EXPERIENCE REPORT

SANDWICH DOCTORATE AS A STRATEGY FOR THE INTERNATIONALIZATION OF NURSING KNOWLEDGE

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ABSTRACT
In recent times, the need for qualified education at PhD level has called attention to the indicators of knowledge internationalization. The goal is to discuss, through an experience report, sandwich doctorate programs as a strategy for the internationalization of nursing knowledge. The gains deriving from the internationalization process based on this experience comprise the advancement of knowledge in terms of the research methods, the social representations theory and scientific knowledge production itself. In addition, the reality experienced permitted a critical analysis of the structural characteristics of post-graduate studies in Brazil, as well as the tracking of related study domains in which international bi-center research agreements and academic mobility programs can be established. In conclusion, the sandwich doctorate is a fruitful strategy of knowledge internationalization and educational enhancement. It is up to the institutions to attract and stimulate the young talents who have the profile and the research potential to invest in its accomplishment.

Keywords: Nursing, Nursing research, International educational exchange, Health postgraduate programs, Social psychology.

INTRODUCTION
Brazil is experiencing a phase of economic progress that influences the labor world, demanding qualified professionals, as well as the social level, through the improvement of the population’s living conditions. In the health area, specifically in nursing, this progress demands the production of tools and the appropriation of knowledge aligned with the public policies, which contribute to the expansion of knowledge and the consolidation of the Unified Health System (SUS), resulting in excellent care delivery to society (1).

That is the context in which nursing is under pressure to enhance its post-graduate programs, aiming to consolidate and expand its scientific and technological range and innovation through the knowledge produced (2). In that sense, nursing research is considered a tool that permits the advancement of nursing science and technology and, at the same, benefits health care.

In this perspective, post-graduate programs have a responsibility in the production of this knowledge, through the preparation of doctoral graduates with the ability to investigate the practical experiences involved in nursing practice contexts (2). Among the competences/aptitudes/domains of nursing PhD’s, the following are highlighted:

Mastery of the state of the art of the theme/activity area, with the ability to dialogue in the international sphere and to understand at a similar range, to argument in order to sustain one’s ideas in front of one’s peers and in other knowledge areas in the scientific community, moving towards the inclusion in and construction of knowledge production partnerships or networks (3:134).

In an education of excellence, required from the post-graduate programs, which complies with this profile and, hence, supports the evolution of nursing science and technology,

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solidarity, nucleation, leadership and internationalization of knowledge should be highlighted, the latter of which is focused on in this paper.

The internationalization of knowledge, through the different strategies adopted for its achievement, is an indicator that furthers, among other gains, the exchange of knowledge and experiences with institutions and partnerships of great scientific merit, facilitating the acquisition of the competences and skills needed for knowledge production, and therefore consolidating the cooperation between Brazilian and foreign groups.

Internationalization expands the nurses’ perspectives and references, in the attempt to attend to the demands of the profession. In that sense, a policy needs to be adopted that stimulates the exchange opportunities with a view to internationalization. That is the case of PhD students’ participation in foreign teaching institutions through “sandwich grants” for PhD programs in the sandwich modality. This strategy allows the students to develop part of their thesis research at foreign institutions of renowned academic excellence.

Different authors, mainly those involved in the assessment of post-graduate studies, indicate the internationalization of knowledge as a contemporary challenge nursing needs to overcome, due to difficulties with the English language, the methodological rigor of research and the relevance of their themes, descriptive studies with little impact in practice and the lack of centers that promote internationalization.

In view of the above and the need for qualified PhD education, the question is raised: are sandwich programs a good strategy to encourage the internationalization of post-graduate programs?

This experience report is aimed at discussing sandwich PhD programs as a strategy for the internationalization of nursing knowledge, thus contributing to the debate in nursing and strengthening its production, and at stimulating PhD students to apply for this kind of exchange modality.

About the gains linked to the thesis project

The research the sandwich PhD grant was linked to was related to Fundamental Nursing in the Intensive Care Unit context. The study was focused on nurses’ care practices for hospitalized clients, considering the presence of technologies in this environment.

