Getting to know former students of PROFAE nursing courses*

ABSTRACT
The PROFAE (Professionalization Project in Nursing) was a relevant initiative for professional education. The objectives were to describe the profile of the former students of the technical nursing course of the São Paulo Health Department training centers so as to evaluate the effects of the course for the mobility and professional performance in the working market. Data collection was performed using a questionnaire answered by 216 former students and four focal groups with former students and nurse supervisors. Most respondents were women, with an average age of 42.2. The course received a positive evaluation, and two aspects were pointed out as motivating for searching for it: institutional support and COREN’s resolutions. The former students perceive they had more initiative and theoretical preparation after the course. Nursing aide remains as the most common position in the area, thus causing dissatisfaction, because, especially in public services, technician positions are not available.

DESCRITORES
Health manpower
Education, nursing
Teaching
Professional practice
Occupational mobility

RESUMO
O PROFAE (Projeto de Profissionalização dos Trabalhadores da Área de Enfermagem) foi uma iniciativa importante na educação profissional. Seus objetivos foram descrever o perfil dos egressos do curso de técnico de enfermagem dos centros de formação da Secretaria de Estado da Saúde de São Paulo e conhecer os reflexos do curso para a atuação na profissão e a mobilidade no mercado de trabalho. A coleta de dados foi realizada por meio de questionário respondido por 216 egressos e por quatro grupos focais com egressos e enfermeiros supervisores. Os respondentes eram, em sua maioria, mulheres com média de 42,2 anos. O curso foi bem avaliado, destacando-se o apoio institucional e as resoluções do Conselho Regional de Enfermagem (COREN) como impulsionadores da procura por ele. Os egressos percebem ter maior iniciativa e preparo teórico após o curso. Na área, a função mais exercida atualmente ainda é a de auxiliar de enfermagem, o que gera insatisfação, pois, especialmente nos serviços públicos, não existem cargos de técnicos.

DESCRITORES
Recursos humanos em saúde
Educação em enfermagem
Ensino; Prática profissional
Mobilidade ocupacional

RESUMEN
El PROFAE (Proyecto de Profesionalización de Trabajadores del Área de Enfermería) fue una iniciativa importante en la educación profesional. Se objetivó describir el perfil de egresados del curso de técnico en enfermería de centros de formación de la Secretaría de Estado de Salud de San Pablo y conocer los resultados para desempeño profesional y movimiento del mercado laboral. La recolección de datos se realizó mediante cuestionario respondido por 216 egresados y cuatro grupos focales de egresados-enfermeros supervisores. Quienes respondieron fueron mayoritariamente mujeres con media etaria 42,2 años. El curso fue bien evaluado, destacándose el apoyo institucional y las resoluciones del Consejo Regional de Enfermería (COREN) como impulsores de su promoción. Los egresados perciben tener mayor iniciativa y preparación teórica luego del curso. En el área, la función más ejercida es la de auxiliar de enfermería. Esto genera insatisfacción, pues principalmente en servicios públicos, no existen cargos de técnico.

DESCRITORES
Recursos humanos en salud
Educación en enfermería
Enseñanza
Práctica profesional
Movilidad laboral
INTRODUCTION

In 1980, there were 1,233,008 health workers in Brazil, mostly secondary and primary-level professional. In the composition of the nursing workforce, corresponding to 304,287 people in São Paulo State, nurses represented 8.5%, nursing technicians 6.6%, auxiliaries 21.1% and attendants 63.8%.

Between 1956 and 1983, the Nursing workforce increased at different rates among various categories. A more enhanced increase occurred in the number of nurses and attendants, possibly due to educational policies for the professionalization of secondary-level technicians (in the 1990's, a considerable group had no professional qualification).

In São Paulo State, COREN-SP data indicate that, between 2004 and 2007, the number of better qualified professionals increased. The nursing category grew from 34,543 to 44,360 (28.4%), nursing technicians from 36,513 to 55,156 (51.0%) and auxiliaries from 187,000 to 183,821 (1.7%).

The growth in the number of technicians probably reflected COFEN Resolution No 276/2003, which established that professional registers would only be granted to professional who had concluded the Nursing Auxiliary Qualification phase, as part of the Technical Professional Education Course in Nursing, setting the deadline of five years to complement their qualification and obtain their permanent professional register.

