

People with physical and sensory deficits: perceptions of undergraduate nursing students*

Pessoa com deficiência física e sensorial: percepção de alunos da graduação em enfermagem

Persona con deficiencia física y sensorial: percepción de alumnos del pregrado en enfermería

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ABSTRACT

Objective: To describe the perception of nursing students before and after the completion of an elective course - People with physical and sensory deficits: approaches and trends in nursing. **Methods:** This exploratory, descriptive, qualitative approach was conducted using a questionnaire administered to students taking this course in three different years: 2007- 2009. Participants included 96 students who described their perceptions using the research questionnaire. **Results:** The participants ranged in age between 17 - 37 years, and were enrolled in the 1st, 2nd or 5th semesters of their nursing education program. Responses were grouped into five categories: communication and relationship with people with deficits, relevance of the discipline, proportionate growth, educating professionals, positive / negative issues and suggestions. **Conclusion:** The findings suggest that the course contributed to the education of students and future professionals about caring for people with physical and sensory deficits.

Keywords: Education nursing; Disabled persons; Nursing

RESUMO

Objetivo: Descrever a percepção de acadêmicos de enfermagem antes e após a ministração da disciplina optativa - Pessoa com deficiência física e sensorial: abordagem e tendências na enfermagem. **Métodos:** Estudo exploratório, descritivo, com abordagem qualitativa, desenvolvido por meio de questionário aplicado em três períodos: 2007.2; 2008.2 e 2009.1. Participaram do estudo 96 alunos que descreveram suas percepções em relação à disciplina supracitada nesse instrumento de coleta de dados. **Resultados:** A idade desse grupo de alunos situou-se entre 17 e 37 anos e encontravam-se matriculados no 1º, 2º e 5º semestres letivos. As respostas foram agrupadas em cinco categorias: Comunicação e relacionamento com pessoas com deficiência; Relevância da disciplina; Crescimento proporcionado; Capacitação de profissionais, e Pontos positivos / negativos e sugestões. **Conclusão:** Concluiu-se que a disciplina contribuiu na formação dos alunos ao capacitar futuros profissionais de enfermagem para o cuidado às pessoas com deficiência.

Descritores: Educação em enfermagem; Pessoas com deficiência; Enfermagem

RESUMEN

Objetivo: Describir la percepción de alumnos de enfermería antes y después de la administración de la disciplina electiva - Persona con deficiencia física y sensorial: abordaje y tendencias en la enfermería. **Métodos:** Estudio exploratorio, descriptivo, con abordaje cualitativo, desarrollado por medio de un cuestionario aplicado en tres períodos: 2007.2; 2008.2 e 2009.1. Participaron en el estudio 96 alumnos que describieron sus percepciones, en relación a la disciplina citada, en el instrumento de recolección de datos. **Resultados:** La edad de ese grupo de alumnos estuvo comprendida entre 17 y 37 años y se encontraban matriculados en el 1º, 2º y 5º semestres lectivos. Las respuestas fueron agrupadas en cinco categorías: Comunicación y relacionamiento con personas con deficiencia; Relevancia de la disciplina; Crecimiento proporcionado; Capacitación de profesionales, y Puntos positivos / negativos y sugerencias. **Conclusión:** Se concluyó que la disciplina contribuyó en la formación de los alumnos al capacitar a los futuros profesionales de enfermería para el cuidado a las personas con deficiencia.

Descriptores: Educación en enfermería; Personas con discapacidad; Enfermería

* Research developed at the Health Communication Laboratory, Nursing Department, Universidade Federal do Ceará. Research funded by CNPq.

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INTRODUCTION

Disabled people have suffered some kind of alteration in the motor, mental, sensory segments or multiple alterations. According to the World Health Organization (WHO), disability is a loss or abnormality in body structure or physiological body function, including mental disabilities⁽¹⁾. According to estimates, 24.6 million people, i.e. 14.5% of the total population present some kind of disability, including difficulties to see, hear, move, or physical or mental disabilities⁽²⁾.

