Technical nursing course at PROFAE-Ceará: an analysis from the graduates' perspective

ABSTRACT
This study aimed to analyze PROFAE’s technical Nursing course from the perspective of the students who had completed the course regarding the identification of strengths and weaknesses they identified during the program. This exploratory, qualitative-based descriptive study was carried out with graduates of the Public Healthcare School of Ceará, who had completed the course. Two focal groups composed of 21 graduates were organized in the months of May and June 2007. The content analysis was used for the comprehension of the discourses. Results indicated that the course provided the graduates with a great deal of knowledge, thus positively affecting their lives and transforming them into agents of change in their work contexts. The study analyzed the curriculum, the methodology, the textbooks and other available materials, as well as the professors. The reported weaknesses were training field limitations, the length of the course, and the sponsorship management. The present assessment represents an important tool for the development of the course, generating an opportunity for the improvement of the proposal.

KEY WORDS

RESUMO
Este estudio objetivou analisar el curso Técnico de Enfermagem do PROFAE, sob a perspectiva dos egressos, vislumbrando o reconhecimento dos pontos fortes e as dificuldades decorrentes do desenvolvimento do curso. Estudo descritivo-exploratório de natureza qualitativa, desenvolvido com os egressos da Escola de Saúde Pública do Ceará. Foram realizados dois grupos focais, com 21 egressos, em maio e junho de 2007. Utilizou-se a análise de conteúdo para compreensão das falas. Evidenciou-se que el curso proporcionou aquisição de conhecimentos, transformando a vida dos participantes, passando a ser agente de mudança no contexto de trabalho. Foram analisados a qualidade do currículo, a metodologia, o material didático disponível pela instituição, bem como a atuação do corpo docente. Como pontos frágeis citaram-se a limitação do campo de estágio, duração do curso e gerenciamento de ajuda de custo. Entende-se que a avaliação representa um aspecto importante para el curso, ensejando el aperfeiçoamento da proposta.

DESCRITORES
INTRODUCTION

The new health model demands trained professionals who respond to the needs of the population and health services. In 1999, the National Health Department set up the Professionalization Project of Nursing Professionals (PROFAE - Projeto de Profissionalização dos Trabalhadores da Área de Enfermagem), whose purpose is to promote the improvement of ambulatory and hospital care quality by supplying professional qualification to the employees of public and private health organizations, as well as by supporting the dynamics and regulation of the work market in the health area[1].

At first, the Project chose to work with two training modalities: the Complementation of the Elementary Education (CEE) and the Professional Qualification of Nursing Assistants (PQ). Considering the growing qualification activity of workers and the demands from the New National Curricular Guidelines for the Technical Professional Education, the project incorporated, in 2002, the Complementation Course for Professional Qualification from Nursing Assistants to Nursing Technicians (CPQ), aimed at assistants who finished high school and who were employed in health organizations of medium and high complexity[2].

Under these circumstances, the incorporation of the qualification complementation happened within the current public policy of the health arena, since qualified professionals are needed for the organization of health services at all care levels and for the development of medium and high complexity services[2].

In the state of Ceará, the first registration of PROFAE took place in November 1999, through the bank Banco do Brasil, aimed at the qualification of a greater number of professionals, which created the opportunity for the participation of several educational institutions in the bidding process of the National Health Department.

With 13 years of accumulated experience in the education of nursing assistants, in 2000 the Public Health School of Ceará (ESP-CE - Escola de Saúde Pública do Ceará) developed activities of mobilization and registration of PROFAE workers and, afterwards, in professional qualification, including a large portion of the candidates registered all over the state in a decentralized way.

Over five years (2001 to 2005) the PROFAE, together with the ESP-CE, qualified 5,351 nursing assistants and 797 nursing technicians.

In this context, the current study proposes to analyze the course, from the point of view of graduated students, aiming at recognizing the strong points as well as the difficulties found in the development of the course. The authors hope this process will provide a new direction to future technical courses in the nursing profession in the state and the country.

