PROFESSIONAL SOCIALIZATION: STUDENTS BECOMING NURSES

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Usually colleges are evaluated by the quality of the knowledge and technical training offered to the students. Little attention is given to the acquisition of the values, behaviors and attitudes necessary to assume their professional role. This exploratory study aims to increase understanding of the professional socialization process that occurs at nursing schools and the results obtained through the socialization of professional values and standards. The educational experience of nursing students involves more than a body of scientific knowledge and the acquisition of abilities to provide care to patients. Questionnaires were filled out by 278 students of two public Nursing Schools in São Paulo state, 164 in school A and 114 in school B. The results indicated that some professional values, norms and behaviors are influenced by College years, studying at a College of Nursing during four years leads to a difference in values, norms and professional behavior.

DESCRIPTORS: higher education institutions; social values; education, nursing; schools, nursing; students, nursing; nurse's role

SOCIALIZACIÓN PROFESIONAL: ESTUDIANTES VOLVIÉNDOSE ENFERMEROS

Habitualmente, las facultades son evaluadas por la calidad del conocimiento y capacitación técnica ofrecidos a los alumnos, y se da poca atención a la adquisición de los valores, comportamientos y actitudes necesarios para asumir su papel profesional. La finalidad de este estudio exploratorio es aumentar la comprensión acerca del proceso de socialización profesional que ocurre en facultades de enfermería y de los resultados alcanzados a través de la socialización de valores y normas profesionales. La experiencia educacional abarca más que un cuerpo de conocimientos científicos y la adquisición de habilidades de les cuidar a los pacientes. Cuestionarios fueron llenados por una muestra de 278 estudiantes de dos Facultades Públicas de Enfermería en el Estado de São Paulo, 164 en la Facultad A y 114 en la B. Los resultados indican que algunos valores, normas y comportamientos profesionales son influenciados por el tiempo de permanencia en la facultad, y que estudiar en una Facultad de Enfermería durante cuatro años lleva a diferencias de valores, normas y comportamientos profesionales.

DESCRIPTORES: instituciones de enseñanza superior; valores sociales; educación en enfermería; escuelas de enfermería; estudiantes de enfermería; rol de la enfermera

SOCIALIZAÇÃO PROFISSIONAL: ESTUDANTES TORNANDO-SE ENFERMEIROS

Habitualmente, as faculdades são avaliadas pela qualidade do conhecimento e treinamento técnico propiciados ao estudante e pouca atenção é dada à aquisição dos valores, comportamentos e atitudes necessários para assumir seu papel profissional. Este estudo exploratório tem o objetivo de aumentar a compreensão do processo de socialização profissional que ocorre nas faculdades de enfermagem e dos resultados obtidos através da socialização dos valores e normas profissionais. A experiência educacional vivenciada pelos estudantes de enfermagem envolve mais do que um corpo de conhecimentos científicos e a aquisição de habilidades para cuidar do paciente. Uma amostra de 278 estudantes de duas faculdades públicas de enfermagem no estado de São Paulo preencheu questionários, 164 da faculdade A e 114 da faculdade B. Os resultados indicam que alguns valores, normas e comportamentos profissionais são influenciados pelo tempo de permanência na escola, e que estudar durante quatro anos em uma faculdade de Enfermagem leva a diferenças de valores, normas e comportamentos profissionais.

DESCRITORES: instituições de ensino superior; valores sociais; educação em enfermagem; escolas de enfermagem; estudantes de enfermagem; papel do profissional de enfermagem

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INTRODUCTION

*T*he aim of this paper is to contribute to an increased understanding of professional socialization processes in nursing in Brazil. Professional socialization is a process through which people learn, during their education and training, the skills, knowledge, values, behaviors and attitudes needed to take up their professional role[1-4]. Like all other professions, nursing dedicates great time and resources to the educational preparation of nurses[5].

Nursing students' educational experiences involve more than acquiring a body of scientific knowledge and patient care skills. Nursing students learn how to relate to patients and themselves as nurses, that is, to construct their professional identities. Thus, while the occurrence of the socialization process generates benefits, its non-occurrence entails severe consequences[6].

