



## Nursing leadership teaching: a bibliometrics study\*

*Ensino da liderança em enfermagem: um estudo bibliométrico*

*Enseñanza del liderazgo en enfermería: un estudio bibliométrico*

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### ABSTRACT

**Objectives:** To quantify and describe the characteristics of scientific production on the teaching of nursing leadership concerning the type of publication, year, vehicle, country, language and theme. **Methods:** A descriptive and bibliometric study conducted in databases of the BVS, using descriptors: *teaching, leadership and nursing*. **Results:** Over 37 years, we identified 73 publications, mostly found in the MEDLINE database and consisting of original articles published in North American journals, written in English, and dealing with teaching strategies. **Conclusions:** The scientific production was sparse but constant during the study period, authored predominantly by North Americans, and published in scientific journals in the United States, which indicated the necessity to develop research on the subject in Brazil.

**Keywords:** Education, higher; Leadership; Nursing; Education, nursing; Bibliometric indicators

### RESUMO

**Objetivos:** Quantificar e descrever as características da produção científica sobre o ensino da liderança em enfermagem quanto ao tipo de publicação, ano, veículo, país, idioma e temática abordada. **Métodos:** Estudo descritivo, do tipo bibliométrico, realizado em bases de dados da BVS, com os descritores *ensino, liderança e enfermagem*. **Resultados:** Em 37 anos, foram identificadas 73 publicações, a maioria encontrada na base de dados MEDLINE e constituída de artigos originais publicados em periódicos norte-americanos, escritos em inglês e versando sobre estratégias de ensino. **Conclusões:** A produção científica foi escassa mas constante no período estudado, de autoria predominantemente americana e publicada em periódicos científicos nos Estados Unidos, o que indicou a necessidade de desenvolver pesquisas sobre o assunto no Brasil.

**Descritores:** Ensino superior; Liderança; Enfermagem; Educação em enfermagem; Indicadores bibliométricos

### RESUMEN

**Objetivos:** Cuantificar y describir las características de la producción científica sobre la enseñanza del liderazgo en enfermería en cuanto al tipo de publicación, año, vehículo, país, idioma y temática abordada. **Métodos:** Estudio descriptivo, de tipo bibliométrico, realizado en bases de datos de la BVS, con los descriptores *enseñanza, liderazgo y enfermería*. **Resultados:** En 37 años, fueron identificadas 73 publicaciones, la mayoría encontrada en la base de datos MEDLINE y constituída de artículos originales publicados en periódicos norteamericanos, escritos en inglés y versando sobre estrategias de enseñanzas. **Conclusiones:** La producción científica fue escasa pero constante en el período estudiado, de autoria predominantemente americana y publicada en periódicos científicos en los Estados Unidos, lo que indicó la necesidad de desarrollar investigaciones sobre el asunto en el Brasil.

**Descriptorios:** Educación superior; Liderazgo; Enfermería; Educación en enfermería; Indicadores bibliométricos

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## INTRODUCTION

The competent and responsible execution of the work processes of nursing requires skills that transcend the technical and scientific dimensions, and cover many attitudinal aspects<sup>(1)</sup>. Basic emotional aptitudes such as flexibility to handle disagreements existing between the members of a team and to harmonize the work environment, sensitivity to recognize and manage talent, and determination to lead the group in the direction of the expected outcomes create a professional differential valued by the market, and that can promote drastic changes and benefits to organizations<sup>(2)</sup>. These competencies are acquired in professional training and subsequently develop from this base, which is why we must deepen the knowledge about the teaching of nursing leadership.

To meet the demand of the increasingly competitive labor market and the expectations of customer service excellence, the nurse should be able to attend, manage, teach, research and participate politically, using leadership as an indispensable tool for the execution of all these processes<sup>(3-5)</sup>.