In recent decades, various professional education initiatives have taken place in Nursing in Brazil, with a view to enhancing quality through the reduction of unqualified staff.

Between 2000 and 2004, PROFAE graduated 16,900 nursing auxiliaries in São Paulo State, while 16,477 complemented their professional qualification as nursing technicians.

OBJECTIVES

- To describe the profile of graduates from the nursing technician courses promoted by SES-SP education centers.
- To identify their perception of the existing context to accomplish the course and of the changes in care delivery quality deriving from the course.
- To check their mobility in the job market after concluding the course.

METHOD

The study comprised two complementary data collection phases. The first involved mapping the graduates and surveying information on their professional insertion, institution support to participate in the course, and students’ perceptions of changes in their professional activity. This mapping was accomplished through a sample survey, whose self-applied questionnaire was forwarded by mail in 2006.

A sample of 246 students was calculated, based on the estimated that 20% of the graduates would be working as nursing technicians, with a 5% sampling error and 95% confidence level. To obtain this sample, 500 students were drafted among 1,199 graduates, considering a 50% possibility that the questionnaires would not be returned. The sample comprised 250 students who took the course at CEFORs in Greater São Paulo and 250 at CEFORs in the interior of the state. To achieve higher questionnaire return rates, students were previously contacted by phone. In total, 215 questionnaires were returned.

Questions related to perceived changes in professional activity were constructed based on a five-point scale, adopted from the original Likert scale proposed in 1932, in which 1 meant little difference between before and after the course and 5 at lot of difference.

Based on the survey results and to go deeper into questions related to the qualifications and skills gained and mobility in the job market, the second data collection phase took place through four focal groups.

Three groups joined graduates with a view to apprehending their perception of the nursing technician education course. Two of these groups involved graduates who were still working as nursing auxiliaries: one included professionals living in the state interior (GF1) and another professionals living in Greater São Paulo (GF2), as distinct job market situations exist in these two regions. Another group joined graduates who were already working as technicians (GF3). In the latter, no sufficient quantity was...
found to separate former students from the interior and greater São Paulo. The fourth comprised nurse supervisors or coordinators whose nursing teams included employees who participated in the education course (GF4). As an exclusion criterion, nurses who also worked as teachers were excluded. In this group, the way the graduates were incorporated in their institutions of origin was discussed, as well as the pertinence of the national policy in function of these graduates’ absorption in the job market.

Approval for the project was obtained from the Institutional Review Board at the University of São Paulo School of Public Health (Protocol No 1220/2004).

RESULTS AND DISCUSSION

Graduates profile

Out of respondents to the questionnaire, 28.5% took the course at CEFOR São Paulo, 23.4% in Araraquara, 13.6% in Osasco, 12.6% in Franco da Rocha, 15.9% in Parque-Açu and 6% in Assis.

As for the school were they graduated as nursing auxiliaries, 52.4% graduated from private schools, 39.5% from public schools and 8.1% from philanthropic entities, suggesting that PROFAE attended to clients with limited access to paid courses, confirming the intended social inclusion policy.

In 2002, only 6.4% of entities that offered nursing auxiliary courses in São Paulo State were public. The presence of respondents who graduated from public schools was significant (39.5%), again suggesting that PROFAE attended to clients with limited access to paid courses, confirming the intended social inclusion policy.

Course participation

Most respondents (72.2%) took the initiative to take the course, followed by 12.3% recommended by service heads and 11.8% suggested by colleagues. In general, the decision to take the nursing technician course was linked with interest in gaining knowledge and possible growth and professional ascent, as focal groups participants expressed:

To gain knowledge (GF1).

I took the technician course because the trend is to evolve, you’re an auxiliary, but you want more. You go through stages, you were an attendant, then I took the auxiliary course, then the technician course, not because the institution charged me, but for the sake of evolution... we need to get better (GF3).

