

# Research in nursing and modification of the knowledge tree in CNPq: contribution to science

*Pesquisa em enfermagem e a modificação da árvore do conhecimento no CNPq: contribuição à ciência*  
*Investigación en enfermería y modificación del árbol del conocimiento en CNPq: contribución a la ciencia*

**Alba Lúcia Bottura Leite de Barros<sup>I</sup>**

ORCID: 0000-0003-2691-3492

**Maria Miriam Lima da Nóbrega<sup>II</sup>**

ORCID: 0000-0002-6431-0708

**Rosângela da Silva Santos<sup>III</sup>**

ORCID: 0000-0002-2541-5646

**Marta Regina César-Vaz<sup>IV</sup>**

ORCID: 0000-0002-0754-7469

**Lorita Marlena Freitag Pagliuca<sup>V</sup>**

ORCID: 0000-0001-9110-8102

## ABSTRACT

**Objective:** to identify funding demands in the light of CNPq's knowledge subareas, as well as data on researchers and research groups, their distribution in the regions and their approximation with health research priorities of the Ministry of Health and the new knowledge tree framework of the area. **Method:** a descriptive study developed with data from 2009 to 2014 about researchers, funding and research areas provided by the *Diretoria de Ciências Agrárias Biológicas e Saúde (Department of Agriculture, Biology and Health Sciences)*. **Results:** there is a concentration of researchers and research groups in the Southeast region. The research priorities in the health field most frequently addressed were: Noncommunicable Diseases, Child and Adolescent Health, Women's Health and Communicable diseases. The grants could be classified in the current framework of knowledge areas. **Final considerations:** this analysis enabled visualizing subarea demands and relevance of changing the nomenclature of the classification of knowledge framework in order to represent the scientific production generated in the nursing area.

**Descriptors:** Knowledge; Nursing; Science; Graduate Nursing Program; Research.

## RESUMO

**Objetivo:** identificar demandas de financiamento das subáreas de conhecimento do CNPq, dados sobre pesquisadores, grupos de pesquisa, sua distribuição nas regiões do Brasil e sua aproximação com prioridades de pesquisa em saúde do Ministério da Saúde e do novo arcabouço da árvore de conhecimento da área. **Método:** estudo descritivo desenvolvido com dados entre 2009 e 2014, sobre pesquisadores, financiamento e áreas de pesquisa, fornecidos pela *Diretoria de Ciências Agrárias Biológicas e Saúde*. **Resultados:** há concentração de pesquisadores e grupos de pesquisa no Sudeste. As áreas da Agenda Nacional de Prioridades de Pesquisa em Saúde mais contempladas foram: Doenças Não Transmissíveis, Saúde da Criança e do Adolescente, Saúde da Mulher e Doenças Transmissíveis. As concessões realizadas puderam ser classificadas na atual árvore do conhecimento. **Considerações finais:** A análise permite a visualização das demandas das subáreas e pertinência da modificação da nomenclatura da árvore do conhecimento, refletindo a produção gerada pela área.

**Descritores:** Enfermagem; Conhecimento; Pesquisa em Enfermagem; Ciência; Educação de Pós-Graduação em Enfermagem.

## RESUMEN

**Objetivo:** identificar demandas de financiamiento de las subáreas de conocimiento del CNPq, datos sobre investigadores, grupos de investigación, su distribución en las regiones de Brasil y su aproximación con prioridades de investigación en salud del Ministerio de Salud y de la nueva estructura del árbol de conocimiento del área. **Método:** estudio descriptivo desarrollado con datos entre 2009 a 2014 sobre investigadores, financiamiento y áreas de investigación suministrados por la *Diretoria de Ciências Agrárias Biológicas e Saúde (Dirección de Ciencias Agrarias Biológicas y Salud)*. **Resultados:** hay concentración de investigadores y grupos de investigación en la región Sudeste. Las áreas de la agenda de prioridades de investigación en salud más contempladas fueron: Enfermedades no Transmisibles, Salud del Niño y del Adolescente, Salud de la Mujer y Enfermedades Transmisibles. Las concesiones realizadas pudieron ser clasificadas en el actual árbol del conocimiento. **Consideraciones finales:** el análisis permite la visualización de las demandas de las subáreas y la pertinencia de la modificación de la nomenclatura del árbol del conocimiento, reflejando la producción generada por el área de enfermería.