Innumerable definitions of leadership have emerged, since the early twentieth century, with the disclosure of the first studies about this theme. These studies addressed broad concepts, such as characteristics or behaviors of the leader<sup>(6)</sup>. Current research already exists about leadership as a process of intentional influence of the leader over his followers, inserted in a particular organizational culture, and with a view to achieving a common objective<sup>(6-9)</sup>.

Considering the excellence in care delivery as one of the principle objectives of the nurse and his team, and the systematization of nursing care as the path for achieving it, leadership is fundamental so that this professional can be not only a supervisor, but a facilitator of this process, capable of planning care together with the team, family and patient, identifying care priorities, anticipating complications, leading the group and delegating with responsibility<sup>(10)</sup>. These skills are partially developed during the undergraduate course in nursing, and the form in which they are taught and learned influences their improvement, throughout the professional career.

The effective leader knows the characteristics of her followers, identifies and develops talent, creates linkages, strengthens the team, envisions and promotes changes and, independent of having the leadership position, makes a difference in organizations where she operates<sup>(7)</sup>. The nurse who has this profile achieves good results, even under adverse conditions, because she constructs a self-sufficient team that is committed to its work. This construction has teaching as its cornerstone.

The teaching-learning process consists of a dialogue that is established between the professor and the student, through which both become subjects of this

process and grow together, in the continuing transformation of knowledge<sup>(11)</sup>. The word *teach* comes from the Latin *signaire*, which signifies within and / or the record of a person's soul<sup>(12)</sup>, and the act of teaching can happen around all of the relationships experienced by humans, whether they are established in institutionalized environments or not<sup>(13)</sup>. Leaders teach and are taught by their followers, which should be based on sound scientific knowledge, the cognitive abilities of those involved, and monitoring the progress of learners<sup>(14)</sup>.

Learning, in turn, is a whole process in which all of the person (cognition, emotion and mind) is mobilized to significantly modify the structure of his intelligence<sup>(15)</sup>. Leadership is necessary so that the nurse can lead the group, whether formed by employees, students, patients or relatives, directed toward learning. Learning to lead, therefore, by means of significant situations of teaching – learning, is part of the guarantee of success along this trajectory.

Both learning and professional development can be consequences of producing and consuming scientific research. Defined as the utilization of methods for investigation and response to questions, resolving problems and refining and expanding a body of knowledge about a specific subject<sup>(16)</sup>, research should produce generalizable, relevant knowledge for nursing, and the role of leader is in applying these discoveries in professional practice and using this technique as a source for the development of further studies. Similarly, the professors who teach nurses to lead need to know the state of the art in this field, to describe their practice.

Leadership also promotes political participation and the consequent strengthening of professional identity. Participating politically, nurses can gain a better position for the execution of other work processes, and can obtain power and social recognition<sup>(3)</sup>.

To know how to lead, therefore, is essential for the effectiveness of nursing work, a fact that awakens the necessity to reflect on the teaching of nursing leadership, making it fitting to inquire how the level of production of scientific knowledge is presented on this theme.

## OBJECTIVES

To quantify and describe the characteristics of scientific production on the teaching of nursing leadership, in relation to the type of publication, year, vehicle of publication, country, language and theme.

## METHOD

This was a descriptive study, of bibliometric type, which constitutes an accessible method for the quantita-

tive analysis of scientific production about a particular subject<sup>(17)</sup>. This method also permits the retrieval of information, subsidizing the qualitative evaluation of scientific activity, which is fundamental for the researcher to monitor what is produced in her area of study<sup>(17-18)</sup>.

Data collection was conducted in March 2010, through consultation of the Bases de Dados de Enfermagem (Database of Nursing, BDENF), Excerpta Medica Database (EMBASE), Education Resources Information Center (ERIC), Literatura Latino-Americana e do Caribe em Ciências da Saúde (Latin American and Caribbean Health Sciences Literature, LILACS), National Library of Medicine (MEDLINE), Periódicos de Enfermagem da Biblioteca Wanda de Aguiar Horta (Journals of Nursing of the Wanda de Aguiar Horta Library, PERIENF), and the digital libraries of theses and dissertations at the University of São Paulo (USP) in the portal SIBi USP and the Federal University of Rio de Janeiro (UFRJ) in the Minerva portal. These databases and libraries were chosen because they have large numbers of publications in the area of health, except for the ERIC database, which has more publications concentrated in the field of education.