Nowadays, in Brazil, social inclusion practices are discussed, departing from the principle that, to insert everyone, society should be able to see to the demands of all members. In this sense, no type of prejudice, discrimination, social, cultural and personal barrier can be admitted. Social inclusion should permit access to public services, cultural goods and products deriving from society's social, political, economic and technological advances⁽³⁻⁴⁾.

Despite the attention given to social inclusion and the considerable number of disabled people, however, health services still do not play a satisfactory role in WHO's proposal of health for all by the year 2000. A study that mapped health institutions' accessibility for physically disabled people observed public roads and found insecurity on the way to primary health care units. At the institutions, access conditions do not permit traffic by physically disabled people, such as wheelchair and crutch users and people with limited mobility⁽⁵⁾. This access difficulty, however, is not only related to people with motor disability, but includes disabled people in general. The environment is almost always inaccessible and professionals are unprepared. The situation influences care delivery to these clients and improvements in their quality of life.

Hence, it is urgent for the health system to specifically act on certain aspects, such as: complying with the standards that guarantee access to physical environments and buildings, putting in practice instruments, using braille to help blind people, besides hiring Brazilian Sign Language (LIBRAS) interpreters to facilitate communication with hearing-impaired people⁽⁶⁾. Thus, when professionals are trained, clients may feel more valued and confident when exposing their needs.

Among the guidelines of the National Health Policy for Disabled People, the training of health human resources for care delivery to these clients is a priority. Preparing trained health professionals to act from primary health care in the Family Health Strategy up to the tertiary care level, including professionals working with rehabilitation, is one of the main strategies within this policy⁽³⁻⁴⁾. Among these workers, nurses stand out.

These professionals, in turn, received a generalist

education that enables them to work in health promotion, protection, recovery and rehabilitation, for individuals as well as families and/or communities. Besides, in their professional practice, they attempt to comply with the principles of public health policies, respecting values and human rights⁽⁷⁾. This perspective precisely supports the demands and skills necessary for health professionals working with physically or sensory disabled people.

Regarding nursing care and assistance for disabled people, self-care activities are listed, such as: hygiene, nutrition, elimination, housework-related daily activities and childcare, among others⁽⁸⁾. Nursing research on the characteristics of communication between sensory disabled people and nurses should also be highlighted, with a view to improving care practice through the construction of verbal and non-verbal communication models⁽⁹⁻¹¹⁾.

Besides, there exist diverse possibilities for health education and promotion activities involving this clientele, in a wide range of themes. Literature appoints the development of health promotion workshops and technologies related to the prevention of sexually transmitted diseases, psychoactive drugs use, breast cancer, prostate cancer, arterial hypertension, sexual and reproductive health promotion and accident prevention, among others⁽¹²⁻¹⁴⁾.

In this sense, a more explicit teaching proposal on nurses' skills to work with disabled people, at undergraduate level, can enhance the understanding that the care and interaction process with disabled people goes beyond words and entails direct and profound consequences for nursing care effectiveness.

In view of this reality, in undergraduate nursing programs, it is justified to train future nurses for effective activities with disabled people. This fact is due to the importance of research on the professional-patient relation, besides the National Curricular Guidelines' recommendations, as a knowledge area that needs to be taken into account in pedagogical projects for the preparation of future health professionals⁽¹⁵⁾.

These skills should be taught across the undergraduate program and should not remain limited to one single subject or period's sole responsibility. Different specific practical experiences should be included in training and, at the same time, past interaction situations are formally highlighted, as well as the behavior of the involved elements and the consequences of interaction for both. Another essential aspect is the students' assessment of the method adopted in the course, as well as the pedagogical techniques used to offer the contents. Students' view is extremely useful to help and validate the course proposals and objectives⁽¹⁶⁾.

Thus, in response to the abovementioned problem, an optional course was set up for undergraduate nursing

students. In this course, aspects of the relationship between nurses and disabled people are addressed, with a view to training future professionals for holistic and effective care delivery. Hence, this study aimed to describe nursing students' perception before and after the optional course – Physically and sensory disabled people: approach and trends in nursing.

