

Nursing doctoral students views about career planning and research priorities

Percepção de estudantes de doutorado em enfermagem sobre planejamento de carreira e prioridades de pesquisa

Percepción de estudiantes de doctorado en enfermería sobre planificación de carrera y prioridades de investigación

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Keywords

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Descritores

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Descriptores

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Abstract

Objective: The aim of this study was to describe the views of nursing doctoral student before beginning and during training doctoral programs about career planning changes and research priorities.

Methods: The study was of qualitative design. The study was carried out with 16 interviews with Health Sciences Institute Faculty of Nursing. Individual interviews were with 16 doctoral students enrolled in different academic specialties following the interviews, the audio recordings were first transcribed and then categorized. The data were analyzed by content analysis.

Results: Data was analyzed by content analysis and then three main themes, namely "changes in career planning," "research priorities," and "development," and six categories were formulated from the data obtained. The participants stated that upon starting their doctoral program, they were aware that they had made various changes in their career plans also doctoral program had affected their professional development and improved their transferable skills.

Conclusion: This study's results suggest that doctoral students should be supported so that they can be effective in their careers, and that post-doctoral education should also be supported. Effective policies concerning the improvement of doctoral nurses should also be developed and implemented based on evidence demonstrating the usefulness of these supports.

Resumo

Objetivo: O objetivo deste estudo foi descrever os pontos de vista de estudantes de doutorado em enfermagem antes do início e durante o doutorado sobre mudanças no planejamento da carreira e prioridades de pesquisa.

Métodos: O estudo foi de natureza qualitativa, tendo sido realizado com 16 entrevistas no Instituto de Ciências da Saúde, Faculdade de Enfermagem. Foram realizadas entrevistas individuais com 16 estudantes de doutorado matriculados em diferentes especialidades acadêmicas. Após as entrevistas, as gravações de áudio foram primeiramente transcritas e depois categorizadas. Os dados foram submetidos a análise de conteúdo.

Resultados: Após análise de conteúdo, três temas principais ("mudanças no planejamento da carreira", "prioridades de pesquisa" e "desenvolvimento") e seis categorias foram formuladas a partir dos dados obtidos. Os participantes afirmaram ter consciência de ter feito várias mudanças nos planos de carreira ao iniciar seu projeto de doutorado, e o trabalho no projeto mudou o desenvolvimento profissional e melhorou as habilidades acadêmicas.

Conclusão: Nossos resultados indicam que os estudantes de doutorado devem ser apoiados para serem eficazes na carreira, e a formação no período pós-doutoral também deve ser apoiada. Políticas efetivas em relação ao aperfeiçoamento de enfermeiros doutorandos também devem ser desenvolvidas e implementadas com base em evidências sólidas da utilidade desses suportes.

Resumen

Objetivos: El objetivo de este estudio fue describir los puntos de vista de estudiantes de doctorado en enfermería sobre cambios en la planificación de la carrera y prioridades de investigación antes del inicio y durante el doctorado.

Métodos: El estudio fue de naturaleza cualitativa, habiendo sido realizado con 16 entrevistas en el Instituto de Ciencias de la Salud, Facultad de Enfermería. Se realizaron entrevistas individuales con 16 estudiantes de doctorado matriculados en diferentes especialidades académicas. Después de las entrevistas, las grabaciones de audio fueron transcritas, en primer lugar, y luego categorizadas. Los datos fueron sometidos a análisis de contenido.

Resultados: Después del análisis de contenido y, a partir de los datos obtenidos, se formularon tres temas principales ("cambios en la planificación de la carrera", "prioridades de investigación" y "desarrollo") y seis categorías. Los participantes afirmaron tener conciencia de haber hecho varios cambios en los planes de carrera al iniciar su proyecto de doctorado: el trabajo en el proyecto cambió el desarrollo profesional y mejoró las habilidades académicas.

Conclusión: Nuestros resultados indican que los estudiantes de doctorado deben ser apoyados para ser eficaces en la carrera, igualmente, también es necesario apoyar la formación en el período postdoctoral. Las políticas efectivas en relación con el perfeccionamiento de enfermeros doctorandos también deben ser desarrolladas e implementadas con base en evidencias sólidas de la utilidad de esos soportes.