The terms utilized for the search, selected from the Descritores em Ciências da Saúde (DeCS) (Descriptors of Health Sciences, DeCS), of LILACS and the Medical Subject Heading Terms (MeSH) of MEDLINE, were *ensino, liderança e enfermagem* (in Portuguese) as well as their counterparts in the English language, *teaching, leadership and nursing*. These same terms were used successfully in the other databases mentioned.

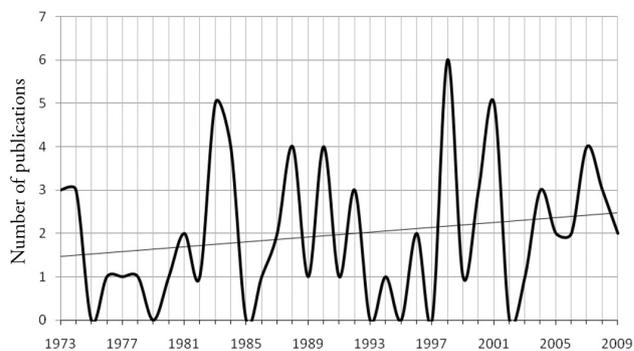
There were 194 indications encountered and, after excluding repetitions, utilizing the MEDLINE database as a reference, and analysis of records (title, abstract and key words, or, only title and descriptors), 73 publications were considered pertinent to the theme of the study. Then, the Microsoft Office Excel® program was used for the construction of an instrument for data recording, in which the variables were distributed, and then the simple and relative frequencies were calculated.

## RESULTS

The 73 publications analyzed corresponded to a period of 37 years (1973-2009), as shown in Figure 1.

The observed trajectory was an ascending rhythm of publications, since the beginning of the period studied, with variations from year to year that drew sharp peaks of publication in the first five years of the 1980s and then again in the 1990s.

In 1998 the greatest number of publications occurred – six and, in seven of the years surveyed, nonconsecutive, the subject was absent from the publications. The average number of titles per year ranged between one and two, with no indications captured before 1973 or after 2009.



**Figure 1.** Number of publications about teaching nursing leadership, between January 1973 and December 2009

Forty-five indications (61.6%) were encountered in the MEDLINE database, 17 (23.3%) in the ERIC database, eight (11%) in EMBASE, two (2.7%) in PERIENF and one (1.4%) in the Theses Database of USP.

The PERIENF database had 1944 as its initial date, but no indications were encountered during the decades of the 1940s until 1960.

EMBASE, despite an indicated concentration of texts about education in the area of health, did not provide many titles, and these had already been found in MEDLINE. The ERIC database, specifically about education but not limited to health, contributed more titles.

It is common to find repeated indications, as the journals are usually indexed in more than one database, but this called our attention to the fact that the LILACS database did not present indications other than those that had been obtained from the MEDLINE database.

The theses bank of USP pointed to one new indication, while the Minerva database had none to offer.

Regarding the type of study, there were: 53 (72.6%) original articles, six (8.1%) anecdotal evidence, four (5.5%) review articles, three (4.1%) news reports, two (2.7%) books, one (1.4%) guideline, and one (1.4%) reflection, as shown in Table 1.

**Table 1.** Types of publications about teaching nursing leadership, between 1973 – 2009.

Publications	Nº	%
Original articles	53	72.6
Anecdotal evidence	6	8.1
Review articles	4	5.5
News reports	3	4.1
Books	2	2.7
Discourse	1	1.4
Doctoral dissertation	1	1.4
Editorial	1	1.4
Guideline	1	1.4
Reflection	1	1.4
Total	73	100.0

Most search results consist of articles, which explain the large amount of original research articles.