METHODS

An exploratory and descriptive study with a qualitative approach was developed at the Nursing Department, specifically at the Health Communication Laboratory (*LabCom_Saúde*) of *Universidade Federal do Ceará*. Exploratory research investigates and unveils the different ways in which a phenomenon manifests itself, as well as associated processes. A descriptive study aims to describe and clarify phenomena related to the nursing profession⁽¹⁷⁾.

At *LabCom_Saúde*, communication experiments are performed in different health care contexts. As a specific environment, it contains special walls made of glass wool, concrete and plaster, so as to isolate it completely from the external environment and impede noise from interfering in the course and recording of experiments. Filled with isolating material, wooden doors contribute to preserve the laboratory's acoustics. Infrastructure includes diverse technological devices with up-to-date computers, a sound and video table, cameras, televisions, multimedia equipment and a microphone. The laboratory is divided in five areas: Lobby for meetings, waiting and making participants feel at ease before the planned activity; Recording room, a large space to put in practice fictitious and real communication situations; Aquarium with equipment, such as a computer, edition and camera control tables; a bathroom; and a dining room.

The course was offered thrice: in the second semester of 2007 and 2008 and in the first semester of 2009. Ninety-six students participated, enrolled in the first, second and fifth terms, due to the fact that the day the course took place should not coincide with compulsory course subjects. Data were collected through questionnaires. At the start, students were asked to describe their perception of how they communicated and related with disabled people, expectations and motivation to participate in the course. At the end, the same questions were asked, and students individually described their perception of communication and their relationship with physically and sensory disabled people, in view of the contents and experiences the course provided. At that moment, they made suggestions on how to improve personal relations between health professionals and these people, besides addressing

negative and positive aspects they observed in the course.

Categories were organized so as to better understand the students' answers regarding pre-activity testimonies, which resulted in two categories: Communication and relation with disabled people, and Relevance of the course in view of students' expectations. Three categories arose from post-activity assessments: Growth the subject enhanced; Professional training and Positive/negative points and Suggestions.

To preserve the students' anonymity, the letters A to Z were used to identify testimonies, followed by the course term they were taking.

As required, ethical-legal aspects were complied with. Subjects signed an Informed Consent Term, according to National Health Council Resolution No. 196/96 on research involving human beings. This research is part of *Labcom_Saúde's* Accessibility Project, which received approval from the Institutional Review Board at *Universidade Federal do Ceará* (Protocol No. 124/02).

RESULTS

Ninety-six students between 17 and 37 years old participated in the course *Physically and sensory disabled people: approach and nursing trends*. Only four of them were male.

Category 1: Communication and relationship with disabled people

Communication is considered a process of understanding and socializing messages exchanged between the issuer and receiver of certain contents. It is considered a need inherent to and characteristic of human beings and, for nursing professionals, it serves as the base for the development of nursing care systemization⁽¹⁸⁾. This category is evidenced in the statements:

I've never had any contact with physically and sensory impaired people (A, S2).

I don't know how to act really, to make the person feel at ease. Communication, thus, tends to be quite complicated and limited (B, S2).

Sometimes I feel incapable of attending to some of these people's needs (C, S2).

[...] I'd get fearful and afraid when dealing with physically/sensory impaired people (D, S5).

In fact, I don't communicate! (E, S5).

Not only the contents of the statements were remarkable, but also the fact that a significant part of the students affirmed they had had little or no contact with these clients in their life. One exception was a student's report, whose parents were hearing-impaired

and who developed skills to communicate with them since very young.

Category 2: Relevance of the course in view of students' expectations

Another aspect that stood out in the nursing students' answers was the valuation of the initiative to set up the abovementioned complementary activity. As the statements illustrate, discourse defends the valuation of disabled people, as well as the need to seek education in this area.