It is important to understand the socialization process that will occur when these new graduates begin work in a health care organization. The values, attitudes and behaviors that were socialized in college will be assessed in the graduates' selection and integration into the organization. Their adjustment will influence organizational stability and commitment, satisfaction, the feeling of mutual acceptance, involvement with work and internal motivation[7,8]. Research about the socialization of newly graduated nurses concluded that the establishment of nursing as a profession is determined by the way nurses are socialized[9]. The classic study by Kramer observed that inadequate socialization is associated with turnover and dismissal requests among nurses in general hospitals[10]. Careless management of the first professional experiences can lead to low motivation and productivity, demoralization and decreased care of patients[9].

CONCEPT OF PROFESSIONAL SOCIALIZATION

Various authors have proposed definitions of the term "professional socialization":

"the process through which individuals are inducted into their culture. It involves the acquisition of attitudes and values, of skills and behaviour patterns making up social roles established in the social structure"[1].

"involves acquiring the requisite knowledge and skills and also the sense of occupational identity and internalization of occupational norms typical of fully qualified practitioners"[2].

"a process of learning to abandon old roles and self conceptions and to acquire new ones... and is accomplished by a process by means of which people selectively acquire the values and attitudes, the interests, skills and knowledge - in short the culture - current in the group in which they seek membership... professional socialisation refers to both the intended and the unintended consequences of an educational program"[3].

"the complex process by which a person acquires the knowledge, skills, and sense of occupational identity that are characteristic of a member of that profession. It involves the internalization of the values and norms of the group into the person's own behavior and self conception"[4].

Three themes emerge from these definitions. One is related to values and to standards which are values made more concrete. New students enter nursing college already with a set of values which can be changed through the socialization process in order to reflect the values of the profession. The second theme is about behavior; when values change, behavior also changes. The third theme is related to the sociopsychological aspect of professional socialization, which occurs inside the individual, changing his/her self-concept so that professional identity is developed[11].

Professional socialization is a critical aspect of nursing students' development and it occurs in the both the educational institution as well as in the clinical context[6]. Professional socialization for graduates happens in two phases: first, socialization occurs through education and training, which is particularly related to the contents of the role. This is followed by socialization through the work environment and its agents. Some aspects of the first socialization can be discarded now, so that professionals act professionally, while some others will be maintained, depending on the forces, professional choices and situational restrictions[12].

NURSES' ROLES

Roles define how individuals act, internalizing certain values and standards of participation in social

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action, among other reference roles. The acquisition of a new role initiates the individual into a specific social group. The assumption of a role and the socialization process essentially occur during the undergraduate course. People who take up the role of nurses not only assimilate new facts and learn new skills, but are immersed in a new culture with expectations about values and standards. They simultaneously develop an identity and self esteem through interaction with role models and judgment about other people's reactions to the role[13].

One critical issue is how the values and ideas about nursing that students bring along with them (anticipated socialization) may be in conflict with the objectives of the training organization. Professional socialization involves changing people's attitudes, values, beliefs and self images, as well as providing skills and knowledge. Each profession has a clear idea about the attitudes and values its future members need to develop and what end product is expected. On the other hand, students can bring varying conceptions of work requirements, interests and conceptions, which may or may not be compatible with the objectives of the program. These two factors - objectives of the program and orientations brought by students - join to create a variety of problems and potential conflicts in the socialization process.

A study of nursing students suggests that professional socialization involves a sequence of phases. First, there is a change from broad and social objectives that made the student choose the profession of nursing to the proficiency and mastering of specific work tasks. Next, a reference group develops, based on other significant factors in the work environment. Finally, the values of the occupational group are internalized and the new student assumes attitudes, values and behaviors prescribed by the group[14]. But there is a consensus in literature about the importance and need to work on values during students' time in school.[15].

