



Scientific production on workplace bullying and nursing: a bibliometric study*

Produção científica sobre assédio moral e enfermagem: estudo bibliométrico

Producción científica sobre asedio sexual y enfermería: estudio bibliométrico

Pablo Leonid Carneiro Lucena¹, Solange Fátima Geraldo da Costa², Jaqueline Brito Vidal Batista², Carla Mousinho Ferreira Lucena², Gilvânia Smith da Nóbrega Morais³, Brunna Hellen Saraiva Costa⁴

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¹ Hospital Universitário Lauro Wanderley, João Pessoa, PB, Brazil.

² Universidade Federal da Paraíba, João Pessoa, PB, Brazil.

³ Universidade Federal de Campina Grande, Campina Grande, PB, Brazil.

⁴ Faculdade de Enfermagem Nova Esperança, João Pessoa, PB, Brazil.

ABSTRACT

Objective: To verify bibliometric indicators of the scientific production available in online journals that approach workplace bullying and nursing. **Method:** A bibliometric study making use of Bradford's law, Zipf's law, and textual statistics was carried out with publications in Portuguese, English, and Spanish, made available in national and international databases, from 2000 to 2016. **Results:** The sample was made up of 111 publications. The main authors had connections with 91 institutions distributed in 24 countries. The United States, Brazil, and Australia were the countries with the most publications. The populations of the studies were made up of nursing professionals and students, and the hospital environment was the most studied setting. The journals with a higher number of publications have international scientific influence. The terms that presented greater semantic power and high frequency in the abstracts were: bullying; *assédio moral*; and *acoso laboral*. **Conclusion:** Indicators showed that workplace bullying occurs in the nursing work environments of several countries, and the number of publications on this theme has tended to increase. Diversifying methods and study settings is important to contribute to the advancement of knowledge and fight against this violence.

DESCRIPTORS

Nursing; Workplace Violence; Working Conditions; Bibliometrics.

Corresponding author:

Pablo Leonid C. Lucena
Rua Professor Manoel Viana, 54, Castelo Branco
CEP 58050280 – João Pessoa, PB, Brazil
pabloleonid@hotmail.com

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INTRODUCTION

Workplace bullying, in spite of being an old phenomenon in the world of work, has been studied in a systemized way since the 1980s. "Mobbing" was the term chosen to refer to a social interaction in which an individual is almost daily bullied by one or more people for several months, which may lead to psychological and psychosomatic disorders in the victim⁽¹⁾.

Studied in several countries and in different areas of knowledge, this type of violence at work has been referred to by synonyms, according to the language of the publications as: bullying, mobbing, and harassment in English; *acoso laboral/moral* in Spanish; *harcèlement moral* in French; and *assédio moral* in Portuguese. It is worth mentioning that, in addition to these main terms, secondary expressions are used, such as: horizontal violence; lateral violence; vertical violence; nurse hostility; abuse; and disruptive behavior⁽²⁾.

In spite of the need for a careful evaluation for each situation, workplace bullying is, in general, a reflection of the work organization process, with the culture of intolerance as its development field⁽³⁾. The increase in the incidence of workplace bullying is related to informal organizational alliances that support and protect offenders, as well as to the poor use of organizational processes and procedures. However, the increase in workplace bullying among people at the same hierarchic level leads to greater incidences of leaving the profession⁽⁴⁾.

Workers victims of workplace bullying have emotional disorders that may affect quality of life and reduce work performance⁽⁵⁾. Exposure to this violence affects the victim's general health status⁽⁶⁾ and anticipates a subsequent increase in anxiety and symptoms of fatigue⁽⁷⁾.

In Brazil, a study that described the nursing profile in the country showed that approximately 360,000 workers suffered some type of violence (physical/psychological) within a period of one year⁽⁸⁾. From the 2000s, workplace bullying has gone through intense reflections in the areas of psychology, law, administration, and health. However, a lack of studies that follow the development of research on this phenomenon in the nursing area was observed.

Therefore, the purpose of the present study was to describe the characteristics and highlight the trends of scientific production on workplace bullying in the nursing area. It is worth mentioning that a descriptive study leads to a better understanding of the phenomenon⁽⁹⁾ and fosters new studies.