It is necessary, within the university curriculum, to include a subject [...], so as to have minimal knowledge (E, S5).

Programs benefitting disabled people in the Unified Health System (F, S5).

Addressing these themes more within [curricular] subjects (G, S1).

Promoting recycling projects (H, S1).

Among the identified expectations regarding the start of the complementary activity, a consensus exists that a differential in the curriculum, as well as the desire to deliver care that is adequate to the specific needs of disabled clients, are the main motivations to set up this education.

I hope to mature a lot and turn into a distinguished professional (I, S2).

I hope we can understand a bit the dimension of disabled people as people, citizens, patients and users in the health system (J, S5).

[...] I hope we'll have the opportunity to get to know institutions that support disabled people (K, S5).

Category 3: Growth provided by the course subject

According to the answers the students described, after the optional subject, communication and relations with physically and sensory disabled people improved, which granted security and some degree of skills. Some students have contact with these people daily but, for them as well as for students without daily contact, interaction will be beneficial. The reports revealed that the subject was generally considered positive, mainly because it highlighted details that were not perceived before, as the statements show.

Communication is much calmer now. I don't look with pity anymore. I see them as fighters, who overcome yet another difficulty in their lives (L, S2).

Today, I believe the relation will be much more natural and spontaneous. Now, I think I'll be able to deal with them naturally (M, S1).

It was a fantastic experience (N, S5).

I feel relatively safer, now, at the end of the course, regarding communication (O, S5).

I still don't communicate much, but I'm sure that, when addressing a disabled person, I'd treat him much better than at the start [of the subject] (P, S2).

All aspects the students mentioned are fundamental, as nurses need to gain verbal and non-verbal communication skills during the care process in relation to the clients, with a view to contributing to the improvement of care delivery.

Category 4: Professional training

When asked about suggestions to improve personal relations between health professionals and disabled people, the students mentioned professional training. In this category, the students mentioned:

Training for health professionals [...], as well as their previous preparation in the college context, as students (Q, S1).

Including subjects in the course that advise on the best way to deal with this type of public. It will be interesting to make it a compulsory course (R, S2).

Preparation. Specialization. Disabled people need to be able to count on well-prepared professionals, who actually know how to deal with their potentials and limitations. And respect above all (T, S1).

It would be good if, at least, at each hospital in the city, health professionals (mainly nurses) existed who knew LIBRAS. The infrastructure at hospitals and clinics; health professionals who are trained as to how to conduct blind people [...] (U, S5).

As the students suggested, to improve interpersonal relations between health professionals and physically and sensory disabled people, training should exist. According to some, this process should start at undergraduate level, while others indicated the health institutions. They also highlighted the need for qualified professionals, specific communication and relations, with a view to qualified care delivery.

Category 5: Positive/negative points and suggestions

As for positive aspects of the optional subject, the students mentioned the lectures by disabled people, visits to institutions, the room structure, number of students, technologies used, air-conditioning and illumination of the room, timetable and the teacher's knowledge. All of these aspects significantly influenced these students' knowledge, experience and sensitization, according to the following reports:

The visits to institutions allowed the students to have contact

with professionals who work, especially attending to disabled people, and to get to know adapted structures [...] (V, S5).

The teacher has great knowledge on the theme, due to research and experience with work at institutions specialized in care delivery to disabled people (X, S1).

At different times, it made us put ourselves in the place of a disabled person and observe how difficult it is not to be 'perfect' (X, S1).

It's a new subject, different from others, which gave us, future nurses, a new view. It offered the opportunity to get to know the reality of disabled people with their limitations and strong points better (Y, S2).

Other positive points are the room structure, number of students and technologies used (movies, lectures, visits) (W, S5).

The course timetable was properly followed (Z, S5).

It would be good, besides the visits to get to know the institutions, to have other visits, in order to be able to interact with the users (M, S1).

Transforming the subject from optional to effective or making course times as accessible as possible and increasing the number of visits (C, S2).

Regarding negative points, the following were observed:

The time, as the more students are awoken to care delivery to disabled people, the better for care humanization (D, S5).