**Descriptorios:** Enfermería; Conocimiento; Investigación en Enfermería; Ciencia; Educación de Posgrado en Enfermería.

<sup>I</sup> Universidade Federal de São Paulo. São Paulo, São Paulo, Brazil.

<sup>II</sup> Universidade Federal da Paraíba. João Pessoa, Paraíba, Brazil.

<sup>III</sup> Universidade do Estado do Rio de Janeiro. Rio de Janeiro, Rio de Janeiro, Brazil.

<sup>IV</sup> Universidade Federal do Rio Grande. Rio Grande, Rio Grande do Sul, Brazil.

<sup>V</sup> Universidade Federal do Ceará. Fortaleza, Ceará, Brazil.

## How to cite this article:

Barros ALBL, Nóbrega MML, Santos RS, Cezar-Vaz MR, Pagliuca LMF. Research in nursing and modification of the knowledge tree in CNPq: contribution to science. Rev Bras Enferm. 2020;73(1):e20170911. doi: <http://dx.doi.org/10.1590/0034-7167-2017-0911>

## Corresponding Author:

Alba Lucia Bottura Leite de Barros  
E-mail: [barros.alba@unifesp.br](mailto:barros.alba@unifesp.br)



EDITOR IN CHIEF: Dulce Aparecida Barbosa

ASSOCIATE EDITOR: Marcos Brandão

**Submission:** 02-03-2018

**Approval:** 09-18-2018

## INTRODUCTION

The National Council for Scientific and Technological Development (CNPq- *Conselho Nacional de Desenvolvimento Científico e Tecnológico*) is an Agency of the Ministry of Science, Technology and Innovation (MCTI - *Ministério da Ciência, Tecnologia e Inovação*), aimed at fostering scientific and technological research. It was founded in 1951, and the first nursing support measures date back to the 1970s. The nursing subarea code and its specialties were created in 1980. In 1986, the *Ad hoc* consultants group was formed. In 1995, nursing joined the Multidisciplinary Health Committee (CA-MS- *Comitê Multidisciplinar da Saúde*), culminating in 2006 with the creation of the Nursing Area Committee (CA-EF - *Comitê da Área de Enfermagem*)<sup>(1)</sup>. This evolution evidences scientific development, leadership of the area in the CNPq, as well as commitment of Brazilian researchers in the solution of relevant problems that could provide impact to the Brazilian population's health.

The funding agency grants scholarships and aids that meet the demand that contributes to the human, scientific and technological development of the country. The impact of what is produced by a discipline must be reflected by the responses to improvements in quality of life, technological innovations and expressive economic return<sup>(1)</sup>. Thus, the Brazilian National Policy on Science, Technology and Innovation in Health (PNCTI/S - *Política Nacional de Ciência, Tecnologia e Inovação em Saúde*) was established by the Ministry of Health (MoH), with the purpose of improving the population's health. The target area of investment follows an agenda of priorities that focuses on problems of difficult resolution, aiming at the scientific and technological development<sup>(2)</sup>.

CA-EF members are committed to the policy of CNPq and aware of the need to produce specific knowledge of nursing and socially relevant. They take into account the right to life, defense of the universal right to health and provision of safe and quality care<sup>(3)</sup>. They also understand the importance of training researchers who envisage the economic, social, political and technological development of the country, managing financial resources that should, as a matter of priority, support research aimed at solving relevant health topics<sup>(4)</sup>.