Only four review articles were encountered in the review period, the last dated 2007, in a North American periodical, with extension restricted by the database, which points to the need to conduct new and comprehensive study on the subject.

As to the vehicle of publication, 65 titles (89.0%) were found in scientific journals, nine of these (12.3%) in the *Journal of Nursing Education*, seven (9.6%) in the *Nurse Educator* journal, and six (8.2%) in the British journal, *Nursing Outlook*.

The doctoral dissertation and other three articles encountered (5.5%) were written in Portuguese and were from Brazil, and 62 publications (84.9%) were written in English, with 52 of them (71.2%) originating from North America (Table 2).

**Table 2.** Language of publications about teaching nursing leadership, from 1973-2009.

Language	N <sup>a</sup>	%
English	62	84.9
Portuguese	4	5.5
Japanese	4	5.5
German	2	2.7
Italian	1	1.4
Total	73	100.0

Of the nine countries of origin of the publications, five used the English language, to which access is considered universal. The other papers presented, at a minimum, an English abstract, which demonstrates the need for mastery of that language for the study of the subject.

Curiously there are many publications in Japanese journals like our Brazilian journals, although the latter was among the first 13 in the ranking of number of citations in nursing within SCI <sup>(19)</sup>, in the period between 1996-2008, and the former was in 11<sup>th</sup> place. Italy, which was in 10<sup>th</sup> and Germany, in 7<sup>th</sup>, contributed fewer titles. The United States of America, the United Kingdom, Australia and Canada led the ranking in the top four positions, during the same time interval, and were represented in the group of publications (Table 3).

Regarding the theme, 33 studies (45.2%) addressed strategies of teaching leadership, 17 (23.3%) reported programs of training and development, and six (6.2%) discussed questions relating to the curriculum of nursing courses. The richness in the variety of approaches to the theme can be observed in the data in Table 4.

**Table 3.** Countries of publication, with respect to teaching nursing leadership, from 1973-2009.

Countries	N <sup>a</sup>	%
United States of America	52	71.2
Brazil	4	5.5
England	4	5.5
Japan	4	5.5
Canada	3	4.1
Germany	2	2.7
Australia	2	2.7
Scotland	1	1.4
Italy	1	1.4
Total	73	100.0

**Table 4.** Thematic approach about teaching nursing leadership, from 1973-2009.

Theme	N <sup>a</sup>	%
Teaching strategies	33	45.2
Training and development programs	17	23.3
Curriculum of nursing courses	6	8.2
Reflections about teaching leadership	5	6.9
Definitions and applicability of teaching of leadership	4	5.5
Fields for the practical teaching of leadership	2	2.7
Effectiveness of health organizations	2	2.7
Leadership events	2	2.7
History of nursing education	1	1.4
Participation in professional associations	1	1.4
Total	73	100.0

Primarily operational and conceptual aspects, followed by historical and political ones, occurred. The latter were of a minimal amount and the conceptual aspects were linked to the planning of education, in a broad manner of comprehension. Training programs were very common themes, but teaching strategies accounted for nearly twice as many citations.

The data from the same table indicate that the linkage with field work was the object of attention of four studies: two directed at the health care organization and two, at the learning environment in a real work situation.

A major part of the studies addressed strategies for teaching leadership and programs of training and professional development. The use of games, simulations, films, teaching contracts and focus groups, in addition to the actions of experienced individuals, as drivers of the teaching-learning process, were the principle strategies discussed. The studies about training programs and leadership development were directed both to the teaching of nurses and the student of nursing.

## DISCUSSION

During the study period - 37 years, the number of publications remained scarce, but constant; that is, there was a recurring interest of researchers about the subject. Significant increase occurred in the years 1983, 1998 and 2001, which points to the necessity of conducting new studies linking the professional context to the quantity and content of the publications found in those years.

