



Production of theses and dissertations about breastfeeding in graduate nursing programs

Produção de teses e dissertação, sobre aleitamento materno, nos programas de pós-graduação em enfermagem

Producción de tesis de maestría y doctorado, sobre lactancia materna, en los programas de postgrado en enfermería

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ABSTRACT

Objective: To characterize the theses and dissertations with a breastfeeding theme in Brazilian post-graduate nursing programs, between 1999 and 2010. **Methods:** A bibliometric study was conducted by consulting the thesis database of the Coordination of Improvement of Higher Education; 96 theses and dissertations were identified, of which 25% were doctoral dissertations and 75% master's theses. Among these, 93% were academic master's and 7% were professional master's. **Results:** The concentration of production resided in the post-graduate nursing programs in the South and Southeastern regions. Three faculty members advised 24.9% of the studies. It was noted that 63.5% of the studies were qualitative in nature, 29.2% were quantitative in nature, and 7.3% used both approaches. The theoretical – philosophical reference that was the most used was phenomenology, and the method was content analysis. **Conclusion:** The results showed the importance of this theme in advanced studies. Overcoming dogmas and ideologies about breastfeeding in favor of science-based positions is a priority when proposing advances in nursing care to promote breastfeeding.

Keywords: Bibliometrics; Education; Nursing; Graduate; Breast feeding

RESUMO

Objetivo: Caracterizar as teses e dissertações na temática aleitamento materno produzidas nos Programas de Pós-Graduação em Enfermagem do Brasil entre 1999 e 2010. **Métodos:** Estudo bibliométrico realizado por meio de consulta ao banco de teses da Coordenadoria de Aperfeiçoamento de Pessoal de Nível Superior, localizando-se 96 teses e dissertações, das quais, 25% eram teses de doutorado, 75% dissertações de mestrado dentre estas, 93% de mestrado acadêmico e 7% de mestrado profissional. **Resultados:** A concentração da produção reside nos Programas de Pós-Graduação de Enfermagem das Regiões Sul e Sudeste. Três docentes orientaram 24,9% dos estudos. Ainda, 63,5% dos estudos eram de natureza qualitativa, 29,2% de natureza quantitativa e 7,3% utilizaram as duas abordagens. O referencial teórico-filosófico mais utilizado foi a fenomenologia e o metodológico, a análise de conteúdo. **Conclusão:** Os resultados mostraram a importância desta temática em estudos avançados. Superar dogmas e ideologias da amamentação por posições cientificamente fundamentadas é prioridade quando se propõem avanços no cuidado de enfermagem em aleitamento materno.

Descritores: Bibliometria; Educação de pós-graduação em enfermagem; Dissertações acadêmicas como assunto; Aleitamento materno

RESUMEN

Objetivo: Caracterizar las tesis de maestría y doctorado en la temática de lactancia materna producidas en los Programas de Postgrado en Enfermería del Brasil entre 1999 y 2010. **Métodos:** Estudio bibliométrico realizado por medio de consulta al banco de tesis de la Coordinación de Perfeccionamiento de Personal de Nivel Superior, localizándose 96 tesis y disertaciones, de las cuales, 25% eran tesis de doctorado, 75% disertaciones de maestría; de éstas, 93% de maestría académica y 7% de maestría profesional. **Resultados:** La concentración de la población reside en los Programas de Postgrado de Enfermería de las Regiones Sur y Sudeste. Tres docentes asesoraron 24,9% de los estudios. Aun, 63,5% de los estudios eran de naturaleza cualitativa, 29,2% de naturaleza cuantitativa y 7,3% utilizaron los dos abordajes. El referencial teórico-filosófico más utilizado fue la fenomenología y el metodológico, el análisis de contenido. **Conclusión:** Los resultados mostraron la importancia de esta temática en estudios avanzados. Superar dogmas e ideologías del amamantamiento por posiciones científicamente fundamentadas es una prioridad cuando se proponen avances en el cuidado de enfermería en lactancia materna.

Descriptorios: Bibliometría; Educación de postgrado en enfermería; Lactancia materna

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INTRODUCTION

The World Health Organization recommends that babies should receive only breastfeeding during their first 6 months of age. After six months, in order to meet their nutritional needs, the child should receive safe complementary foods and nutritious adequate foods, along with breastfeeding until they are 2 years of age or beyond ⁽¹⁾.