In this context, the participation of *Associação Brasileira de Enfermagem* (ABEn - Brazilian Nursing Association) in 2003 is highlighted. During the 55<sup>th</sup> Brazilian Congress of Nursing (CBEn - *Congresso Brasileiro de Enfermagem*), there was concern about the collective construction of the *Agenda Nacional de Prioridades de Pesquisa em Enfermagem* (freely translated as Brazilian National Agenda for Nursing Research Priorities), with the selection of themes and research problems based on the relationship between university initiatives and social demands<sup>(5)</sup>.

CA-EFE members recognize the importance of grants dissemination of financing offered to the area of nursing. These grants can support the leaderships, ABEn, CAPES (*Coordenação de Aperfeiçoamento de Pessoal de Nível Superior* - Coordination for Improvement of Higher Education Personnel) and CNPq, in making decisions related to the development of new researches or even in the achievement of new spaces for nurses, subsidizing members of CA-EF in important negotiation spaces for the area. This space has been requested by nursing researchers, coordinators of Graduate Programs and the representations of the area in

CAPES, CNPq and ABEn, in discussions and reflections of what nursing research and what should research about<sup>(3)</sup>.

It is worth mentioning the meeting in 2014 at the invitation of the ABEn president, Angela Maria Alvarez, to the members of CA-EF-CNPq with leaders and researchers in the nursing area: Regina Aparecida Garcia de Lima, Isabel Amélia Costa Mendes, Silvana Martins Mishima and Carmen Gracinda Silvan Scochi, in which the identity of nursing as a scientific discipline and profession was discussed. After exposing the current situation of Brazilian nursing, CNPq and CAPES leaders were asked to present, during the 66<sup>th</sup> CBEn, the topics researched by the nursing researchers at CNPq and the Graduate Programs. Results would support future negotiations and achievements with the MoH, since such leaders observed a significant loss of spaces in this ministry's programs. It was also proposed greater integration among the leaderships so that partnerships could be effectively established, contributing to the advancement of Brazilian nursing.

The CA-EF's proposal was to present, at this event, CNPq grants received by the nursing area in the light of the *Agenda Nacional de Prioridades de Pesquisa em Enfermagem* of the MoH<sup>(5)</sup>; subareas proposed by researchers and Graduate Program coordinators<sup>(6)</sup> and the research lines in nursing<sup>(7)</sup>. In this way, it was judged that it would be possible to give greater visibility to the production of the area, allowing future political achievements with the CNPq, such as increased funding, increased number of fellows by modalities and modification of the Nursing Knowledge Tree, representing the desire of Brazilian researchers<sup>(3,8)</sup>.

Science and technology classification is a key tool for its organization<sup>(9)</sup>. These authors who supported the recommendations of the European Science Foundation<sup>(10)</sup> argue that science classifications allow the development and monitoring of strategies by organizing the peer reviewer processes. They produce statistical portfolios and strengthen mechanisms for the analysis of research projects and programs that are excellent tools of control; allow the scientific production within each area and analyze the relationships between investments and results, giving visibility to them.

In order for emerging sciences, such as nursing, to fulfill their social role, it is necessary that Brazilian and international organizational structures support and foster their development<sup>(9)</sup>.

The aim of this study is to present the analysis of nursing activities supported by the CNPq, seeking an approximation with the current nursing knowledge in force in Brazil.

## OBJECTIVE

To identify funding demands in the light of CNPq's knowledge subareas, as well as data on researchers and research groups, their distribution in the regions and their approximation with health research priorities of the Ministry of Health and the new knowledge tree framework of the area.

## METHOD

The data were provided by the advisory services of the *Diretoria de Ciências Agrárias, Biológicas e da Saúde* (DABS - *Department of Agriculture, Biology and Health Sciences*) of CNPq. They were classified according to the current Nursing Knowledge Tree and the *Agenda de Prioridades de Pesquisa em Saúde* of the MoH. The

information contained was related to the researchers, according to the number of institutions and region of the country, level of researchers by region of the country and distribution of researchers by knowledge subarea. The distribution of this information occurred between 2009 and 2014. It was analyzed by two doctoral students supervised by one of the authors of the study. These data were tabulated in Microsoft Office Excel spreadsheets and presented during the 66<sup>th</sup> CBE, being synthesized here. The information collected and used, from the CNPq database, followed the confidentiality and anonymity.

