

VALIDATION OF THE COMPETENCE PROFILE PROPOSAL FOR THE TRAINING OF NURSES

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ABSTRACT

Objective: to estimate the validity of the competence profile content developed for the training of the generalist nurse in the health and administrative and managerial attention areas.

Method: descriptive study, with quantitative approach. The data collection and validation occurred through the Delphi technique, in a virtual way, with questionnaire sent by e-mail, between April and May 2016, with the participation of 28 professional judges and 26 nursing specialists judges from all regions of the country. For the calculation of the degree of agreement among the answers of the experts, signed in at least 70% for the Content Validity Index, and the binomial test for dichotomous analysis of the proportion of the answers of the specialists.

Results: considering the 14 items of the care area profile, a content degree of 93% by professional area and 97% by education area was obtained. The 18 items of the administrative and management profile were approved with a degree of agreement of 95% by the professional area and 99% by the education area.

Conclusion: the competence profile validated in content may help undergraduate nursing courses in the country and is a safe educational tool, aiming at the implementation of the Course Pedagogical Projects.

DESCRIPTORS: Professional competence. Nursing. Education, nursing. Health care. Validation studies.

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VALIDAÇÃO DA PROPOSTA DE PERFIL DE COMPETÊNCIAS PARA A FORMAÇÃO DE ENFERMEIROS

RESUMO

Objetivo: estimar a validade do conteúdo do perfil de competências elaborado para a formação do enfermeiro generalista nas áreas de atenção à saúde e administrativa e gerencial.

Método: estudo descritivo, com abordagem quantitativa. A coleta de dados e validação ocorreram por meio da técnica Delphi, de forma virtual, com envio de questionário por *e-mail*, entre abril e maio de 2016, com a participação de 28 juízes especialistas da área profissional e 26 da formação em enfermagem inseridos em todas as regiões do País. Para o cálculo do grau de concordância entre as respostas dos especialistas, firmado em, no mínimo, 70% para o Índice de Validade de Conteúdo, e o teste binominal para análise dicotômica da proporção das respostas dos especialistas.

Resultados: considerando os 14 itens do perfil da área cuidar, obteve-se grau de concordância do conteúdo de 93% da área profissional e 97% da área educação. Os 18 itens do perfil da área administrativa e gerencial foram aprovados com grau de concordância do conteúdo de 95% pela área profissional e 99% pela área educação.

Conclusão: o perfil de competências validado em conteúdo poderá auxiliar cursos de graduação em enfermagem do País e constitui ferramenta educacional segura, visando à implementação dos Projetos Pedagógicos de Curso.

DESCRITORES: Competência profissional. Enfermagem. Educação em enfermagem. Atenção à saúde. Estudos de validação.

VALIDACIÓN DE LA PROPUESTA DE PERFIL DE COMPETENCIAS PARA LA FORMACIÓN DE ENFERMEROS

RESUMEN

Objetivo: estimar la validez del contenido del perfil de competencias elaborado para la formación del enfermero generalista en las áreas de atención a la salud y administrativa y gerencial.

Método: estudio descriptivo, con abordaje cuantitativo. La recolección de datos y validación ocurrió por medio de la técnica Delphi, de forma virtual, con envío de cuestionario por *e-mail*, entre abril y mayo de 2016, con la participación de 28 jueces especialistas del área profesional y 26 de la formación en enfermería insertados en todas las regiones del país. Para el cálculo del grado de concordancia entre las respuestas de los especialistas, firmado en al menos el 70% para el Índice de Validez de Contenido, y el test binominal para análisis dicotómico de la proporción de las respuestas de los especialistas.

Resultados: considerando los 14 ítems del perfil del área cuidar, se obtuvo un grado de concordancia del contenido del 93% del área profesional y el 97% del área educativa. Los 18 elementos del perfil del área administrativa y gerencial fueron aprobados con grado de concordancia del contenido del 95% por el área profesional y el 99% por el área educación.

Conclusión: el perfil de competencias validado en contenido podrá auxiliar cursos de graduación en enfermería del país y constituye una herramienta educativa segura, buscando la implementación de los Proyectos Pedagógicos de Curso.