As a study guideline, the following guiding question emerged: "Which bibliometric indicators of scientific production available in online journals approach workplace bullying and nursing?" Thus, this was the objective of the present study, to describe bibliometric indicators of scientific production available in online journals that approach workplace bullying and nursing.

METHOD

This is a bibliometric study, whose potential to follow scientific productivity standards over time helps to respond important questions about the progress of science⁽¹⁰⁾. The bibliometric analysis method, associated with other approaches, allows for viewing the content of scientific articles and understanding the dynamics and trends of the production of these studies⁽¹¹⁾.

Searches in the LILACS, MEDLINE, and BDNF databases, in addition to the Cochrane and SCIELO online libraries, were carried out for the development of the present study. The terms *assédio moral*, *acoso moral*, harassment, bullying, and mobbing were used. These terms were associated with the Boolean operator AND, and the words *enfermagem*, *enfermeria*, nursing, nurse, and nurses.

The bibliographic survey occurred in January 2017, and 3,113 scientific productions were identified. The following inclusion criteria were adopted for sample selection: publications available in scientific journals from 2000 to 2016; full text in English, Portuguese, or Spanish; and search terms present in titles or abstracts. As exclusion criterion, publications in the following modalities were excluded: theses; dissertations; and monographs.

Based on these parameters, 331 publications were found. After close reading of all abstracts, scientific productions that were not directly related to the objective proposed for the present study were excluded. In addition, repeated articles were excluded. As a result, the sample of the study was made up of 111 articles.

To facilitate organization and analysis of data, a table containing the following bibliometric indicators was prepared in Excel software: year of publication; languages; number of authors; type of publication; environment studied; country; most productive institutions; and education area of the main authors. The data collected from the above-mentioned indicators were grouped and analyzed through descriptive statistics (frequency and percentage).

Bradford's law was applied to evaluate the dispersion of scientific journals in relation to their productivity, because it is a model traditionally used in bibliometric studies of medical literature⁽¹²⁾. This law allows for separation of the number of journals found into groups (zones) considering individual productivity. The core is made up of journals with greater productivity on the phenomenon studied, and the zones are made up of journals that publish with lesser frequency.

It is worth mentioning that Bradford's law was used through data tabulation and, later, the analytical formula $mB = (1.781 \times Ym)^{1/P}$ was used to check the result, where mB is a constant (Bradford's multiplier), Ym is the maximum productivity, and P is equivalent to the number (n) of zones⁽¹³⁾.

In addition, analysis of the abstracts' contents was carried out through the application of Zipf's law (frequency of words), and the IRaMuteQ 0.7 alpha 2 software was used as an auxiliary instrument.

The check of occurrences of words in the present study was carried out with the purpose of observing which term

tends to be consolidated in the description of workplace bullying in Brazil, the United States, and Spain, which are the countries with a greater number of publications in their respective languages. Zipf's laws, classic in bibliometric studies, provide analytical models to estimate numerical characteristics of words in a specific text⁽¹⁴⁾. The first law is applied to high-frequency words. The second law (Zipf-Booth) is used in low-frequency words. Then there is Goffman's Transition Point T. This last was chosen because it allows for estimating a transition zone between most- and less-frequent words where high-semantic content words are found – that is, words that may be used in indexing⁽¹⁵⁾.

The IRaMuteQ software was used to carry out the textual analysis of the abstracts. This instrument carries out classic lexical analyses, identifies the number of words, mean frequency, and number of hapax (words with a frequency of 1);

searches vocabulary; and reduces words based on their roots (lemmatization)⁽¹⁶⁾. One study recognized this software as an important tool, because it allows a careful look at the material collected and, with the basic lexicography resource, allows for knowing the most often used vocabulary by the participants of the study⁽¹⁷⁾.

RESULTS

CHRONOLOGICAL DISTRIBUTION OF ARTICLES

Figure 1 presents the number of publications per year. Peaks of productivity in 2009, 2012, and 2016 were observed. However, there was a decline in 2011. Regarding the reason for the decrease in scientific productions in the year mentioned, no reference of evidence was found in the literature researched.