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Introduction

The preparation (or training) of doctoral nurses to develop nursing science and knowledge is critical to establishing a strong foundation in academic and research career.⁽¹⁻³⁾ The demand for nursing doctoral training is increasing day by day.⁽⁴⁾ Increasing the number of doctoral nurses is necessary for the advancement of nursing science and practice.⁽¹⁾ The new doctoral graduates who will respond to requests from the field are faced with many responsibilities.^(4,5) Among the most important responsibilities of new doctoral graduates is the ability to conduct research,⁽¹⁾ refers to the conducting research skills as the expected result of doctoral education. There is also limited information on effective approaches to educating students on conducting research in nursing doctoral programs.⁽⁵⁻⁸⁾ The conducting research skills of doctoral students are a fundamental mechanism in the introduction, use and dissemination of nursing research to future nurses.^(1,9)

In order to guide doctoral nurses, they can set research priorities and plan independent research. The main responsibilities of philosophical nurses are to identify research priorities, to conduct research and publish research findings. Furthermore doctoral programs also contribute to increasing students interest in research by encouraging them critical thinking and develop new scientific viewpoints and approaches.^(6-8,10) Thus, it is possible to explore new information acquired for the profession with theories learned in doctoral programs and various aspects of research processes.⁽¹¹⁾ The selection of research priorities provides a framework for consensus on the scientific gaps that need to be investigated and thus for the development and use of nursing knowledge.^(12,13)

One of the difficulties faced by doctoral students is the transition from the practice specialist to the research scientist. This liability is subject to change and is under the obligation to produce information that affects patient care.⁽¹⁴⁾ This usually leads to a situation called research-practical dualism (dilemma).⁽¹⁵⁾ These difficult responsibilities, changing roles and anticipations that are waiting for doctoral students in the future are creating

some challenges.⁽¹⁶⁾ For example; nurses with doctoral degrees stated that they could not easily transfer their clinical and managerial experience to new study areas.^(17,18) Therewithal, they think that they are not qualified enough to be employed in the university for a long time.⁽¹⁹⁻²¹⁾ They also reported that they felt stress, insecurity, weakness, and fear, even though they were excited.^(19,20,22,23) For this reason, effective strategies should be developed for the future labor problems of doctoral nurses.⁽²⁴⁾ Therefore, new information that will contribute to the relevant literature about post-doctoral career planning is needed.

In Turkey and other Asian countries, the number of doctoral programs has rapidly increased. This rapid increase has brought problems with human resources and inadequate educational infrastructure.⁽²⁵⁾ In Turkey, nursing doctoral programs were initiated in 1972 using the North American Ph.D. model.⁽²⁶⁾ As of 2009, graduate education is available in the field of nursing in 26 of Turkey's 90 universities, but only 9 of them have doctoral programs.⁽²⁷⁾ However, titles, curriculum and assessments in nursing doctoral programs have varied by country.⁽²⁸⁾ In this context, despite the importance of the role of demand for PhD nurses, continuing uncertainties in their career planning.

The limited career opportunities available in Turkey for researchers with Ph.D.'s and the difficulties in finding opportunities specific to the doctoral education field present major barriers to career planning.⁽²⁹⁾ Especially in the area of nursing and starting with undergraduate education, there is not enough data available to provide guidance to supervisor and program administrators regarding career planning. The aim of this study was to investigate the views of nursing students before beginning and during training doctoral programs about career planning changes and research priorities.