METHOD

This is a descriptive-exploratory study, based on the qualitative methodology. This methodology was chosen due to the recognized existence of a dynamic relation between the real world and the subject. This relation attributes meaning to the phenomena interpreted, by working with a universe of meanings, values and attitudes regarding the processes and phenomena that cannot be quantified, which answers the guiding question of this study[3].

This study is part of a project financed by UNESCO and the National Health Department, through the Administration Bureau of Health Work and Education (SGTES - Secretaria de Gestão do Trabalho e da Educação na Saúde); the study, named Evaluation of the Nursing Technical Course/PROFAE by egressed graduate students and supervisors in Ceará, comprises the results of the first stage of this project. It was approved by the Committee of Ethics in Research of the ESP-CE, through the statement nº 04/2006.

The study location included three cities in the state of Ceará (Fortaleza, the capital city; Maracanaú, a metropolitan city; and São Benedito, located in the north of the state), which were randomly selected from a total of 18 cities that had selections of Nursing Technical Courses, promoted by the association PROFAE/ESP-CE, from 2002 to 2005.

It started with the identification of the egressed graduate students, based on the database available at ESP-CE. Afterwards, the city health departments and local coordinators of the egressed groups were contacted in order to locate and invite them to voluntarily participate in the focal groups.

Two groups were than formed, one in Fortaleza, with graduates from the groups of Fortaleza and Maracanaú, and the other in São Benedito. The sample had 21 graduates when the dialogues of social agents were commenced, with the purposes initially proposed by the study. The focal group of Fortaleza and Maracanaú had the participation of 10 graduates; there were 11 nursing technicians in São Benedito’s group.

A semi-structured script was created to lead the focal groups, focused on questions related to the perception of the graduates regarding the Nursing Technical Course, high-
lighting the strong points and difficulties faced during the educational process.

The focal groups were carried out in compliance with the rigor required by the literature in terms of the homogeneity of the group (all participants were graduated students); the limit of participants that allow a good interaction; the right number of people for the facilitators and moderators to lead; and the use of a script to guide the discussion. The focal groups met in places prepared for this purpose, and the discussions were recorded after the participants’ consent, respecting the confidentiality of their names and the provided information. The central guiding question, presented at the beginning of the focal groups was: What did PROFAE’s course from Ceará mean to you?

Thus, this study tried to obtain enough information for the reconstitution of the symbolic universe of the informers, in order to allow a profound analysis of the speeches involving the central guiding question of the studied subject.

After the transcription of the tapes, studying each word used by the graduates, the speeches were read and analyzed. The categories were then set up and organized in light of Bardin, and analyzed based on a dialogue close to the literature reviewed for the study.

At the end of this stage, the authors believed they accessed the material focused on by the study group. The categorization performed in the processing and analysis stage indicated a convergence of the categories around two central subjects, which will be further discussed: 1) Strong points of the Nursing Technical Course; 2) Main difficulties faced in the Nursing Technical Course.

Subjects were identified through alphanumeric codes, indicating the number of the focal group, and a sequential number was also attributed according to the list of names of the participants.

Finally, this study was exploratory in character, since there is still a lack of empirical or conceptual knowledge about the examined subject, from the perspective adopted by this study, in literature.

RESULTS AND DISCUSSION

The study had the participation of twenty-one students who had graduated the program, whose ages ranged from 22 to 58 years old (average of 41 years old), and whose nursing technical course took from one to three years. However, there was also the involvement of professionals from groups who graduated in the years 2003, 2004 and 2005.

The nursing technicians were employed by hospital units (10), health centers (6), and Family Health Strategy groups (3), one of them in the administrative area, and only one was unemployed at the time the focal group was gathered. The period of time working in the nursing profession ranged from 2 to 29 years (average of 12 years), including activities as a nurse, nursing assistant and nursing technician.

The included categories, according to the speeches of the graduates regarding both the strong points and difficulties faced during the Nursing Technical Course of PROFAE/ESP-CE will be presented as follows.

1) Strong points of the Nursing Technical Course

The Nursing Technical Course as a training instrument for the nursing assistant

The perception that the course provided the acquisition of knowledge, changing the life of the participants and becoming a changing agent in the work context, was evident in several speech extracts. The graduates highlighted the course program, the didactic material provided by the institution, as well as the performance of the professors.