METHODOLOGY

The aim of this study was to examine the standards and changes in professional values as a function of the professional socialization process developed in college during the nursing undergraduate period (four years). The cross sectional approach was chosen because of the lower cost and a shorter duration required for data collection. Thus the passage of time (duration of undergraduate program) was eliminated by the sampling of diverse student groups from different academic years[16]. A longitudinal method would have allowed for a more precise identification of the variation in changes as a function of the socialization process. Given that the long data collection period (four years) would have required the continuity of technical staff and financial support, and the sampling problem of limited number of subjects who could be followed during four years, we chose to carry out a cross sectional study.

Three research questions were posed:
- How does the professional socialization which occurs in nursing colleges influence students' acquisition of professional values?
- What changes occur in relation to these values through the professional socialization?
- How do demographic factors influence the acquisition of professional values?

The study questionnaire was developed from previously used questionnaires, whose results had indicated some variables that influenced the professional socialization process. These questionnaires were adapted from studies validated by different authors. This procedure was aimed at reducing the margin of error caused by the method[17] and allowing for intercultural comparative studies:

The study questionnaire consisted of six parts:
- **Demographic data**: age, civil status, city of education, semester enrolled in, religion and college.
- **Vocational data**: included the age of choosing the nursing career, whether nursing was the first career option, and the desire to change to another career.
- **Socioeconomic data**: Parents' education level and family's socioeconomic status.
- **Professional socialization**[11]: The questionnaire included 18 questions from a set of 54 items developed by DuToit in 1995, comprising statements about the subject and nursing. The items used a five-point Likert scale and covered four dimensions: a) Career values; b) Personality Characteristics; c) Professional Competences and d) Professional Values. These dimensions were extracted through factorial analysis. The alpha coefficient is 0.8365, which means that the scale can be considered reliable.
- **Nurses Professional Values**[18]: The NPVS (Nurses Professional Values Scale) consists of 44 five-point

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Likert scale items. For each item, respondents indicate the importance of the value statement (from "not important" to "most important") for each nursing practice. The NPVS is based on the 11 principles found in the American Nurses Association' ethics code. The items cover 11 dimensions: Respect for life, Privacy/Confidentiality, Advocacy, Truth-Accountability/Responsibility, Knowledge Competence, Decision Making/Critical Thinking, Knowledge Development, Quality of care/Nursing excellence, Fairness/Equity, Professional image/Integrity and Altruism/Activism. The alpha coefficient reported is 0.9451.

- **Socialization in health professions**[19]: This scale deals with the attitude transformations that occurred in dentistry students during different professional formation phases, and was adapted for Nursing students by the study authors. The respondents assessed the importance of 15 different traits of nursing practice on a five-point scale. The items covered 3 components: a) Person orientation; b) Science orientation, and c) Status orientation. The alpha coefficient was 0.8365.

The study sample consisted of students from two public nursing colleges in the Southeast of Brazil. Students at the end of each of the four years of the Nursing course were approached in class and were given information about the study. Those who agreed to participate in the study signed the free and informed consent forms. Then, they filled out the questionnaires. Average completion time was approximately 20 minutes. At the two colleges, 278 questionnaires were filled out: 164 in college A and 114 in college B.

RESULTS AND DISCUSSION

Data showed that 22.7% of students who answered the questionnaires were taking the second semester of the Nursing course, 32.4% the fourth semester, 25.9% the sixth semester and 19.1% the eighth semester.

Respondents' mean age was 21.58 years, with a range from 17 to 45 years. Women were 96% of the respondents, with 96.4% being single and 67.3% have never worked. Respondents (29%) spent their childhood in cities of between 100 and 500 thousand inhabitants; 21% in cities with between 20 and 50 thousand inhabitants; 18% in cities with more than 500 thousand inhabitants; 14% in cities with 50 to 100 thousand and the remaining 18% were in cities with between 5 and 20 thousand. Over half of the sample (54.7%) was considered middle class, 24.5% were lower class and 20.8% were considered to be from the high class (according to the Brazilian Economic Classification Criterion, developed by the ANEP - National Association of Research Companies - Dec. 2002)[20].