In early life, breast milk is arguably the food which meets the nutritional ideals with proper balance of nutrients, in addition it presents numerous immunological and psychological advantages, and besides that it also has an important role in reducing child mortality ⁽²⁾.

The advantages of breastfeeding for the child, his or her mother and society are several and unquestionable when practiced since birth, exclusively up to 6 months and complemented with appropriate foods until 2 years of age or beyond, it shows great potential to transform growth, development and prevention of diseases in childhood and adulthood ⁽³⁾.

The research area on breastfeeding delimits an area of interest in the Knowledge Construction, aggregating, in an interdisciplinary way, the knowledge produced by medicine, nursing, nutrition, dentistry, psychology, among others. The knowledge built on Breastfeeding in *strictu sensu* graduate programs plays an important role, and it is politically recognized in the formation of qualified human resources. This knowledge also stimulates the development of research for the preparation of new researchers and intellectuals workers for competencies development.

Among the various areas of knowledge in Nursing, the breastfeeding theme, although with significant contributions, still causes countless inquiries and it has been commonly used in *stricto sensu* graduate studies of Nursing Graduate Programs, a condition which encourages us to ask the following question: What are the characteristics of dissertations and theses produced in Nursing Graduate Programs in Brazil on breastfeeding area?

Guided by these considerations, a bibliometric study of dissertations and theses of Programs between 1999 and 2010 was decided to be conducted. This study aimed at characterizing these productions on the topic of breastfeeding, regarding the type of study, theoretical-philosophical and methodological, advisor, the argumentation or defense year and the institution, so as to contribute to build a body of knowledge that could offer subsidies for the nursing care practice in this field of knowledge.

METHODS

To meet this goal, Bibliometrics was used, defined as a set of laws and principles applied to statistical and

mathematical methods aimed at mapping the scientific production, authors and representation of information by document counting. Bradford's Law aims at estimating the degree of relative importance of journals in a given area of knowledge, and journals which produce the greatest number of articles on a given subject, composes a nucleus of journals, supposedly of higher quality or relevance to the area. Lotka's Law, on the other hand, proposes to define the major contributions of researchers in certain fields of knowledge, consider that some researchers, supposedly the most prestigious ones in a particular area of knowledge, produce several researches, and many researchers, supposedly less prestigious ones, produce little. And lastly, the Zipf's Law which scores the frequency with which certain words appear in scientific texts, a way to define their representativeness in this context ^(4,5).

Bibliometrics is a quantitative instrument, which minimizes the subjectivity inherent to the index and retrieval of information, producing knowledge in a particular subject area. It assists in mapping and generating different indicators of information and knowledge, facilitating decision making in managing information for a specific scientific community ⁽⁵⁾.

For data collection it was done a search for published dissertations and theses that used the topic, Breastfeeding, held in Nursing Graduate Programs in Brazil between 1999 and 2010, available online on the theses database of Coordination Improvement of Higher Education Personnel (CAPES).

The search for studies occurred in March 2011 and the first step was the adoption of the keywords: "breastfeeding or lactation". These were selected based on health terminology found in the Health Sciences Descriptors. The search was conducted through <http://capes.gov.br> website in the "Summary" option, in which there is a tool that allows users to search by author's name, subject and institution. The subject tool with the option "any of the words", the level and the base year were selected by us. A total of 1344 studies were located, including 317 theses, 967 academic Master's dissertations and 60 professional Master's dissertations.

Due to the fact our option was to conduct the search of the available abstracts through CAPES Theses Database, all information obtained in this study was extracted only from abstracts.

The following and more accurate step for the selection of studies was the analytical reading of all the abstracts in order to identify the production of health area, specifically on the topic breastfeeding which were exclusively developed in Nursing Graduate Programs, which constituted the inclusion criteria. After reading these, 96 studies were selected, of which 24 theses, 67 academic Master's dissertations and five professional Master's dissertations.

Hereafter, the information was placed on a table in the software Microsoft Excel, containing columns separating the following information: program/institution, year of defense or argumentation, author, advisor, title of study, design, theoretical-philosophical and methodological framework and outcomes, for tabulation and later analysis, which their inter-relation with the available literature strengthened the discussion of results.

The different studies thematic were also grouped by categories in the same table of the software Microsoft Excel to facilitate the analysis, since the central topic of breastfeeding/lactation is very broad.