DESCRIPTORES: Competencia profesional. Enfermería. Educación en enfermería. Atención a la salud. Estudios de validación.



INTRODUCTION

Today, higher education institutions face the challenge of offering training that promotes the development of competence in future professionals, in the face of situations of intense technological innovation, communication, and changes in a global plan, which result in environments of uncertainty and unpredictability.¹

In this sense, starting with the implementation of the first National Curricular Guidelines² (DCNs) of the nursing undergraduate course, the educational institutions had the challenge of adapting their pedagogical course projects,³ a fact that will be repeated, with the promulgation of the new Nursing DCNs, in 2018. Faced with the established changes, at the time, in 2001, in the Nursing undergraduate course at *Universidade Federal de Mato Grosso* (UFMT), Cuiabá *campus*, there were discussions about the training of nurses, concluding that there is a need to clarify, first, the essential skills for these professionals with the intention of instituting an internal practice to evaluate the course and the students, which constitutes an important part to the pedagogical project of course.³

From the findings, in 2010, a research was developed by professors of the UFMT undergraduate nursing course, which resulted in the creation of a competences profile guiding the formation of generalist nurses, which was agreed upon by teachers and students of that course, nurses from the health units where the practical activities of the course were held and community representatives (members of local health councils at the time).³ The text of the profile was elaborated from competences classified in four areas: health care; administrative and managerial; educational; and knowledge production,³ which are organized in two parts: competence, which describe the general and specific attributes of the professional, and represent the set of knowledge, skills and attitudes applied in the various work situations, and the evaluation criteria, which comprise corresponding performances to be observed in the student.⁴

However, the competence profile was not published and/or operationalized in the course, and considering the dynamicity of the educational practice, the need to estimate the validity of the content of the competence profile was identified based on the evaluation of nurses inserted in different contexts of the Country. Therefore, two studies were conducted concomitantly, aimed at validating the same skill profile. On this occasion, among the four competences of the profile, emphasis is given to those directed to health care and management.

Locally, it was verified the need to build a competence profile aimed at the training of general nurses, and in this same direction, both at the national and international level, discussions about professional competences are expressive.

From this perspective, it is observed that, internationally, the studies concentrate on the analysis of competences, the opinion of specialists regarding them and on the necessary competences in the specific assistance situations. The analysis of the clinical skills of nurses to perform care for the patient with acute myocardial infarction,⁵ as well as the analysis of competences to act on patient safety in a hospital environment was seen.⁶ In the scope of health care, global and public health competences were identified, with the purpose of informing and/or integrating the findings to nursing education institutions.⁷ Based on the focus of advanced nursing practice, skills such as leadership, care management, research and others were defined, and the competences listed were agreed by experts through opinions.⁸

In the national scenario, the discussions about professional competences are significantly related to the development and identification of them for the nurses' performance, which consider some components of professional practice or area of specific specialties. In this sense, the clinical competences survey for the care practice was carried out,⁹ the development of management competences based

on lifelong learning,¹⁰ and identified competences to be developed to promote health for patients with chronic heart diseases.¹¹

Regarding competence profiles, in its creation, they have become orienters for nursing practice,² profile of competences to act in the emergency scenario, aiming at quality care,¹² and the profile of professional skills for care in the Intensive Care Unit (ICU),¹³ aimed at the humanization of care.

It is also identified that studies aimed at validation in the nursing area are directed towards the care, namely: validation of instrument content for the evaluation and classification of post-brachytherapy vaginal stenosis;¹⁴ validation of self-care assessment guideline for patients with type diabetes *mellitus*.¹⁵ and Content Validation of the Care Transitions Measure (CTM-3), which allows measuring the satisfaction of patients with the continuity of care.¹⁶

It can be noticed the increase of investigations on the professional competences considering its development, construction of profiles guided by areas of nursing specialties, evaluations based on the expertise of specialists and the validation of the content of instruments used in nursing care.