Difficulty to conciliate the times of visits with class times, as well as lecture times (T, S1).

Lack of practice at institutions, educational actions, for example (I, S2).

There should be more visits to institutions, including more direct and closer activities with these patients (P, S2).

Students should develop a health education activity, involving one type of disabled (V, S5).

The short duration of the subject, visits to institutions that could be expanded, the accomplishment of educational activities with disabled people and the end of one subject coinciding with the start of another were registered as negative points. These aspects, reconsidered in planning, can contribute to improve this course subject.

DISCUSSION

In the specific case of sensory disabled people, communication is often limited by differences in the use of verbal and non-verbal means, bodily characteristics, among other aspects⁽⁹⁾. For the nursing students in this research, without any previous education and/or training, these difficulties are also present and expressed at different times.

These data support the literature, affirming that nursing students, due to the lack of adequate education,

face difficulties or even avoid closer contact with disabled clients, generally transferring this responsibility to other people⁽⁹⁾.

The encouragement of course subjects, activities and training addressing the theme under discussion at higher education institutions, especially public universities, has been increasingly addressed and put in practice. At the federal university where the study took place, initiatives and projects exist in the fields of education, architecture and urbanism and library science, among others. In the health area, this nursing initiative is a pioneer and results from more than 15 years of research and community services involving disabled people.

The abovementioned activity and its relevance correspond to the demand for course subjects and contents addressing health promotion, prevention, rehabilitation and care for disabled people, according to the law that establishes the guidelines and bases for Brazilian education. This incorporation into undergraduate course curricula in health aims to improve care for these clients, either in the Unified Health System or supplementary care context⁽³⁾.

Nurses' possibilities to act when disabled patients are involved comprise health care and education for these people's self-care, attending to their biopsychosocial and spiritual needs. Another aspect that should be heeded is this professional category's insertion in support institutions for disabled people, not only regarding rehabilitation, but also regarding health promotion aspects⁽¹⁹⁾.

As evidenced in a previous study, in common communication situations, students and nurses experience difficulties to address clients, either to explain daily routines, identify needs, provide orientations, inform about procedures, or simple to listen⁽²⁰⁾. These difficulties are even greater in case of sensory disabled patients.

Regarding sensory impaired people, the communication process takes particular forms that are considered more effective. As proposed, professionals need to adapt their way of communicating and interacting, according to the patient, as each type of disability has its characteristics. Therefore, information is also needed on the patient's education level, so as to establish the best form for this communication and relationship⁽¹⁰⁾.

Nursing professionals' education should be increasingly based on a relation of partnership between teaching and health institutions. Thus, the hope is to prepared professionals with solid knowledge, who are capable of innovation, teamwork, so as to manage the uncertainty and complexity of nursing care. One of the course goals was to sensitize future professionals to seek greater knowledge, with a view to distinguishing them

in terms of relating and communicating with disabled people, as this theme has not been addressed in academic higher education. Hence, education is perceived as a dynamic and continuous knowledge construction method. Knowledge, moved by the development of critical-reflexive thinking and human relations, leads to the creation of personal and professional commitment, by training professionals to transform reality⁽²¹⁾.

In the search for knowledge, the urgent need to create the subject was perceived, mainly deriving from the findings of previous studies in which disabled people's difficulties to access health services were identified, besides nurses' lack of preparation for health care delivery to this population. Based on these data, gaps were observed in the teaching and learning process of undergraduate nursing students in terms of skills for care delivery to and communication with disabled people.

In view of this reality, the course project was submitted to the nursing course coordination, together with the syllabus and the program contents. Then, a favorable opinion was obtained to set up the subject, but as a complementary activity at first. After offering the activity during two terms, the need was perceived to introduce it as an optional subject. That happened in 2009, when a subject called Nursing in special situations was created at the Nursing Department of *Universidade Federal do Ceará*. This subject permits more than one syllabus, and students register for the syllabus they are interested in.

