers in nursing with national and international associations of different types.	56.7
Innovate in areas of nursing research.	56.7
Participate in international nursing events.	53.3

**Source:** Zanchetta MS, Medeiros M, Munari DB, Gouveia MTO, Albarracin DGE, Aguilera-Serrano C, Santos WS, Metersky K, Fredericks S, Costa E, He SZ. Environmental scan of resources for the creation of a Nursing Knowledge Network - Summary Report. ISBN- 978-1-77417-040-3. 63p. Toronto Metropolitan University, 2022. <https://doi.org/10.32920/19908994.v1>

and international research partnerships” (two responses with 93.3% and others with close content).

Regarding knowledge about research methodology, the NKN can redefine Lusophone CN and SN into a culture of renewal, with the incorporation of other methodological recommendations operationalized by multidisciplinary international research teams, while considering the operational difficulties arising from their lack of information. In general, the benefits express the genuine interest of obtaining answers primarily to personal, institutional, and national interests that should be carefully considered, ensuring respect for the characteristics of other subgroups of faculty, students, and researchers in the NKN. The NKN should, through social inclusion of its members, instrumentalize its intentions, interests and expected benefits (see Table 3).

Regarding the strategies for the contribution of these CN and SN in the NKN’s actions, it was reported: (a) discussion and

development of collaborative research on clinical care throughout the life cycle and the strengthening of partnerships to respond to research funding calls; (b) leadership in the development of more complex, multi-settings, multi-sites and experimental research projects; (c) encouraging faculty and student mobility; (d) development of courses, lives, interinstitutional disciplines for graduate programs, and research training courses; (e) collaboration in committees of development of graduate projects and defense in master’s or interinstitutional doctorates, in addition to the supervision of international undergraduate and graduate students; and (f) increase in social communication, with the dissemination of the NKN work in social media, promoting and disseminating scientific events. The institutional information corroborates the idea that the NKN would facilitate actions of internationalization of Lusophone CN and SN by sharing technological resources and singular intellectual capital. As a result, some obstacles

resulting from insufficient funding for scientific activities in their various phases of implementation would be overcome. Nursing expertise with remote educational technologies makes us consider the feasibility of such actions at work at a distance, necessary for the NKN operationalization.

## DISCUSSION

Nursing goes beyond territorial limits and is interconnected by global awareness about investment in health as a public good, valuing the real and potential contribution of nurses in improving health, creating gender equality and strengthening economies.<sup>13</sup> In nursing, there is a longstanding acknowledgement that the profession is perfectly positioned to engage its members as actors in human rights efforts and for global health diplomacy.<sup>39</sup> Pursuing the structured work for a nursing international network aiming to achieve concrete outcomes, it means a unique opportunity to contribute even to the success of the internationalization plan of Lusophone CN and SN. The analysis of the institutional information gathered from the environmental scan of resources indicated that the Lusophone CN and SN focus on institutional actions to increase nursing research. Thus, there would be an increase in the impact of research, dissemination, and the use of results both in education and in clinical practice as a fruitful way of sharing ideas and practices, to broaden the horizons of nursing science with one's knowledge and actions.<sup>40</sup> Working in networks, even if they are systemic, broad, holistic and flexible, would bring significant changes, despite their inherent complexity<sup>19</sup> in responding to the Lusophone CN and SN interests and needs.

The globalization that also influences nursing promoting the discussion about transversal global competencies and greater awareness of knowledge by faculty and researchers about health policies, education, and nursing research.<sup>24</sup> Knowledge that is contextualized in the scenario of equity for access to health care, and in their offer to socially vulnerable populations.<sup>17</sup> Together, Lusophone CN and SN can propose answers to the current dilemmas of nursing in Portugal that faces the challenge of evaluating the cost-effectiveness of nurses' interventions to respond to the increasing complexity of health needs<sup>41</sup> and the relative number lower of nurses than the average of the European Union.<sup>42</sup> These issues also involve advanced education for the differentiated practice of specialist nurses (e.g., nurse specialist vs advanced nurse practitioner), for which expertise in the production of knowledge in Nursing is a central issue. Moreover, a consensus in the professional category and the achievement of social and political support necessary for the revision of the relevant legislation.<sup>41</sup>

## CONCLUSION AND IMPLICATIONS FOR PRACTICE

The analysis of the information confirmed the characteristics and potential recommendations of Lusophone CN and SN in the NKN. Their participation in the NKN is based on their stories in social contexts that demand their social and political engagement

to protect their interests. Such participation consists of overcoming barriers to obtain greater respect for research activities from senior leaders or scientists under training. The participation of those scientists in the NKN creation brings possibilities of a demonstration of originality, creativity, ingenuity, and expertise in teaching, learning and research.

Therefore, nursing social leadership in the Lusophone CN and SN can contribute to the recognition of their knowledge production as paramount to social change resulting from the expansion of public policies in the field of education, health, and social assistance, as well as the policy development in response to contingencies. The practice of producing nursing knowledge in many settings by its social actors can be improved by the refinement of ways of thinking, creating, producing, and disseminating knowledge. The present manuscript is not an empirical study and therefore, does not report on any type of methodological limitations.

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Conception of the reflection design. Margareth Santos Zanchetta. Marcelo Medeiros. Márcia Teles de Oliveira Gouveia. Edwaldo Costa. Walterlânia Silva Santos.

Data collection and the theoretical framework for conducting reflection. Margareth Santos Zanchetta. Marcelo Medeiros. Márcia Teles de Oliveira Gouveia. Edwaldo Costa. Walterlânia Silva Santos.

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