Methods

Participants

The study was of descriptive, qualitative design. The study was conducted at the Institute of

Health Sciences in Turkey over the period February 2014-October, 2015. The Health Sciences Institute offers 71 Higher Graduate Program. This graduate program comprises 44 Master Graduate Program and 27 doctoral programs. Third Cycle (Doctorate Degree) Program is comprised of courses, (at least 78 ECTS), field study (12 ECTS) and thesis (150 ECTS), in total 240 ECTS credits. Students must have minimum Cumulative Grade Point Average (CGPA) of 2.50/4.00. The study sample comprised 16 nursing doctoral students enrolled in the Doctoral Program in Nursing. The inclusion criteria for the study were; Students who has received a two-year theoretical training in the process of preparing the thesis from every department (doctoral programs in nursing management, psychiatry, internal medicine, surgery, gynecology, and public health nursing) volunteering for the study were recruited into the sample group. The research was conducted using the convenience sample form of purposive sampling.

Data collection

A semi-structured interview form was used in the study. The form, which was drawn up in line with the literature, contains four open-ended questions. The interviews with a general question: "What kind of difference was there between your career plans before and after doctoral program?" and semi-structured questions such as "Which problems have you realized in your profession after program?", "Which research priorities did the training program help you to see in terms of the future and how did you define these?" and "How did the theoretical and practical aspects of your doctoral program impact your improvement?" In addition, additional questions were asked. Data were collected by using the in-depth individual face-to-face interview technique. Interviews with all participants were conducted by the same researcher. Before initiating interviews with the students, they were informed about the purpose of research, how it would be conducted all the information would be kept confidential, students' names would remain anonymous and that the interview would be recorded. Then, their written consents and statements of voluntary partici-

pation were obtained. The interviews were held at the school in a quiet room where no interruptions would occur, and that each interview would last 45-60 minutes. When data began to be repetitive and the researcher could not obtain new information, the interviews were completed.

Data analysis

Following the interviews, the voice recordings were first transcribed verbatim and then content analysis approach was used. The aim of content analysis is to examine data qualitatively and concurrently quantify the data. Content analysis applies a descriptive procedure in both coding of the quotations and its interpretation of quantitative counts of the codes.^(30,31) Systematic coding and categorizing approach applied for exploring written information to decide patterns of words used, their frequency and their relationships. At the first stage, researchers independently read and reread the content of the transcripts word-by-word, to derive codes from the data by highlighting exact words from the text that captured key thoughts or concepts originating from the participants' responses to the interview questions. At the next stage, the coders then compared their codes and discussed their perceived meanings to establish if there was concurrence of the independently derived codes.

The guidelines for conducting qualitative studies established by the Consolidated Criteria for Reporting Qualitative Research (COREQ) were followed.⁽³²⁾ To ensure the validity of the research, data continued to be collected until data saturation was reached. To make sure that the questions were properly comprehended, care was taken to conduct the interviews in an appropriate environment. All of the interviews were recorded on a voice recorder. At every stage of the study, the researchers gathered together to form a consensus. To ensure the reliability of the research, at each stage, the support of two faculty members familiar with qualitative research and experts in their fields was enlisted. The researchers transferred the research results to the reader in a clear and comprehensible way. Furthermore, the data collection instruments employed were saved to serve as confirmation of the coding and notes car-

ried out in the analysis process. The research report comprised three main themes: changes in career planning, research priorities, and development.

Written permission for conducting the research was obtained from the Non-Interventional Clinical Trials Ethics Committee (Decision Date: February 20, 2014, Decision No. 2014/07-10) at which the research was conducted.

Results

Participants were aged between 25 and 34 years age, with the mean age of 29 years. In the examination of the views of the doctoral students in nursing on the changes in their career planning and their research priorities, the decision was made to categorize these under three main themes (“changes in career planning,” “research priorities” and “development”) and 13 sub-categories (Chart 1).

Chart 1. Main Themes, Categories and Sub-categories drawn up with respect to the Impact of the Doctoral Program in Nursing on Career Planning and Research Priorities

Main Themes	Categories	Sub-Categories
Changes in Career Planning	Uncertainty	Role ambiguity Being an academic
	Awareness	The common language difficulties with clinicians Innovation
Research Priorities	Community requirements	Community Improving health
	Gaps in education and the curriculum	Supervisor criteria Doctoral program issues Research training
Development	Professional Development	Theoretical Improvement Developing nursing philosophy
	Transferable Skills	Problem-solving Conducting and publishing research

