



Federal Fluminense University

AURORA DE AFONSO COSTA
NURSING SCHOOL



Tendencies in the production of scientific knowledge in nursing regarding HIV/AIDS: a bibliometric study

Eliane Rolim de Holanda¹, Maria da Conceição Cavalcanti Lira¹,
Marli Teresinha Gimeniz Galvão², Marta Maria Coelho Damasceno²,
Thelma Leite de Araujo²

¹Pernambuco Federal University, ²Ceara Federal University

ABSTRACT

Aim: To analyze the scientific production in nursing regarding HIV/AIDS published in journals edited in Brazil and available electronically, from 2000 to 2011.

Method: This is a bibliometric study performed with 194 articles, descriptively analyzed regarding their category, year of publication, 'Qualis' standard, educational background of the authors, title of the authors and area of work and affiliated institution, as well as method, research subjects, study scenarios and subtopics.

Results: The data points to a meaningful increase in the quantity of studies related to the topic, an expressive participation of PhDs, professors and students from public universities and a weak participation of assisting nurses. The majority of the scenarios in the articles are in the southeast and northeast regions of Brazil. It was also clear that there was a lack of publications about children, teenagers, elderly people, sex workers, drug users and homosexuals. There was a tendency for qualitative research methods. **Conclusion:** We conclude that the findings of this study show gaps in the knowledge that can be explored by future investigations by nursing professionals.

Descriptors: Nursing Research; HIV; AIDS; Knowledge.

INTRODUCTION

The infection by the human immunodeficiency virus (HIV) and the acquired immunodeficiency syndrome (AIDS) was identified at the beginning of the 1980s and represents a serious international public health issue due to the rise in the number of infected people, the high cost of therapy, the physical and emotional after-effects and the high levels of mortality⁽¹⁾.

According to estimates, there are around 42 million people infected and living with HIV worldwide⁽²⁾. Recent data showed that the AIDS epidemic in Brazil is still at elevated levels. There were 608,230 registered cases from 1980 to 2011 and the incident rate oscillates around 17.9 cases per 100 thousand inhabitants⁽³⁾.

With the development of antiretroviral therapy and the access to treatment, some studies have pointed to a change in the epidemiologic profile and an improvement in the quality of life of seropositive people. Nevertheless, finding a solution to the problem is still a long way off and many challenges are still faced by scientists from all disciplines regarding this area of study.

In this context, nursing can provide important contributions, especially regarding the preventive actions over risk behavior, adherence to pharmacologic therapy and assistance of ill patients among others. When working directly with these matters, it is necessary to work together with the whole health team to search for solutions for the many transformations related to the epidemic.

The understanding of the track, followed by the construction of knowledge regarding HIV/AIDS is an important step. This way, the study of the scientific production in nursing regarding seropositive patients is essential to help to identify the needs to improve actions. This type of research permits to analyze which aspects receive little attention, in order to stimulate new studies in those areas⁽⁴⁾.

To acquire the indicators of validation and measurement of scientific production, bibliometrics is being used as a methodology in many areas of knowledge. It is based on the principle that analyzes technical scientific production by the quantitative study of publications⁽⁵⁾.

The relevance of this study is to generate a summary and quantification of the published articles through scientific literature regarding the topic of HIV/AIDS using bibliometrics. At the same time, studies of this nature can subsidize reflection regarding academic production and models of investigation adopted by these academic centers, as well as showing the existing scientific gaps that point to future priorities of investigation.

Based on the information demonstrated, the objective of this study is to analyze Brazilian scientific production in nursing regarding HIV/AIDS published in journals, from 2000 to 2011.

METHOD

A bibliometric study was performed, with a proposition to evaluate the scientific production present in all nursing journals about HIV/AIDS available electronically, produced and published in Brazil between 2000 and 2011, permitting the identification of the profile of these publications.