In this sense, an important gap is identified with respect to the validation of competences profile for the training of nurses, considering not the professional practice itself, in specific areas or situations, but the totality of the generalist nurse training. Thus, this study aims to estimate the validity of the competence profile content developed for the training of the generalist nurse in the health and administrative and managerial areas.

METHOD

Study of content validation of a proposal for competences profile for the training of the generalist nurse. For the data collection, the Delphi technique was used, which aims to consult a group of experts on a given subject by means of a questionnaire in successive rounds, until the convergence of the answers or consensus is obtained.¹⁷ For these studies, the degree of agreement of at least 70% among the experts' answers for the Delphi round was established.¹⁷⁻¹⁸

The validity of content is a type of validation through which researchers seek to verify validity through experts, the representativeness of the items or questions.¹⁹

The possible specialist judges, all nurses, were grouped into two areas: nursing professional and nursing training.

Selection of participants in the training area included inclusion criteria, which got scores. To be a specialist judge, the minimum score of 3 (three) was defined, considering the sum of the inclusion criteria, which had equivalence of 1 (one) point each, namely: having a Ph.D. degree in Nursing or in another area of knowledge, act or have acted as professor and/or coordinator of a nursing course for at least two years, have produced an article of national and/or international relevance published in the last five years. Based on the inclusion criteria, a search was made on the Lattes platform of the Conselho Nacional de desenvolvimento Científico e Tecnológico (National Council for Scientific and Technological Development), articles on national databases and indication of coordinators of nursing courses of federal universities, obtaining a total of 96 possible participants. An invitation letter was sent for the participation of the research by electronic mail, and 42 professionals responded positively, becoming part of the sample.

For the professional area, the possible participants were selected through search in the Lattes curricula, articles in national database and organized list with the name and telephone number of the nursing managers of the federal university hospitals, reaching a total of 59 professionals. Thus, to be elected as expert judges, a selection was conducted using the selection criteria adapted from the classification system of experts from Fehring,²⁰ with which scores are applied to the selection criteria and, by means of the sum it is verified whether or not the participant is able to be a specialist. Thus, the possible participants had to reach the minimum of 3 (three) points, from the selection criteria and

respective scores: to be a professor, to be a specialist (*Lato Sensu*), have experience as a professor over two years, have experience in hospital care for more than five years: equivalent to one (1) point for each criterion. While being a Ph.D., having a dissertation or thesis with the subject skills in the professional area, having a scientific article with skill thematic in the professional area and having experience in hospital management for more than two years corresponds to 2 (two) points each criterion. After analysis of the curricula, two professionals did not obtain the minimum score and were excluded, so the sample consisted of 57 participants from the professional area.

The data collection took place during 30 days between April and May 2016, after approval of the Research Ethics Committee of Hospital Universitário Júlio Müller in the city of Cuiabá under the opinions 1.377.833 and 1.773.685 and respective CAAE 51716915.6.0000.5541 and 51777315.3.0000.5541.

Data were collected virtually. The skill profile was entered in questionnaire format in software online Survey Monkey® and structured as follows: the first page containing a letter with brief presentation of the researchers, the title, objectives, data collection procedure and guidelines of what the skills and evaluation criteria were. By “moving forward”, one went to the next page, the Informed Consent Form (ICF), and when one clicked “yes”, answering the question do you agree to participate in the survey?, guidelines on how to proceed to respond to the questionnaire were provided. When moving again, the profile items with the skills and their respective evaluation criteria were accessed to be appreciated. The questionnaires were sent by *e-mail* to the judges. Only the participants who accepted to participate in the survey after reading the ICF were able to access the contents of the competence profile in full.

The structured questionnaire based on the Likert scale of verification, “which consists of taking a construct and developing a set of statements related to its definition to which the respondents will emit their degree of agreement.”^{21:5} The scale was inserted in each item of the questionnaire and the different degrees of agreement varied from 1 to 5: corresponding respectively to: I totally agree; I partially agree; I do not agree or disagree; I partially disagree; and I totally disagree. Thus, each participant from his or her judgment made the choice of degree of agreement.