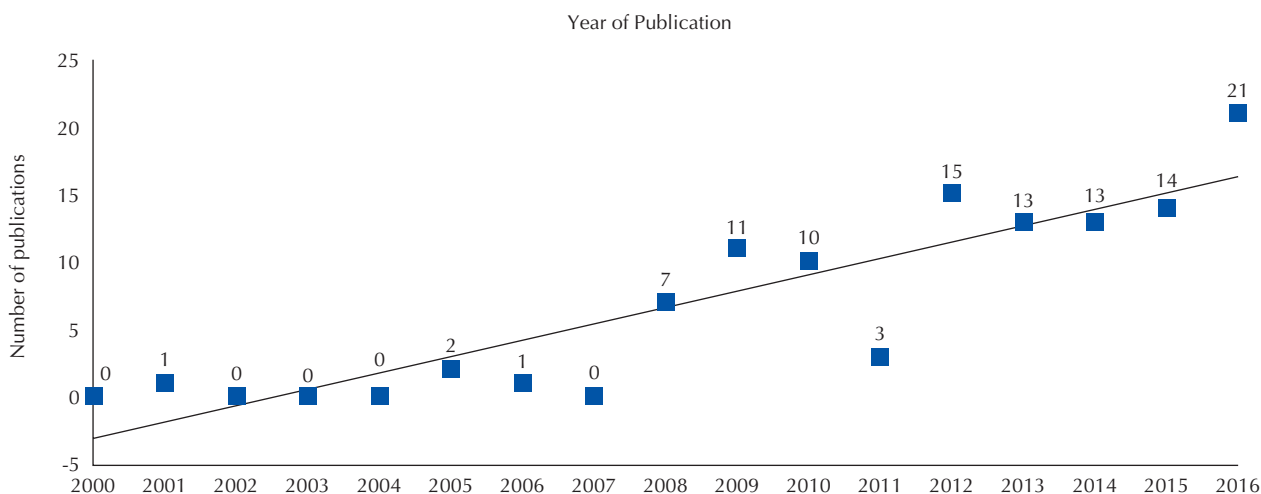


Figure 1 – Distribution of articles according to year of publication.

From 2000 to 2007, a period equivalent to 47% of the total years studied, it was observed that only four (3.6%) studies with results related to nursing were published.

LANGUAGES AVAILABLE FOR FULL READING

The prevalent language was English, exclusively present in 91 publications (81.9%), followed by 11 articles (10%) available only in Portuguese, and five articles (4.5%) in Spanish.

With regard to studies available for reading in two languages, one publication was available simultaneously in English and Portuguese (0.9%), and another in English and Spanish (0.9%). Two (1.8%) articles in the sample were published in the three languages included in the study.

NUMBER OF AUTHORS PER ARTICLE

Regarding the number of authors per article, individual authorship was present in 20 (18%) publications. The proportion of two authors per article obtained the highest rate, which consisted of 31 studies (28%). This was followed by studies with three (n=22), four (n=26), and five (n=3) authors, which represented 19.8%, 23.4%, and 2.7% of the total publications, respectively. Seven articles (6.3%) presented six authors, one article (0.9%) presented seven authors, and one article (0.9%) presented 14 authors.

TYPE OF PUBLICATION AND POPULATION STUDIED

Table 1 presents data related to the type of publication. The original articles stood out for the high number of publications, a fact that motivated research regarding information on the population included in the studies, as well as study settings.

Tabela 1 – Types of publication and population studied in original articles.

Variables	Number of articles	%
Type of article		
Original	76	68.5%
Review	26	23.4%
Reflection	6	5.4%
Editorial	3	2.7%
Público participante dos artigos originais		
Nursing professionals	(present in) 66 articles	86.8%**
Nursing students	(present in) 12 articles	15.8%**
Physicians*	(present in) 4 articles	5.3%**

*All studies that included physicians also included nursing professionals.

** Calculated based on 76 original articles.

When verifying the methodological design of the original studies, 78% (n=59) of the studies were found to be quantitative, with three (4%) cohort studies (prospective longitudinal), and 56 (74%) descriptive cross-sectional studies. Qualitative studies corresponded to 22% (n=17).

The *nursing professional* category was present in 86.8% of the studies. This category included college-level and high school-level professionals. This categorization was adopted due to the diversity of terms used by the countries where the publications were written to enumerate the members of nursing teams and their respective education levels.