The search for articles was done directly on the following websites of important nursing journals: São Paulo Nursing Minutes (*Acta Paulista de Enfermagem*, original title), USP Nursing School Journal (*Revista da Escola de Enfermagem da USP*, original title), Latin American Nursing Journal (*Revista Latino Americana de Enfermagem*, original title), Nursing Text and Context Journal (*Revista Texto e Contexto Enfermagem*, original title), Brazilian Nursing Journal (*Revista Brasileira de Enfermagem*, original title), Rio Grande do Sul Nursing Journal (*Revista Gaúcha de Enfermagem*,

original title), Ana Nery School Journal (*'Revista da Escola Ana Nery'*, original title), Bahia Nursing Journal (*'Revista Baiana de Enfermagem'*, original title), Online Brazilian Journal of Nursing (OBJN), Rio de Janeiro State University Nursing Journal (*'Revista de Enfermagem da UERJ'*, original title), Minas Gerais Nursing Journal (*'Revista Mineira de Enfermagem – REME'*, original title), Electronic Nursing Journal (*'Revista Eletrônica de Enfermagem'*, original title), Nursing (from São Paulo), Cogitare Nursing (*'Cogitare Enfermagem'*, original title), Online Pernambuco Federal University Nursing Journal (*'Revista de Enfermagem UFPE Online – REUOL'*, original title) and Nursing Investigation Journal (*'Revista de Investigação em Enfermagem'*, original title).

There was also a search on the electronic database BDENF, which is inserted in the Health Virtual Library (BVS, in Portuguese) and in the Scientific Electronic Library Online (SciELO), aimed at including the highest number of articles.

The collection of articles occurred during the month of October, 2011. The searches used the controlled descriptors from the Descriptors in Health Sciences list (DeCS, in Portuguese), under 'HIV' or 'AIDS'.

To select the articles, the following criteria were adopted: a) articles published in nursing journals in Brazil, written in Portuguese, English and Spanish; b) articles fully available electronically and freely; c) articles that had at least one nurse author; d) publications related to the topic of nursing and HIV/AIDS, published from January 2000 to September 2011. All other types of publication were excluded (editorials, comments, reflections, essays, experience reports, clinic case studies, theses and dissertations) and articles that did not deal with this study's aimed topic, other than those which had at least one of the words listed in the search. Articles repeated in the database were counted only once, in order to avoid duplicity of information.

To collect the data, an instrument was generated in a spreadsheet format, with the objective to extract from the articles the following information: category of the article, year of publication, 'Qualis' standard of the journal (according to Coordination of Improvement of Higher Education Personnel – CAPES – in 2009), educational background of the authors, academic title, area of activity (assistant, professor, student), filiation of the authors, methodological approach used in the investigation, study subjects, location of the study (the place of data collection) and other subtopics studied. It is necessary to mention that 'Qualis' is a CAPES's system of qualification of journals, annals and magazines to create a hierarchy of the quality of intellectual production of post-graduation programs. The scientific media is divided into quality indicative categories, graded as A1 for the highest level, followed by A2, B1, B2, B3, B4, B5 and C, which is the lowest and equal to zero.

To classify the subtopics, after a careful reading of the articles, the main discussions explored in the paper are taken into consideration.

To organize the data, we used Microsoft Excel 2007® software. The results were analyzed through descriptive statistics and the discussion was supported by the scientific literature related to the understanding of the findings.

As this research was carried out with information already published and in the public domain, there was not a necessity for further appreciation by an ethics committee for research with human beings. We highlight that all ethical principles were respected throughout the research and during the analysis of textual content.

RESULTS

The bibliographic search found 1,049 articles. However, based on the criteria of inclusion

and exclusion here mentioned, the study sample was composed of 194 articles, which composed the body of the analysis (Figure 1).

In regards to the published article, 22 out of 194 (11.34%) articles were bibliographic reviews and the other 172 (88.66%) were original articles, developed in hospitals, universities, schools and other fields of study. The number of pieces of field research was greater than the papers studied here.

The annual distribution of articles was growing, showing a predominance of scientific productions in 2009 and 2010, out of a total of 30 (15.46%) papers (Table 1).

To analyze the classification of the journals according to 'Qualis', it was shown that 92 articles (47.42%) were published in journals qualified as 'Qualis' A2, 61 (31.44%) as B1, 24 (12.37%) as B2, 10 (5.15%) as B3 and only seven (3.61%) were included in the level B4. No articles regarding the studied topic were found to be classified as B5 or C.

There was a total number of 640 authors in the investigated articles, constituting from one up to eight authors per study. It was frequent

to see some authors more than once, as they published as co-participants in some studies.