Some aspects were more frequently mentioned by the graduates as essential to the guarantee of the quality education provided by the ESP-CE. It is also believed that besides the previously mentioned factors, aspects such as the possibility of being approved in public selection exams and the professional growth were presented as strong points of the course. Speeches indicate this meaning:

- Having this credibility, having status regarding other people instead of feeling inferior, but also in terms of knowledge, teaching methods, other technical courses (GF2-E5).
- Also an opportunity that came up, because there have been several public selection exams in the cities lately and we can compete for a position, so it doesn’t only influence our daily work, but we also have the opportunity of advancing technically and financially (GF1-E8).

Another aspect highlighted by the group was the greater confidence in the execution of nursing procedures following the course, and the consequent increase in safety at work, considering the sensible adoption of biosafety measures, and showing the practical incorporation of the acquired knowledge. These factors are evident in the following speeches:

- The technical course gave us more confidence at work; today we are at the hospital because we know what we are doing, the doctors prescribe and we already know what to do with certainty (GF2-E2).
- Practicing, exercising, handling and administering the medication as an aerosol, an injection, the day-by-day, so this course is excellent, you feel confident, any student does. You practice what you learned confidently (GF2-E11).
- The course brought us a great confidence regarding the biosafety at work and today our techniques are different (GF2-E6).

Graduates also highlighted the humanization in the provision of nursing care, a subject that is currently considered the protagonist on the stages of public health worldwide.
and which is unquestionably the main topic of discussions regarding the scope of administration, health care and education[9]. According to the statements, the multidimensional treatment of the patient was discussed in the classroom, as is observed in the following extracts:

This course not only made us work properly according to the procedures, but also provided a lot of discussions on the patient issue (GF1-E3).

[... ] the question of treating not only the disease the patient is actually experiencing, but also the other side we work on, giving love, affection, more attention, and understanding the patient's psychological aspect (GF2-E1).

Considering that nursing is a profession mainly guided by health care, it is one of the few professions whose work market is still undergoing rapid expansion. The range of possibilities for working in the nursing area may be one of the main reasons for the high demand for nursing courses[6].

During the past 13 years of working with professional education in the nursing area, the ESP-CE's priority was the development of a curriculum that would encompass the several sectors of performance of these professionals, trying to meet the needs of the health care area, based on a humanistic and transforming conception.

The use of the Problem-solving Methodology: making the course more dynamic

The problem-solving methodology aims at developing the creativity and potential of the trainees by encouraging their participation in the learning-teaching process in the perspective of the reality context knowledge[5].

Considering that the candidates of the Nursing Technical Course of PROFAE/ESP-CE already worked in the nursing field, the educational proposal was present in the Professional Education. The content of several disciplines was developed in an articulated way and narrowed to fit the practice of nursing, encouraging students to take on roles of minor and major complexity.

According to the speeches of the graduates, it is believed that this methodology helped the learning process and raised their interest in the course. The following statements illustrate this situation:

[... ] when we arrived we would wait for the professor to write all the class content on the board... some people wanted to give up on the course.... but we had to discuss it, we had to start a discussion about the problem in the classroom (GF2-E11).

They used a method in which there was a different dynamic activity every day, and that started opening our minds and getting us more involved.... it was a routine, [...] I think what we learned there was great (GF2-E2).

The facilitators even explained the methodology had to be that way, only theory, because it was a short term, but they know how to transmit that theory in a very dynamic way [...] (GF1-E8).

The National Curricular Referential of the Technical Professional Education recommend the use of teaching methodologies that facilitate learning aimed at the resolution of problems. It also states that the nature of these problems is not only technical-scientific, but also social, which promotes a discussion on the context[8].

In the interim, the problem-solving methodology considers the learning process as a construction process, whose epicenter is the apprentice himself, starting from a real problem and theorizing the previous knowledge, and later applying it to reality. This method allows the student to guide his own learning, searching for information to improve the pre-existing knowledge base[9-10].

The didactic material: availability and quality

The didactic material adopted by the course comprised a textbook named Handbook of Nursing Assistants and Technicians, which outlined the contents studied during the course. It mainly focuses on the performance of the nursing technician in the hospital area.