The trajectory of workers who sought professionalization in nursing is similar to that of attendees who took the auxiliary course. A study published in the Latin American Journal of Nursing identified some of the motivations that made them take the auxiliary course: belief in the possibility to improve living and work conditions; gratuity of the courses; support from relatives and colleagues. Another aspect the group participants strongly highlighted was the disseminated information that, by professional regulation law (COFEN Resolution No 276), the function of nursing auxiliary would be extinguished, so that, to continue working, professionals would need nursing technician education:

Over there at the hospital, there was a rumor that auxiliaries also needed to take the technician course [...] (GF1).

You had to do it because nursing auxiliaries would no longer exist at some hospitals (GF2).

 [...] they said that COREN would require it [...] that no auxiliary would exist as from 2008. I said: I want to exist, so I’ll be a technician (GF2).

Part of the students who answered the questionnaire got support from their institution to take the course through special times at work (47%) and facilities to change shifts between morning, afternoon or night (51%).

In all focal groups, reference was made to institutional support, which made employees’ participation in the courses feasible. This support took the form of work shift and scale agreements, allocation to sectors that enhanced learning and other aspects. In addition, students felt privileged by the quality of the course, facility in terms of the place they took the course and gratuity:

One positive point of the course was that it was held in the city where we lived because, in general, this type of student already works and, if you need to travel, even with cost aid, that’s difficult. It was very positive to be able to take the course in the city you live in, with teachers you know, who generally are nurses from the same town, whom you already have contact with. You are more at ease to ask questions (GF3).

Convenience also played a role, taking the course at the hospital itself. You knew the sectors of your own institution [...] (GF2).

 [...] it was a miracle in my life, it was very good that it worked out (GF3).

I think that the hospital board gave support, yes. Over there at the hospital they never opposed, they always encouraged employees (GF1).

The municipal government helped a lot, prepared the course packs (...) we didn’t spend anything on the course. We got time off work to do the practicum (GF3).

The nurses who participated in the focal group also mentioned this institutional support and highlighted the extent to which this facilitated students’ motivation:

Special times were granted to workers who took the course. At the hospital, they were very interested in moti-
vating course participation. And what we could observe is that they (students) were that motivated that they learned more each day, and demonstrated this in their daily work (GF4).

Employers play an important role, also regarding in-service training. That was also present in the Large-Scale and Decentralized Classes Project. The guideline of PROFAE was worker training, that is, it was a prerequisite that students were working in health during the course. Of all workers, 74% continued working at the institution they were working at while taking the nursing technician course.

Job market mobility

About 23% of respondents have more than two jobs, which is not uncommon in the health area. Adherence to double work shifts expanded in the 1990's, when wage tightening intensified, unemployment increased and public services worsened, making many nursing professionals tightening intensified, unemployment increased and public services worsened, making many nursing professionals accepting exhaustive double work journeys(9).

The analysis privileged information on what the respondents indicated as their primary job, considering that this is the professional’s main source of income.

Regarding the function the professional performed in the first job, 80.1% of the respondents worked as nursing auxiliaries and only 14.6% as nursing technicians.

Although the nursing auxiliary function has not been extinguished, according to some participants, today, health institutions, especially hospitals, prefer to hire professionals with a nursing technician degree, even to work as nursing auxiliaries.

Today, hospitals do not hire auxiliaries, they only hire technicians, even for the function of auxiliary. We end up subjecting to that... (GF2).

This theme aroused manifestations of dissatisfaction among part of the graduates, as a majority did not manage to change functions and ascend. Most work at public health services. In other words, the State itself does not absorb professionals who were adequately qualified, involving State investments, to work and be remunerated according to their professional education. That is so because either the functions were not created or because there is no access possibility while maintaining rights already acquired as public workers in one carrier – that is, to start working as technicians, they would have to give up what they already have and start a new career, which would not be worth it.

There is no career plan, maintaining the actual bond and all [...] the hospital elaborates a proposal on the following terms: you move on to technician, but lose already gained rights, such as service time, among others. [...] There would have to be a situation in which you can move like in a career, without having to interrupt one contract with the State and start another one, because then it’s harmful (GF1).

The only negative thing really is to work as a technician but actually be paid as an auxiliary (GF2).