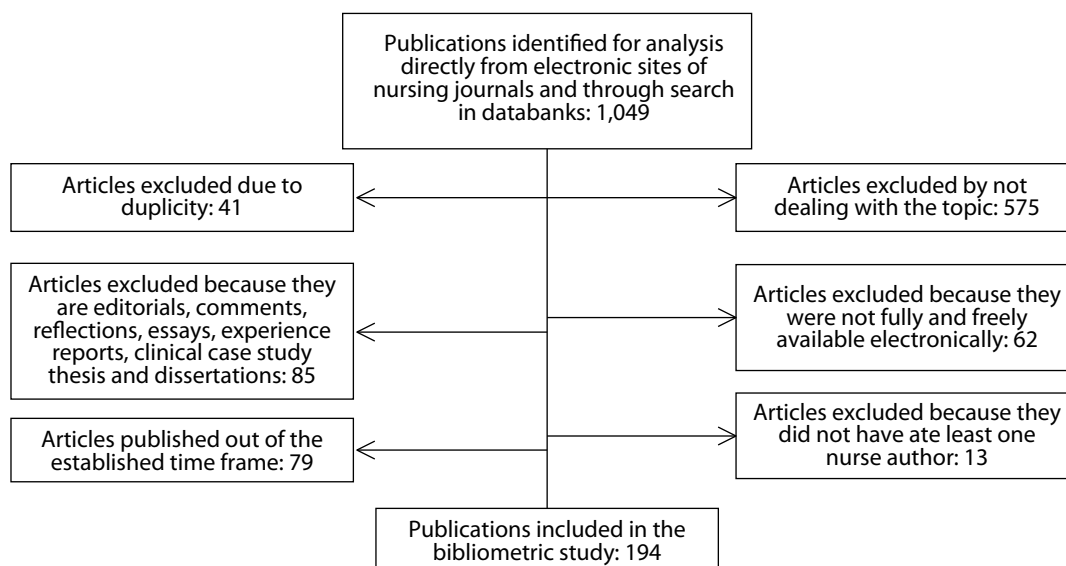
Table 1: Annual distribution of published articles related to the topic of HIV/AIDS. Recife, Brazil, 2011

Year	f	%
2000	4	2.06%
2001	4	2.06%
2002	7	3.61%
2003	7	3.61%
2004	7	3.61%
2005	10	5.15%
2006	24	12.37%
2007	25	12.89%
2008	18	9.28%
2009	30	15.46%
2010	30	15.46%
2011	28	14.43%
TOTAL	194	100

Source: Generated by the authors, 2012.

Based on this quantity, regarding the educational background of the authors, it was seen that the articles were designed by 461 (72.03%) nurses, followed by 20 (3.13%) other health professionals, such as: doctors, dentists, nutritionists, physiotherapists, biologists, pharmaceu-

Figure 1: Flowchart of the search results from the information sources, selection and inclusion of articles in the bibliometric study. Recife, Brazil, 2011.



Source: Generated by the authors, 2012.

tical professionals and speech therapists. Also published in nursing journals were eight (1.25%) professionals from other areas of knowledge, such as pediatricians, occupational therapists, physicists, statisticians and psychologists. In a significant amount of articles, there was a total of 151 (23.59%) cases where the authors did not mention their educational background.

In regards to the title of the authors of the articles, it was identified that 284 (44.38%) had a PhD or post-PhD level, 87 (13.59%) had a Masters level, 48 (7.5%) had bachelors' degrees or were specialists, 109 (17.03%) were students and 112 (17.03%) did not mention this information. In regards to the characterization of the students, 43 (6.72%) were PhD students, 45 (7.03%) Master students and 21 (3.28%) were undergraduate students. We must mention that no articles by Lato Sensu students were found.

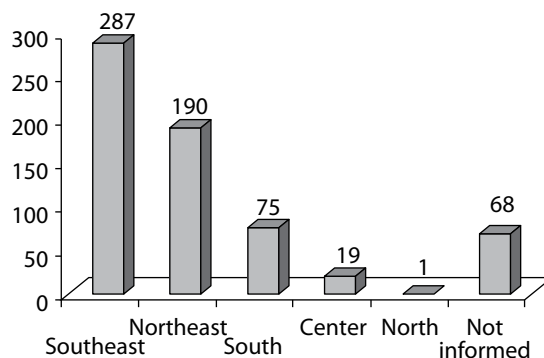
In regards to the professional activities of the authors, from the total of 640 different writers, the majority (n=340) or 53.13% of them were professors, 103 (16.06%) were exclusively undergraduate or graduate level students and 69 (10.78%) were professionals working in assisting areas. There was no information regarding the activities performed by 128 (20%) authors analyzed.