Approximately half of the respondents chose the Nursing career when they were between 18 and 22 years of age and for 39.9%, Nursing was the first career option. As to the career, 32.8% of the interviewees would choose another career than Nursing if they could. Most (60.8%) subjects were Catholic, 20.9% were Spiritists 10.8% were Evangelics and the remaining 8.5% were of no religion or were classed as Other.

As to the father's highest completed education level, 24.5% of the students' fathers had finished primary education; 37% secondary education; 31.9% undergraduate education and 6.6% graduate education. In relation to the mother's highest completed education level, 21.3% had finished primary education; 40.1% secondary education; 33.9% undergraduate and 4.7% graduate education.

Although similar results were found for a large majority of the statistics (table 1), the two groups (college A and B) showed differences in some items. Test results revealed significant differences between participants from colleges A and B for: semester, age of career choice and would choose another career than Nursing.

Table 1 - Equality test of samples in colleges A and B. Test Statistics[*]

Demographics Variables	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
City Size	9208.500	15649.500	-0.002	0.999
Economic class	7712.500	20273.500	-1.247	0.213
Mother's education level	9102.000	22632.000	-0.266	0.790
Father's education level	8636.000	15077.000	-0.662	0.508
Would choose another career	6909.000	20112.000	-4.124	0.000
Marital status	9328.000	15883.000	-0.094	0.925
Gender	8999.000	15554.000	-1.568	0.117
Age	8924.500	22127.500	-0.358	0.721
Age of career choice	7794.500	14349.500	-.2.412	0.016
Work experience	8748.000	22278.000	-1.120	0.263
Religion	9304.500	15859.500	-0.075	0.940
Semester	6960.500	20499.500	-3.741	0.000

[*] Grouping variable: college

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In college A, 34.8% of participants were taking the second semester, 28% the fourth, 16.5% the sixth and 20.75% the eighth semester. In college B, on the other hand, only 5.35% were in the second semester, 38.6% in the fourth, 39.5% in the sixth and 16.7% in the eighth semester.

As to the age when choosing the Nursing career, the mean age in college A was higher than in college B. In college A, 42.6% of respondents would choose a career other than Nursing if they could, against only 18.8% in college B.

We also calculated statistics for orientation (person, science and status), socialization (professional, personality, pride about career and vocation), and value variables (altruism/activism, advocacy, decision making/critical thinking, fairness/equity, knowledge competence, knowledge development, privacy/confidentiality, professional image/integrity, quality of care, respect for life, and truth accountability/responsibility). Table 2 shows the number of respondents, mean scores, standard deviations and minimum and maximum values for each orientation, socialization and value variable.

Table 2 - Orientation, socialization and values variables statistics

Variables	N	Mean	Std. Deviation	Minimum	Maximum
Orientation					
Science	278	4.14	0.5948	2.67	5
Status	278	3.74	0.5638	2.33	5
Person	275	4.24	0.5222	2.71	5
Socialization					
Professional	274	3.74	0.5268	2.00	5
Personality	278	4.14	0.4272	3.00	5
Pride about Career	271	4.13	0.5458	1.60	5
Vocation	278	4.12	0.7156	1.00	5
Values					
Mean altruism/activism	276	4.23	0.5148	2.80	5
Mean advocacy	275	4.12	0.5345	2.50	5
Mean decision making/critical thinking	275	4.36	0.4831	3.00	5
Mean fairness/equity	274	4.29	0.5208	2.75	5
Mean knowledge competence	275	4.35	0.4103	3.25	5
Mean knowledge development	276	4.11	0.5779	2.25	5
Mean privacy/confidentiality	277	4.26	0.5098	2.67	5
Mean professional image/integrity	275	4.22	0.5230	2.67	5
Mean quality of care	275	4.15	0.5560	2.75	5
Mean respect for life	272	4.30	0.4829	3.20	5
Mean truth-accountability/responsability	274	4.41	0.4551	3.25	5

We carried out the Kruskal Wallis and Mann Whitney tests to measure the difference between the mean scores of demographic variables and values.

As shown by Table 3, statistically significant results were found among several demographic and vocational variables and values.

