

Clinical and management skills for hospital nurses: perspective of nursing university students

Competências clínicas e gerenciais para enfermeiros hospitalares: visão de egressos de enfermagem

Competencias clínicas y gerenciales para enfermeros hospitalarios: visión de egresados de enfermería

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ABSTRACT

Objective: to analyze nursing university students' perception of the professional skills to act in the hospital setting developed during their academic training, and what strategies are being created for the development of these skills during their performance. **Method:** an exploratory, qualitative study in which 40 nursing university students participated. The data were collected from September to December 2016 and conducted thematic inductive analysis. **Results:** clinical skills were identified that could be learned and previously developed at the undergraduate level; and management skills learned during undergraduate education and developed only in the hospital environment. Strategies for the development of skills were identified, such as individual study and Permanent Education, by the employing institution. **Final considerations:** it was evidenced that college contributed in significant proportions for learning and development of some clinical and management skills in the hospital. Still, despite the identified strategies, managers and training centers need to continuously implement strategies for the development of new skills in nurses.

Descriptors: Nurses; Professional Skills; College Education; Hospitals; Strategies.

RESUMO

Objetivo: analisar a percepção de egressos de enfermagem acerca das competências profissionais para atuar no cenário hospitalar desenvolvidas durante sua formação acadêmica, e quais estratégias estão sendo realizadas para o desenvolvimento destas competências durante sua atuação. **Método:** estudo exploratório, qualitativo, no qual participaram 40 egressos de enfermagem. Os dados foram coletados de setembro a dezembro de 2016 e realizada análise temática indutiva. **Resultados:** identificaram-se competências clínicas que puderam ser aprendidas e previamente desenvolvidas na graduação; e competências gerenciais aprendidas durante a graduação e desenvolvidas somente no ambiente hospitalar. Estratégias para o desenvolvimento de competências foram identificadas, como estudo individual e Educação Permanente, pela instituição empregadora. **Considerações finais:** evidenciou-se que a graduação contribuiu em proporções significativas para aprendizagem e desenvolvimento de algumas competências clínicas e gerenciais na área hospitalar. Ainda, apesar das estratégias identificadas, há necessidade de gestores e centros formadores implementarem continuamente estratégias para o desenvolvimento de novas competências nos enfermeiros.

Descritores: Enfermeiros; Competência Profissional; Educação Superior; Hospitais; Estratégias.

RESUMEN

Objetivo: analizar la percepción de egresados de enfermería acerca de las competencias profesionales para actuar en el escenario hospitalario desarrolladas durante su formación académica, y qué estrategias se están realizando para el desarrollo de estas competencias durante su actuación. **Método:** estudio exploratorio, cualitativo, en lo cual participaron 40 egresados de enfermería. Los datos fueron recolectados desde septiembre hasta diciembre 2016 y fue realizado el análisis temático inductivo. **Resultados:** se identificaron competencias clínicas que pudieron ser aprendidas y previamente desarrolladas en la graduación, y competencias gerenciales aprendidas durante la graduación y desarrolladas solamente en el ambiente hospitalario. Las estrategias para el desarrollo de competencias fueron identificadas por la institución empleadora, como estudio individual y educación permanente. **Consideraciones finales:** se evidenció

que la graduación contribuyó en proporciones significativas para el aprendizaje y el desarrollo de algunas competencias clínicas y gerenciales en el área hospitalaria. Además, a pesar de las estrategias identificadas, hay una necesidad de gestores y centros formadores para implementar continuamente estrategias para el desarrollo de nuevas competencias en los enfermeros.

Descripciones: Enfermeros; Competencia Profesional; Educación Superior; Hospitales; Estrategias.

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INTRODUCTION

The term “skill” has been gaining space and undergoing changes over time due to the transformations that have occurred in the economy, in the labor market and in the process of globalization. In this context, skills are related to the human capabilities to perform specific tasks, in which they became a base element that allowed companies to concentrate on the essential aspects of their business and to have a human capital that had knowledge, skills and to meet the challenges of the globalized world. With this, skills are turned into individuals who possess knowledge and possess skills and attitudes to develop their work with effectiveness⁽¹⁾.

In the health area, the “professional skills” theme is being addressed and has been concern for service managers, as well as centers for training their professionals. In this regard, the National Curriculum Parameters (DCNs) institute for the health area courses an academic and professional profile that includes the following skills: Health Care; Decision-Making; Communication; Leadership; Administration and Management, and Permanent Education. Specifically in Nursing, DCNs point to skills as fundamental aspects in the composition of the courses’ pedagogical projects, guiding the training of nurses. In this perspective, the teaching based on skills acts as a strategy for the transformations occurring in the world of work, especially in health services⁽²⁾.