According to graduates, this didactic material adopted by the course contributed significantly to the enrichment of the learning process. The following extracts evidence this consideration:

The way the material was offered to us facilitated our learning, we received a very good collection that is helping even those who want to apply for a public selection exam now, and we had many handbooks that the facilitators gave us, they searched the material they used to study and passed it on to us [...] (GF2-E7).

Is is so good that the course handbook was required for this state selection exam. I studied and passed with the handbook of the nursing technical course (GF1-E3).

As complementary material, the pedagogic team prepared a Handbook of Support Texts, with updated articles and subjects to be discussed in the classroom. There was also the distribution of a selection of books from the National Health Department, aimed at the education of nursing assistants as a means of studying and reviewing contents.

Qualification of professors: stimuli to students

The technical-pedagogical team of the Nursing Technical Course comprised a general coordinator, a group of pedagogical and local coordinators, facilitators and internship supervisors. The pedagogical coordinator was in charge of the technical-pedagogical coordination in the execution of the groups, in terms of monitoring, assessing and supporting the performance of the local coordinators, facilitators and internship supervisors, applying the appropriate mechanisms for professional improvement and development.
Another important agent in the process was the local coordinator who monitored the courses by using specific strategies, such as monitoring the classroom dynamics, meeting for teaching planning, and encouraging proposals for complementary activities, aimed at complying with the curriculum execution schedule. The following extracts translate this reality:

[...] what made us study, despite being tired from work, was the facilitators with their dynamics, I think that gave us the will to learn and practice (GF1-E9).

Very good, they really understand the subject, they know how to pass it on, it was very good (GF1-E5).

In the methodology used, the facilitator-supervisor acts as a mediator in the teaching-learning process, in which the student is the subject of the story instead of the object. The relationship between facilitator and student must happen in a horizontal way, providing moments of life experience along with an understanding of the bonds of their practice to the larger social global practice(9).

The education of critical and reflective professionals, with the ability to face the problems presented in society and, mainly, in the health care field, involves the use of active teaching-learning methodologies that allow students to act as subjects in the elaboration of their learning process, with the professor as a facilitator and advisor(11).

The support of the members involved in the training process

In order to accomplish a decentralized execution of the PROFAE courses, the project established partnerships with administrators of the SHS, in the three government areas, aimed at guaranteeing the necessary conditions for the implementation of the groups in the cities. Similarly, the education regulation was articulated with the state systems in charge, aimed at recognizing the school external area as a means for the development of formative actions(12). The recognition of the support of PROFAE’s partner institutions was expressed by graduates in the next extracts:

[...] we had the support of the Public Health School, it is an open door to us. Who doesn’t want to study there? Who doesn’t want to study at PROFAE? (GF1-E7).

[...] the hospital nursing chief even changed our shifts so that we wouldn’t be late for the course, so that we wouldn’t miss it, because it was valid, significant, and they facilitated it for us, of course (GF2-E6).

The reproduced speeches show that the egressed student sees the partnership network of PROFAE more clearly through the institutional performance which promotes the course; in this case, the Public Health School of Ceará, and their work location.

The establishment of partnership networks consists of essential strategies of interaction and exchange of experiences between institutions and professionals, so that they are able to support each other in their work and meet their educational purposes more effectively, through the transformation and continuous improvement of their practices, which is an essential condition to respond to the constant needs to adapt to the evolution of the socioeconomic and cultural environment(2).

It is important to highlight that the network of partnerships established for the courses of PROFAE mainly aimed to guarantee the qualification of workers employed at the SHS units, in order to maximize resources and promote the exchange of experiences among the agents involved. This is a very meaningful strategy professionally for broadening the horizons of everyone, through the exchange of points of view and knowledge.

**Effective interpersonal relationship**

One aspect identified by the participants as positive was the interpersonal relationships. They attribute great importance to the harmonious relationship of the group and to the effective processing of learning, as may be observed in the following extracts:

I see everyone has one purpose, both the facilitators who helped the students and the students who helped each other. When a classmate was missing, another student copied the class content for him. I was helped a lot, I just learned because of the others, I wouldn’t have continued alone [...] (GF2-E11).