## RESULTS

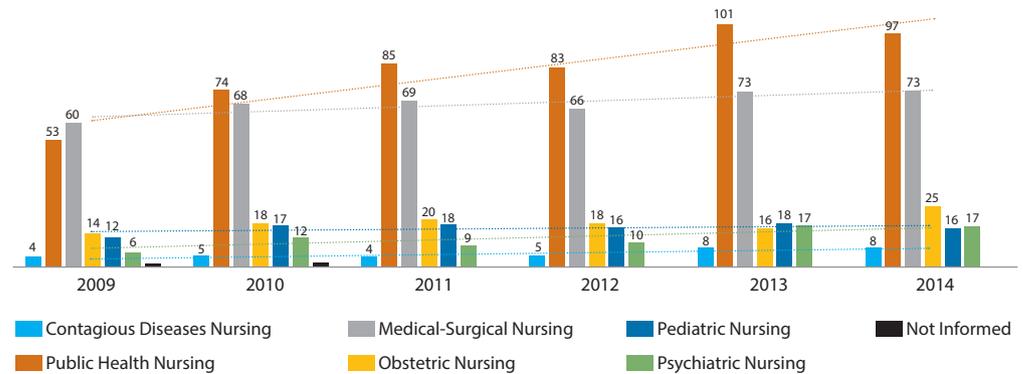
### Compilation of CNPq data analysis

Table 2 shows that among the 24 research priority areas, nursing has developed studies related to 11 of them, the most contemplated being: Noncommunicable Diseases (19), Child and Adolescent Health (18), Women's Health and Communicable Diseases (15 each). The sub-areas of the new configuration of the most demanded area

of knowledge were: Adult and Elderly Health Nursing, Women's Health Nursing (14 each) and Fundamental Nursing (11).

CNPq makes concessions for the accomplishment of national and international events, being that they obeyed the Call 2, schedules 1 and 2 in 2013, and the Call 6 in 2014. More than half of the 13 concessions (57%) were allocated to non-CNPq researchers; and ten (43%) to CNPq researchers. These events can be general of the category or even of specialties.

Table 3 shows that most of the concessions could be classified in the proposal. The subareas of the new configuration of the area of knowledge most in demand were: Collective Health Nursing 43, Fundamental Nursing 27, Women's Health Nursing 25, and Adult and Elderly Health Nursing 23.



**Figure 1** - Characterization of the researchers demand by subarea of the Nursing Knowledge Tree, São Paulo, São Paulo, Brazil, 2009 to 2014

**Table 1** - CNPq researchers and their characteristics, according to the demographic region of the country, São Paulo, São Paulo, Brazil, 2014

Region	Researchers characteristics	CNPq Researchers Institutions*	Researchers by region	Level/ Pq 1A	Level/ Pq 1B	Level/ Pq 1C	Level/ Pq 1D	Level/ Pq 2	Research groups
North		1 (3%)	1 (1%)	0	0	1	0	0	11
Northeast		5 (16%)	29 (17%)	2	1	4	7	15	97
Center-West		5 (16%)	6 (3%)	0	0	0	4	4	41
Southeast		8 (26%)	103 (59%)	10	10	12	16	54	230
South		12 (39%)	34 (20%)	4	2	1	4	23	103

Note: \*31 institutions.