Therefore, a theoretical-methodological approach was chosen that values the universe of common sense knowledge and invests in unveiling the practical knowledge that guides subjects in the world, the Social Representations Theory. The process-based approach of this theory was used, in the attempt to apprehend how the representation of the object is constructed, its genesis, elaboration processes and constituent aspects.

Thus, France was chosen, the country where the theory emerged in the work of Serge Moscovici, starting with the publication of *La Psychanalise, son image, son public* (1961). More specifically an important school in the development of the theory, renowned for its contribution to the study of social representations as a structuring nucleus, mainly through the academic investments of professors Jean Claude Abric and Claude Flament. They proposed methodological strategies to unveil the central nucleus of the social representation. That is the School of Aix-en-Provence, through the Social Psychology Laboratory affiliated with the *Université de Provence*.

This laboratory was created more than 40 years ago and its scientific policy rests on two objectives: to develop theoretical and methodological studies about social representations, cognitive dissonance and psychological and social construction processes of social practices; and to develop a research orientation that articulates theoretical and applied research, implying a disciplinary and multidisciplinary association.

The laboratory offers education at the MSc (social psychology of work, health, communication and marketing and the environment) and PhD levels, considering the two thematic axes that sustain the laboratories’ studies. In addition, it maintains relations with different French and foreign universities and regional and national entities from different disciplines, through which the institution attempts to disseminate the research towards the professionals, through the actors from the socio-educative, health and work contexts, offering consulting services regarding local public policies.
The main goal of the PhD program was the deepening of the theoretical framework chosen, aiming to obtain better conditions for its applicability in the data analysis and in the discussion of the research results. To put it in practice, some challenges had to be overcome, like gaining fluency in the French language for example, achieved through intensive private classes one year before leaving the country; and the planning of teaching activities at the University, so that the leave of absence would not affect the subjects taught in the negative sense. The latter challenge was overcome through the presentation of a proposal to reorganize the work plan and through institutional support, considering that the international exchange would also add value to the quality of undergraduate teaching.

The training program was developed between September 2011 and March 2012. The preliminary work plan included: supervision of the analysis and discussion phase, from the theoretical and methodological perspectives, focused on the use of the software Alceste for data analysis; immersion in the study of social representations and their approaches at the interface with the health area through participation in PhD education seminars; presence at local and regional events of interest; exchange with other research domains at the laboratory, permitting an interdisciplinary dialogue.

Among the activities, regular meetings with the research laboratory’s team of teachers are highlighted, during which the thesis problem and the related theoretical-methodological aspects were discussed, based on the epistemological foundations of the social representations theory. These meetings involved dialogues about identity aspects of nursing, thematic and lexicographic analysis of the discursive corpus, triangulation of the data collection and analysis techniques.

Another very important activity to achieve the objectives outlined for the program refers to the course offered by the postgraduate program in social psychology of health. These courses intended to achieve specific education in the field of health psychology, so as to intervene in the practices related to prevention in public health and to the implementation of support devices; and training to use conceptual and methodological instruments for the analysis of health problems at the individual and collective level. The courses chosen were: Study methods of social representations; Analysis of the research interviews; Social psychology of health.

The seminars regularly held at the laboratory were another form of participation, as they served as a space for contact with other theoretical approaches developed in the group with regard to the social representations, such as the future perspective and its implications in social practices, addressed in meetings like: Time perspective and social context: a socio-cognitive approach.

The PhD thesis defense sessions related to health and the exchange of ideas with its authors, on the other hand, represented an opportunity to get to know the types of research designs the French researchers most invested in, which was the case with the multi-method approach and quasi-experimental research evidenced in the study: Social representations, theory of fear management and construction of risk linked to HIV in the context of an intimate sexual relationship: a quasi-experimental approach.

In addition, the specific course on the management of the software Alceste is underlined, as well as the access to the extensive bibliographic collection of books and studies that is part of the laboratory, offering an immersion into the European literature related to the group’s study areas. This activity summary illustrates the gains deriving from the sandwich program, mainly in terms of knowledge advancement on the research methods, the social representations theory and the scientific production itself, demonstrated in the organization of the empirical material, in the deepening of the analysis produced in Alceste and in its discussion.