Access to the questionnaire was free, allowing exits and returns according to the participant's willingness to respond. A 30-day response time was established, with an e-mail reminder sent via e-mail every ten days, reiterating the request for participation. With the stipulated deadline, the questionnaires were closed, and participants who kept them incomplete or who did not respond were excluded. From the 57 participants in the professional area, 28 completed the questionnaire. From the 42 participants in the training area, 26 answered all the items.

For the treatment of the data, descriptive analysis with absolute and relative frequency was used by means of a table, and the content validation of the proficiency profile was given through the Content Validity Index (IVC), which measures the proportion or percentage of specialists who are in agreement with the instrument and its components, based on the index score, which is calculated by summing the agreement of these items divided by the total number of responses.¹⁹ Thus, we manually verified the IVC by means of the sum of the answers in agreement, represented by one to totally agree and 2 (two) to partially agree, in the Likert scale, being divided in the case of these studies by 28, related to the number of respondents of the professional area and 26 of the training area.

Data analysis was performed using the binomial test, with summation of Likert scale items (totally agree + partially agree), ascertaining whether the observed proportion was statistically equal to or greater than 70%. For the binomial test, we used the statistical software Open Epi. The level of agreement was interpreted by means of a 95% confidence interval (CI) analysis of greater than or equal to 70%, and the probability of this proportion was not random (alpha error 0.05).²²

RESULTS

Specialist judges in the professional area were mostly between the ages of 51 and 60 years old (42.84%) and mostly female (92.86%). In relation to the region of professional performance, two participants belonged to the North region (7.14%), eight to the Northeast (28.57%), one to the Midwest (3.58%), ten to the Southeast (35.8%) and seven to the South (25%). Most had a doctor degree (46.43%), with experience in hospital management between one to ten years (57.12%) and experience in hospital care between one to ten years (32.14%). Specialist judges in training were mostly female (92.31%), aged between 51 and 60 years old (42.30%). The region of professional performance was distributed as follows: one participant from the Northeast (3.84%), two from the Midwest (7.70%), 15 from the Southeast (57.70%) and eight from the South (30.76%). All had experience in higher education teaching, most between two to 10 years (34.61%).

It was found after the first Delphi round that the consensus of 70% signed for these studies was achieved, not requiring a second round. For the single Delphi round, there was an abstention of 51% and 38% of the training. It is predicted in the literature abstention around 30% to 50% in the first round.¹⁷

Regarding the text of the health care competences, from the 28 participants in the professional nursing area, 27 responded accordingly. Thus, among the 28 possibilities of answers, we obtained 27 points referring to the sum of totally agree and partially agree, being approved the agreement content of 96%. Among 26 possibilities of answers from the participants in nursing training, 25 points were obtained referring to the sum of totally agree and partially agree, being approved the degree of agreement content of 96%. Regarding the evaluation criteria, all participants had validity of the content with agreement greater than 70% by the participants. However, out of a total of 13 items, only one item achieved 100% agreement among professional judges, while those in the training area agreed to 100% for seven items.

In relation to administrative and managerial competences, the content of its text was approved with 93% agreement among professional judges. Thus, among the 28 possibilities of answers 26 points were obtained referring to the sum of totally agree and partially agree. The specialist judges in training agreed with 92% on the text of the administrative and managerial competences, and the content was approved, that is, from the 26 possibilities of answers, 24 points were obtained for totally agree and partially agree. All the evaluation criteria were valid for content with a percentage greater than 70, but from the total of 17 items referring to the criteria, it was observed that the participants in the professional area agreed on 100% for three items and those in the training area agreed on 100% for 14 items.

It was identified that the participants of the training area indicated in agreement of 100% most of the items of the text of the health care and evaluation criteria competence, with a total of seven. On the other hand, the participants in the professional area indicated the total agreement, that is, 100% for three items. Considering that the total of items was 14 for the care competence described in the profile.

For the text of the administrative and managerial skill and its evaluation criteria, the convergence of 100% of the answers of the participants of the training area was destined for 14 items and those of the professional area pointed out three items, remembering that the total of items to be validated was of 18, for the profile of the managerial competences of the nurse.