In undergraduate health education, curricula are fragmented and structured in courses and cycles, concentrating theoretical teaching in anatomopathological systems and from a biomedical perspective. Themes are addressed with little opening to other knowledge areas, besides prioritizing the hospital-centered model⁽²²⁾. This goes against the comprehensive and holistic care proposal, which should be prioritized and taught to students. In care delivery to disabled people, this care should be qualified, as each disability entails its particularities.

Pedagogy presents different approaches, ranging from teaching focused on the teacher to other student-focused approaches. Nowadays, a permanent interaction process between students, teachers and knowledge objects is perceived. With a view to interacting with students' ideas, teachers provoke concrete inquiries, offer sources and materials, answer questions, mark alternatives and suggest new relations⁽²³⁾. This relation offers students a space for interaction and freedom to participate. In the course, this relation was sought

through knowledge and personal and professional growth.

As literature alerts, to plan and prepare classes, an adequate number of students is needed, in line with the space and number of teachers, adequate room, diverse and adequate support materials, within the perspective of effective and efficient education⁽²⁴⁾.

The most recent National Curricular Guidelines the Ministry of Education approved led to the establishment of new curricula for undergraduate health courses. The graduates/professionals' profile displays a nurse with generalist, humanistic, critical and reflexive education. In short, professionals who are able to practice nursing with scientific and intellectual knowledge and based on ethical principles⁽²⁵⁾.

In the category on the course's negative aspects, one of the points the students appointed was disabled people's need for health education. In this sense, when relating this education concept with the nursing profession, the researchers consider that all nursing actions include educative actions. Effective teaching opportunities need to be enhanced, based on awareness about the value of education as a means for nursing professionals to grow and improve their practice, as well as nurses' acknowledgement for their educative function in the development of the work process. Knowledge is a necessary value in daily activities and supports their daily actions⁽²⁶⁾.

FINAL CONSIDERATIONS

In this study, according to the categories of communication and relation with disabled people, professional training, positive and negative aspects of the optional course, the need was observed to insert contents on the theme at universities. Future nursing professionals need to get qualified, especially because these people are entitled to high-quality care at health care units.

Regarding criticism, this is welcome, but part of the students' statements can derive from their lack of understanding on the course's informative nature, that is, the intention was not to equip students to work with disabled people, which would demand a larger hour load and could represent a second course, to be offered after students have mastered other care skills. Instead, the goal was to raise undergraduate students' awareness in order to understand issues involving disabled people in society and health. This goal, the researchers assume, was achieved.

REFERENCES

1. Organização Mundial da Saúde. *Classificação internacional de las deficiências, actividades e participação: um manual de las dimensiones de la inhabilitación e su funcionamiento*. Geneva: Organização Mundial de Saúde; 1997.