RESULTS

From the total amount of 1344 studies initially identified, the sample for this bibliometric study in the proposed period resulted in 476 abstracts, which presented the breastfeeding and lactation as a central topic of the research (thesis or dissertation) in health area. Of these abstracts, 380 studies were from different Graduate Program such as Medical Sciences, Medicine, Nutrition, Dentistry, Public Health, among others, and 96 were developed in Nursing Graduate Programs, the object of analysis for this bibliometrics.

The quantity of specific studies (96) for Nursing area, 24 (25%) were characterized as PhD theses, 72 (75%) as Master's dissertations, of which 67 (93%) were

dissertations of academic Master's programs and five (7%) professional Master's programs (Figure 1).

The theses and dissertations analyzed were from the period between 1999 and 2010. Still noting the Figure 1, between the years of 2005 and 2008, there was a greater number of academic Master's dissertations. On the other hand, the PhD theses were presented in a greater number in 2003, 2006, 2008 and 2009.

Dissertations presented in Nursing Programs of Professional Master's began in 2006. This year, a paper was presented in the Graduate Program at the Federal University of Fluminense. In 2008 three dissertations were presented, and in 2009, a dissertation, both in the Graduate Program of State University of Sao Paulo.

Regarding the institutions, the University of Sao Paulo (USP – Ribeirao Preto) is occupying the most prominent place in the productions, with 18 (18.7%) studies, followed by the University of Sao Paulo (USP – Sao Paulo), with 17 (17.7%), Federal University of Rio de Janeiro (UFRJ) with 13 (13.5%) and the Federal University of Santa Catarina (UFSC) with 9 (9.3%) representing almost 60% of the entire sample (Figure 2).

When it was analyzed which researchers had more advisees, a researcher is highlighted with ten (10.4%) studies, followed by another with eight (8.3%) and other advisor with six (6.2%) studies. Thus, three advisors guided 24 (24.9%) of the dissertations and theses produced in Nursing Graduate Programs. Of the total

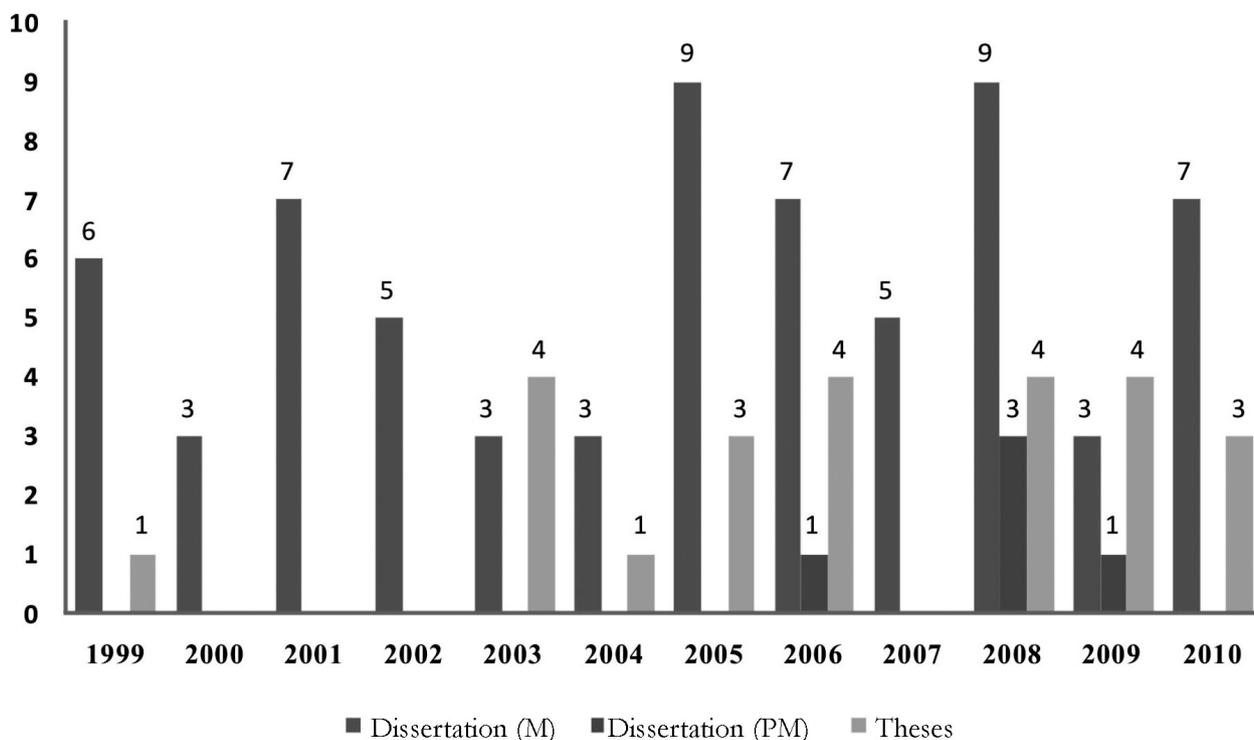


Figure 1. Distribution of PhD theses and dissertations in Nursing Graduate Programs on breastfeeding according to the year. CAPES, 2010