Comparing the answers of the judges specialized in the professional area and the training, they were consonants, which culminated in the validation of content of the competences profile in the two areas.

The result of the validation of profile content in healthcare provided by specialists is shown in Table 1. The results of the validation with the values obtained from the IVC, the CI and the p-value were explained in the same.

In the health care competence, one criterion was 100% approved (n=28), while in the other sample (n=26), the degree of agreement was 100%. The lowest level of agreement for health care skill in the sample of nurses in the professional area (n=28) was 89% (CI 73.5; 97.2) in four criteria. In the sample of teachers (n=26), the lowest grade was 88% in two criteria.

Table 1 - Result of the validation of content of the profile related to health care competences. Cuiabá, MT, Brazil, 2016

Health Care Competences	CT+CP [†]		%IVC [‡] (CI [§] 95%)	p-value
	n=28	n=28		
1. Being able to intervene in the health-disease process taking responsibility for the quality of nursing care / care in its different levels of health care, with prevention, promotion, protection and rehabilitation actions to the health, in the perspective of integral care in both individual and collective levels.	26		96 (82.5; 99.8)	0.003
		25	96 (82.5; 99.8)	0.003
1.1 Recognizes vulnerabilities and potential risks in individuals, and population groups considering their determinants.	27		96 (83.6; 99.8)	0.002
		26	100 (89.1; 100)	<0.00
1.2 Identifies health needs and problems (individual and collective) within a specific context of life and the health institution.	26		93 (78.3; 98.7)	0.008
		26	100 (89.1; 100)	<0.00
1.3 Applies instruments of evaluation and interpretation of health status.	25		89 (73.5; 97.2)	0.025
		26	100 (89.1; 100)	<0.00
1.4 Diagnoses needs and problems based on theoretical and methodological assumptions (theories, methods and techniques).	26		93 (78.3; 98.7)	0.008
		26	100 (89.1; 100)	<0.00
1.5 Recognizes health needs and problems in their various dimensions (sociocultural, psychoemotional, biological and environmental), considering their expressions and evolutionary phases.	25		89 (73.5; 97.2)	0.025
		26	100 (89.1; 100)	<0.00
1.6 Make decisions to deal with problem situations.	27		96 (83.6; 99.8)	0.002
		25	96 (82.5; 99.8)	0.003
1.7 Proposes alternative solutions based on scientific evidence, respecting the conditions of the individual and family and/or collectivity, their knowledge, culture, autonomy and vulnerability.	26		93 (78.3; 98.7)	0.008
		26	100 (89.1; 100)	<0.00
1.8 Responsible for the quality of care/nursing care at different levels of health care, from the perspective of integral care.	26		93 (78.3; 98.7)	0.008
		25	96 (82.5; 99.8)	0.003
1.9 Uses appropriate technologies to solve problems/needs.	25		89 (73.5; 97.2)	0.025
		26	100 (89.1; 100)	<0.00
1.10 Recognizes self as a member of the health team integrating nursing actions with multiprofessional actions.	28		100 (89.8; 100)	<0.00
		23	88 (71.7; 97.0)	0.039
1.11 Interprets the results of his intervention from indicators of change.	26		93 (78.3; 98.7)	0.008
		24	92 (76.8; 98.7)	0.013
1.12 Evaluates intervention processes based on methods and instruments of interpretation and intervention in health.	26		93 (78.3; 98.7)	0.008
		23	88 (71.7; 97.0)	0.039
1.13 Translates and disseminates the results of nursing work in language accessible to clients.	25		89 (73.5; 97.2)	0.025
		26	100 (89.1; 100)	<0.00

*CT: totally agree; †CP: partially agree; ‡IVC: Content Validity Index; §CI: Confidence Interval; ||Binominal test

In general, it is observed that there are no statistically significant differences in the responses of the two samples, since the content of the competences listed and their respective criteria were validated.