Thus, considering that the nurse historically holds management positions in health services, and especially in the hospital, professional skills for management are considered paramount in the role of this worker, thus becoming relevant for professionals, institutions to define and implement management skills for these individuals⁽³⁾.

In this sense, we can highlight a study that related the experience of the teaching-learning process in the development of management skills in which essential skills for nurses’ performance were revealed, such as: leadership, communication, administration, formulation and participation in decision processes, decision-making and management. Still in this same research, the authors pointed out the importance of establishing management skills in nursing curricula, especially when added to alternative teaching methods that provide criticality in the teaching process⁽⁴⁾.

Recently, with regard to nurses working in the hospital, clinical skills were identified. Among them we can find integral care of the patient and their technical procedures, knowledge of the pathologies presented, previous experience, and so on. Also, strategies to develop these skills were identified: interaction with other professionals, daily practice/experience of nursing practice, continuous learning through courses, specializations, improvements, among others. The authors pointed out these skills and strategies as essential in improving the resolution of

clinical problems, facilitating professional development, as well as helping to identify training gaps for the practice and direction of educational actions inside organizations⁽⁵⁾.

In this way, management and clinical skills are articulated, proving to be essential to the nurses’ work in the hospital context. In this sense, this study presents the following questions: What professional skills did nursing university students of a Higher Education Institution (HEI) acquire to perform in the hospital labor market during their academic training? What strategies have been used to develop these skills according to the perspective of nursing university students?

In this direction, identifying the necessary skills for nurses should allow nursing training centers to reflect on gaps in knowledge, skills and attitudes in their curricula for these future professionals, as well as the need to develop pedagogical strategies that favor the acquisition of appropriate training, such as the improvement of new skills in order to respond to the needs of organizations.

OBJECTIVE

To analyze the perception of nursing university students about the professional skills to perform in the hospital setting developed during their academic training and to identify what strategies are being created for the development of these skills for their performance.

METHOD

Ethical aspects

This study was approved by the Research Ethics Committee (CEP) of the Ribeirão Preto School of Nursing of the *Universidade de São Paulo* (EERP-USP).

Type of study and methodological procedures

This is an exploratory study, using the qualitative approach of the data. The study was developed according to the COREQ precepts (for qualitative research).

Setting, study participants and data sources

The study setting consisted of a HEI from a city of São Paulo’s countryside. HEI is a Public University of Nursing that offers two types of Courses: “Bachelor’s degree” and “Bachelor’s degree and License for teaching”, being certified about 130 undergraduates annually.

Thus, among the undergraduates certified annually, the last two years of these courses were included, totaling approximately 260 professionals. Among these, the undergraduates who work in the hospital area who have gone through the previous professional experience (three months) were selected, making up

a total of 100 professionals. It is believed that undergraduates going through this minimum period of work may already have experienced and used several professional skills. Those who did not meet the mentioned selection criteria were excluded from the research.

The population consisted of 40 nurses and was defined as saturation of the data⁽⁶⁾.

Collection, data organization and work steps

Data were collected from September to December 2016 through semi-structured interviews. For some professionals, the contact happened by electronic means whose face-to-face meeting was not possible.

Initially, it was preferred to conduct the interview with university students in face-to-face meeting according to their availability, which occurred with 11 university students. Subsequent to this step, since no data saturation was obtained, the researcher continued the interviews with the university students available online, being made by contact via Skype, and being composed by 29 university students. It should be noted that the option for Skype was due to the fact that most university students have returned to their home cities or search for jobs in larger cities, making it difficult to meet them face-to-face, as well as being a real-time strategy.

The interview script was composed of two parts: the first part, containing socio-professional identification data, such as age, gender, origin, year of undergraduate education, professional activity and in which area of activity, and type of professional training (undergraduate course, specialization, masters, and doctorate). The second part contained questions related to the skills acquired during and after undergraduate education, as well as questions related to the strategies used to develop these skills, according to the perspective of the university students.

