PROFILE OF DISSERTATIONS COMPOSING THE LINE OF RESEARCH

"TECHNOLOGICAL DEVELOPMENT IN HEALTH AND NURSING"

PERFIL DAS DISSERTAÇÕES COMPONENTES DA LINHA DE PESQUISA “DESENVOLVIMENTO TECNOLÓGICO EM SAÚDE E ENFERMAGEM”

PERFIL DE LAS TESIS COMPONENTES DE LA LÍNEA DE INVESTIGACIÓN “DESARROLLO TECNOLÓGICO EN SALUD Y ENFERMARÍA”

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ABSTRACT

Objective: to characterize the dissertations of the Stricto Sensu Post-Graduate Program in Nursing at the Federal University of Rio Grande do Norte (PGENF-UFRN, in Portuguese) which are components of the line of research << Technological development in health and nursing >>. Method: clipping from a documentary study carried out in 2012 by students of the discipline “Perspective of Internationalization of PGENF-UFRN Program.” Results: of 70 approved dissertations from January 2010 to July 2012, 29 were of the line of research << Technological development in health and nursing >> and were analyzed in light of the indicators: year, study object, linked group, applicability, type of study, approach, study site and dissertation products. Conclusion: it is promoted discussion and reflection about doing research, care and education in nursing, as well as the benefit that PGENF-UFRN provides through the line of research << Technological development in health and nursing >>. Descriptors: Nursing; Post-Graduate Nursing Education; Nursing Research; Technology.

RESUMO


RESUMEN


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INTRODUCTION

Nursing, in the context of education, has experienced several changes in response to the demands of its professional training with appropriate profile to health demands, production of innovative knowledge and social assistance.¹

Over the past 30 years, parallel to the expansion of graduation, it has occurred the realization of a vigorous system of post-graduation in nursing. Thus, in 1974, Brazil had only two master courses and, from 2010 - year considered as International Year of Nursing, by the World Health Organization (WHO) - presented 41 post-graduate programs and 61 courses accredited by the Coordination of Personnel Training of Higher Education (CAPES). Of these, 20 are doctoral, 38 academic Master and three professional master.²

Participating in this panorama of education, it has been discussed the Stricto Sensu Graduate Program in Nursing, Federal University of Rio Grande do Norte (PGENF-UFRN), which began its activities in 1996 and only in 2001 was accredited by CAPES.³ The propellant goal of the program is to fully develop the human being, their professional training, guided by ethics values, solidarity and citizenship, producing knowledge of educational, technological and scientific character.⁴

PGENF-UFRN offer master's and doctoral courses with concentration area “Nursing in Healthcare”, which is anchored in theoretical and philosophical matrix of care to human, health, nursing in healthcare and in post-graduation education.⁵

After the restructuring of the lines and research groups in 2010, the program is now formed in four lines of research: “Education and work in nursing and health”; “Nursing in health surveillance”; “Nursing in mental and collective health”; and “Technological development in health and nursing”.⁶

With a view to reflect on the application of technology in health and nursing, we delimited as study object the line of research “Technological development in health and nursing”, which produces knowledge in themes of “[...] art, development , adaptation and assessment models, procedures, tools and other technologies applicable to practice in health and nursing”.⁷

The choice of this study object is justified by the fact that technology represents a set of scientific, empirical, systematic and specialized knowledge, which promotes the theoretical and practical reasoning in order to improve human labor efficiency.⁵ The application of scientific knowledge thus underlies the way to take care.⁶

So, to guide this study, we formulated the following research questions: 1) What are the characteristics of dissertations of PGENF-UFRN that compose the line of research “Technological development in health and nursing” (year, linked group, applicability, type of study, approach, study site and dissertation products)?; 2) What study objects related to the line of research “Technological development in health and nursing” are discussed in the dissertations of PGENF-UFRN? Thus, we aimed to characterize the dissertations of the Stricto Sensu Graduate Program in Nursing at the Federal University of Rio Grande do Norte (PGENF-UFRN) that compose the line of research "Technological development in health and nursing".

METHOD

It is a documentary study of the cut carried out in 2012 by doctoral and master's students of PGENF-UFRN, enrolled in the discipline << Perspective of Internationalization >> of Post-Graduate Program in Nursing at Federal University of Rio Grande do Norte (PGENF / UFRN).