**Table 2** - CNPq financing grants, according to health research priorities, São Paulo, São Paulo, Brazil, 2013/2014

CNPq grants / Research priority	Range A* (2014)	Range B* (2014)	Range C* (2014)	Special scholarships in the country schedule - 1, 2, 3**	Special scholarships abroad schedule - 1, 2, 3**
Technologies Evaluation and Economy in Health	1 (2%)	----	2 (17%)	1 (3%)	----
Health Systems and Policies	4 (9%)	2 (12%)	1 (8%)	5 (15%)	5 (14%)
Mental Health	2 (5%)	2 (12%)	----	3 (9%)	2 (6%)
Adult and Elderly Health	3 (7%)	1 (6%)	1 (8%)	3 (9%)	----
Women's Health	6 (14%)	2 (12%)	1 (8%)	----	6 (17%)
Child and Adolescent Health	4 (9%)	3 (17%)	----	5 (14%)	6 (17%)
Clinical Research	5 (11%)	----	2 (17%)	----	4 (11%)
Work Management and Health Education	7 (16%)	1 (6%)	1 (8%)	3 (9%)	4 (11%)
Communicable Diseases	7 (16%)	3 (17%)	1 (9%)	4 (12%)	----
Noncommunicable Diseases	4 (9%)	2 (12%)	3 (25%)	8 (23%)	2 (6%)
Health, Environment, Labor and NSA Biosafety	----	----	----	----	3 (9%)
NSA	1 (2%)	1 (6%)	----	2 (6%)	3 (9%)

Note: \* Recommended value (Range A: 30 thousand; Range B: 60 thousand; Range C: 120 thousand) – Chamada MCTI (freely translated as Brazilian MCTI Call – This Call aims to select proposals for financial support for projects that aim to contribute significantly to the scientific, technological and innovation development of the country in any area of

**Table 3** - CNPq financing grants, according to the new proposal of the nursing knowledge area, São Paulo, São Paulo, Brazil, 2013-2014\*

New classification of the Knowledge Area/ Benefits Granted by CNPq	Fundamental Nursing	Mental Health Nursing	Adult and Elderly Health Nursing	Women's Health Nursing	Child and Adolescent Health Nursing	Collective Health Nursing	Management and Administration Nursing	NSA
Special Scholarships in the Country	5 (13%)	3 (8%)	8 (22%)	8 (3%)	6 (16%)	11 (30%)	3 (8%)	1 (3%)
Special Scholarships Abroad	6 (17%)	2 (5%)	6 (17%)	6 (17%)	----	6 (16%)	----	1 (3%)
Range A**	13 (24%)	4 (8%)	3 (6%)	8 (15%)	9 (17%)	15 (28%)	----	1 (2%)
Range B**	2 (12%)	2 (12%)	1 (6%)	2 (12%)	4 (23%)	6 (35%)	----	----
Range C**	1 (8%)	----	5 (42%)	1 (8%)	----	5 (42%)	----	----

Note: \* For special scholarships in the country and abroad, schedule 1, 2 and 3 - Reference year: 2013 and 2014; \* For special scholarships in the country and abroad, schedule 1 and 2 - Reference year: 2014; \*\* Recommended value (Range A: 30 thousand; Range B: 60 thousand; Range C: 120 thousand) - Chamada MCTI (freely translated as Brazilian MCTI Call - This Call aims to select proposals for financial support for projects that aim to contribute significantly to the scientific, technological and innovation development of the country in any area of knowledge)/CNPq/Universal14/2014-nursing.

## DISCUSSION

The data presented evidences that the largest contingent of researchers is allocated in the Southeast and South region of the countries, areas recognized with greater national development. However, it is worth noting the participation of the Northeast region in the training of researchers, as well as the progression of the level of these researchers. The impact of researchers training in the country can be observed in Figure 1, which can be observed that the rise of the subareas of the researchers is relevant when compared to 2009 and 2014.

Possibly, the new classification covers the needs researched by different researchers and regions of the country.

Classification systems allow, among other things, highlight the scientific productivity of each area and to analyze the relationship between the investment made and its results<sup>(9)</sup>. Thus, its change impacts on different segments within CNPq itself and CAPES, since changes in computational language generate administrative implications of great magnitude. Knowledge tree modification is an old request from several advisory committees, including nursing, as previously highlighted<sup>(3,8)</sup>.