In regards to the institution of the authors, from the 640 authors, 528 (82.5%) belonged to 25 Brazilian public universities, 67 (10.47%) were from private higher education institutions and 45 (7.03%) were from many other health institutions, such as hospitals, basic health units and institutions related to service management. Among the assisting institutions, college hospitals – public and private ones – were the ones mostly observed in the participation of scientific production.

Based on the geographic location, 287 (44.84%) authors were predominantly from the southeast region of Brazil, followed by 190 (29.68%) authors from the northeast region of Brazil. It was shown that 68 (10.63%) authors did

not indicate the institution to which they were linked (Figure 2).

Figure 2. Distribution of authors by geographic region. Recife, Brazil, 2011.



Source: Generated by the authors, 2012.

São Paulo University was highlighted, with 20.47% (n=131) authors from the southeast, followed by Ceara Federal University, which had 119 authors, equivalent to 18.59% from the northeast region. In third position, the Rio de Janeiro State University represented 73 (11.71%) of the published authors.

The predominant methodological approach was a qualitative one, adopted in 114 (58.76%) articles. In other papers, it was shown that in 48 (24.74%) articles the quantitative research type was used, 26 (13.4%) were review or documental articles, and only six (3.1%) chose the quantitative-qualitative method.

In regards to the subject, or the investigated population in the studies, the majority (n=40), equivalent to 20.62%, concentrated on HIV seropositive adults, asymptomatic or with AIDS, without any gender distinction. There were 26 (13.4%) bibliographic reviews or documental articles, for which the empirical material was collected in computerized databases or environments. As they did not specify the population, they were classified as "not applicable". Only three studies (1.55%) focused on sex professionals, a fact that will be discussed

later, despite the social norms applied to these workers (Table 2).

Table 2: Distribution of articles according to focused study subjects. Recife, Brazil, 2011.

Subjects	f	%
Children		
Seropositive children	4	2.06
Teenagers		
Teenagers	13	6.7
Seropositive seropositive	3	1.55
Adults (without definition of gender)		
HIV/AIDS seropositive adults	40	20.62
Elders (without definition of gender)		
Elders	3	1.55
Seropositive elders	4	2.06
Male gender		
Men	3	1.55
Female gender		
Seropositive mother/pregnant/ puerperal	30	15.46
Seropositive women	14	7.22
Women	13	6.7
No information about gender or age group		
Caretakers	11	5.67
Other health professionals	2	1.03
Nursing professionals	25	12.89
Sex workers	3	1.55
Not applicable	26	13.4
Total	194	100

Source: Generated by the authors, 2012.

When investigating the variable “study scenario”, or in other words, the place where the research was carried out, it was verified that the majority, or 61 (31.44%) studies, were performed in hospitals, followed by 46 (23.71%) done in specialized mobile units. Other fields included: specialized centers, basic care units, educational institutions and a home environment.

Based on the main categories and the sub-topics mentioned in the articles, it is highlighted that countless discussions related to the confrontations and the meanings regarding AIDS (n=69), followed by the promotion of health (n=53), the development of health processes in HIV/AIDS (=43) and the prevention of diseases or

reinfection (n=29). It is explicit that the subtopic, co-morbidity, identified in five articles, dealt with diseases directly correlated with HIV, such as tuberculosis, hepatitis type C, chronic renal failure and lipodystrophy syndrome (Table 3).

Table 3: Categories and subtopics mentioned in the articles. Recife, Brazil, 2011.

Subtopics	f	%
Promotion of health to HIV holder (n=53)		
Comorbidities in HIV infection	5	2.58
Quality of life of people with HIV/AIDS	3	1.55
Adherence to antiretroviral therapy	22	11.34
Education in health about HIV/AIDS	12	6.19
Vulnerability to STD/AIDS	11	5.67
Prevention of diseases or reinfection to HIV (n=29)		
Prevention against HIV/AIDS	18	9.28
Sexual practices of people with HIV	11	5.67
Confrontation and meanings about AIDS (n= 69)		
Experiences and meanings to have HIV	27	13.92
Impact of AIDS in social behavior	16	8.25
Confronting HIV/AIDS	12	6.19
Result of diagnose	4	2.06
Social representation of HIV/AIDS	10	5.17
Processes of health in HIV/AIDS (n= 43)		
Processes and theories of nursing to HIV	18	8.76
Production of the knowledge about HIV/AIDS	10	5.15
Professional education	8	4.12
Occupational risks	5	2.58
Measurement instruments	2	1.03
Total	194	100

Source: Generated by the authors, 2012.