As for the search strategy, we used the database produced in the aforementioned discipline, which is composed of master's theses produced from 1996 to 2011. It is worth noting that, the program had, in 2012, the first class of the doctoral course and, therefore, there are no completed and approved theses, which justifies the use only of masters.

For this study, we built a research protocol, also validated by the discipline professors and advisors, made up of eight research indicators: year, study object, linked group, applicability, study type, approach, study site and dissertation products.

The indicators linked group, applicability, study type, approach and study site followed the following categorization:
1) Linked group: promotional actions and of attention to human groups in Mental Health and Public Health; Kaleidoscope of Education in Nursing; Nursing Care in Different Stages of Life; Clinical Nursing; Nursing in Health Care; Nursing Procedures Incubator; Care Research Laboratory; Security; Technology in Health and Nursing; Care and Epidemiological Practices in Health and Nursing; Education in Nursing; Health and society; or Education and Work in Nursing and Health.

2) Applicability: in education and/or health services;

3) Type of study: whether it is experimental, quasi-experimental or non-experimental; sectional, longitudinal or unspecified; descriptive, analytical, exploratory, case-control, cohort, meta-analysis, oral history, collective subject discourse, action research, phenomenology, social representations, ethnography, symbolic interaction, historical materialism or other (to specify);

4) Approach: quantitative, qualitative or quantitative and qualitative;

5) Place of study: Hospital; Basic Health Unit/Family Health Unit (BHU/FHU); municipality; Mobile Emergency Service (SAMU); or Higher Education Institutions (HEIs).

The temporal dimension of the sample included the period from January 2010 - year of program restructuring - to July 2012.

Inclusion criteria were set - dissertations of PGENF-UFRN that composed the line of research << Technological development in health and nursing >> - and exclusion criteria were - dissertations of PGENF-UFRN that composed the lines of research << Education and work in nursing and health >>; << Nursing in health surveillance >>; << Nursing in mental and collective health >>; and approved in years before 2010.

The synthesis of final data will be presented by means of tables and charts to facilitate the visualization of the results.

**RESULTS**

Considering the year 2010 as the initial period of analysis of production of PGENF-UFRN dissertations, the year in which the lines of research of the program were reconfigured for the current frame, the study population totalizes 70 dissertations, defended in the period from January 2010 and July 2012, distributed differently in the program's lines of research, as explained in Table 1.

<table>
<thead>
<tr>
<th>Line of research</th>
<th>Total n (%)</th>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2010 n (%)</td>
<td>2011 n (%)</td>
</tr>
<tr>
<td>Technological development in health and nursing</td>
<td>11 (40,7)</td>
<td>16 (43,2)</td>
</tr>
<tr>
<td>Nursing in surveillance to health</td>
<td>4 (14,9)</td>
<td>8 (21,6)</td>
</tr>
<tr>
<td>Nursing in mental and collective health</td>
<td>6 (22,2)</td>
<td>5 (13,6)</td>
</tr>
<tr>
<td>Education and work in health and nursing</td>
<td>6 (22,2)</td>
<td>8 (21,6)</td>
</tr>
<tr>
<td>Total n (%)</td>
<td>27 (100)</td>
<td>37 (100)</td>
</tr>
</tbody>
</table>

It is elucidated, thus, that the sample of dissertations of PGENF-UFRN that configures the study object of this article - those composing the line of research << Technological development in health and nursing >> - expresses the most expressive quantity of production in the program during the study period: 41.4% (n = 29).

It is seized up, still, that the line of research investigated showed significant growth of production between 2010 and 2011, an increase that was expressed in a figure of 45.5%, demonstrating the importance of this line for solidifying PGENF-UFRN.

This line of research currently integrates nine educators of a total of 21 professors who compose the program, totaling 42.9% of its faculty. There is thus an average of 3.3 guidelines for each professor member of the line of research "Technological development in health and nursing", which are divided into three research groups (Figure 1).
With regard to the theme of concentration of the investigated dissertations, a classification was established in four main areas - education, management, research and care practice, that in view of the spinal focus of production, expressed mainly on the study objects of dissertations. As explained in Table 2, the thematic area “care practice” predominated in the sample, totaling 69.0% (n = 20) of the analyzed productions.