Data analysis

Inductive content analysis was used to interpret the data from this study. In order to do so, we opted for the use of thematic analysis, which followed the following steps: transcription and data reading; coding of interesting characteristics of the data in a systematic way throughout the data set; search for topics by means of grouping codes; review of topics where it verifies whether they respond to the coded parts; ongoing analysis to improve the specificities of each theme; and, finally, final analysis of the selected parts, related to the guiding questions of the research and the literature, producing an academic report of the analysis⁽⁷⁾.

The analysis allowed choosing three broad categories: Clinical Skills; Management Skills; and Individual and Organizational Strategies for the Development of Professional Skills in Hospital Institutions. It was also possible to show, among the categories, some subcategories of skills, in which stand out among the clinical skills: Professional Attitude; Patient Care: Technical Procedures; Theoretical-Practical Knowledge and Clinical Reasoning; and Systematization of Nursing Care (SNC); and subcategories of management skills, such as Leadership and Decision-Making; Communication; People, Material and Cost Management; and Interpersonal Relationships and Teamwork.

RESULTS

Characterization of participants

The population was composed of 40 nursing university students. The data showed a predominantly female population, which 33 (82.5%) were female and seven (17.5%) were male. The majority of the participants, 31 (77.5%), came from different cities of the institution. Regarding the hospital's area of activity, complex care places were identified, such as the Intensive Care Unit (ICU), the Trauma Center, among others.

Regarding the professional training, the data revealed that 36 (90%) of the participants carried out graduation courses, among them: 13 (32.5%) of university students at *latu sensu* graduation; 22 (55%) performed multiprofessional residency; and only one (2.5%) master's degree in progress (*stricto sensu* graduation).

When the data of the interviews were analyzed, the category of clinical skills was identified, and, in general, these skills were possible to be taught and previously developed during the undergraduate education. We also identified the second category of skills called management skills, which could be learned in the classroom in the theoretical block of the discipline, but its development and implementation occurred only in the context of work. Thus, it is observed that during the undergraduate course there was focus on clinical skills.

And, finally, we identified the third category, called Individual and Organizational Strategies for the Development of Professional Skills in Hospital Institutions.

Clinical Skills

The analysis of university students' statements allowed to choose clinical skills, in which they were divided into subcategories, denominated: "Professional Attitude", "Patient Care: technical procedures", "Theoretical-practical knowledge and clinical reasoning" and "SNC".

Professional Attitude

The professional attitude was one of the most mentioned skills by the participants regarding the skills learned and developed during the graduation period:

We learned a lot on attitude, ethics, dressing well, tied hair, on how it is our speech [certainly not to do anything if there is doubt, only if there is with clarity] attitude used to speak with the patient, with professionals, to have flexibility, assiduity, commitment and even impeccable personal appearance. (E29)

Patient care: technical procedures

Patient care and care techniques were considered vital skills for effective hospital care. Some university students considered the technical procedure part learned/taught and previously developed in the undergraduate education, but improved in the work practice:

I think in undergraduate education we can also learn all about patient care, such as physical examination, holistic integral care, observing the whole as a family, procedures and rehabilitation. And also the practical techniques, like puncture, complete physical examination, of course we improve better practicing, but we could have all this in the undergraduate

education, and in the work environment we are enhancing our skills. (E37)

Theoretical-practical knowledge and clinical reasoning

The theoretical-practical knowledge and the capacity of clinical reasoning in relation to fully involve the patient were found to be paramount in the hospital environment. Given this, participants considered knowledge a factor initiated, as well as previously developed during undergraduate education and improved in the work environment:

I believe that we have a clear idea of the process of clinical reasoning, that we have to check every step and check everything about the patient and always think about what might happen in the face of a picture, the reason why such medicine or tests are used; beyond theoretical-practical knowledge. This has been well developed, but knowledge always changes, so we have to always update ourselves. (E3)

Systematization of Nursing Care (SNC)

Finally, SNC was indicated as inevitable to assure positive repercussions on the quality of care provided, which was learned and fully developed at the undergraduate level:

With regard to SNC and the whole nursing process, we were able to learn and develop during the whole undergraduate education, which allowed me a better practice in the hospital nowadays, as we were very charged to do correctly and to almost all undergraduate subjects they passed case studies where we had to develop this process and actually apply to the patient in the practice at the internship. (E8)

Management Skills

The analysis of the university students' statements allowed them to choose management skills and thus to divide them into subcategories, such as: "Leadership and Decision-Making", "Communication", "People, Materials and Cost Management" and "Interpersonal Relationships and Teamwork".