According to the table 1, it is verified that of the 13 criteria of evaluation related to health care, five received the lowest index of agreement among the participants. The evaluation criteria 1.3, 1.5, 1.9 and 1.13 had the lowest degree of consensus among professional judges.

Items 1.3 and 1.5 are related to nurses' performance in conducting the situational diagnosis of individual and collective health conditions and health assessment instruments. Item 1.9 refers to nurses' performance in using appropriate technologies for problem solving and/or care-related needs in the practice of the nursing profession, and the evaluation criterion 1.13 deals with nurses' performance in disseminating nursing outcomes with language accessible to users and professionals.

Among the judges in the training area, criteria 1.10 and 1.12 obtained the lowest level of agreement and refer, respectively, to being a member of the health team, integrating the nursing actions to the multiprofessional ones and the evaluation of processes of intervention based on methods and instruments of interpretation and intervention in health.

Concerning the criteria of administrative and managerial competences, three obtained a degree of agreement of 100% in the sample of the professional area (n=28), while the same degree of agreement was obtained in 14 criteria in the sample of the training area (n=26). The lowest degree of agreement in the first sample (n=28) was 89% (CI 73.5; 97.2). The lowest agreement for the second sample (n=26) was 96% (CI 82,5; 99,8).

The result of the validation of profile content in administrative and managerial area provided by specialists is shown in Table 2, below:

Table 2 - Result of the validation of content of the profile referring to administrative and managerial competences. Cuiabá, MT, Brazil, 2016.

Administrative and Managerial Competences	CT ⁺ +CP ⁺		%IVC ⁺ (CI [§] 95%)	p-value
	n=28	n=26		
2. Be able to take initiatives, manage the workforce, physical and material resources and information technologies, and be able to be an entrepreneur, manager and leader of the health and nursing teams.	26		93 (78.3; 98.7)	0.008
		24	92 (76.8; 98.7)	0.013
2.1 Identifies the social policies and models of health care and their implications in the organization of the different areas and levels of care.	28		100 (89.8; 100)	<0.00
		26	100 (89.1; 100)	<0.00
2.2 Discern between the various forms of work organization and its scientific foundations.	27		96 (83.6; 99.8)	0.002
		26	100 (89.1; 100)	<0.00
2.3 Identifies partners for the establishment of cooperation networks, existing in the local reality, for problem solving.	26		93 (78.3; 98.7)	0.008
		26	100 (89.1; 100)	<0.00
2.4 Recognizes the constituent elements of the work process in health and nursing (subjective, technical-scientific, ethical-political and socio-educational).	26		93 (78.3; 98.7)	0.008
		26	100 (89.1; 100)	<0.00
2.5 Identifies the elements of institutional human and non-human resources policies and their determinants in the management of people, materials, equipment, costs/financial, environments, technologies, information, and health and nursing care.	25		89 (73.5; 97.2)	0.025
		26	100 (89.1; 100)	<0.00

Table 2 - Cont.