Ten publications included *undergraduate nursing students* and two other publications associated these students with *nursing professionals*, totaling 15.8%. Physicians were mentioned in 5.3% of the publications, and these studies were associated with nursing professionals.

Among the results of the studies published throughout the period researched (2000-2016), frequent mention of the *vertical-descendant* type of violence – a modality in which the victim is bullied by a hierarchic superior – was observed. With regard to the studies carried out with students, reference to bullying by nursing supervisors during traineeship stood out. Another modality often mentioned was bullying by workers with the same hierarchic position, categorized as *horizontal bullying*.

Regarding the place of occurrence, the hospital environment was mentioned in 87% of the original articles. Bullying in environments such as educational institutions, clinics, primary health care, and ambulances occurred in small proportions, in addition to other settings with names that varied according to the country of the study. This shows that most studies presented an association between the phenomenon of *workplace bullying* and the *hospital environment*.

COUNTRY, MOST PRODUCTIVE INSTITUTIONS, AND AREA OF STUDY OF THE MAIN AUTHORS

Table 2 presents data related to the first authors identified from the publications' list of authors in numerical order.

Connections with 91 institutions distributed in 24 countries were observed. Nursing education stood out; however, 25 publications were written by authors from other areas of study.

Table 2 – Results related to country, affiliation, and area of study of the main authors.

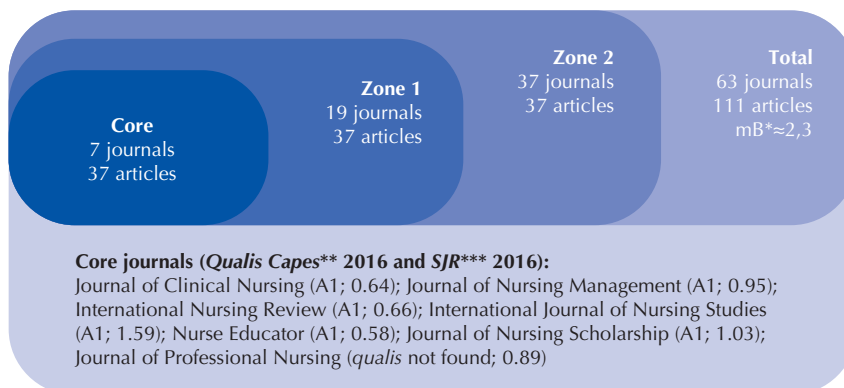
Variables	Number of articles	%
Country of the main author		
United States	36	32.4%
Brazil	14	12.6%
Australia	11	10%
Canada	8	7.2%
Spain	7	6.3%
United Kingdom	5	4.5%
Turkey	4	3.6%
South Korea, Taiwan, and Italy	3*	2.7%*
Chile, Greece, and Japan	2*	1.8%*
Egypt, Portugal, China, Barbados, Singapore, Iran, Denmark, Istanbul, Norway, Turkey, and Lismore	1*	0.9%*
Institutions with three or more articles		
University of Cincinnati (USA)	4	3.6%
Universidade Federal da Paraíba (Brazil)	4	3.6%
Southern Cross University (Australia)	4	3.6%
Universidade Estadual de Maringá (Brazil)	3	2.7%
University of Massachusetts, Lowell (USA)	3	2.7%
Note: Seven institutions, each with two articles	14	12.6%
Note: 79 institutions, each with one article	79	71.2%
ÁreT Area of study (main author)		
Nursing	86	77.5%
Psychology	13	11.7%
Medicine	6	5.4%
Business administration	4	3.6%
Physiotherapy	1	0.9%
Computer science	1	0.9%

*value per each country

DISPERSION OF JOURNALS IN PRODUCTIVITY ZONES

The number of publications per Bradford's zone was 37 articles. This law, in its classic form, instructs that each zone must contain one-third of the total publications (111) found. Bradford's multiplier (*mB*) ranged in an acceptable way among zones, and the result of the analytical form calculation was approximately $mB \approx 2.3$ (analytical). The number of articles in all zones remained the same (37). However, the number of journals increased from one zone to the other; that is, whereas zone 2 presented 37 journals that published only one article, *Bradford's core* presented the same number of articles (37) published by seven journals.