Leadership and Decision-Making

Leadership and decision-making were considered management skills implemented in work practice, listed as imperative for the effective work process of nurses in the hospital environment:

We had the concept of leadership, theories, other professionals being leaders, but each person now develops in their work, in undergraduate course the person ends up not being a leader, because professionals don't let them to and many don't feel prepared for it. And at the time that we are going to practice what we have developed ... I didn't see it in undergraduate education. (E16)

Communication

Interpersonal communication was another essential skill related to the quality work of the nurse in the hospital, mainly associated with effective communicative tools with the multidisciplinary team, declared by the university students as developed in the work practice:

The ability of communicating was developed in the work environment, because despite listening in the whole undergraduate

course period about communication processes, introduction to communication with patient, it was concluded that with professionals we don't develop so much skills. With regard to the communication process with patients or relatives, yes, but with a multidisciplinary team, only practicing you have more autonomy, more responsibility and obligation to fulfill an effective work. (E32)

People, Materials and Cost Management

Management of the entire hospital sector, such as people, materials and cost was also considered an essential management skill for the development of the work in an effective way, acquired with practical professional experience.

In relation to the question of management as a whole of people and materials I could enhance myself only by experiencing; how to manage a unit, now I have autonomy, more dexterity ... because of the basis I had in college and in the day to day that you get the hang of it ... I worked a year ago, so it enabled me to learn and develop this issue. (E31)

Interpersonal Relationships and Teamwork

The Interpersonal Relationship and Teamwork were highlighted as key skills for the quality of care in the hospital environment, and these skills are introduced in the undergraduate education and only implemented in the care practice:

The issue of really working as a team and dealing with people was a totally built-in aspect of the work environment, because at undergraduate course we haven't spent time enough in the team to trust you and get to know you, so we don't know the conflicts, and in practice this everything is very different, you have to obtain this ability to handle several problems and situations with people and, on top of all this, know how to work in a team so that the result is satisfactory to the patient. (E8)

Individual and Organizational Strategies for the Development of Professional Skills in Hospital Institutions

There were some strategies developed by university students:

I attend specialization courses and since I started working I try to do new things, new techniques to enhance my practice. I do research and participate because it helps me to be more skilled. (E40)

Participants also listed strategies offered by the institution in which they work to improve their skills:

Sometimes, there are courses in the institution, which is very rare, and when it has is obligatory, sometimes it has lectures of a specific content, but it is more directed to the nurse. Recently there was one on Nursing Annotation, but it is quite rare, twice a semester. There is discussion of cases among other professionals that when there is no work overload we can participate, however we are very busy. There is no career path; they don't help to participate in something. (E16)

DISCUSSION

The analysis of the university students' statements made it possible to verify that some skills were learned only by theoretical content during the undergraduate education, not being

implemented in this period, and others were able to be learned and previously implemented during the practical internships, even superficially, and only enhanced in hospital practice. These assumptions reveal that future nurses arrive to the market with limited preparation to face their work reality and, therefore, often seek for professional improvement after the academic training, as occurred in this research, in which a high number of professionals was inserted in graduate programs, that is, 36 nurses, evidencing concern to develop new skills in order to adjust to the work environment in an effective way.

It was also noticed that a great number of university students was female, historical characteristic of the profession. In the same way, it was verified that the participants had already begun their work practices in complex units, such as ICU and Emergency Service, environments that require constant concentration and attention, besides specific knowledge to develop the work activities, making the nurses, from an early age, look for professional improvement as a way to help their performance, since these places require specific skills, which occurred in the undergraduate education in a punctual and/or superficial way.

Although the selected HEI provides a field for students to develop the skills required in the job market, nursing university students have highlighted gaps in what has been learned and developed at undergraduate level and what has been developed and/or implemented in hospital work. Regarding the perception of university students among the professional clinical skills, they emphasized their learning and previous development during undergraduate course, as well as improvement in the work environment, such as Professional Attitude; Patient Care/ Care Techniques; Theoretical-Practical Knowledge and Clinical Reasoning; and Systematization of Nursing Care.

Given this, the professional attitude in the hospital environment was considered as a fundamental skill of the nurse. Likewise, these data are in line with the findings of other studies that point out what is primordial for a nursing professional to have attitude, empathy, focus on the environment, assiduity and flexibility⁽⁸⁾.

Still in the context of professional attitude, researchers also highlight the need for ethics while performing of job functions, highlighting the importance of the professor to instruct and develop attitude, punctuality, political sense and responsibility to the student. Thus, they highlight the relevance of adopting strategies that promote meaningful learning, reaffirming the effectiveness of active methodologies and the early insertion of students in the practice settings. However, in order to achieve quality in undergraduate education, emphasis is placed on the training of professors in the use of new technologies and in-service ethics⁽⁹⁾.