Table 2. Quantitative productions x subject area and study objects, Natal / RN, 2010-2012.

<table>
<thead>
<tr>
<th>Thematic area</th>
<th>Study objects</th>
<th>Total n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>School performance in face of violence; teaching of the nursing process; and counseling on HIV/AIDS.</td>
<td>3 (10.3)</td>
</tr>
<tr>
<td>Management</td>
<td>Nursing process in management of hospitals.</td>
<td>1 (3.4)</td>
</tr>
<tr>
<td>Research</td>
<td>Evaluation of postoperative pain; violence in public servants of UFRN; and quality of life: of servants and patients with venous ulcers.</td>
<td>5 (17.2)</td>
</tr>
<tr>
<td>Care practice</td>
<td>Protocol for patients with venous ulcers; the nursing care: in tuberculosis control, in cancer pain, to elderly at home, in intensive care, to patients in the prostatectomy immediate postoperative period, in malignant neoplasm of the cervix and in pressure ulcers; labor relations in the nursing team; Nurses' knowledge about: epidemiological surveillance, the process of caring in TBI and on SAE; organizational climate in Epidemiology Hospital Centers; occupational accidents suffered by nurses and infections in ICU caused by excessive workload.</td>
<td>20 (69.0)</td>
</tr>
</tbody>
</table>

As for the applicability of the results achieved with dissertations, 55.2% (n=16) of the productions have elucidated their benefits for nursing education and 88.2% (n=25) expressed their contributions to improvements in health services.

For the classification of the type of dissertations, we took into account the classification of research as to: the presence of intervention (experimental, quasi-experimental and non-experimental); the form of data collection (transverse and longitudinal); the study design (analytical, descriptive, exploratory, ethnographic, case- control and case study); and approach (quantitative, qualitative and quantitative and qualitative).

Non-experimental (93.1%; n=27), transverse (58.6%; n=17), descriptive (89.7%; n=26) and exploration researches (34.5%; n=10) and with quantitative approach (79.3%; n = 23) prevailed, with only one study presenting quantitative and qualitative approach (3.4%). It is worth noting that, we considered the classification exposed in the study itself.

Researches were developed mostly in hospitals (62.1%; n=18) (Figure 2). Of the studies promoted in hospitals, studies in...
public hospitals prevailed (77.8%; n=14), of which we highlight the University Hospital Onofre Lopes (50.0%; n=9), followed by the Hospital Monsenhor Walfredo Gurgel (11.1%; n=2).

The production of the students of PGENF-UFRN, authors of the analyzed dissertations, was also investigated through Lattes Platform, considering the production of students in the condition of learners enrolled in the program, and as graduates, analyzing, in this case, their production, resulting from argumentative study, published until 24 months after their defense (Figure 3). The year 2012 was not considered because the data analysis was performed only until July of that year, not representing, therefore, a reliable value for analysis.

With regard to the publication of articles, the main form of dissemination of scientific knowledge of post-graduate students, there was a positive increase between 2010 and 2011, with a production increase of 47.2% as students and 850.0% while graduates, confirming the important growth of the students’ commitment to solidifying the PGENF-UFRN.

Considering the number of students who defended their dissertations each year, there was an increase in average of 3.27 articles per student in 2010 to 3.31 in 2011; and an increase in average of 0.18 articles per egress in 2010 to 1.19 in 2011.

The Lattes curriculum of students, predominantly, were updated in 2012 (69.0%; n=20), ranging in updating between 08/03/2010 and 23/07/2012.

The expressiveness of the line of research “Technological development in health and...
nursing” in PGENF-UFRN is not an occasional reality. Studies seeking to analyze the scientific production in other national post-graduate programs have also reported the significance of the theme “technologies in health and nursing” in their contexts.