Nursing, in force at CNPq, is constituted by seven subareas, three of which are circumscribed by population group and care subjects (Adult and Elderly Health Nursing, Women's Health Nursing, Child and Adolescent Health Nursing) and four others defined by field of specialty (Mental Health Nursing, Collective Health Nursing, Fundamental Nursing, Management Nursing and Emerging, Re-emerging and Neglected Diseases Nursing).

It should be noted that the tree change was not only a nomenclature, but a paradigm, showing the overcoming of the biomedical model, called "Flexern Report"<sup>(11)</sup>, adopting a classification focused on the person (human groups), broader specialties related to health policies (Collective Health, Mental Health)<sup>(12-13)</sup> for global interests (Emerging, Re-emerging and Neglected Diseases)<sup>(14-16)</sup>, adopting, for the traditional areas of nursing, an updated language (Management and Administration)<sup>(17)</sup> and finally, to the area that underlies the knowledge of the Fundamental Nursing discipline, providing identity to the contemporary production of the area<sup>(18)</sup>.

Nonetheless, previous studies have evidenced a number of subareas of knowledge proposed by different advisory committees, which, by their magnitude, made it impossible to make any changes.

From the compilation of the data, it is observed that the researchers have received support from the CNPq and have attended to the *Agenda de Prioridades de Pesquisa em Saúde*, most

of the time<sup>(12)</sup>. The recommendation of CNPq, CAPES, and MoH, of the new Nursing Knowledge Tree suggested by researchers and coordinators of the Graduate Program, is due to the fact that the former does not reflect the knowledge generated by the discipline. Nevertheless, it is the responsibility of nursing leaders to undertake political management with the boards of these bodies to change this language. With this, it will favor visibility and reinforce the social relevance of nursing in the areas of human resource training at its different levels, impacting on the increase of funds for the research, as well as the number of researchers.

Moreover, the negotiations conducted by CA-EF, management 2014, were promoted, and in meetings with the DABS, the results of the discussions that took place in CBEn and the National Researchers Forum, expressing the need to modify the Nursing Knowledge Tree at CNPq. At the time, the study presented at CEPEn (*Centro de Estudos e Pesquisas em Enfermagem - Center of Nursing Studies and Research*) of 2014 was requested to be resent from the article resulting from the proposal of the new knowledge tree<sup>(8)</sup> and support from ABEn and the Coordination of the nursing area of CAPES.

Negotiations between 2014 and 2015, culminated in the technical note of the board meeting that took place in October 2015, the theme of which was: "*Proposta de revisão das subáreas do comitê de Assessoramento de Enfermagem (CA-EF), na árvore do conhecimento da Enfermagem disponível na plataforma Carlos Chagas*".

**Chart 1** - Comparison between Nursing Knowledge Trees - old and current, São Paulo, São Paulo, Brazil, 2017

Old Nursing Knowledge Tree	Current Nursing Knowledge Tree
Medical-Surgical Nursing	Adult and Elderly Health Nursing
Obstetric Nursing	Women's Health Nursing
Pediatric Nursing	Child and Adolescent Health Nursing
Psychiatric Nursing	Mental Health Nursing
Contagious Disease Nursing	Emerging, Re-emerging and Neglected Diseases Nursing
Public Health Nursing	Collective Health Nursing
	Fundamental Nursing (new area)
	Management and Administration Nursing (new area)

The first subareas were widely discussed by the nursing community and presented at a congress and forum of the area. Thus, for these, there was only update of the nomenclature. As for the Contagious Diseases Nursing subarea existing in the old tree, it was agreed to maintain it with CA-EF, on the occasion of the judgment of the Pq 2015 grants, aiming at the permanence of the six subareas and the addition of two. Thus, the updating occurred only in the name given by the MoH, the World Health Organization (WHO) and the Pan American Health Organization (PAHO), in Emerging, Re-emerging and Neglected Diseases Nursing. Two other new subareas were proposed: Fundamental Nursing and Management and Administration Nursing, due to the existence of lines of research; projects and scientific production in these subareas, which did not find correspondence in the Proposal Form.