Technical procedures and direct care with patients, such as the physical examination and specific procedure skills of the nurse were points identified by the university students as being learned and previously developed at the undergraduate level, as well as only improved by the work practice due to the lack of professional experience they had. This data corroborates with other authors who showed that newly trained nurses arrive unprepared for the hospital environment due to insufficient professional experience⁽¹⁰⁾. In view of this, it is HEI's responsibility

to provide larger learning environments, such as internships, so that the student can develop more technical skills and reach the market with adequate preparation for patient care.

In this premise, HEI, in addition to preparing its students technically, must ensure that the transfer of theoretical knowledge is incorporated and used in the practice of future work, providing that these professionals have developed critical capacity so that they can obtain the clinical reasoning verified in the work activities in order to ensure excellence in the quality of care. Thus, the data of this study evidenced that the clinical skill "Theoretical-Practical Knowledge and Clinical Reasoning" was introduced and previously developed in the undergraduate education, as well as improved during the work process.

However, one of the ways to ensure that this skill is developed and improved in the undergraduate environment is that it must be increased during the curricular internship. In this direction, the internship provides the development of technical skills and the enhancement of knowledge built in theory in practice. Thus, in order for the internship to perform its role, it is necessary the presence of an institution official with training or professional experience in the area of knowledge developed in order to guide and supervise the student in the field⁽¹¹⁾.

Finally, the SNC skill was seen as primordial to be incorporated into the hospital nurse's work process, being that it was learned and developed judiciously in the academic environment by being encouraged, often, by exercises in the disciplines and in the practical internships. In this context, the teaching of the SNC, because it is a complex process that needs to be developed with greater commitment among professors and nurses in the fields of practice in undergraduate courses, should turn to the development of professional skills and, for this, the professors must have the perception and the ability in their execution, allowing the construction of the knowledge of the academics centered in the importance and the development of tools for the quality care of the nursing professionals. Thus, for this teaching to be developed, there is also a need to strengthen teaching-learning strategies and integration of theory with practice among students⁽¹²⁾.

Other types of professional skills punctuated by university students were management skills, learned through theoretical content, not being implemented and/or developed during undergraduate education, but only in work practice.

With regard to Leadership and Decision-Making, we see how university students go unprepared and unsafe to take on the jobs and roles of leaders. The training of nurses with leadership skills is a major concern of nursing faculty, since the training is far from the development of skills that help the academic to lead. The emphasis is also on technicality, with the students' concern with technical procedures and the removal of management activities⁽¹³⁾. It is therefore essential that the training institutions use strengthening strategies to provide the development of these skills, such as the use of encouragements and exercises directed in the field of practice so that they arrive prepared in the labor market.

Regarding this fact, it should be pointed out that HEI should be concerned with the training of nurses capable of performing complex technologies in order to meet the labor market. In

that direction, the knowledge, skills, and capacities for Nursing leadership and decision-making can and should be taught in bachelor's degree courses in order to prepare students for leadership roles. However, changing curricula does not produce an immediate response to the training of undergraduates or their preparation for specific care settings. Leadership specifically requires additional education and experience⁽¹⁴⁾.

However, in addition to the leadership and decision-making skill, communication was punctuated by nurses as a skill developed only in the job market. Researchers point out that, in order for the student who has just finished college/been hired to have effective communication in service, it is essential to have prior scientific knowledge in order to have good interpersonal communication between teams, patients and families; in addition to the importance of the role of the professor with the student in the undergraduate course, using active methodologies to integrate teaching with practice and community, supporting and encouraging interaction with patients and health teams; teaching and orienting about communication, and encouraging the participation and verbal and non-verbal expression of thoughts and knowledge in the group⁽¹⁵⁾.

In this perspective, it is known that the student during the undergraduate course can use the communication as a tool in their practice environment, that is, in the internship. Although it is possible that the effective communication with the team can be developed during the academic training, in this study, this premise was not reported by the professionals university students, reason that can be given due to the insecurities of the student or attitude of the professionals that already are inserted at work, which do not offer this kind of openness.