Changes in career planning

The participants stated that prior to the doctoral program they had planned on becoming academics but that they were now facing uncertainty in this respect. They said that their thoughts of becoming academics continued throughout the course of the doctoral program along with their thoughts about the uncertainty they were facing. In this context, they remarked that they wanted to be clinical educators, researchers, and enter other fields such as industry and politics. The participants stated that upon starting their doctoral program, they were

aware that there could be various changes in their career plans. The reasons for these changes were:

Uncertainty

The students claimed that they experienced uncertainty, particularly about which field they could work and how they could practice what they had learned. They said they believed that as well-educated nurses with a high level of skills and knowledge, they needed to promote the profession of nursing in multidisciplinary areas and make it known how much nurses could contribute to these fields.

Uncertainty about and the search for roles:

“...Maybe I would like to work at a pharmaceutical firm as a nurse with a doctorate, perhaps in the training department or in industry....Maybe I really want to work in a company or maybe at the Ministry of Health because those of us who complete a doctorate really have a limited choice in what we can do. We’re an elite group but highly trained people like us should be able to serve the public in some way.” (P-5)

Being an academic,

“Before the program, my career plan was mostly to stay in the field but now I’ve started to think that I should take on an academic role. Also, we unfortunately don’t get the chance to use the theoretical knowledge we have already gained in the doctoral program. Even if we wanted to, it’s not very easy to get together a team and make a difference by yourself.” (P-15)

Awareness

The difficulty of establishing a common language with clinicians:

“... I saw after I started my doctorate that I couldn’t take any of what I learned into the clinic or field. We carry out research here, for example, get some wonderful results. We search an incredible literature and there are very good studies that con-

*tribute to the nursing profession and its practices
....” (P-13)*

Innovation

“I need to fill up a gap in my country, do something that currently does not exist, but in reality, how many original ideas can we come up with?” (P-4)

“The realities of the country are a little different from those of the world. The privatization wave in healthcare brings with it class differences. We need new methods; new initiatives to ensure equality in accessing services, giving people the healthcare they desire, equally and continuously.” (P-12)

Research priorities

The participants said that they had changed their research priorities over the course of the program. These priorities change within the community, the gaps in the curriculum and the needs of nursing. The students emphasized that societal needs included home care and providing care for people with chronic illnesses, remarking that this was an area which should have priority in research studies.

Community:

“Before the program, since I was working, I hadn't really thought so much about home care. I'm now aware of this issue. There's a great need for this. and dealing with chronic illnesses at home to looking after the home care of terminal patients and providing support for caregivers at home.” (P-11)

Improving health:

“Actually, if I can properly educate a healthy person, someone who has never been hospitalized, I think I can improve conditions so that people avoid hospitalization altogether.... protecting and improving health is something that nurses with graduate degrees can focus on....I have come to believe this more.” (P-8)

Gaps in education and the curriculum

The students stressed that research was lacking in some areas and the doctoral curriculum did not address the gaps in the field. They said that more research in needed fields would increase the effectiveness of a completed doctoral education.

Supervisor criteria:

“All through the program, I thought about how good it would be if one of the research priorities would be to study the possibilities of to what degree we could provide advisory services in and outside of the country. I wish there could be studies to help me ascertain how qualified I am and what supervisor competencies are.” (P-14)

Doctoral program issues:

“After starting on the doctoral program, I observed that there were certain deficiencies in the program, educational issues and in what we're learning; what can be done to improve education?” (P-1)

Research training:

“My biggest problem is a class on research; there should definitely be one of the topics to be studied. How should a research class be carried out in nursing? Should it be like we're offered, or should it include practice....” (P-14)

Development

In this theme, the students expressed the impact of the doctoral program on their theoretical development, on the philosophy of nursing, and its contributions to transferable skills.

Professional development:

Students said that the courses they took throughout the doctoral program made an important contribution to their professional development.