The precarious working conditions are also revealed through the pressures they suffer in the job market:

... because, if I’m a technician, I have my register as a technician, theoretically I cannot work as a nursing auxiliary, I know that. But, if you get to a hospital and need to work, need the money and you want to work in your area and they offer the function of nursing auxiliary, you end up accepting (GF1).

Between 1999 and 2002, the number of workplaces for nursing attendants dropped, while workplaces for nursing auxiliaries grew in Brazil(10). In 1999, attendants represented 43.6% of the total primary-level workforce, decreasing to 24.8% in 2002. In this context, auxiliaries started to represent the largest nursing workforce. Between 1999 and 2002, however, the share of nursing technicians increased to 29.6%, while auxiliaries increased by only 6.5%, indicating a rise in the number of workers who finished secondary education.

All respondents who managed to work as nursing technicians had their professional register (Table 1), although two of them were registered in another function. Among auxiliaries 17.1% had no professional register. Twelve respondents were registered in function different from those they were working in.

Table 1 - Professional register of PROFAE - Nursing Technician - course, graduated from CEFORs in São Paulo State, according to the function performed in the primary job - São Paulo - 2006

<table>
<thead>
<tr>
<th>Function performed</th>
<th>Possesses professional register</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>Attendant</td>
<td>6</td>
</tr>
<tr>
<td>Auxiliary</td>
<td>131</td>
</tr>
<tr>
<td>Technician</td>
<td>30</td>
</tr>
<tr>
<td>Others</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>170</td>
</tr>
</tbody>
</table>

The data collected in this study show that most (79%) graduates did not manage to change their professional category: from nursing auxiliary to technician.

A study published in 2003(12) had already highlighted that the fact public health institutions at state level does not include this category in their staff makes part of students from the public network migrate to the private network. This is also the case at private health institutions that do not include the nursing technician category in their staff. At the Ministry of Health, a National Committee was set up in 2003, in the attempt to elaborate policies and guidelines to minimize this problem(12).

Workers have been appointing the precariousness of the health job market for many years, highlighting aspects like adverse working conditions, bad remuneration, ex-
haustive hours and lack of legal social protection instruments. Distortions in the market were already common for qualified staff, like the hiring of technicians and auxiliaries as attendants.

Therefore, graduates charge COREN with actions as a class entity in defense of the creation of nursing technician functions in health institutions, as this council was responsible for putting pressure on nursing auxiliaries to get qualified as technicians because of the proposed extinction of nursing auxiliaries.

I think that COREN itself could be charging this, because it's their interest, because, if you are registered as a technician, you will also pay your obligatory fee to the class entity as a technician, that is, the amount of the contribution will be higher (GF1).

COREN talks so much, encourages and asks who is an auxiliary to take the technician course, but they do not facilitate that side for us. [...] The council hardly helps us, only comes to collect charges (GF2).

The respondents who changed their professional category (15 technicians) were asked about salary improvements associated with the change in category: 53.3% answered that salaries improved and 33.3% that they did not change. That suggests a lack of salary definition for the different levels in the nursing category.

Table 2 - Salary improvement of students who changed professional category among PROFAE - Nursing Technician - graduates from CEFORS in São Paulo State - Brazil - 2006

<table>
<thead>
<tr>
<th>Changed category</th>
<th>Changed salary</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Did not answer</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Changed category</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>Yes</td>
<td>8</td>
<td>53.3</td>
<td>5</td>
<td>33.3</td>
<td>2</td>
<td>13.3</td>
</tr>
<tr>
<td>No</td>
<td>-</td>
<td>22.5</td>
<td>69</td>
<td>77.5</td>
<td>89</td>
<td>100</td>
</tr>
<tr>
<td>Did not answer</td>
<td>1</td>
<td>11.1</td>
<td>2</td>
<td>22.2</td>
<td>6</td>
<td>66.7</td>
</tr>
<tr>
<td>Total</td>
<td>9</td>
<td>8.0</td>
<td>27</td>
<td>23.9</td>
<td>77</td>
<td>68.1</td>
</tr>
</tbody>
</table>

About the theme, a researcher in this area says that secondary-level nursing professionals, when seeking to ascend in the same profession, appear as a curious and at the same time concerning issue, as the choice does not only aim for better salaries, as professionals' revenues in this area are hardly promising in comparison with other professions.