It is also shown that in Table 3 there was an expressive propagation of the use of nursing theories and processes of systematization in nursing assistance, demonstrating the application of the understanding of the profession to consolidate nursing as a science.

DISCUSSION

When investigating the production of information about HIV and AIDS, it was perceived that the articles classified as originals or as research represented the largest proportion of the papers published. This finding evidences the effort of nursing professionals to consolidate the body of knowledge, as well as to know the dimensions of concrete insertions of the HIV/AIDS epidemic in society⁽⁶⁾.

Besides that, the editors try to follow the criteria of selection to index the journals in databases from the scientific characteristics of the articles. Thus, there is a higher punctuation when the majority of the articles is original⁽⁷⁾.

In this sense, the development of the knowledge generated in scientific studies is essential to a constant improvement in nursing assistance. According to what is believed, nurses must adopt a practice based on evidences, using the results from research to base their decisions, actions and interactions on the patients under their responsibility, solidifying the identity of nursing as a profession⁽⁸⁾.

It was also confirmed that there is an expressive increase in the number of articles in a delimited time frame. Such facts show the research interest in this topic, and it seems to reflect the new demands generated by the seriousness of the discussion.

In regards to the fall of production seen between 2000 and 2004, this may reflect the lack of updates by databases and journals used in this investigation. However, it is possible to consider that the nurses were publishing their findings in other journals that are not specifically designed for nursing studies⁽⁹⁾.

Based on the stratification of 'Qualis 2009', the majority of the articles published were satisfactory. This demonstrates the growing interest in the search for excellence in the profession.

Considering this classification, among all papers that composed the body of analysis of this study, maybe the lack of articles published in A1 journals is due to the fact that there are no nursing journals in Brazil at this level.

The directives of CAPES to evaluate the *stricto sensu* post-graduation programs have directed these programs to keep journals based on international standards, which seems to justify a higher demand for articles in journals with high level 'Qualis'. This observation has expressive meaning to nursing, which provides care to seropositive people, as the publications have excellent quality and generate a great impact on the scientific community⁽⁴⁾.

There was a predominance of nurses among the authors. This data can be explained because of research published exclusively in nursing journals. However, there were a few authors from other professional categories. In this sense, the multi-professional study must be better stimulated, as it contributes to amplify the understanding about HIV, a topic that needs an interdisciplinary approach⁽¹⁰⁾.

As identified, a large number of the articles were elaborated by college professors. This information finds support in studies that show the supremacy of the professorate in the writing of papers^(9, 11). The highest production in the academic area can be attributed to aspects related to the many functions these professors have, especially those in public institutions. College career growth depends on factors such as titles, tutoring and publications. Also, to keep the grades of post-graduation programs, the publication of research papers involving professorial and student bodies is required⁽¹²⁾.

It is also shown that there is an expressive participation of undergraduate and post-graduation students as authors, which demonstrates the early insertion of undergraduate students in the scientific sphere, and of nurses from *stricto sensu*

post-graduation courses. Such a finding matches the recommendations from Brazilian research promotion institutions, which support the initiatives to teach undergraduates on how to produce research. The support for scientific initiation increases the participation in questions related to the growth of science in Brazil, and it also contributes to better-qualified human resources.

Despite that, research is not an activity which is exclusive to academia. It was detected that some nurses that assist HIV seropositive patients are also active in the studies. It is clear, however, that there are not enough Brazilian nursing professionals participating in the production of information. These nurses could bring important contributions to the questions that crop up every day as a result of their work.

Hence, it is necessary to motivate health institutions to involve their assisting professionals in research projects, in order to stimulate them to develop a reflexive and scientifically based practice⁽⁸⁾.

According to what has already been mentioned, there was no information about the area of work of a significant number of authorships. This lack of data generated a gap in the bibliometric research. Furthermore, it was shown that there was a necessity to include complete and standardized data in Brazilian journals available electronically.

The predominance of research originated in the southeast region of Brazil was the same as that found in other studies^(4,5,9,12-14). Such research indicates the pioneering role of this region in implementing HIV/AIDS care, and the concentration of undergraduate and post-graduation nursing courses, as well as a high concentration of hospitals. Adding to that, it is also important to say that São Paulo was the first Brazilian state to officially create an AIDS care program in 1983, with the publication of a technical workbook about the disease, initiating studies about this in-

fection almost at the same time it started around the world⁽¹¹⁾.