There is also our involvement, because the girls work at the hospital, at the PSF and we didn’t have that contact, then after the course we got closer, getting to know each other’s work [...] (GF1-E9).

The way of acting and interacting of the learning agents causes different results in this process. The facilitation of this learning process depends on the quality of behavior presented in the personal relationships of the group, such as authenticity, appreciation and empathetic understanding(13).

In this context, it is unanimous that, depending on the type of interaction established, the student may either be isolated in an attempt to protect himself, or to perfectly accomplish the learning process. The existence of differences may cause conflicts in the group, which may be minimized through communication(14).

The approach to interpersonal relations in any course is extremely important, especially in the technical education of nurses, considering care is the main study object.

2) Main difficulties faced in the Nursing Technical Course

**Adaptation to the teaching methodology**

There were difficulties in the adaptation of the graduates to the methodology adopted by the institution. The lack of ability to speak in public and shyness were mentioned as difficult aspects in the teaching-learning process.
However, the participants understand that the problem-solving methodology is appropriate for efficient learning. The next extracts evidence this meaning:

My greatest difficulty was my shyness, getting there and going to the front to speak to everyone was terrible (GF1-E9).

[...] I had difficulties to express myself, to present projects, to speak in front of others, because I was very shy and didn’t want to go, but there I learned how to be more extroverted (GF2-E9).

The shyness mentioned by students is intrinsically connected to the difficulty of speaking in public. A shy person presents a behavior standard that does not express thoughts and feelings well, thus hindering an active interaction. They are (re)experiences of situations occurred at a time when the ability to think cognitively was not fully developed, interacting with the world completely through emotions.(15).

This difficulty presented by graduates, regarding the methodology used in the course, also derives from the education received by the professionals, mostly centered in the professor, who acted as an information transmitter(16).

The lack of access to tertiary hospitals during internship

The Nursing Technical Course includes supervised internship as an essential activity for the student to perform. The purpose is to promote the development of competencies (knowledge, ability and attitudes) in the students, so that they may interact with the client/patient with confidence, ethics, humanization and respect, providing high quality care in their daily work.

Furthermore, it allows for theory-practice integration, encouraging the student towards actions of promotion, prevention, control, recovery and rehabilitation referenced in the needs for individual and collective health, determined by the process generator of health and disease.

The internships, which took place over 340 hours, were taken in the health units of cities that held the course, as well as at other reference services, according to the development of the modules, providing the students with education, feedback and professional experience in a real work situation.

The focal groups indicated the internship field limitation during the educational process as one of the main difficulties, as may be observed in the extracts below:

[...] most of the nursing assistant course happened at the HGF, at least with me here at Profae. At the time of the technical course I think the HGF was not available due to several other courses, and we had to go to Gonzaguinha, Valdemar de Alcântara, and then it was farther (GF2-E10).

The internships should be inserted in big hospitals, where we would be able to see everything, [...] they wanted us to take the internship in a big hospital, in order to see everything (GF1-E9).

Considering that the purpose of the course was to complement the professional qualification of Nursing Assistants, within several health care specialties, the indicated difficulty is problematic because such specialties involve primary, secondary and tertiary care.

Nevertheless, the need to establish the course in loco was emphasized when adjusting this process with the city administrators, in order to reduce as much as possible the commuting of students to other cities, mainly due to the fact that most of them were employed in city hospital units as nursing assistants.

In this context, the course decentralization was chosen to avoid the establishment of associations. This strategy would facilitate access, reduce possible avoidance evasions, and allow students to work on contents experienced in their own local realities. However, they face internship fields in their cities with insufficient technical capacity, in the perspective of secondary and tertiary care.

Aimed at minimizing this situation, the ESP-CE has negotiated internship fields in larger cities, despite the trainees’ over-crowding in some units, which made the establishment of partnerships more difficult.

Course duration and content broadening: moments of conflicts

Some of the students relayed that the short time period in which the course was given (eight months) restricted the broadening of the learned concepts, as well as their practice in the internship field.