Another essential management point considered as necessary skill for nurses in the hospital is the People, Materials and Cost Management effectively. Authors evidenced that the management of the unit in what refers to the dimension of physical, human, material and cost resources is essential in the nurses' work process. Therefore, analyzing and knowing its unit as a whole, integrally in proportion to the materials, supervising the team, providing rationing and containing the waste becomes crucial to quality of care⁽¹⁶⁾. This fact was pointed out in the statements of the participating university students, but HEI and hospital organizations should promote conditions that favor the development and improvement of strategies in order to prepare professionals in the practice environment.

In view of this placement, the HEI must transpose the nursing undergraduate training itinerary about the management aspects, providing tools for a convergent professional exercise, dissipating dichotomies between management and care, as well as surpassing the existing deterministic and structural models⁽¹⁷⁾.

Another skill of extreme importance punctuated for the assistance is the Interpersonal Relationship and Teamwork, skills developed only in the hospital work environment, that is, after the academic training, since it was related to aspects of professional maturity. Being that, only after university did the university students feel more mature and able to deal with conflicts, in addition to the fact that during undergraduate course students were seen as unprepared and not responsible for their actions. In this sense, the health team tends not to 'trust' and not to assist in the development of this skill from an early age.

There are positive and negative points in team interaction, where individual differences such as temper, character and personality may be considered as possible barriers to interpersonal relationships and, as a consequence, may interfere in the development of teamwork in hospital sectors⁽¹⁸⁾.

In this context, with regard to the pedagogical methods carried out with the students in the field of health, it is necessary that the relations established in the academic environment are convergent with values that prioritize aspects of humanization in health, so that the attitude adopted with the population that will be cared for. In this way, the professor-student relationship can allow the understanding and development of the interactions about living in society that translate positive behavioral modes, such as solidarity, respect, ethics, responsibility, among others⁽¹⁹⁻²⁰⁾.

Given the analysis discussed, it is reflected that, although the clinical and management skills are described in a fragmented way in this investigation, it is emphasized that these are articulated at all times in the work process of the hospital nurse, skills that are essential for the assistance in the work of hospital nurses.

Another point that deserves to be highlighted, according to the university students, is the creation of strategies for the development of skills in the hospital, which can be offered by the institution itself, among them: the use of Permanent Education, creation of healthy environments, among others; as well as own/personal strategies for developing skills, such as individual and graduation studies. Given this, it is important to reflect the role that hospital organizations have in training and providing Permanent Education in their work environments, so that nurses can improve their skills by promoting institutional gains and quality care.

In this sense, the authors point out the use of virtual space by professors to students, implementation of the use of portfolios, encouragement to extension projects, application of theoretical concepts in simulated settings and the adoption of formative evaluation as effective strategies to develop skills and learning in future nursing professionals⁽²¹⁾.

However, it has also been emphasized that training programs should be offered by nursing institutions to newly hired nurses in hospital sectors through which the professional can receive the necessary instructions to carry out their activities in the specific sectors. In this way, the protocols, conduct and the professional profile that the institution aims at as a member of a team of excellence are transferred, so that it has a state of the art assistance⁽¹⁰⁾.

In this direction, it can be seen that the Permanent Education, the professional qualification, the offer of courses and the updates by the employers and trainers institutions are essential for the nurses to work with excellence in service. In addition, the hospital service demands, given the complexity and various clinical and management skills required, mentioned here, that the professionals themselves also use their own resources so that they can keep up with the changes that occurred in the process of job.

Thus, it is reflected that Continuing and Permanent Education, when favored in the teaching-service interaction, allows the adaptation of teaching to the real conditions found in the world of work; and another factor that should be considered in the training of the future nurse is the Continuing and Permanent Education, demonstrating the need for investments and commitment of the two sectors of education and service⁽²²⁻²³⁾.

Study limitations

There is a limitation in this research because it was carried out only with university students from the last two years of a single HEI. Therefore, for future research, it is recommended to extend the study to other educational institutions with a view to comparing and/or generalizing the data, in order to contribute to identify gaps in the training of nurses in should be developed for the hospital environment.

Contributions to the sectors of nursing, health or public policy

We believe that this study has great relevance for the contribution in the reflection of the nurses, managers and training centers so that they can recognize the clinical skills and essential managements to the hospital nurse, in the sense of implementing strategies or programs to develop these skills of according to the needs of each service, collaborating for the excellence of the service.