number of dissertations and theses analyzed, an advisor was responsible for the academic advising of (5.2%) dissertations/theses, one for four (4.1%) dissertations/theses, three advisors were responsible for the academic advising of three (3.1%) dissertations/theses, four advisors for two (2.1%) theses/dissertations and other 46 advisors were responsible for the academic advising of only one dissertation/thesis (1.0%) respectively.

Regarding the design of these studies, 61 (63.5%) studies were qualitative, 28 studies (29.2%) were quantitative and in seven studies (7.3%) both methods were used.

When analyzed the theoretical-philosophical/methodological framework used in qualitative studies, it was found that in 42 studies (61.7%) the authors described the theoretical and philosophical framework. But the methodological framework was described in only 28 of them (41.1%).

The theoretical- philosophical framework of highest prevalence was Phenomenology, described in nine studies (21.4%) followed by the Social Representation Theory described in six studies (14.3%). Regarding the methodological framework, Content Analysis showed a higher prevalence being adopted in eleven studies (39.3%), followed by the Collective Subject Discourse used in eight studies (28.6%).

According to the different outcomes found on the topic breastfeeding/lactation, the abstracts were categorized. There were, then, 15 categories described in the following table (Table 1).

The categories “Support and Promotion of BF”, “Perception of BF by the mother,” “Prematurity/Underweight and BF” and “Family and BF”, computed 51 studies (53.1%).

In the theses, the “Support and Promotion of BF” was the most studied category by researchers, represent-