Nursing in the northeast region of Brazil has characterized itself as an important center for the generation of scientific information. This can be justified by the consolidation of local post-graduation courses, the extension of specialized hospitals, as well as by the rise in the epidemic in this region, instigating the interest for new investigations by local researchers.

From the findings, it was shown that there is a higher tendency for the studies to use a qualitative approach, not excluding however the other methodological possibilities. In Brazil, qualitative research arrived in the 1970s as the new methodological approach, whose characteristics are different from those studies performed so far. It takes a holistic approach and is descriptive and based on meanings. It emphasizes the importance to know, to understand and to interpret the meanings of events, beliefs and values of individuals. Based on this premise, according to the fact that social reality does not provide all quantitative information, qualitative research imposed itself as an indispensable strategy to perform investigations in nursing⁽¹⁵⁾.

The predominance of the use of a qualitative perspective with regard to the phenomena, and with regard to the researched objects, can have different origins. Among these, researchers have to obtain the answers to subjective questions, capable of reflecting their daily routine, and the search within the field of nursing science which is removed from the biomedical model⁽¹³⁾.

According to the analysis of the research carried out in this study, the category of subjects that was most frequent was HIV seropositive adults, with or without AIDS. Possibly, this data relates to the evolution of the HIV infection, from a fatal disease to a chronic condition. The reduction of morbimortality and the improve-

ment in the quality of life can be accredited to Bill 9313, drawn up on November 13 1996, which discourages the right to a free distribution of antiretroviral medication to infected patients nationwide.

Women, specifically seropositive mothers and pregnant women, are second on the list of subjects represented in the studies, which can be explained by the feminization of the epidemic observed in Brazil since the 1990s. It is known that in 1985, for every 26 cases among men, there was one case among women. In 2010, this ratio was 1.7 men for every case among women⁽³⁾.

Despite the fact that the ratio is still higher for males, the disease is expanding faster among women⁽¹⁶⁾. The aforementioned process of feminization has two decisive aspects: the systematic increase of AIDS among young women and the additional problem of vertical transmission, which represents the main cause of virus contamination in the population, including a new population group exposed to the epidemic – children. However, the number of articles that have dealt with children was limited, a fact that is repeated in other studies^(17, 18). Nevertheless, there is a large pediatric population infected with HIV, yet the investigation of care and treatment in this scenario is also limited.

The insufficient quantity of studies with children, teenagers and elderly people, seropositive or not, represents a gap in our understanding that needs to be filled by future publications. It is important to mention the lack of research with sex workers, drug users and homosexuals in the studied time frame. This lack of information can be a reflex of a methodological difficulty to get inserted in the field where these subjects are, or be a result of the difficulty to get consent from these individuals to participate in research that may delve into their privacy. On the other hand, it is also possible that the researchers have

little interest in exploring the AIDs phenomena in such population groups, because they are afraid to deal with situations of social marginalization, which can possibly be threatening⁽¹⁹⁾. Therefore, the stigmas and the prejudice against these marginalized groups can be seen not only in society as a whole, but also in the scientific community⁽¹³⁾.

The low percentage of studies dealing with the three groups mentioned above demonstrates that they are not getting the proper attention from researchers. As sexual and blood transmission are the main causes of the spread of the disease among the Brazilian population, and as the use of the terminology 'risk group' is not currently being used, the population as a whole needs to be equally targeted by studies⁽²⁰⁾.

Research involving nursing professionals was visibly represented, and was placed third in this study. This data matches the indications by authors^(6,13,20) that also discussed the implications brought by the epidemic to professional practice in its multiple aspects; such as the relationship with patients, access to the information produced regarding the disease, sharing the decisions with the patient-caretaker, as well as possible occupational risks.

In general, the publications about HIV/AIDS seem to keep the same hospital-centered paradigm as the guideline to investigation scenarios in nursing. In this sense, the significant presence of the hospital locus indicates the necessity to invest in other research scenarios, such as schools, universities and public locations, primarily using the preventive approach.

Also, the priority to delimit the subtopic "experiences and meanings to have HIV" in the research characterized a search to understand the changes which occurred in the lives of seropositive people, on a biological, social or psychological level, as well as the implications of this condition.