Some participants believe that certain techniques, for instance vaccinations, should have been practiced and monitored by a specialist nurse, as the next extracts show:

The most negative point I found in the course was the short time we had, that was the reason for this hurry among students, facilitators and staff, we believe we were put at a disadvantage because of the time (GF2-E6).

I am having the experience of vaccinating now, because in my opinion the immunology internship did not have an instructor, an immunization nurse who would be by the trainee’s side, and the immunization is something really serious (GF2-E2).

The Nursing Technical Course was planned to be executed over 10 months, with 20 hours a week, for a total of 750 hours at the end of the course. The last groups of
PROFAE/ESP-CE had to take the course in a shorter period of time, due to the contract expiration date.

Therefore, the activities scheduled for these courses were intensified due to the time limit given by the National Health Department. Cross-sectional disciplines were then developed in theoretical-practical classes that were taken from Mondays to Fridays and, occasionally, on Saturdays.

The excess of activities experienced by students who work made their teaching-learning process more difficult, since they had to accomplish both their professional and educational activities, and were not dismissed early enough at some moments by the administrators, as previously expressed. The following extracts evidence this fact:

 [...] I was tired. I got up to go to work at four in the morning, had to take two means of transportation, came to the class in Maracanaú and arrived very tired, but I stayed there from six to ten at night (GF1-E10).

 [...] our time, as I said we worked and went to class on Saturdays too, it was tiring for us because on Monday I had to go to work again. It was a negative point, but it was productive (GF2-E8).

The National Health Department created the PROFAE based on the needs of several health care workers who needed training, despite the fact that they needed to keep working.

Considering this peculiarity, and observing the National Health Department guidelines, the educational institution implemented a course with theoretical-practical activities provided during evening hours and internships with a maximum of six hours during the day, when the students/workers would be dismissed by the unit administrator, in case they were working.

Adult workers have a rich source of learning and formulation of knowledge, as well as a source of socialization and several emotions: their work\(^{18}\). Therefore, instead of viewing their work as an element that makes school activity more difficult, the course tried to create ways and mechanisms to make it more present in the learning process, without creating a punishing system due to the difficulties generated from this activity.

**Student Allowance: administration difficulties**

The Student Allowance was instituted by the law n° 10.429, de 24.04.2002, aimed at the payment of thirty reais for expenses for collective intercity and interstate transportation, for students registered in courses of PROFAE in their commute from home to their course location and back home\(^{19}\).

Nevertheless, there were many difficulties administrating to the beneficiaries, which caused the dissatisfaction of not only registered students who did not receive the allowance, even though they were taking the course, but also for those who received it partially. The extracts below state this dissatisfaction:

 [...] sometimes we cannot get this allowance during the period of the course. For us, who are paying the transportation it is a little difficult to take the money from our home expenses to pay for the tickets, it is embarrassing (GF1-E4).

 [...] I didn’t receive any allowance from Profae, I mean, I don’t know if it is because they were still implementing it, or because something happened, but it failed anyway (GF2-E11).

**FINAL CONSIDERATIONS**

The authors could observe, based on the statements of the graduates, a satisfactory evaluation regarding the Nursing Technical Course of PROFAE/ESP-CE, in terms of methodology, didactic material and the performance of the professors. The professional growth, from the content learned by these students, was a frequently mentioned factor, reinforcing the importance of this kind of educational strategy in the education of technicians.

Some aspects were pointed out by the graduates as improvement indicators, such as the internship field limitation, the course duration and the administration of the student allowance. The planning of technical nursing education groups should observe strategies to minimize the difficulties faced by those who routinely work and have to participate in the course activities.

Based on this information, it is important to re-discuss the organization and operation of more Nursing Technical Courses to be provided by the ESP-CE, so that these future professionals may be better prepared for an effective performance in the nursing care provided to the population at all health care levels.

In this perspective, the authors believe that this study provided not only the ESP-CE, but also other technical schools of professional education who develop this educational modality, with a reflection on the need for a continuous evaluation of the courses and their operation strategies.

**REFERENCES**


Funding Institution
Programa de Incentivo à Pesquisa nas Escolas Técnicas do SUS no âmbito do Projeto PROFAE/Ministério da Saúde/UNESCO