2.6 Correlates the influence of the evolution of administrative thinking on the management practice of health and nursing services at different levels of care.	26	93 (78.3; 98.7)	0.008
	25	96 (82.5; 99.8)	0.003
2.7 Analyzes the physical and organizational structure of the health and nursing services, in view of the interventions to improve the work process.	27	96 (83.6; 99.8)	0.002
	26	100 (89.1; 100)	<0.00
2.8 Analyzes the weaknesses and potentialities (subjectivity/plans in conflict/informal leadership) for the administrative/managerial work process.	26	93 (78.3; 98.7)	0.008
	26	100 (89.1; 100)	<0.00
2.9 Recognizes self as an agent of social transformation and change that ensures individual and collective well-being.	28	100 (89.8; 100)	<0.00
	26	100 (89.1; 100)	<0.00
2.10 Recognized as leader and technical responsible for nursing team and member of a multiprofessional team.	27	96 (83.6; 99.8)	0.002
	26	100 (89.1; 100)	<0.00
2.11 Uses scientific, ethical and legal principles in decision making and interpersonal relationships in health and nursing services.	28	100 (89.8; 100)	<0.00
	26	100 (89.1; 100)	<0.00
2.12 Plans, on a shared basis, the resolution of management problems related to health and nursing care.	27	96 (83.6; 99.8)	0.002
	26	100 (89.1; 100)	<0.00
2.13 Implements actions articulated with the institution's human resources and permanent education policies.	27	96 (83.6; 99.8)	0.002
	25	96 (82.5; 99.8)	0.003
2.14 Manages nursing care in all health work processes.	27	96 (83.6; 99.8)	0.002
	25	96 (82.5; 99.8)	0.003
2.15 Accompany and supervise the nursing work process using measures to guarantee the quality of health care according to the rights of the citizen.	27	96 (83.6; 99.8)	0.002
	26	100 (89.1; 100)	<0.00
2.16 Employs evaluative methodologies that aggregate workers and the community served in a co-responsible manner for the improvement of health services.	25	89 (73.5; 97.2)	0.025
	26	100 (89.1; 100)	<0.00
2.17 Disseminates the evaluations carried out among the workers, the interested clientele and the scientific community.	25	89 (73.5; 97.2)	0.025
	26	100 (89.1; 100)	<0.00

*CT: totally agree; †CP: partially agree; ‡IVC: Content Validity Index; §CI: Confidence Interval; ¶Binominal test

It is observed that only the judges of the professional area indicated with less agreement the evaluation criteria 2.5, 2.16 and 2.17, which deal, respectively, with the human resources management, evaluation methods of the health services and dissemination of the results inherent to health.

Considering the 14 items of the profile of the area of care, among the 392 possibilities of answers of the participants in the professional area, 364 points were obtained concerning the answers, I totally agree and partially agree, 93% of the content was approved. Among the 364 possible responses of the participants in the training area were 352 points for the items I totally agree with and partially agree, with their content approved in 97%.

Analyzing the 18 items of the management area profile, among the 504 answers to the professional judges' answers, 477 points were obtained concerning the answers. I agree totally and partially agree, 95% approved its content. For the 468 possibilities of answers of the judges specialists of the training in nursing obtained 463 points regarding the answers totally agree and partially agree, the content with 99% was approved.

DISCUSSION

In general, the results obtained with validation between the two groups of nurses were similar, although the participants were inserted in different contexts and cultures of action. The content of the competence profiles of health care management is in accordance with the DCNs, and the lower degrees of agreement obtained in the health care competence criteria, together with the two participating samples indicate the need for further discussion in the light of DCNs, which guide the training process in health and nursing.

The DCNs are the guiding axis for the pedagogical projects of course, glimpsing the minimum content for the formation and notes on the professional profile, geared towards generalist, critical, reflexive and humanistic formation, based on scientific rigor and ethics.²³ Health and administrative and managerial competences reflect knowledge, know-how and attitudes, identified as the three fields of competences,²⁴ as elements to be developed within the scope of training.

It is considered that the constant wording in the validated competence profile is in line with the precepts of the DCNs and the *Sistema Unico de Saúde* (Unified Health System)-SUS, pointing to the need for intervention in the health-disease process, with prevention, promotion, protection and rehabilitation health, in the perspective of completeness.²³

This alignment needs to be problematized here, precisely because the DCNs are undergoing revision, because they are criticized for their centrality in the work's technicality, as well as for enabling diverse interpretations due to the subjectivity printed in their writing.²³

This reductionist view of training, centered on the development of scientific technical competence, is surmountable as the contemporary view considers the formative process because of the interaction between the multiple dimensions that permeate the field of teaching and professional practice. The relationships in the educational processes that are established in the interface between health, education and work are not limited to technical questions, didactic procedures or related to teaching contents, but based on the adoption of theoretical and pedagogical references capable of promoting meaningful, transformative and professional needs that are present today.²⁵