Figure 2 represents the numerical proportion of dispersion of articles regarding the theme studied in relation to the journals that published them, according to the results of the original tabulation of Bradford's zones. At the bottom of Figure 2, the names of the journals that comprised the *core* were highlighted, associating them with an exclusively Brazilian classification (*Qualis*) and another international (*SJR*), because they proportionally published the greatest number of articles on the theme.



Legend: *mB (Bradford's multiplier); **Qualis: Brazilian system of scientific production classification of graduation programs; ***SCImago Journal Rank (SJR indicator) is a measure of scientific influence of academic journals.

Figure 2 – Dispersion of journals and articles according to Bradford's law.

MOST FREQUENT WORDS IN ABSTRACTS OF AUTHORS FROM THE UNITED STATES, BRAZIL, AND SPAIN

Understanding that the abstract is the structure responsible for compiling the most relevant information from the full text, analyses of abstracts were carried out based on Zipf's law, which is classic in bibliometrics. According to this law, when observing a decreasing organized list with all words (forms) present in a text, it is possible to notice a correlation between

the frequency of a term and its position on the list, something that would describe certain constancy in the selection and use of the words in the text by its respective author.

Of the total content of the list of terms developed from Zipf's law, high-semantic content words were extracted, as presented in Chart 1. Among them, the terms used for the description of the phenomenon studied that most stood out for their high frequency were: *bully(ing)*, in English; *assédio (moral)*, in Portuguese; and *acoso (laboral)*, in Spanish.

Chart 1 – Frequency of high-semantic content words in abstracts.

FREQUENCY OF WORDS IN ABSTRACTS – ZIPF'S LAW								
Abstracts in English Authors from the United States (n=34)			Abstracts in Portuguese Authors from Brazil (n=14)			Abstracts in Spanish Authors from Spain (n=4)		
Word	F	Rank*	Word	f	Rank*	Word	f	Rank*
Nurse	180	4 ^a	Assédio	46	6 ^a	Enfermería	12	7 ^a
Bully	172	5 ^a	Moral	45	7 ^a	Laboral	11	8 ^a
Workplace	60	9 ^a	Enfermagem	26	10 ^a	Personal	9	3 ^a
Behavior	46	14 ^a	Violência	25	11 ^a	Riesgo	9	10 ^a
Violence	43	16 ^a	Saúde	21	15 ^a	Acoso	8	11 ^a

Legend: f – frequency that the word is repeated in abstracts analyzed by language.

Rank* – Position that the word holds, considering grammatical forms excluded from the table for presenting high frequency but low-semantic content, such as: prepositions; articles; pronouns; and numerals.

n=number of abstracts that comprised the textual corpus analyzed

Five words per language were presented in Chart 1. A higher-frequency criterion was used to obtain the first two words. That is, when excluding all high-frequency terms with low-semantic content (articles, prepositions, pronouns), the two words with higher occurrences were included. In order to obtain the last three words (per language), Goffman's Point T (n) was calculated through the formula $n = [-1 + \sqrt{(1 + 8I_1)}] / 2$, where 8 is a constant and I_1 is the number of words with a frequency of 1. Based on this equation, it is possible to determine a transition zone among high- and low-frequency words. This zone comprises high-semantic content words with good conditions for use in text indexing. The values calculated for English, Portuguese, and Spanish were 35, 27, and 20, respectively.

The results of the calculations mentioned were more appropriate to abstracts in English and Portuguese, due to a possible interference in the size of the textual corpus

of these languages, which were larger than the corpus in Spanish, which was made up of only four texts. In English, 1,286 forms (words) were found, with 6,044 occurrences (frequency), of which 638 forms occurred only once. In Portuguese, 665 forms were found, with 2,184 occurrences, of which 404 forms occurred only once. In Spanish, 333 forms (words) were found, with 889 occurrences (frequency), of which 222 forms occurred only once.

With regard to the abstracts analyzed in the present study, there was no record of abstracts in Spanish from three of the seven articles where the first author was from an institution from Spain. These articles were probably written in English, because the following abstracts and full texts were only found in that language: "Mentoring and group identification as antecedents of satisfaction and health among nurses: What role do bullying experiences play?";

“Prevalence of bullying at work and its association with self-esteem scores in a Spanish nurse sample”; and “Vertical and lateral workplace bullying in nursing: development of the hospital aggressive behavior scale”.