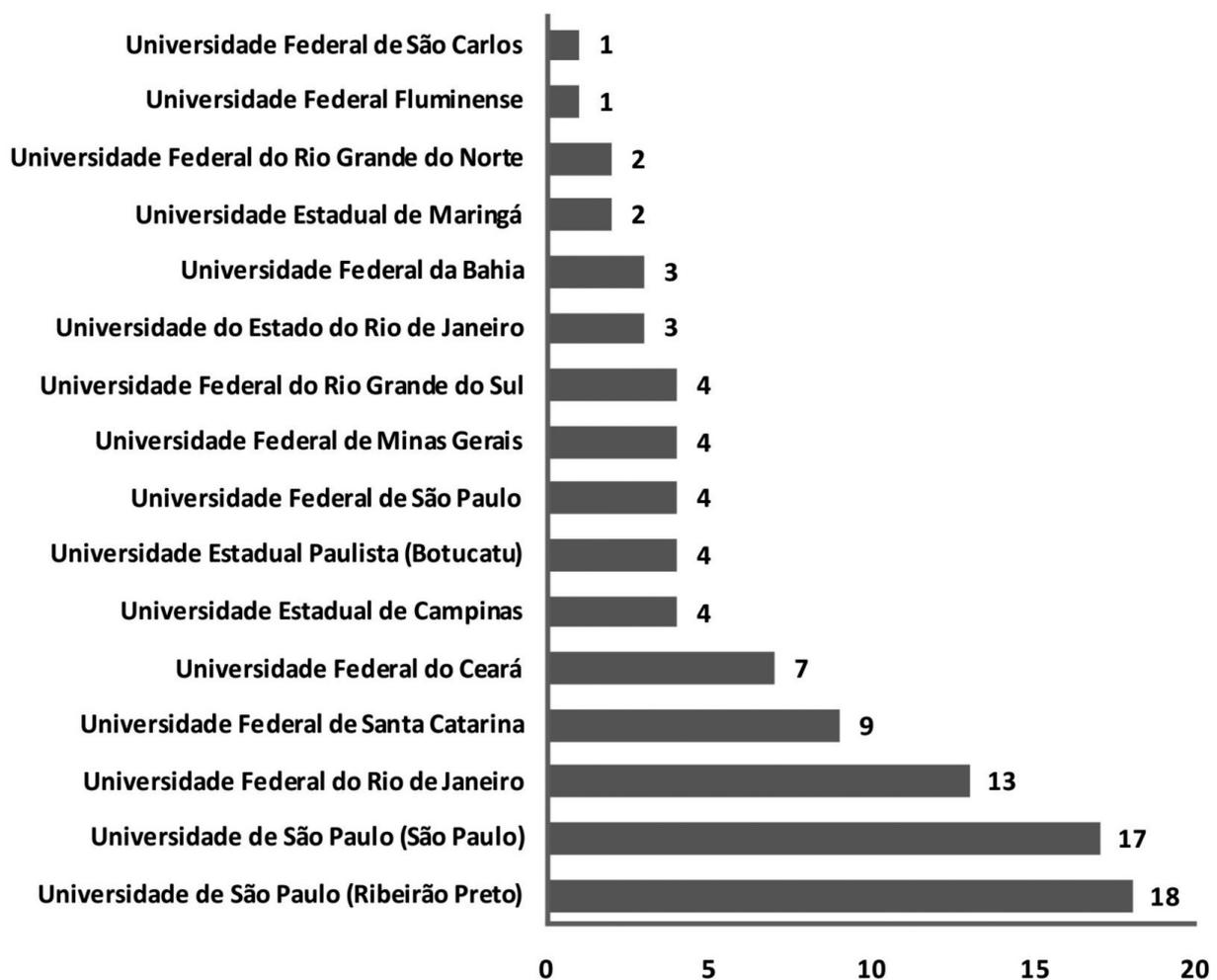


Figure 2. Distribution of theses and dissertations in Nursing Graduate Programs on breastfeeding according to the institutions. CAPES, 2010

Table 1. Distribution of theses and dissertations of Nursing Graduate Programs on breastfeeding according to the categories. Florianopolis, 2010

Categories	PhD				Master's				Professional Master's				Total
	Quali	Quantit	Qi/Qt	Total	Quali	Quantit	Qi/Qt	Total	Quali	Quantit	Qi/Qt	Total	
Support and Promotion of BF	3	0	3	6	7	2	0	9	0	1	0	1	16
Perception of BF by the mother	1	1	0	2	10	2	0	12	1	0	0	1	15
Prematurity/Underweight and BF	2	0	0	2	4	3	2	9	0	0	0	0	11
Family and BF	0	0	0	0	9	0	0	9	0	0	0	0	9
Teaching/education of BF	2	0	0	2	3	1	0	4	0	2	0	2	8
Prevalence of BF	0	0	0	0	0	7	0	7	0	1	0	1	8
HIV e BF	2	0	1	3	2	0	1	3	0	0	0	0	6
Physiological problems of lactation	0	0	0	0	3	3	0	6	0	0	0	0	6
Evaluation of BF	0	1	0	1	3	1	0	4	0	0	0	0	5
Weaning	1	1	0	2	2	0	0	2	0	0	0	0	4
Adolescence and breastfeeding	2	0	0	2	1	0	0	1	0	0	0	0	3
Benefits for the baby	0	1	0	1	0	1	0	1	0	0	0	0	2
Rights and BF	1	0	0	1	0	0	0	0	0	0	0	0	1
Malformation and BF	1	0	0	1	0	0	0	0	0	0	0	0	1
Sexuality and BF	1	0	0	1	0	0	0	0	0	0	0	0	1
Total	16	4	4	24	44	20	3	67	1	4	0	5	96
%	16,7	4,2	4,2	25,0	45,8	20,8	3,1	69,8	1,0	4,2	0,0	5,2	100,0

ing 25% of the studies. In academic Master's dissertations the category most studied was "Perception of BF by the mother" representing 17.9% of the studies. In the professional Master's dissertation the most representative studies were in the category "Teaching/Education of BF" representing 40% of the studies.

When analyzed again the design of the studies, it was verified that the qualitative studies were more developed in Academic Master's and in PhDs representing 60 studies (65.9%) while the quantitative studies had greater representation in the Professional Master's, representing four studies (80%). The categories most represented in the qualitative studies were in PhD programs, "Support and Promotion of BF" and the Academic Master's, "Perception of BF by the mother." The category most studied quantitatively in the Professional Master's was "Teaching/Education of BF."