From 2000 onwards, the impact of antiretroviral use on the survival of sufferers was also observed, placing a research problem based on the questions that arose from the survival of these subjects, a fact that probably justifies the second highest frequency of studies related to the subtopic "adherence to antiretroviral therapy" among the investigated articles.

The strong presence of the topic "HIV/AIDS prevention" concurs with the questions linked to the practices that aim to prevent people coming into contact with the virus. The occurrence of HIV/AIDS is probably due to the difficulties in finding a cure for the disease and a lack thereof, and also a lack of preventative measures to confront the epidemic.

Other results from the main subtopics show an urgency to perform new research focused on the gaps found in literature, which need to be further investigated, and is aimed at finding strategies of prevention, of confrontation, of assistance and of the formation of human resources in the area of nursing that are more efficient to fight HIV.

CONCLUSION

Implications for nursing practices and research

This study showed tendencies, advancements and gaps in the research in nursing related to HIV. A growing development of studies about the topic was observed in the northeast region of Brazil, yet there was little participation in the research by assisting nurses and by other health professionals in nursing articles.

We highlight the lack of studies directed towards children, teenagers, elderly people, sex workers, drug users and homosexuals, with or without the virus; an aspect that deserves further attention due to their important roles

in the epidemiologic situation of HIV/AIDS in Brazil today.

The topics discussed were also characterized and they provide subsidy to a wider comprehension of the interests of scientific community regarding nursing activities and the epidemic. The subtopics centered on the consequences of living with HIV/AIDS and the questions related to drug adherence and disease prevention.

However, some articles analyzed do not present relevant data, such as educational background of the authors, their academic title, area of work and affiliated institution. This indicates the need for more attention when publishing papers, because these variables provide important information that permits the characterization of scientific productions.

We can also affirm that nursing research is important to potentiate the legitimation of the practice, to search for new ways to care, by approximating the theoretical and practical dimensions of the profession, to contribute to the improvement of the quality of life of the population and at the same time, to support professional practice.

Based on this discussion, we recommend the development of new studies in order to fill the gaps here presented. This study reflects upon the understanding by the Brazilian nursing profession regarding the HIV/AIDS epidemic over the last decade and the beginning of this one. It has brought considerable findings, which will help in directing future investigations into this topic.

REFERENCES

1. Acioli S, Heringer A, Oliveira DC, Gomes AMT, Formozo GA, Costa TL, et al. HIV/AIDS and nursing in thesis and dissertations - 1980 to 2005: a biblio-