This practice is common for authors who publish their studies in high-impact journals. Therefore, analysis of the frequency of words of these three articles was not carried out, because the use of the text in the author's language was adopted as a criterion, with the aim of describing the original use of the words without translation. The following two articles in English were excluded from this evaluation for only presenting full texts, without abstracts: “Are School Nurses Victims of Bullying?” and “Complexity, bullying, and stress: analyzing and mitigating a challenging work environment for nurses”.

DISCUSSION

The temporal cut chosen for the present study was 17 years. During this period, indicators (Figure 1) showed an increase in the number of publications on the theme, with a focus on 2008. When applying the trend line resource, a trend towards the linear increase in research on the theme of workplace bullying and nursing was observed. However, considering the severity of this phenomenon's consequences and the fact that the study searched articles in languages used in several countries, the number of 111 publications was understood as limited for the period.

With regard to the type of publication, it should be considered that some final papers are not published as articles, a fact that hinders the dissemination of knowledge. This reality is confirmed by a bibliometric study approaching dissertations and theses in national settings. This study showed that, among 57 studies analyzed, 12 resulted in studies published in journals⁽¹⁸⁾. It is understood that the publication of these studies is of utmost importance for the dissemination of research results. The structure of an article facilitates the reading process as well as criticism since it presents objective writing and reduced number of pages.

The first study found in the period examined was published in 2001, written by a psychologist from the United Kingdom, and entitled “Workplace bullying in nurses.” It is about a process in which the victim is submitted to several systematized offenses, with civil rights infringed by one or more work colleagues. This study showed that 44% of nurses reported have experienced bullying within the previous 12 months. The victims reported significantly lower levels of satisfaction at work and higher levels of anxiety, depression, and a propensity to abandon work⁽¹⁹⁾.

In the Brazilian setting, the first article that approached the relation between workplace bullying and nursing was published in 2006. This study examined occupational violence problems in an urgent-care setting and presented in its results that workplace bullying was equivalent to 30% of the violence suffered by the nursing workers researched⁽²⁰⁾.

A systematic review showed the prevalence of workplace bullying among nursing workers to be approximately 17-20%. Some risk factors were associated, such as: being aged 30 years or less; having a short professional trajectory; and working in specific units or shifts⁽²¹⁾.

A study carried out with South Korean nurses detected the prevalence of different types of violence related to work environments. Verbal abuse was prevalent, followed by threats of violence, physical violence, sexual harassment, and workplace bullying. Physical violence, threats of violence, and verbal abuse often occurred in intensive care units, whereas the occurrence of sexual harassment and workplace bullying was higher in surgery rooms. According to the research results, these situations were experienced by nurses with higher demands of work and less trust in justice⁽²²⁾.

The analysis of the “number of authors” variable indicated that the number of co-authorship productions (81.9%) was significantly higher than the other categories. In this respect, one study emphasizes some of the benefits of contributions such as: access to equipment and materials; sharing of scientific knowledge; greater specialization; and deepening of research. In addition, it indicates that the concrete results of a co-authored study are not less important. On the contrary, they present a greater probability of acceptance and a higher number of citations when compared with works published by a single author⁽²³⁾.

With regard to the types of publication, quantitative, descriptive, and cross-sectional studies stood out, representing 74% of the original articles. The relation between workplace bullying and health problems is well documented in cross-sectional studies; however, knowledge about how this relationship is developed over time is still sparse⁽⁷⁾. Therefore, developing studies with other methodological approaches is relevant to contribute to the advance in knowledge construction on workplace bullying.

The participant population with the highest rate of original publications (Table 1) was mostly made up of nursing professionals (86.8%), which was a result previously expected due to its relation to the terms used for the search of articles. However, undergraduate nursing students constituted another important population evidenced in the findings.

It is worth mentioning that, among the publications of the sample, studies with auxiliary and technical level nursing students, which is a professional categorization in Brazil, were not found. There was also a lack of specific studies carried out with nursing managers in order to verify whether these professionals are bullied by their subordinates. These gaps indicate a possible underreporting of violence against these populations.