The Opinion favoring the areas review took place in 2015. Its dissemination by CA-EF took place in the Forum of Researchers and Coordinators of Graduate Programs, during the 67<sup>th</sup> CBE in the city of São Paulo. As an argument for approval, the technical Opinion considered: 1. The demand deals with the old claim of the scientific community dating back to the early 2000s, agreed after extensive debate among the main representations of the area (ABEn and Coordination of the Nursing Area at CAPES); 2. The proposal allows a better visualization of the production of knowledge in the field of health research at MoH.

This old claim was made through the union between researchers and leaders of CNPq, CAPES and ABEn, committed to the solution of relevant Brazilian health problems. This achievement and the classification of the nursing area are highlighted by researchers from other countries who highlight the important scientific development from such classification<sup>(9)</sup>. They also allow the visibility of lines of research, projects and the scientific production of the

area of knowledge, making possible the analysis of the historical, political and social value of the profession.

Finally, it realigns the correspondence of the register of the proposals demanded by the researchers in different financing agencies, such as CAPES, Research Support Foundations (FAPs - *Fundações de Apoio à Pesquisa dos Estados*) and MoH, because the *Plataforma Carlos Chagas* (Carlos Chagas Platform) is the reference for the other funding agencies in research. Therefore, it is up to the leadership of these bodies to make the necessary change so that this identity strengthens. It is also up to the researchers to establish a shared agenda with research priorities, reinforcing their execution in a network and consolidating the current area of nursing knowledge<sup>(9)</sup>.

## FINAL CONSIDERATIONS

Changes in science occurred in the last three decades and had an impact on the development of knowledge in the area of nursing. In turn, it followed the world trends, reflecting the necessary advances related to caring for, teaching and, consequently, research demands in the nursing area.

There was a greater concentration of researchers in the Southeast region, according to their characteristics: number of institutions, region of the country, level of researchers and research groups followed by the South, Northeast, Center-West and North regions. The most contemplated areas of the *Agenda de Prioridades de Pesquisa em Saúde*, in this analysis, according to the Universal Call and Special Scholarships were: Noncommunicable Diseases, Children's Health, Women's Health and Communicable Diseases.

In these calls, the concessions made could be classified in the current proposal of the knowledge tree, making visible the generated production of the nursing area.