Table 3 - Differences between mean scores for socialization variables and values and demographic variables

Socialization Variables and Values	Demographic Variables	Chi-Square	Sig
Orientation			
Science	- Year of registration	- 7.65	- 0.054
	- Socioeconomic Status	- 11.35	- 0.045
	- Education Mother	- 13.60	- 0.003
	- Religion	- 12.90	- 0.045
Status	- Year of registration	- 6.53	- 0.088
	- Other Career	- 6850	- 0.020
	- College	- 7393.0	- 0.003
	- Work experience	- 6910.50	- 0.011
People	- Other career	- 6603.00	- 0.013
Socialization			
Professional Competences	- First option	- 7811.50	- 0.058
Personality Characteristics	- Age	- 10.79	- 0.029
	- Year of registration	- 16.71	- 0.001
Career values	- Year of registration	- 10.22	- 0.017
	- Other Career	- 4387.50	- 0.000
	- College	- 5719.00	- 0.000
	- First Option	- 7326.00	- 0.019
Professional Values	- Year of registration	- 14.17	- 0.003
	- Other Career	- 6841.50	- 0.017
	- College	- 7728.50	- 0.012
	- Gender	- 918.00	- 0.031
Values			
Altruism/Activism			
Advocacy	- College	- 7889.00	- 0.054
Decision Making/Critical Thinking			
Fairness/Equity	- Education Mother	- 7.80	- 0.050
Knowledge Competence	- Education Mother	- 7.61	- 0.055
Knowledge Development	- Year of registration	- 8.94	- 0.030
	- Other Career	- 6992.50	- 0.048
	- College	- 7807.00	- 0.033
Privacy/Confidentiality			
Professional Image/Integrity			
Quality Care	- College	- 7467.00	- 0.009
Respect Life	- Year of registration	- 15.48	- 0.001
Truth-Accountability/Responsability			

How long the students have been in college indicates a significant difference in the values they assume, strengthening the hypothesis that the time in college and the college itself are related to value changes. However, other factors also exert an important influence, particularly vocational variables and the mother's education level.

In an attempt to identify, at these two colleges, in what Nursing course years differences occur between the mean scores for orientation variables, reward, socialization and values, we carried out the Mann Whitney test to compare the following years: 1x2, 1x3, 1x4, 2x3, 2x4 and 3x4.

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We found significant results between:

- first and second course year for career values;

- first and third year for status orientation, career value, knowledge development, quality of care and respect for life;

- first and fourth year for status orientation, respect for life and professional image/integrity;

- second and third year for science orientation, knowledge development, quality of care, respect for life and truth-accountability/responsibility;

- second and fourth course year for professional socialization, personality, vocation, professional image/integrity and respect for life; and

- third and fourth year for vocation.

This reveals that a majority of changes occurs between the second and the third course year.

These results suggest some conclusions about the socialization process that occurs during the undergraduate nursing course:

The year of registration is an influential factor for some values

The year of registration makes a difference for changes in socialized professional values. It should definitely be considered what other demographic variables can improve the forecasting of changes.

College in itself also influences values: status orientation, career values and Professional values (vocation), knowledge development and quality of care.

Vocational choice makes a difference for some values

In almost half of the values, vocational variables seem to be related to value differences. Status and person orientations, incorporating professional competences, career values and knowledge development are related to the vocational choice, indicating the importance of this factor. If the student makes a wrong vocational choice, the impact of college on the socialization of these values is weaker.

The year of registration does not make a difference

For some values, the socialization variable, i.e. the year of registration is not related, which means that it does not contribute to changes in the following variables: Person orientation, professional competences, fairness/equity values and knowledge competence. Vocational values are related to gender, while fairness/equity and professional competences are related to the mother's education level.

We have no information about influential factors

For a number of values (Altruism/Activism, Decision making/Critical thinking, Privacy/Confidentiality, Professional image/Integrity and Truth-accountability/Responsibility, we did not manage to identify any variable that could help to explain the difference.

CONSIDERATIONS

Controlling a large quantity of demographic variables allowed us to verify whether the variation of professional values was due to the demographic variables or to the time the student remained in college.