FINAL CONSIDERATIONS

Considering the academic training issues of the study nurses, the results showed that the undergraduate education contributed in significant proportions for the learning and previous

development of clinical skills in the hospital area. Among them, Professional Attitude, Patient Care and Care Techniques, Theoretical-Practical Knowledge and Clinical Reasoning, and SNC were the most outstanding. The university students also identified management skills, which were learned at undergraduate level and only developed in the hospital work environment, such as Leadership and Decision-Making; Communication; People, Materials and Cost Management; and Interpersonal Relationships and Teamwork. We also demonstrated individual and organizational strategies used by university students in order to develop and reach skills for the hospital nurse's work process.

In view of these notes, the results allowed a broad analysis of the professional management and clinical skills that articulate are indispensable in the hospital nurses' work process, so that they can perform their role in a committed and transformative way in health services, especially in the hospital, making provided. It is also known that there are several challenges to be faced in the educational and hospital spheres, but it is up to nurses to take decisions in response to these challenges, as well as the importance of the reflection of training centers and service managers to update and identify resources so that the difficulties can be softened.

REFERENCES

1. Correa GC. Definição e desenvolvimento de competências: um paradigma no processo estratégico. *Rev CEPE* [Internet]. 2015[cited 2017 Apr 18];39(67):103-16. Available from: <https://online.unisc.br/seer/index.php/cepe/article/view/6294/4329>
2. Brasil. Ministério da Educação. Resolução CNE/CES nº 3/2001: sobre as Diretrizes Curriculares Nacionais do Curso de Graduação em Enfermagem. *Diário Oficial da União, Brasília*, 9 nov, 2001. Seção 1. p. 37.
3. Manenti AS, Ciampone MHT, Mira VL, Minami FL, Soares JMS. The construction process of managerial profile competencies for nurse coordinators in the hospital field. *Rev Esc Enferm USP* [Internet]. 2012[cited 2017 Apr 18];46(3):727-33. Available from: http://www.scielo.br/pdf/reeusp/v46n3/en_27.pdf
4. Rosin J, Tres DP, Santos RP, Peres RR, Oliveira JLC. Desenvolvimento de competências gerenciais na enfermagem: experiência entre residentes. *Rev Eletr Gestão Saúde*[Internet]. 2016[cited 2017 Apr 18];7(1):231-46. Available from: https://www.researchgate.net/publication/308516997_Desenvolvimento_de_competencias_gerenciais_na_enfermagem_experiencia_entre_residentes
5. Aued GK, Bernardino E, Peres AM, Lacerda MR, Delleira C, Ribas EN. Clinical competences of nursing assistants: a strategy for people management. *Rev Bras Enferm*[Internet]. 2016[cited 2017 Apr 18];69(1):142-9. Available from: <http://www.scielo.br/pdf/reben/v69n1/0034-7167-reben-69-01-0142.pdf>
6. Cherques HRT. Saturação em pesquisa qualitativa: estimativa empírica de dimensionamento. *Rev PMKT* [Internet]. 2009[cited 2017 Apr 18];3:20-7. Available from: http://www.revistapmkt.com.br/Portals/9/Edicoes/Revista_PMKT_003_02.pdf
7. Braun V, Clarke V. Using thematic analysis in psychology. *Qual Es Psychol*. 2006;3(2):77-101.
8. Viana MAS, Fortuna SM, Borges FA, Gatto Jr JR, Matumoto S, Clapis MJ. Analysis of attitudinal assessment in the education of mid-level nursing professionals. *Rev Eletr Enferm*[Internet]. 2016[cited 2017 Apr 18];18:1-10. Available from: <https://revistas.ufg.br/fen/article/view/41632/22162>
9. Meira MDD, Kurcgant P. Competências de Egressos Graduados em Enfermagem: avaliação de Gestores Empregadores. *Rev Cienc Gerenc*[Internet]. 2015[cited 2017 Apr 18];19(30):60-4. Available from: <http://pgskroton.com.br/seer/index.php/rcger/article/view/3666/3140>
10. Moreira AJN, Sampaio CCG, Silva ML, Chevitaress L. Mundo do trabalho: dificuldades e desafios enfrentados pelos enfermeiros recém-admitidos em unidades hospitalares. *Rev Rede Cuid Saúde* [Internet]. 2016[cited 2017 Apr 18];10(3):1-16. Available from: <http://publicacoes.unigranrio.br/index.php/racs/article/view/3966>
11. Ferreira MN, Reis AC. Estágio Curricular Supervisionado: O Papel do Supervisor na Formação Profissional do Discente de Engenharia de Produção. *Scient Plena* [Internet]. 2016[cited 2017 Apr 18];12(2):1-9. Available from: <https://www.scientiaplena.org.br/sp/article/view/2852>
12. Conceição VM, Araujo JS, Oliveira RAA, Zago MMF, Souza RF, Santana ME, et al. Percepções culturais de acadêmicos e enfermeiros sobre a sistematização da assistência de enfermagem. *Rev Enferm UFSM*[Internet]. 2014[cited 2017 Apr 18];4(2):378-88. Available