Among the motives that made graduates seek to ascend, that is, change from auxiliary to technician, the following stand out: professional ascent, scientific knowledge and, consequently, a change in status inside the team.

Repercussions on qualification and skills acquisition

The research also attempted to identify the reflexes of the course in these graduates’ daily work, as the main goal of PROFAE was to improve the quality of hospital and outpatient care by preparing competent professionals to guarantee Unified Health System (SUS) users maximum efficacy and minimum risk.

Both graduates and nurses generally assessed course quality quite positively. Comparisons were made with the quality of education offered by private institutions, also for the undergraduate level.

Also, there are other schools there, private schools for technicians, that cannot even hold a candle to PROFAE (GF1).

At the time there was a student who was taking the nursing course and I was taking the technician course and we used to study together: the same materials he had in nursing college I had in the technician course (GF1).

The didactical material was very good [...]. My niece is in the third year of the nursing program and she’s using my material from the technician course. The content is excellent (GF1).

Another aspect that was highlighted was teachers’ good qualification and the course coordination’s concern with selecting adequate teachers for each theme addressed.

The teachers who taught us were college professors, they weren’t teachers, like, from preparatory schools. Most of them were very good (GF1).

I think that the positive aspect was the content of the course. As they said earlier, the teachers were very well trained. [...] There were things we didn’t know and said: I didn’t understand. And everything started all over, while we didn’t learn, they didn’t move on to another theme. [...] If anyone didn’t capture something that’s because he didn’t want to, because they were there to teach really (GF2).

The nurses who participated in the focal group also referred to the careful planning and development of courses and activities:

... when the group was inside the hospital, most supervisors were nurses from the institution too and knew what they wanted and knew what they wanted to change and what they were after. [...] So, that made a difference. [...] Private schools do not know the professional, do not know how he is working (GF4).

This point reveals one of the pillars of the pedagogical model the CEFORS have been using since their creation, in which students and teachers gain knowledge that get used as instruments to change the work environment they are inserted in, in this case the SUS.

Some focal group participants also served in the courses as practicum supervisors and talked about their preparation to perform these tasks:

We also grew a lot. In general, we don’t know how education work, nor know about the political-pedagogical project. And they (course coordination) talked about that the whole time. So, it was nice for us to have the view of how education is, what our role is as educators... (GF4).
Besides these aspects related to good professional preparation, the importance of course participation in personal terms was mentioned:

... it was something that helped. If it didn’t help financially, it helped in terms of knowledge, because we gain further knowledge, more security to do things. And, for many people who had already quit studying and didn’t want to do anything anymore, I think it was an encouragement to go back studying and, thus, reanimate each of them to work... (GF3).

In the questionnaires, the students assessed the course’s impact in their professional life, scoring some aspects: possibility to put in practice knowledge gained during the course; stimulus from the head to study; greater skill in care delivery; greater contact with patient relatives; understanding of electronic devices at Intensive Care Units (ICU); better writing on nursing notes; facility to make mathematical calculations; theoretical understanding of care delivery; better unit organization; facility to identify and forward problems; taking more initiative.

Figure 1 - Assessment of course impact on work of PROFAE – Nursing Technician – graduates in SES-SP CEFORs - São Paulo - 2006

In Figure 1, the indicators under analysis are ranked according to the highest percentage of scores 4 and 5. The questions in which changes were more significant, adding up scores 4 and 5 in at least 85% of respondents, were: taking initiative; understanding of care; greater skill in care delivery; facility to deal with problems and unit organization.

The questions with the lowest scores were: putting gained knowledge in practice; facility to deal with devices, with 75% for scores 4 and 5.

To assess the course impact, it is important to take into account the alert[15] that nursing performance quality is mediated by the work context, that is, sites with structural conditions and continuity of educative processes enhance graduates’ professional performance. Professional education cannot be detached from the analysis of aspects related to these students/workers’ place of work, as in-service education is a relevant part of any health service institution’s mission. Students’ transformation is expected to occur in class as well as in daily work, incorporating new techniques and scientific knowledge.