The available data allow for some preliminary reflections. The identification of value changes over time indicates the importance of college in the socialization of professional values.

Taking an undergraduate Nursing course during four years leads to a difference in professional values, standards and behaviors. The curriculum at these two colleges contains some emphasis during the second and third year, which leads to variations in some values. Moreover, each college possesses a characteristic that is strong enough to influence some values.

However, we cannot underestimate the influence of demographic and vocational variables. Some values are internalized before students go through the college experience and changes depend on earlier socialization.

Finally, for some values, we did not manage to identify any relationship.

LIMITATIONS

One of the factors that cause a certain degree of difficulty for the study is the difference in the study sample; at one of the colleges, the number of last-year students is smaller. Consequently, differences attributed to college can be influenced by the existing difference in the profile of the study groups.

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A study of the curricula could contribute to a further understand of what changes happen in second and third-year subjects and activities, in order to identify the transformations that occur during this period.

REFERENCES

1. Wanous JP. Organization Entry: Recruitment, Selection, Orientation and Socialization of Newcomers. Reading: Addison-Wesley Publishing Company, 1992.

2. Chatman JA. Matching People and organizations: selection and socialization in public accounting firms. Administrative Science Quarterly, 36:459-484, 1991.

3. Merton RK, Student-physician: introductory studies in the sociology of medical education. Cambridge: Harvard University Press, 1969.

4. Moore WE. The professions: roles and rules. New York: Russel Sage, 1970.

5. Shuval JT. Entering Medicine: the dynamics of transition. Oxford: Pergamon Press, 1980.

6. Cohen HA. The nurse's quest for a professional identity. Menlo Park, California: Addison-Wesley, 1981.

7. Howkins EJ, Ewens A. How students experience professional socialization. Int J Nurs Stud 1999 February; 36(1):41-9.

8. Boyle DK, Popkess-Vawter S, Taunton RL. Socialization of new graduate nurses in critical care. Heart Lung 1996 March-April; 25(2):141-54.

9. Kramer M. Reality Shock: why nurses leave nursing. St. Louis: CV Mosby, 1974.

10. Nesler MS, Hanner MB, Melburg V, McGowan S. Professional socialization of baccalaureate nursing students: can students in distance nursing programs become socialized? J Nurs Educ 2001 October; 40(7):293-302.

11. du Toit D. A sociological analysis of the extent and influence of professional socialization on the development of nursing identity among nursing students at two universities in Brisbaine, Australia. J Adv Nurs 1995 January; 21(1):164-71.

12. Lurie EE. Nurse practitioners: issues in professional socialization. J Health Soc Behav 1981 March; 22(1):31-48.

13. Taylor HR, Westcott E, Bartlett HP. Measuring the socialization of graduate and diplomate nurses using the Corwin Role Orientation Scale. J Adv Nurs 2001 January; 33(1):20-8.

14. Simpson IH. Patterns of socialization into professions: the case of student nurses. Sociol Inq 1967; 37:47-54.

15. Scherer ZAP, Scherer EA, Carvalho AMP. Reflexões sobre o ensino da enfermagem e os primeiros contatos do aluno com a profissão. Rev Latino-am Enfermagem, março-abril 2006, 14(2):285-91.

16. Isaac S, Michael WB. Handbook in research and evaluation. San Diego: EdITS Publishers, 1976.

17. Schmitt N. Method bias: the importance of theory and measurement. Journal of Organizational Behavior 1994 September; 15(5):393-8.

18. Weis D, Schank MJ. An instrument to measure professional nursing values. J Nurs Scholarsh 2000; 32(2):201-4.

19. Eli I, Shuval JT. Professional socialization in dentistry: a longitudinal analysis of attitude changes among dental students towards the dental profession. Soc Sci Med. 1982; 16(9):951-5.

20. Associação Nacional de Empresas de Pesquisa [Página na internet]. São Paulo: ANEP [acesso em 2002 dezembro]. Pesquisa em foco: informativo dos associados da ANEP - dezembro 2002; [4 telas]. Disponível em: www.anep.org.br/pesquisaemfoco/dez2002/cceb.htm