2. Instituto Brasileiro de Geografia e Estatística. Censo 2000. Rio de Janeiro; 2000. [citado 2008 Mar 8]. Disponível em: <http://www.ibge.gov.br>.
3. Brasil. Ministério da Saúde. Secretaria de Atenção à Saúde. Política nacional de saúde da pessoa portadora de deficiência. Brasília: Ministério da Saúde; 2009.
4. França ISX, Pagliuca LMF, Baptista RS. Política de inclusão do portador de deficiência: possibilidades e limites. *Acta Paul Enferm*. 2008;21(1):112-6.
5. Vasconcelos LR, Pagliuca LMF. Mapeamento da acessibilidade do portador de limitação física a serviços básicos de saúde. *Esc Anna Nery Rev Enferm*. 2006;10(3):494-500.
6. França ISX, Pagliuca LMF. Acessibilidade das pessoas com deficiência ao SUS: fragmentos históricos e desafios atuais. *Rev RENE*. 2008;9(2):129-37.
7. Brasil. Conselho Federal de Enfermagem. Resolução 160: código de ética dos profissionais de enfermagem. Rio de Janeiro: Conselho Federal de Enfermagem; 1993.
8. França ISX, Pagliuca LMF. Inclusão social da pessoa com deficiência: conquistas, desafios e implicações para a enfermagem. *Rev Esc Enferm USP*. 2009;43(1):178-85.
9. Pagliuca LMF, Régis CG, França ISX. Análise da comunicação entre cego e estudante de enfermagem. *Rev Bras Enferm*. 2008;61(3):296-301.
10. Pagliuca LFM, Fiúza NLG, Rebouças CBA. Aspectos da comunicação da enfermeira com o deficiente auditivo. *Rev Esc Enferm USP*. 2007;41(3):411-8.
11. Macedo KNF, Pagliuca LMF. Características da comunicação interpessoal entre profissionais de saúde e deficientes visuais. *Rev Paul Enferm*. 2005;23(3/4): 221-6.
12. Cezario KG, Mariano MR, Pagliuca LMF. Comparando o comportamento sexual de cegos e cegas diante das DSTs. *Rev Eletrônica Enferm*. [Internet]. 2008;10(3): 686-94. [citado em 2008 Jun 10] Disponível em: <http://www.fen.ufg.br/revista/v10/n3/v10n3a14.htm>.
13. Cezario KG, Pagliuca LMF. Tecnologia assistiva em saúde para cegos: enfoque na prevenção de drogas. *Esc Anna Nery Rev Enferm*. 2007;11(4):677-81.
14. Pagliuca LMF, Costa EM. Tecnologia educativa para o auto-exame das mamas em mulheres cegas. *Rev RENE*. 2005;6(1):77-85.
15. Rossi PS, Batista NA. O ensino da comunicação na graduação em medicina: uma abordagem. *Interface Comun Saúde Educ*. 2006;10(19):93-102.
16. Carvalho EC, Bachion MM, Almeida LCP, Medeiros RN. O ensino de comunicação em enfermagem: um desafio. *Rev Latinoam Enferm*. 1997;5(3):27-34.
17. Polit DF, Beck CT, Hungler BP. Fundamentos de pesquisa em enfermagem: métodos, avaliação e utilização. 5a ed. Porto Alegre: Artmed; 2004.
18. Stefanelli MC, Carvalho EC, organizadoras. A comunicação nos diferentes contextos da enfermagem. Barueri: Manole; 2005.
19. França ISX, Pagliuca LMF, Sousa RA. Discurso político-acadêmico e integração das pessoas com deficiência: das aparências aos sentidos. *Rev Esc Enferm USP*. 2003;37(4):24-33.
20. Azevedo RCS. A comunicação como instrumento do processo de cuidar: visão do aluno de graduação. *Nursing (São Paulo)*. 2002;5(45):19-23.
21. Paschoal AS, Mantovani MF, Méier MJ. Percepção da educação permanente, continuada e em serviço para enfermeiros de um hospital de ensino. *Rev Esc Enferm USP*. 2007;41(3): 478-84.
22. Brasil. Ministério da Saúde. Seminário: incentivos às mudanças na graduação das carreiras da saúde. Brasília: Secretaria de Gestão do Trabalho e da Educação na Saúde; 2003.
23. Pettengill MAM, Nunes CB, Barbosa MAM. Professor e aluno compartilhando da experiência de ensino-aprendizagem: a disciplina de enfermagem pediátrica da Universidade Federal de Mato Grosso do Sul. *Rev Latinoam Enferm*. 2003;11(4):453-60.
24. Silva CC, Silva ATMC, Oliveira ICC, Leon CGRMP, Serrão MCPN. Abordagem por competências no processo de ensino-aprendizagem. *Rev Bras Enferm*. 2005;58(1):91-4.
25. Barbosa ECV, Viana LO. Um olhar sobre a formação do enfermeiro/docente no Brasil. *Rev Enferm UERJ*. 2008;16(3):339-44.
26. Domingues TAM, Chaves EC. O conhecimento científico como valor no agir do enfermeiro. *Rev Esc Enferm USP*. 2005;39(N Esp):580-8.