DISCUSSION

A variety of studies found in the initial sample occurred due to the fact breastfeeding and lactation are quite broad words and cover a wide range of studies, including studies which would misguide the proposal, which was to select a sample that the central topic was the study of breastfeeding/lactation in health area. In many studies, breastfeeding/lactation appeared solely as a citation, not being the focus of the study. In several others, the term breastfeeding/lactation was referring to animal research.

Research on breastfeeding area in Nursing Graduate Programs proved to be very significant, since the total number of studies initially found with specificity for this theme (476), the Nursing ones accounted for 20% of the total, reflecting the relevance assessed to the topic in the production of nursing knowledge.

By identifying more dissertations than theses using the topic breastfeeding, this finding relates to the production in academic Nursing which has 70% in the form of dissertations and 30% in the form of theses, given that the number of Masters courses are 35, which is higher than the PhD total of 20⁽⁶⁾.

In South and Southeast regions of the country it is possible to find a higher concentration of Universities with Nursing Graduate Programs totaling 34 (68%) universities with *stricto sensu* Graduate Programs in Academic Master's, Professional Master's and PhD confirming the importance of the productions in the institutions of these regions. The North, Northeast and Midwest regions added 16 (32%) Nursing Graduate Programs.

It was in the Southeast and South where the first *stricto sensu* courses in Nursing Graduate Programs were implanted in Brazil. The first was the Master's degree course at the Federal University of Rio de Janeiro in 1972, followed by the University of Sao Paulo in 1973⁽⁷⁾ and the Federal University of Santa Catarina in 1976⁽⁸⁾.

According to Erdmann and Fernandes (2009)⁽⁹⁾, Nursing Graduate Programs in Brazil have been consolidating themselves through the human resources formation in research, granting masters in nursing science from the beginning of the 70s, and Phds in the early 80s, becoming stronger in their specificities and diversities. The knowledge construction is the result of competent human resources in the investigative process to a more skilled care. Additionally, the development of the research is an important strategy to make Nursing as a stronger science and profession in its generalities and specialties⁽¹⁰⁾.

When comparing the number of dissertations/theses advised by 12 researchers 50 (52%) with the number of dissertations/theses advised by 46 researchers, 46 (48%), it was verified that this finding confirms that Lotka's law which considers that some researchers, supposedly the most prestigious ones in a particular area of knowledge, produce several researches, while supposedly less prestigious ones, produce very little^(4,11).

The non-description of all frameworks in the studies may have occurred because only abstracts, which were available in the CAPES Database, were analyzed.

The results of the categorization of the topics involving breastfeeding/lactation revealed as a whole, the range of possibilities for nurses' actions which play a role in pregnancy and motherhood.

Studies of theses and dissertations have shown great concern to support and promote breastfeeding, as well as to understand the perceptions of the mother regarding breastfeeding, and to discuss the problems of premature nutrition, low birth weight of newborns and family concerns in the process of breastfeeding.

These studies come to meet the commitments of Brazil with the Millennium Development Goals following the initiatives of the Ministry of Health to protect, promote and support breastfeeding in the country⁽¹²⁾. The act of breastfeeding is not centered only on the mother, this process expands to other interactions in family and social spheres, additionally the nursing professional has to understand this process and increasingly produce more studies that plan and resize a nursing care to raise breastfeeding rates in the country.

CONCLUSION

This study provides an opportunity to know some characteristics of dissertations and theses developed on the topic of breastfeeding by the *stricto sensu* Nursing Graduate Programs in Brazil from 1999 to 2010.

The results showed that most of the studies adopt a qualitative methodology and they also used theoretical and philosophical comprehensive approaches. This approach allows us to understand the phenomena, according to the perspective of those participating in the study.

The interest in the breastfeeding area has been increasing in recent years, a phenomenon evidenced in the studied period, although in the first 4 years of this period, there was only one PhD thesis. From 2003 to 2010, it was identified a growing number of both, theses and dissertations produced.

Emphasis is given to the Nursing Graduate Programs, which represents 20% of all theses and dissertations with the topic of breastfeeding during the study period. These Nursing Graduate Programs with higher number of productions are concentrated in South and Southeast regions of Brazil and when comparing the numbers of academic advising, it appears that ten researchers advised more than half of the researches.

In conclusion, this study emphasizes the relevance to point out paths which are in development in scientific production in nursing concerning breastfeeding in *stricto sensu* Graduate Programs in Brazil. Overcoming dogmas and ideologies of science-based positions for breastfeeding is a priority when proposing improvements in nursing care to promote breastfeeding.

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