Studies involving nursing students highlighted the occurrence of bullying in both academic environments⁽²⁴⁾ involving students, professors, and employees; and training environments⁽²⁵⁻²⁶⁾, presenting nurses and supervisors of services as offenders.

However, students may not be prepared to recognize and deal with bullying behavior. The following impacts of this type of violence were reported by students: physical, emotional, and psychological reactions; isolation; repercussions on learning, productivity, and performance; and interference in the perception of nursing and health care⁽²⁵⁾.

In the context of the studies with nursing professionals and students, the type of bullying where the victim is offended by a person of a higher hierarchy, categorized as *vertical-descendant* was highlighted⁽²⁷⁾. This recurrent

and serious modality is expressed by the abusive use of power granted by the aggressor's position in the institution that hinders workers in their activities and negates their rights⁽²⁸⁻³⁰⁾. In addition to this modality, studies indicate that the violence practiced among people of the same hierarchy, known as horizontal bullying, favors the victim's professional and academic abandonment, because it undermines their conviviality with their peers⁽³¹⁻³³⁾.

The United States, Brazil, and Australia stood out among the countries that publish the majority of articles on the theme. Not coincidentally, the following most productive institutions are from the abovementioned countries, respectively: the University of Cincinnati; Universidade Federal da Paraíba; and Southern Cross University.

The University of Cincinnati presents inhibitory policies related to violence, such as the University's policy statement on sexual harassment, the University's policy statement on discriminatory harassment, and the University's non-discrimination policy. The *Núcleo de Estudos e Pesquisas em Bioética e Cuidados Paliativos* (Center for Studies and Research in Bioethics and Palliative Care) is a pioneer in research on events of workplace bullying in the Northeast of Brazil and is part of the Universidade Federal da Paraíba. Southern Cross University disseminates a policy against bullying and discrimination in the institution, with the purpose of establishing a productive and positive work and educational environment. These actions favor and encourage the development of studies on the theme.

With regard to the journals included in the study, those that integrated Bradford's core (Figure 2) have relevant international scientific influence and good evaluation in Brazilian graduation programs, with *Qualis A1* for nursing. The term *Qualis* refers to the Brazilian system of evaluation and classification of journals that publish the scientific production of the graduate programs.

In order to achieve these findings, the classic model of distribution of journals utilizing Bradford's law was applied. This model allows for the identification of the most broadly chosen journals to publish a theme – that is, the most influential journals in a specific field of the scientific literature⁽³⁴⁾. The results showed a significant dispersion of the 111 publications, since the workplace bullying theme was published in 63 different journals.

In addition to the main themes, authors of articles on workplace bullying use some secondary terms to construct their texts⁽²⁾. This practice may hinder access to information for readers who are unaware of the variety of terms, because the online article search process requires that researchers make use of words that ensure the recovery of the highest number of publications.

In this respect, bibliometric laws were used to follow the trend in the use of terms regarding the phenomenon over 17 years. The results of analysis of frequency of words contained in the abstracts in English (Chart 1) showed that the most frequent term used in publications was bullying ($f=172$). This finding evidences an interesting aspect, because the pioneer researcher on workplace bullying conceptualized and defended the use of the term mobbing to describe the phenomenon in English⁽¹⁾.

This researcher understood that the term bullying was more appropriate to relations of violence among students. However, the results showed that the other researchers followed another logic over the years, because the term bullying was often associated with the terms nurse ($f=180$) and workplace ($f=60$). Therefore, the use of the word bullying was not restricted to the school context, standing out in scientific publications in English if compared with the terms mobbing and harassment.

Corroborating the abovementioned finding, it was observed that the term mobbing emerged in only three articles, with a total frequency (f) of four repetitions. Another study, of utmost importance for workplace bullying, added that the phenomenon in the United States may also be associated with the term harassment⁽²⁷⁾. This term was found in five publications, with 12 repetitions ($f=12$).

Regarding studies in Spanish, the words with higher frequencies and high meaning were *enfermería*, *laboral*, and *acoso*. The abstracts in Portuguese presented *assédio*, *moral*, and *enfermagem* as the most recurrent terms.