Concerning the difficulties faced, the adaptation process to the French culture and language is highlighted, which is natural in this type of exchange; the participation in subjects/courses in an area different from nursing; the need to master the English language; the understanding of innovative research designs applied in the social representations studies; which were slowly
overcome through the gradual deepening of the program.

In addition, this training permitted equipping the research group in Brazil through the transmission of updated references; contributed to tightening the exchange relationships between the laboratory in France and the group in Brazil, with possibilities for bi/multicenter studies and the researchers’ visits to these groups; to the greater valuation of the group by adding foreign researchers to the productions; to the enhanced fluency in another language.

This academic experience is in line with what is expected from internationalization, in which the external validation of what is produced and the need to follow the global technical-scientific development are requisites for its development\(^4\). Hence, international partnerships to socialize the knowledge and disseminate the results favor the advancement of science, influencing the professional practice and the clients’ quality of life.

**About the experiences related to the postgraduate program and its interfaces with the internationalization of knowledge**

In view of the current requirements of science, technology and innovation with regard to the international impact in nursing knowledge production, some experiences and their critical reflection in confrontation with the Brazilian reality should be pointed out, as they are relevantly related to this internationalization process.

One of them refers to the research structure and conditions. As regards the PhD students, mainly the grantees from French funding agencies, they are stimulated to attend the university regularly. Therefore, they have their own office with technological resources and material to guarantee their stay at the institution and favor the exchange of experiences and ideas, besides creating an environment that encourages academic work. The research laboratory also has its own headquarters, with a structure that permits the sharing of technological and bibliographic resources and the organization of meetings.

Concerning the PhD education, there is no set of compulsory subjects to be taken, but the PhD students’ participation in the orientation process of the Master’s student is considered, including the correction of the “memorials” related to the courses. In addition, they participate in the training course in psychology, with a regular timetable of teaching activities in the classroom.

A compulsory subject on the English language is taught in the Master’s program, by a lecturer from the program, which sustains the fact that the texts discussed are mainly written in English. This supports its greater mastery by the students, facilitating the international academic mobility that is frequently observed at the laboratory.

There is no strictly defined deadline to conclude the research-thesis, which generally happens within a five-year interval, favoring intervention and experimental research designs that demand more time to develop. In that sense, there are differences between France and Brazil, as the deadline to terminate the PhD program is 48 months. The time to finish research in Brazil can be one of the variables that contribute towards more descriptive/diagnostic than evaluative/intervention PhD research projects, which hampers the internationalization of the results produced in Brazil\(^4,6\). The laboratory seminars take place between November and June, which is the main academic activity period, approximately twice per week, with a previously agreed upon timetable, so as to guarantee the presence of the teachers who are considered full members and of external speakers, which represent a large part of the seminar program. The meetings are organized around cross-sectional axes that join the different research areas associated with the laboratory.

It is also noteworthy that these seminars join other laboratories with their respective students in the attempt to expand the discussion of the cross-sectional axes. The laboratory has its own collection, site that disseminates publications, the timetable of meetings, the program of the PhD defense sessions, and the students have unlimited access to different online databases.

The reality experienced during the sandwich PhD program permits an analysis of the structural characteristics of postgraduate education in Brazil, with a view to the advancement and consolidation of the internationalization. In that perspective, it is
observed that institutions with a precarious physical and human resource structure for the appropriate functioning of the research laboratories face difficulties to maintain their productions. Also, the lecturers and students’ limited fluency in the English language, problems to organize the agenda of researchers and students’ meetings in the context of the research groups and the isolated production, with little sharing of common axes, associated with the PhD students’ “dispersion” during the thesis production period and the limited time to finish the research, are factors that hamper the internationalization of nursing knowledge.