The peak of publications in 1998 may be a reflection of the creation, in 1995, of the Leadership Program for Change (LPC), designed by the International Council of Nurses (ICN), based in Geneva. The LPC is a leadership development program for nurses and other health professionals by means of practical experiences. Since its inception, the program was available in more than 50 countries and many of these also began to implement the Train the Trainers Program, launched in 2002, in which an Authorization Agreement with a provider organization authorized in the use of methods and materials of the ICN to certify teachers for the implementation of the LPC<sup>(20)</sup>.

The increasing number of publications since 2003 can be related to the Nursing Reinvestment Act, signed in 2002, by President Bush, to resolve the nursing shortage in the United States of America. This initiative was intended to stimulate people to enter and remain in the nursing career, thus reducing the shortage of professionals. The law established the granting of educational scholarships, investments in nursing education and a series of benefits for retention of professionals and professors<sup>(21)</sup>. Similarly, Project 2000, a British initiative to promote migration of "enrolled nurse" to the level of "registered nurses"<sup>(22)</sup> can be connected with these findings.

Ninety-five percent of the publications were found in the North American databases (MEDLINE, ERIC and EMBASE), including two studies by a Brazilian author. On the other hand, the Latin American LILACS and Brazilian BDENF and Minerva did not present titles about the theme, which demonstrates the necessity of developing and publishing research on the teaching of nursing leadership in Brazil and Latin America.

The large number of original articles encountered demonstrated the importance of the theme and the interest of authors to deepen the knowledge about the teaching of leadership.

The facility of spreading and access to information justifies the choice of journals as the main vehicles for publication and encourages the dissemination and application of new knowledge.

The large amount of North American titles is due to the constant investments in the United States of America in research and the interest of many re-

searchers in publishing their work in this country. The scarcity of Brazilian publications on the theme draws attention, and that also goes for England, Japan and other countries with lower production, such as Canada, Germany, Australia, Scotland and Italy. On the contrary, there is range of the theme, whose publications appear dispersed across several continents with the exception of Africa.

The fact that the major part of the studies addressed teaching strategies and programs of leadership training and professional development evidenced the pragmatism of nurses.

The preoccupation of the authors with the employment of methods that favor the construction of knowledge and practical application of that learning demonstrated that the focus of the publications was directed to the implementation of educational activities.

To find studies about training programs and leadership development oriented to both the education of nurses and the nursing student, corroborated the idea that formation of leaders is a essential condition for good performance and, therefore, should be of concern not only to educational bodies, but also to health institutions<sup>(23)</sup>.

## CONCLUSIONS

The subject was investigated in a consistent fashion over the past 37 years, with a predominance of production of original articles (72.6%), whose principal vehicles of publishing were journals, facilitating the propagation of knowledge.

The predominance of North American publications (71.27%) was natural because of the large investment in research characteristic of this nation, contrasted to the scarcity of publications about the teaching of nursing leadership in Brazil, which demonstrates the necessity to develop Brazilian studies with this theme.

The preoccupation of scholars with the creation and evaluation of teaching strategies and programs of training and staff development, as attested by the number of studies about this aspect, strengthens the recognition of education as a basis for competent professional practice.

The present study aimed to contribute to the awakening of the construction of knowledge about the teaching of nursing leadership. It is the first approach that permits appraisal of what the theme represents for nursing. Similar baseline measurement can be undertaken, in this or other fields of knowledge, to identify the potential and the trajectory of production, taking the present study as a model.

This bibliometric study did not include the discussion of the results of studies in order to favor the

presentation of conjectures and hypotheses guiding explanatory discussions or proposals around the theme, except that with which it is undertaken. Its limits are exactly the direction for the quantification of the observed, an option made when defining the type of study.

The results, however, can subsidize the development of new research on the subject, based on what the authors already produced, since a review article of content, for example, produced based on information encountered is in preparation.

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