## REFERENCES

1. Erdmann AL, Mendes IAC, Leite JL. A enfermagem como área de conhecimento no CNPq: resgate histórico da representação de área. *Esc Anna Nery Rev Enferm.* 2007;11(1):118-26. doi: 10.1590/S1414-81452007000100017
2. Ministério da Saúde (BR). *Agenda Nacional de Prioridades de Pesquisa em Saúde*. 2ª ed. Brasília: Ministério da Saúde; 2008.
3. Pires DEP. Transformações necessárias para o avanço da enfermagem como ciência do cuidar. *Rev Bras Enferm.* 2013;66(no.spe):39-44. doi: 10.1590/S0034-71672013000700005
4. Leite JL, Mendes IAC. Pesquisa em enfermagem e seu espaço no CNPq. *Esc Anna Nery Rev Enferm.* 2000;4(3):389-94.
5. Ministério da Saúde (BR). *Agenda Nacional de Prioridades de Pesquisa em Saúde*. 2. ed., 3. reimpr. Brasília: Ministério da Saúde; 2011.
6. Associação Brasileira de Enfermagem (ABEn). Strategic planning for research and postgraduate programs in Brazilian nursing. *Rev Bras Enferm.* 2003;56(6):599-600. doi: 10.1590/S0034-71672003000600001
7. Associação Brasileira de Enfermagem (ABEn). Consolidação das propostas de linhas de pesquisa em Enfermagem. In.: *Anais do 11º Seminário Nacional de Pesquisa em Enfermagem*, 2001 May 27-30. Belém: ABEn; 2001.
8. Oliveira DC, Ramos, FRS, Barros ALBL, Nóbrega MML. Classificação das áreas de conhecimento do CNPq e do campo da Enfermagem: possibilidades e limites. *Rev Bras Enferm.* 2013;66(no.esp):60-5. doi: 10.1590/S0034-71672013000700008
9. Mendes AMOC. Classificação das ciências, visibilidade dos diferentes domínios científicos e impacto no desenvolvimento científico. *Rev Enf Ref.* 2016;IV(10):143-9. doi: 10.12707/RIV16049
10. European Science Foundation. Health research classification systems: Current approaches and future recommendations [Internet]. Strasbourg: European Science Foundation; 2011 [cited 2018 Sep 05]. Available from: [http://archives.esf.org/fileadmin/Public\\_documents/Publications/spb43\\_Health\\_Research\\_Classification.pdf](http://archives.esf.org/fileadmin/Public_documents/Publications/spb43_Health_Research_Classification.pdf)
11. Almeida Filho N. Reconhecer Flexner: inquérito sobre produção de mitos na educação médica no Brasil contemporâneo. *Cad Saúde Pública.* 2010;26(12):2234-49. doi: 10.1590/S0102-311X2010001200003

12. Oliveira DC. Prioridades de pesquisa em saúde e em enfermagem. In: Anais do 17º Seminário Nacional de Pesquisa em Enfermagem, 2013 June 03-05. Natal: ABEn; 2013.
  13. Oliveira VE. Public Health and Public Policies: similar but different fields. *Saúde Soc.* 2016;25(4):880-94. doi: 10.1590/S0104-12902016172321
  14. Paz FA, Bercini MA. Doenças emergentes e reemergentes no contexto da Saúde Pública. *Bol Saúde.* [Internet] 2009 [cited 2018 Sep 10];23(1):9-13. Available from: [http://www.boletimdasaude.rs.gov.br/download/2014101308310301\\_doencas.pdf](http://www.boletimdasaude.rs.gov.br/download/2014101308310301_doencas.pdf)
  15. Ministério da Saúde (BR). Organização Pan-Americana de Saúde (OPAS). Indicadores e Dados Básicos - Brasil – 2008 (IDB-2008): doenças emergentes e reemergentes [Internet]. Brasília: Ministério da Saúde, OPAS; 2008 [cited 2018 Sep 10]. Available from: <http://tabnet.datasus.gov.br/cgi/idb2008/matriz.htm>
  16. Ministério da Saúde (BR). Organização Pan-Americana de Saúde (OPAS). Relatório da OMS informa progressos sem precedentes contra doenças tropicais negligenciadas [Internet]. Brasília: Ministério da Saúde, OPAS; 2017 [cited 2018 Sep 10]. Available from: [https://www.paho.org/bra/index.php?option=com\\_content&view=article&id=5401:relatorio-da-oms-informa-progressos-sem-precedentes-contradoencas-tropicais-negligenciadas&Itemid=812](https://www.paho.org/bra/index.php?option=com_content&view=article&id=5401:relatorio-da-oms-informa-progressos-sem-precedentes-contradoencas-tropicais-negligenciadas&Itemid=812)
  17. Silva DIS. Desafios contemporâneos para a gestão em saúde: reflexões sobre as contribuições da enfermagem. *Rev Elet Gest Saúde.* [Internet] 2016 [cited 2018 Aug 05];7(1):441-53. Available from: <http://periodicos.unb.br/index.php/rgs/article/view/3466/3152>
  18. Fawcett J, DeSanto-Madeya S. *Contemporary Nursing Knowledge: Analysis and Evaluation of Nursing Models and Theories.* 3rd Edition. Philadelphia: F.A. Davis Company; 2013.
-