Theoretical development:

“The basic course we take to understand nursing theories: we learned there (this was the subject of

my thesis) that nursing is a science and we learned about all the processes it went through before it became a science.” (P-15)

Developing nursing philosophy:

“The doctoral program was very beneficial to me in terms of teaching me the philosophical aspects of the profession; I started to be more analytical about the profession, about the problems, the essence of the problems and internalizing the philosophical dimensions of the profession.” (P-15)

Transferable skills:

It was seen that the doctoral students improved upon their transferable skills to a significant degree:

Problem-solving:

“I had understood the doctoral program as an approach meant to improve problem-solving skills. We addressed problems from a wider perspective. Consequently, I think we got the opportunity to consider current problems in more depth.” (P-12)

Conducting and publishing research:

“I can now write articles. I am more sure of how to scan the literature. I at least know what ‘evidence’ is. I can access evidence-based research and I know now that this is what our approach should be.” (P-14)

Discussion

Doctoral programs in nursing are important from the perspective of many dimensions that include developing models for nursing, carrying out productive and quality research on evidence-based practices, and educating a labor force of highly competent nurses. It is for this reason that it is particularly important that doctoral students work with their advisors to set out their career plans. Doctoral education in nursing in Turkey has been formulated to ensure that students achieve competency in both

theory and practice and has targeted serving the needs of nurses who work both as academics and in the clinical setting. The objective of the present research was to investigate the views of nursing students in doctoral programs about changes in career planning and research priorities and to discuss these in the context. According to the results of this study, discussion was held on the framework of three main themes. These themes are changes in career planning, research priorities, and development.

Changes in career planning

It was seen that the career plans of doctoral students were affected by various factors over the course of the doctoral program and their plans may change if demand from different sectors is at the end of the program. These factors were the uncertainty about the roles of nursing that resulted from the inability to appropriately apply the knowledge and skills learned in the program and the steadily prevailing thought of transitioning to an academic career. In 1999, Antrobus and Kitson argued that graduates of doctoral programs were needed in clinical positions but today, there is no awareness and therefore no consensus on the actual worth of doctorate-level researchers in the nursing profession or about just how valuable their work is for society.^(33,34) The confusion about post-doctorate nursing roles in career planning is therefore inevitable. In studies conducted, newly graduated doctoral nurses did not feel that they were sufficiently qualified to be employed by the university for a long period of time,⁽¹⁹⁻²¹⁾ the lack of a general awareness of the institutional and administrative demands of the academic role and the fact that they are not fully explained^(20,23) and for these reasons they have not been able to easily convert their clinical and managerial experience into academic environment.^(17,18) Our study revealed that the participants generally wished to become academics. In a study the majority of students expected to continue their academic career after the doctoral education.⁽³⁵⁾ One study shows that its participants' career plans included completing post-doctoral scholarship requirements and later occupying faculty positions at research-focused universities.⁽³⁶⁾ Another study reveals that nurses work

in academic positions while also working in clinical settings and that as a result of this, they are promoted to higher-level positions by integrating their efforts at hospitals and universities.⁽³⁴⁾

The students stated that over the course of their doctoral education, their awareness was heightened in many respects. They said in this context that they realized the difficulties of establishing a common language with clinicians and they became aware of the importance of innovation. Similarly in another study, researchers working on their doctorates emphasized that improving skills and competencies was essential for clinical experience and in impacting healthcare policies.⁽³⁷⁾ Nurses working on doctorates concentrate on using research, managing clinical systems and patient outcomes in the context of providing patient care.⁽²⁴⁾ The doctoral program also creates awareness of change and innovation and stresses the importance of finding the right place to work in terms of engaging in career planning in order to sustain an existence in the profession.