from: <https://periodicos.ufsm.br/reufsm/article/view/11234/pdf>

13. Amestoy SC, Backes VMS, Thofehrn MB, Martini JG, Meirelles HS, Trindade LL. Nurses' perception of the teaching-learning process of leadership. *Texto Contexto Enferm* [Internet]. 2013[cited 2017 Apr 18];22(2):468-75. Available from: <http://www.scielo.br/pdf/tce/v22n2/v22n2a24.pdf>
14. Joseph ML, Huber DL. Clinical leadership development and education for nurses: prospects and opportunities. *Dove Med Press* [Internet]. 2015[cited 2017 Apr 18];7:55-64. Available from: <https://www.dovepress.com/clinical-leadership-development-and-education-for-nurses-prospects-and-peer-reviewed-article-JHL>
15. Oliveira KRE, Braga EM. The development of communication skills and the teacher's performance in the nursing student's perspective. *Rev Esc Enferm USP*[Internet]. 2016[cited 2017 Apr 18];50(n.esp):32-8. Available from: <http://www.scielo.br/pdf/reeusp/v50nspe/0080-6234-reeusp-50-esp-0032.pdf>
16. Lima RS, Lourenço EB, Rosado SR, Sanches RS, Fava SMCL, Dázio EM. Gerenciar unidade de internação hospitalar: o que pensam os enfermeiros? *Enferm Cent O Min* [Internet]. 2016[cited 2017 Apr 18];6(2):2190-98. Available from: <http://www.seer.ufsj.edu.br/index.php/recom/article/view/1128>
17. Senna MH, Drago LC, Kirchner AR, Santos JLG, Erdmann AL, Andrade SR. Significados da gerência do cuidado construídos ao longo da formação profissional do enfermeiro. *Rev Rene* [Internet]. 2014[cited 2017 Apr 18];15(2):196-205. Available from: <http://www.revistarene.ufc.br/revista/index.php/revista/article/view/1463/pdf>
18. Navarro ASS, Guimarães RLS, Garanhani ML. Teamwork and its meaning to professionals working in the family health strategy program. *Rev Min Enferm* [Internet]. 2013[cited 2017 Apr 18];17(1):69-75. Available from: <http://www.reme.org.br/artigo/detalhes/579>
19. Santana AMB, Ferreira JA, Nogueira MF, Andrade LDF. Relacionamento interpessoal na prática universitária: desvendando a visão do discente. *Ciênc Cuid Saúde* [Internet]. 2015[cited 2017 Apr 18];14(4):1513-19. Available from: <http://periodicos.uem.br/ojs/index.php/CiencCuidSaude/article/view/29886/16536>
20. Moreschi C, Siqueira DF, Piexak DR, Freitas PH, Rangel RF, Morisso TS, et al. Interação profissional-usuário: apreensão do ser humano como um ser singular e multidimensional. *Rev Enferm UFSM* [Internet]. 2011[cited 2017 Apr 18];1(1):22-30. Available from: <https://periodicos.ufsm.br/reufsm/article/view/2086>
21. Meira MDD, Kurcgant P. Nursing education: training evaluation by graduates, employers and teachers. *Rev Bras Enferm* [Internet]. 2016[cited 2017 Apr 18];69(1):16-22. Available from: http://www.scielo.br/pdf/reben/v69n1/en_0034-7167-reben-69-01-0016.pdf
22. Almeida ML, Peres AM. Conocimientos, habilidades y actitudes sobre la gestión de los egresados de enfermería de una universidad pública brasileña. *Invest Educ Enferm* [Internet]. 2012[cited 2017 Apr 18];30(1):66-76. Available from: <http://www.scielo.org.co/pdf/iee/v30n1/v30n1a08>
23. Fater KH, Ready R. An education-service partnership to achieve safety and quality improvement competencies in nursing. *J Nurs Educ* [Internet]. 2011 [cited 2017 Apr 18];50(12):693-6. Available from: <https://www.ncbi.nlm.nih.gov/pubmed/21919426>