- graphic study. Online braz j nurs [Internet]. 2006 [cited 2011 Nov 02]; 5(3): [about 5 p.]. Available from: <http://www.objnursing.uff.br/index.php/nursing/article/view/577/135>
2. UNAIDS. Programa Conjunto das Nações Unidas sobre HIV/AIDS [Homepage in the internet]. Relatório sobre a epidemia mundial da AIDS, 2010 [cited 2011 Oct 05]. Available from: http://www.unodc.org/documents/lpo-brazil//noticias/2010/11/Resumo_Dados_Globais_UNAIDS_2010.pdf
 3. Ministério da Saúde (Brasil). Boletim epidemiológico AIDS/DST. Brasília: Ministério da Saúde; 2011.
 4. Cicolo EA, Roza BA, Schirmer J. Doação e transplante de órgãos: produção científica da enfermagem brasileira. *Rev bras enferm.* 2010 Mar; 63(2):274-8.
 5. Ravelli APX, Fernandes GCMI, Barbosa SFF, Simão E, Santos SMA, Meirelles BHS. A produção do conhecimento em enfermagem e envelhecimento: estudo bibliométrico. *Texto & contexto enferm.* 2009 Sept; 18(3):506-12.
 6. Gir E, Silva AM, Costa FPP, Hayashida M. Alterações na prática profissional de enfermeiros de um hospital de ensino do interior paulista, em consequência ao surgimento do HIV/AIDS. *Rev gauch enferm.* 2000 July; 21(2):37-54.
 7. Carvalho LF. Bibliometria e saúde coletiva: análise dos periódicos Cadernos de Saúde Pública e Revista de Saúde Pública. Rio de Janeiro. Dissertação [Mestrado em Saúde Pública] - Escola Nacional de Saúde Pública Sérgio Arouca; 2005.
 8. Polit DF, Beck CT. Fundamentos de pesquisa em enfermagem: avaliação de evidências para a prática da enfermagem. 7. ed. Porto Alegre: Artmed; 2011.
 9. Araújo MAL, Araujo TL, Damasceno MMC. Conhecimento em HIV/AIDS de 1998 a 2005: estudos publicados em periódicos de Enfermagem. *Esc Anna Nery Rev Enferm.* 2006 Apr; 10(1):126-31.
 10. Reis RK, Gir E. Caracterização da produção científica sobre doenças sexualmente transmissíveis e HIV/AIDS publicados em periódicos de enfermagem no Brasil. *Rev Esc Enferm USP.* 2002 Dec; 36(4): 376-85.
 11. Santos CG. AIDS em revista(s): produção científica no Brasil, 1982-2002. São Paulo. Dissertação [Mestrado em Saúde Coletiva] – Coordenação dos Institutos de pesquisa da secretaria de estado da saúde de São Paulo; 2004.
 12. Araújo KM, Brandão MAG, Leta J. Um perfil da produção científica de enfermagem em Hematologia, Hemoterapia e Transplante de medula óssea. *Acta Paul Enferm.* 2007 Mar; 20(1):82-6.
 13. Oliveira DC, Formozo GA, Gomes AMT, Acioli S, Marques SC, Costa TL, et al. A produção de conhecimento sobre HIV/AIDS no campo da teoria de representações sociais em 25 anos da epidemia. *Rev Eletr Enf [Internet].* 2007 [cited 2011 Nov 02]; 9(3):821-34. Available from: <http://www.revistas.ufg.br/index.php/fen/article/view/7508>
 14. Reveles AG, Takahashi RT. Educação em saúde ao ostomizado: um estudo bibliométrico. *Rev Esc Enferm USP.* 2007 June; 41(2):245-50.
 15. Merighi MA, Barbosa GR, Ferreira FC. Estudo bibliométrico sobre dissertações e teses em enfermagem com abordagem fenomenológica: tendência e perspectivas. *Rev latinoam enferm.* 2007 Aug; 15(4):645-50.
 16. Pinto VM, Tancredi MV, Golub JE, Coelho AC, Tancredi Neto A, Miranda AE. Prior history of sexually transmitted diseases in women living with AIDS in São Paulo, Brazil. *Braz j infect dis [Internet]* 2012 [cited 2013 Jan 09]; 16(3): 226-31. Available from: <http://www.scielo.br/pdf/bjid/v16n3/v16n3a02.pdf>
 17. Vijayan T, Benin AL, Wagner K, Romano S, Andiman WA. We never thought this would happen: transitioning care of adolescents with perinatally acquired HIV infection from pediatrics to internal medicine. *AIDS Care [Internet].* 2009 [cited 2013 Jan 09]; 21(10): 1222-9. Available from: <http://www.ncbi.nlm.nih.gov/pubmed/20024697>.
 18. Holanda ER, Souza MA, Holanda VR, Santos SMJ, Galvão MTG, Lopes MVO. Adesão ao tratamento de crianças soropositivas ao HIV: uma análise conceitual. *Aquichan [Internet].* 2012 Dec [cited 2013 Jan 09]; 12(3): 228-40. Available from: <http://aquichan.unisabana.edu.co/index.php/aquichan/article/view/2242/pdf>.
 19. Oliveira DC, Costa TL, Gomes AMT, Acioli S, Formozo GA, Heringer A, et al. Análise da produção de conhecimento sobre o HIV/AIDS em resumos de artigos em periódicos brasileiros de enfermagem, no período de 1980 a 2005. *Texto & contexto enferm [Internet].* 2006 Dec [cited 2013 Jan

09]; 15(4): 654-62. Available from: <http://www.scielo.br/pdf/tce/v15n4/v15n4a14.pdf>.

20. Castro EK, Remor EA. Aspectos psicossociais e HIV/AIDS: um estudo bibliométrico (1992-2002) comparativo dos artigos publicados entre Brasil e Espanha. *Psicol refl crit.* 2004;17(2):243-50.

Collaborators

Eliane Rolim de Holanda and Maria da Conceição Cavalcanti Lira participated in the design of the project, data collection, analysis and interpretation of data, writing of the article and final approval of the published version.

Marli Teresinha Gimeniz Galvão, Marta Maria Coelho Damasceno and Thelma Leite de Araujo supervised all the steps of the research, contributed with a critical review of the intellectual content, writing of the article and final approval of the published version.

Received: 07/03/2012

Revised: 19/07/2013

Approved: 10/09/2013