Hence, these factors represent a current challenge for the postgraduate program in the production of new knowledge aligned with practice in health and nursing, with a view to changes in the care reality\(^{(10)}\). The sandwich PhD program helped to identify the research areas of the researchers affiliated with the laboratory where the program was carried out, with a view to screening related knowledge areas within which bi-center international research agreements and internal and external academic mobility programs can be established. These are: Drugs consumption; Palliative Care/Euthanasia; Pain; Occupational Health; Adolescent health; Health/disease process; Woman’s health.

**FINAL CONSIDERATIONS**

The complexity involved in the health needs of the people who visit the services is increasingly demanding professional qualification, especially from the nurses, who need to apply up-to-date knowledge that contributes to the achievement of an excellent health status. Hence, it demands ability to produce innovative technologies that attend to the demands of professional practice.

This advancement and innovation of professional practice involve the education of nursing PhD’s, presupposing technical-scientific competency in care delivery to subjects in their health-disease process and social context; and the mastery of a nursing area in range and depth, contributing to the incorporation of know-how into care.

PhD education of excellence is the current challenge postgraduate programs are facing, in the attempt to get aligned with the policy focused on the advancement and consolidation of scientific knowledge, technology and innovation in nursing. In this context, the internationalization indicator is a parameter that strengthens PhD education, as it encourages the debate of ideas, the contact with theoretical and methodological perspectives mastered at the centers of excellence, and the exchange of experiences.

In view of its multiple benefits, the sandwich PhD is a favorable strategy for the internationalization of knowledge and the enhancement of education. The institutions are responsible for attracting and stimulating the young talents, who have the profile and the research potential to invest in its accomplishment. An open mind, scientific curiosity and an innovative attitude are ingredients that turn this international “plunge” into a fruitful course to follow.

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**DOUTORADO SANDUÍCHE COMO ESTRATÉGIA DE INTERNACIONALIZAÇÃO DO CONHECIMENTO DA ENFERMAGEM**

**RESUMO**

A necessidade de formação qualificada do doutor na atualidade vem exigindo atenção aos indicadores de internacionalização do conhecimento. Objetiva-se discutir, através de um relato de experiência, o estágio doutorado sanduíche como estratégia de internacionalização do conhecimento da enfermagem. Os ganhos advindos do processo de internacionalização a partir desta experiência de estágio abarcam o avanço do conhecimento no que tange aos métodos de pesquisa, a teoria das representações sociais e a própria produção do conhecimento científico. Além disso, a realidade vivenciada oportunizou uma análise crítica das características estruturais da pós-graduação no Brasil, e permitiu rastrear domínios de estudos afin correspondentes aos quais podem ser estabelecidos convênios de pesquisa internacional biocêntricos e programas de mobilidade acadêmica. Conclui-se que o doutorado sanduíche configura-se como uma estratégia profícua de internacionalização do conhecimento e incremental à formação, cabendo às instituições atrair e estimular os jovens talentos com perfil e potencial para pesquisa a investirem na sua realização.

DOCTORADO SÁNDWICH COMO ESTRATEGIA DE INTERNACIONALIZACIÓN DEL CONOCIMIENTO DE LA ENFERMERÍA

RESUMEN
La necesidad de una formación cualificada del doctor en la actualidad viene exigiendo atención a los indicadores de internacionalización del conocimiento. El objetivo fue discutir, a través de un relato de experiencia, la práctica de doctorado sándwich como estrategia de internacionalización del conocimiento de la enfermería. Las conquistas advenidas del proceso de internacionalización a partir de esta experiencia de práctica abarcan el avance del conocimiento en lo que se refiere a los métodos de investigación, a la teoría de las representaciones sociales y a la propia producción del conocimiento científico. Además de eso, la realidad vivida propició un análisis crítico de las características estructurales del posgrado en Brasil, y permitió rastrear dominios de estudios afines dentro de los cuales pueden ser establecidos convenios de investigación internacional bicéntricos y programas de movilidad académica. Se concluye que el doctorado sándwich se configura en una estrategia provechosa de internacionalización del conocimiento e incremento a la formación, cabiendo a las instituciones atraer y estimular a los talentosos con perfil y potencial de investigación a invertir en su realización.


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