Knowing the basic principles that guide care is essential to qualify any nursing professional. Understanding why each care is delivered makes users and professionals feel more secure. This aspect is related with the indicator facility to deal with problems, forwarding them adequately.

In the general course assessment, these technicians considered that the difference in their education refers to the fact that they have more elements to justify procedures they already accomplished.

We already did that, it’s just that, through the technician course, you have the knowledge, you know why you’re doing that (GF3).

About having gained more professional initiative, scores 4 and 5 predominated. Today, employers have demanded professionals who take professional initiative and autonomously and responsibly make decisions on their sphere of competency. These requisites are important in the efficiency and efficacy of care delivery and permit the acknowledgement of their work by the health team and users.

The nurses’ declarations underline that the main change refers to attitude. The nurses perceived the technicians as more committed to nursing team performance as a whole.

After they took the technician course, they started to be less resistant. They started to have another view, closer to the nurse. They are more flexible, they work more as the nurses’ companions (GF4).

The nurses also highlighted that the return for the institution was very positive, i.e. taking course through
the PROFAE project was important for health service qualification.

During the course, you could already perceive, some students, workers, who already took more initiative. [...] They were interested in showing that they were learning. [...] It was good for the institution, and they are there today (GF4).

They developed [...] in a way we admired a lot. I got very proud of them, of seeing their growth, and they continue there until today, like, trying to get better (GF4).

As for better contact with patients and relatives during the procedure, a positive score was found. Care humanization was considered the cross-disciplinary axis for PROFAE nursing technician education at the CEFORS. Hence, the development of this professional competency was to be expected(16).

Studies have already found that professional communication with patients and family members is ignored to the detriment of technical actions. Students assessed in these studies did not show changes in this respect before and after the course(15,17).

The largest percentages of score 2, considered regular, were found for handling more complex devices and facility to make mathematical calculations. A study in this respect(18) describes that the change in dealing with devices after technical education was very subtle. Medication administration is an action that demands mathematical skills from technical professionals with a view to compliance with the prescribed doses.

Finally, about half of the students indicated they perceived that their heads acknowledged transformations in their work, expressed through 57% of scores 4 and 5.

The only difference is that, when the nurse needs something, when she’s got some difficulty or needs help, he talks to me (GF1).

After we took the course, the nurses trust us more, because we get by [...] only when there’s a subject we are unable to solve, then we call the supervisor (GF2).

Nurses look at technicians differently, because you’re already one step closer to them, so there’s a little more trust already (GF3).

Regarding their perception of themselves in terms of professional performance changes deriving from course participation, there is a consensus that changes are much more related to attitudinal aspects than to specific skills gained to perform tasks specific of nursing technicians.

... there is no difference between technician and auxiliary, just the degree (GF2).

The thing that I feel that changed is that I charge myself more in all senses, mainly when preparing the report, because I have to excel among my colleagues who are auxiliaries, I need to detail things more, when a patient arrives I go over things in general (GF3).

We feel quite secure (GF1).

**CONCLUSION**

Graduates reported they decided to participate in the PROFAE nursing technician course driven by COREN resolutions on the extinction of nursing auxiliary functions. Institutional support and the gratuity of the course, important characteristics of PROFAE, also exerted a positive influence on the decision. The institution they were working at during the course provided support by offering special times to leave or arrive (47%) and facilitate work shift changes (51%).

Both graduates and nurse supervisors highlighted the course quality, ranging from its planning to activity development. The nurses perceived that former students were committed to nursing team performance as a whole, and the later mentioned having gained greater ability to take initiative and better theoretical understanding of their actions.

Most graduates had a job contract (74%), worked as nursing auxiliaries and possessed a professional register as auxiliary (77%), despite being graduated as nursing technicians. They worked in the hospital area (72%) and continued their professional activities at the same place on the occasion of the course (74%). Out of graduates who changed their professional category from auxiliary to technician, only 53.3% indicated that their wages had improved.

The non-existence of nursing technician functions in public health services arouses dissatisfaction because
most graduates from the nursing technician courses have not had the opportunity to change and improve their function. Another consequence is that COREN was charged with demanding the establishment of a function and career plan that values professional qualification.

REFERENCES


Support
São Paulo Research Foundation - FAPESP - Process 2005/03299-0.