An example of this is the Program of Post-Graduate Nursing in Adult Health (PROESA) of the School of Nursing of University of São Paulo that, after having their publications of the period of 2000-2004 analyzed, clarified that it was prevalence of investigations focused on technologies of care, a theme that covered 44.2% of their studies.7

Research that aimed to investigate technological productions in Master's Course of Nursing Post-Graduate Program at Federal University of Nursing Santa Catarina (UFSC) also asserted the importance of this topic in post-graduate school, reflecting that it may derive from the multiple benefits technology for nursing: generating knowledge; mastering processes and products; transforming the empirical use in order to turn it into a scientific approach; among many other possibilities.8

When reflecting on dissertations that compose a line of research that has the technological development as a guideline, it is essential to demystify the idea that technology is only linked to the use of the most modern equipment, since professional knowledge and the relational process are intrinsic mechanisms to health work process.9

Technological development must be seen, thus, in a complex and comprehensive perspective that includes: the hard technology, characterized by the use of equipment; the soft-hard technologies, related to structured knowledge, standards, protocols and knowledge; and light technologies, relationships.10 The last two types were the main objects of investigation of dissertations analyzed.

That is why the “care practice” theme predominates in the studies analyzed (69.0%; n=20), when students sought the unveiling of their practical reality, investigating the technology in its multiple dimensions: knowing, caring, acting, relating, investigating and improving, often interdependently.

The studies focused on “care practice” were also prevalent in other post-graduate programs.11-12 This elucidates the significant existence of professionals who seek post-graduation with the desire to discover and to improve the experiences of their profession, tracing intervention strategies to modify realities and improving their practice.11-12

With the scope of better understanding the focus of technological development in the analyzed dissertations, we sought to build a reflection on their subjects from the perspective of a scholar who addresses that investigations in nursing can focus technologies: of care, of concepts, interpretative customer situations, administration, education, communication processes or mode of conduct.13

Unlike research on the dissertations of UFSC, that highlighted the education technologies as predominant,9 in PGENF-UFRN the care technologies (55.2%; n=16) obtained highlight, which include investigations about techniques, procedures and knowledge used by nurses in care.13 Education technologies (17.2%; n=5), conduct technologies (13.8%, n=4) administration technologies (10.3%, n=3) and communication processes technologies (3.5%; n=1) were also studied.

When analyzing the methodological design of the studies, similar to other studies,7,14 there was predominance of investigations classified as “no intervention”, i.e., non-experimental and descriptive/exploratory studies.

It is necessary, when we speak of studies design, especially, in the post-graduation, to bring up an increasingly present discussion in all scenarios, intellectuals and assistance: the classification of levels of evidence according to research, which is based on a hierarchy of studies that seeks to facilitate the understanding of the degree of clinical recommendation of the results from the research.15

Thus, as for the quality of evidence, we found a large production of studies that fit in the level of evidence 6 - evidence derived from a single descriptive or qualitative study.16 Not, we do not tend to assert, however, that the performed research have no significance for national and international intellectual scenario, considering that descriptive studies are also important for the analysis of contexts and to support the production of higher-level evidence. It is supported, therefore, the need to balance these figures, encouraging the development of experimental research in high-class nursing.

On the approach of the analyzed dissertations, it was highlighted the fact that 79.3% (n=23) of the studies followed a quantitative approach, unlike several studies that traced profiles of post-graduate programs in nursing and highlighted the qualitative studies as predominant.12,14,17-9
It is emphasized, however, the essentiality of both approaches in nursing research. What it is crucial in this scenario is the appropriateness of the study design, in its various aspects, to the question one wants to investigate, adapting techniques and seeking references that support a high-class scientific production.

Finally, it is necessary to highlight the sine qua non condition of two aspects: the constant updating of the Lattes curriculum, since this platform is the primary source of research and knowledge on scientific production; and the commitment of students with post-graduate programs that integrate as well as the community at large and, as students and graduates, hey should be responsible for disseminating the results achieved with their argumentative study.

FINAL CONSIDERATIONS

Reflecting on the characterization of the dissertations of a post-graduate program in nursing, specifically about a particular line of research, permeates the delimiting sense of productions profiles and reaches the direction of identification and reflection of the social benefits that the program provides. The PGENF-UFRN, through its line of research ‘Technological development in health and nursing’, produces knowledge and forms masters and doctors in the perspective, in particular, of improving the health service and teaching practices in nursing through the use of various technology aspects. Thus, it is promoted discussion and reflection about doing research, care and education in nursing, as well as the PGENF-UFRN’s contribution in this context - understood as a social contribution process of Higher Education Institution that goes beyond geographical boundaries and vocational training, reaching interdisciplinary, national and international levels of dissemination of knowledge.

REFERENCES


Profile of dissertations composing the line of...