The application of Zipf's law associated with the use of the IRaMuteQ software provided an objective analysis of the abstracts. It is worth mentioning that the study found strong conceptual and semantic associations among the terms highlighted in the three languages, which must be taken into consideration by the board of the Latin American and Caribbean Center of Health Sciences Information (BIREME). Therefore, the inclusion of the expression "*assédio moral*" among Health Sciences Descriptors (*DeCS – Descritores em Ciências da Saúde*) is suggested.

CONCLUSION

Bibliometric indicators show that the scientific production available in online journals on workplace bullying and nursing is in development in national and international scope, with a trend towards growth.

Journals with more publications on this theme have high scientific influence among academic journals (*SJR and Qualis Capes A1*), and the use of Bradford's law was important for analysis, systematization, and presentation of this result. Co-authorship work production (82%) is the most used system, and publications are especially available in English (81.9%). The United States, Brazil, and Australia are responsible for 55% of the publications and 45% of the remainder are distributed among other 21 countries.

In spite of the use of different terms to refer to the phenomenon in the same language based on Zipf's law, the consolidation of the term Bullying in English, *Acoso Laboral* in Spanish, and *Assédio Moral* in Portuguese was evidenced.

Further longitudinal studies must be carried out, as well as studies with other different populations and settings, which will contribute to the expansion of knowledge on workplace bullying in different circumstances. It is worth mentioning the importance of an educational process involving employers and nursing education institutions, because professionals and students must be able to recognize and fight this violence.

RESUMO

Objetivo: Verificar indicadores bibliométricos da produção científica disponível em periódicos *online* que abordam assédio moral e enfermagem. **Método:** Estudo bibliométrico com utilização da Lei de Bradford, Lei de Zipf e estatística textual realizado com publicações em português, inglês e espanhol, disponibilizadas em bases de dados nacionais e internacionais, no período de 2000 a 2016. **Resultados:** A amostra foi constituída por 111 publicações. Os principais autores tinham vinculações com 91 instituições distribuídas em 24 países. Estados Unidos da América, Brasil e Austrália foram os países que mais publicaram. Profissionais e estudantes de enfermagem compuseram as populações das pesquisas, e o ambiente hospitalar foi o cenário mais investigado. Os periódicos com maior número de publicações possuem influência científica internacional. Os termos com maior poder semântico e alta frequência nos resumos foram: *bullying*, assédio moral e *acoso laboral*. **Conclusão:** Os indicadores apontam que o assédio moral ocorre no ambiente de trabalho de enfermagem em vários países e que o número de publicações nesta temática tende a crescer. É importante diversificar os métodos e os cenários de investigação para contribuir no avanço do conhecimento e no combate a essa violência.

DESCRITORES

Enfermagem; Violência no Trabalho; Condições de Trabalho; Bibliometria.

RESUMEN

Objetivo: Verificar indicadores bibliométricos de la producción científica disponible en periódicos en línea que abordan asedio moral y enfermería. **Método:** Estudio bibliométrico con utilización de la Ley de Bradford, Ley de Zipf y estadística textual realizado con publicaciones en portugués, inglés y español, facilitadas en bases de datos nacionales e internacionales, en el período de 2000 a 2016. **Resultados:** La muestra estuvo constituida de 111 publicaciones. Los principales autores tenían vinculaciones con 91 centros distribuidos en 24 países. Estados Unidos de América, Brasil y Australia fueron los países que más publicaron. Profesionales y estudiantes de enfermería compusieron las poblaciones de las investigaciones, y el ambiente hospitalario fue el escenario más investigado. Los periódicos con mayor número de publicaciones tienen influencia científica internacional. Los términos con mayor poder semántico y alta frecuencia en los resúmenes fueron: *bullying*, asedio moral y *acoso laboral*. **Conclusión:** Los indicadores señalan que el asedio moral ocurre en el ambiente laboral de enfermería en distintos países y que el número de publicaciones en esta temática tiende a crecer. Es importante diversificar los métodos y los escenarios de investigación para contribuir al avance del conocimiento y al combate a dicha violencia.

DESCRIPTORES

Enfermería; Violencia Laboral; Condiciones de Trabajo; Bibliometría.

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