Despite the high degree of agreement and considering that the text of the profile proposed in this study can constitute a guiding guide of teaching practices, it does not have the prescriptive pretension of teachers and students in the accomplishment of academic activities. It is intended, however, to seek an approximation in relation to the different elements that are considered along the construction and validation of proficiency profiles, which can bring training subsidies. Considering the local needs reflected by both the academic community and the reality of health services, for example, are determining factors.²⁶ In this sense, the pedagogical relationship, which brings theory closer to practice, leads future nurses to reflect on the demands of health services, and helps them to acquire competences that can be mobilized when inserted into the world of work.²⁷ Also, in this scenario, it is perceived that nurses' education is inclined to the need to offer adequate attention to specific groups of the population, such as the elderly, who need different care and, from this perspective, the teaching-learning process through has been a powerful contribution to the development of competences.²⁸

The formative process is complex, since it interweaves the subjective elements present in the political microspace of the interactions between teachers and students in the classroom, and between social actors in the field of practice, as well as between these and the political, economic, social, cultural, ethical and aesthetic of the society in which they are inserted. In this perspective, the DCNs, although reformulated, certainly will not reach such complexity, and they must leave a margin of flexibility so that the pedagogical projects of course can pay attention to the regional specificities in the formation process.

In the same direction, competence profiles must flow, that is, they need to guarantee the nuclear aspects, which are essential to the development of the competences of the nursing professional, but certainly do not intend to guarantee an intact format to the determinations and influences of the environment where the training takes place.

It is also necessary to recognize that the competences profile, by itself, does not allow the necessary conditions for the changes to occur. The institutional and political support for the implementation of new pedagogical proposals is relevant in the process of implementation and operationalization of new curricula. Likewise, it is important to change the perspective of teachers and students on pedagogical doing, to break with the fragmentation between theory and practice, with curricular rigidity, with the concept of content-centered education, with merely summative evaluation, among other dichotomies still so present in nursing education.²³

Thus, the skill profile of administrative and managerial health care is a part of the whole that represents the training of nurses, not excluding the importance of other areas of performance of these professionals as the production of knowledge/research, education, ethical-political action.²⁹

In this sense, the proposed profile points a direction to the teacher and is not omission to the new perspectives, that is, it assumes provisional and temporality character, and admits the necessity of analyzing, in each formation context, the pertinence of its adoption and the necessary critical awareness that must permeate the reflections of the social actors of the formative scope that intends to use it.

Viewed from another perspective, in a scenario of frank expansion of undergraduate nursing courses, including the night and distance modality, it is analyzed that the proposal of competence profile, can contribute to the guarantee of minimum standards of quality in professional training. Likewise, however critical it may be to the Nursing DCNs, it can not be denied that they have, to some extent, interfered in the construction of projects and courses more aligned with the principles and guidelines of SUS, in the 17 years of its existence.³⁰

Thus, it is considered that the curricular guidelines, the pedagogical projects of the courses, and even the professional profiles can not be attributed the responsibility for the change in the nursing training processes. For this, the re-reading and resignification by the social actors, especially by the teachers, becomes imperative. The profiles do not therefore have an unscathed shape to the determinants and influences of the environment where the formation takes place.³⁰

The results presented here can contribute to provide support to the processes of construction and validation of competence profiles, as well as, it is the starting point for new research on the skills needed by nurses.

As limitations, the inclusion of nurses from the collective health scope in the process of evaluation of the skills for health care and management of the generalist nurse profile, which needs to be considered for the complementation of the evaluation, is emphasized. In addition, the method adopted makes it impossible to establish cause and effect relationships, and the level of consensus established limits the generalization of the findings.

CONCLUSION

The skill profiles of the health care and management areas were validated by specialists. The specifics of the participants were important for the estimation of validity, since they are competences related to the care and management, inherent in the training and the professional practice of the nurse.

The proposal of validation estimation presented may help nursing undergraduate courses in the country, through a competence profile considered a safe educational tool. The implementation of the profile is an alternative of improvement of the pedagogical projects of courses, and its improvement may be provoked by new researches.

The competences and respective criteria shared in this study represent only a part of the list of competences required for the training of general nurses. It is recognized that the completeness of the profile demands the inclusion of competences for the education, research and production of knowledge in nursing.

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NOTES

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