Research priorities

It is very important for raising the quality of scientific research in nursing to be able to produce scientific and evidence-based knowledge and implementation to practice. The participants in the research stated that their research priorities changed during the course of the doctoral program. The focal point of this change was societal priorities and working on nursing education curriculums. The students expressed a desire to fill in the gaps in this context and contribute to the development of evidence-based knowledge. A study has determined the research priorities of university departments providing doctoral training as protection, the management of healthcare issues, improving quality of life, improving self-care and health safety among individuals, families and the community in illness, and raising the quality of health of populations at risk.⁽³⁸⁾ In two studies conducted with doctoral students in United Kingdom and Australia, students stated that they had the opportunity to study on a large number of methodologies, so they wanted to make a difference for nursing or midwifery care to focus on clinical research, collegiality and competitiveness, but when

the articles were rejected by the journals they were disappointed.^(39,40)

The study reports the views of nurses in doctoral programs who commented on approaches and guidance of supervisors and problems in education, particularly in education on research. In a study that investigated the views of doctoral students on their work with mentors reported that the students pointed to communication problems with their supervisors, issues with the checking and supervision of their thesis work, a lack of trust, academic bullying and being abandoned by the supervisor as their principal.⁽⁴¹⁾ It can therefore be said that supervisor criteria is a vital part of doctoral education. An experienced supervisor plays an important role in helping a doctoral student design an academic career development plan, helping to break down the difficulties of doctoral studies, and helping the professional network not only lead to doctoral programs but also to significant career opportunities in the following years.⁽⁷⁾

At the same time, the participants offered their thoughts on re-evaluating the educational program and in particular, improving research education. They said that they felt the need for an improvement in the practical aspects of research training and for classes on analytical thinking and analysis. A qualitative study conducted in United Kingdom has reported that students wish to take field-specific and more structured classes in their own areas of work.⁽⁴²⁾ It may be said that the quality of doctoral education in Turkey may be improved with similar research conducted in this manner, leading to a re-formulation of the curriculum in the light of the results.

Development

The respondents in the study stated that the doctoral program was effective in their professional development and in improving transferable skills. In this context, they said that besides improving their development in the philosophy and theoretical background of nursing, they increased their skills in problem-solving, conducting research and publishing their findings. The institution where the present study was conducted provides class-

es on research, the philosophy/history of science and nursing theories, creativity and inventiveness in science, methods of statistical analysis and other basic subjects, as well as training in nursing administration, psychiatric nursing and other special branches and practices in nursing. The participants reported that these classes made an impact on their scientific thinking and theoretical approach to patient care, nursing administration, healthcare systems and policies. In a study reviewing the quality of doctoral education, participants said that the program had left them with various gains that ultimately had an important impact on their career planning. These included the skills of analytical thinking, writing articles, improving professional courtesies and developing academic relationships.⁽⁴³⁾ In this study, it is believed that skills have been defined as development themes have a significant impact on career planning.

The reported findings should be interpreted within the context of specific limitations of the study. The sample size comprised a small group to accommodate the completion of the work within a compressed time frame. All participants involved in the study were female, because there was no male students that fit inclusion criteria. This may affect findings, as the perspectives may be different based on career planning and research interests. Last, this study took place at one institution with a selected group of nursing doctorate student, and it cannot be assumed to represent areas outside this context.

Conclusion

From past to present, differences in the way nurses with doctorates are valued in the clinical and academic environment, how the knowledge, skills and experiences derived from their education find a place in their career plans, have been a subject of controversy. Another recommendation for supervisors is that a focus be placed on improving theoretical and practical courses to develop programs and instruments which will ascertain career planning tendencies. It may be useful to

prepare an academic career development plan to achieve success in the doctoral program and to create a scientific career path. Supervisors should be actively involved in developing this plan at the beginning of the doctoral program. Expected qualifications for the career goals developed with the student and activities to be undertaken may include courses and other activities (eg, article writing conferences, summary presentations, participation in research conferences, research or teaching assistantships, internships, journal clubs, or seminars participating in research). Moreover, it might also be suggested that a major contribution in this context will be establishing courses to improve the research and scientific method techniques that are developed by education administrators. This study's results suggest that doctoral students' education and training should be supported so that they can be effective in their careers. Effective policies concerning the improvement of doctoral nurses should also be developed and implemented based on evidence demonstrating the usefulness of these supports.

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Collaborations

Ünal A, Seren İntepeler Ş, Ayhan Öncü Y declare that they contributed to the study design, data analysis and interpretation, writing of the article, relevant critical review of the intellectual content and approval of the final version for publication.

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