

CONSTRUCTION AND EVALUATION OF THE STRUCTURING MODELING OF THE PROGRAM OF EDUCATIONAL ACTIONS FOR NURSING

CONSTRUÇÃO E AVALIAÇÃO DA MODELAGEM DE ESTRUTURAÇÃO DO PROGRAMA DE AÇÕES EDUCATIVAS PARA A ENFERMAGEM

CONSTRUCCIÓN Y EVALUACIÓN DEL MODELO DE ESTRUCTURACIÓN DEL PROGRAMA DE ACCIONES

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ABSTRACT

Objective: to build and evaluate the structuring modeling of the Educational Actions Program for Nursing (PAEE-Programa de Ações Educativas para Enfermagem). **Method:** this is a methodological study consisting of two stages. The first one covered the understanding of the Business Process Management Initiative (BPMN) modeling and added documents and institutional research for the first version of the model. The second stage was a working group carried out under the Joint Application Design (JAD) method with 9 managers of the Nursing care areas of a private hospital in Rio Grande do Sul. To evaluate the modeling, 13 items were defined and evaluated by a Likert scale. The analysis was performed using the consensus index (CI>0.80) and comparison of means and standard deviation ($p<0.05$) of the first and last evaluation of the modeling. **Results:** four sessions were held, with the participation of six managers in the last session. Between the first and last evaluation, when comparing means, it was highlighted that: the sequence is logical ($p=0.008$), steps are clear ($p=0.013$), language is clear and coherent ($p=0.008$), load annual time of educational actions is adequate ($p=0.002$), the quarterly period for the observational evaluation is sufficient ($p=0.017$) and performance evaluation meets the steps ($p=0.018$). The global assessment of the 13 items by the CI demonstrated the maturity of the modeling (CI=0.41 to CI=0.94) sustained by the collective sharing of ideas, suggestions, and recommendations on the modeling of the PAEE. **Conclusion:** the construction and evaluation of the PAEE modeling based on documents, research, and experiences through a working group showed the appreciation of educational actions aligned with the work processes for implementation in the institution.

Keywords: Nursing; Learning; Education, Continuing; Education Department, Hospital; Health Human Resource Training.

RESUMO

Objetivo: construir e avaliar a modelagem de estruturação do Programa de Ações Educativas para Enfermagem (PAEE). **Método:** estudo metodológico constituído por duas etapas. A primeira abrangeu a compreensão da modelagem Business Process Management Initiative (BPMN) e agregou documentos e pesquisas institucionais para a primeira versão do modelo. A segunda etapa foi um grupo de trabalho realizado sob o método Joint Application Design (JAD) com 9 gestores das áreas assistenciais de Enfermagem de um hospital privado no Rio Grande do Sul. Para avaliação da modelagem, foram definidos 13 itens que foram avaliados por uma escala de Likert. A análise ocorreu pelo índice de consenso (IC>0,80) e comparação de médias e desvio padrão ($p<0,05$) da primeira e última avaliação da modelagem. **Resultados:** foram realizadas quatro sessões, com a participação de seis gestores na última sessão. Entre a primeira e última avaliação, na comparação de médias, destacou-se que: sequência é lógica ($p=0,008$), as etapas são claras ($p=0,013$), a linguagem é clara e coerente ($p=0,008$), a carga horária anual das ações educativas é adequada ($p=0,002$), o período trimestral para a avaliação observacional é suficiente ($p=0,017$) e avaliação de desempenho atende às etapas ($p=0,018$). A avaliação global dos 13 itens pelo IC demonstrou amadurecimento da modelagem (IC=0,41 para IC=0,94) sustentada pelo compartilhamento coletivo de ideias, sugestões e recomendações sobre a modelagem do PAEE. **Conclusão:** a construção e a avaliação da modelagem do PAEE com base em documentos, pesquisa e vivências por meio de um grupo de trabalho evidenciaram a valorização das ações educativas alinhadas aos processos de trabalho para a implementação na instituição.

Palavras-chave: Enfermagem; Aprendizagem; Educação Continuada; Serviço Hospitalar de Educação; Capacitação de Recursos Humanos em Saúde.

RESUMEN

Objetivo: construir y evaluar la modelización para la estructuración del Programa de Acciones Educativas en Enfermería (PAEE). **Método:** estudio metodológico que consta de dos fases. El primero abarcaba la comprensión del modelado de la Iniciativa de Business Process Management

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Iniciativa (BPMN) y agregaba documentos e investigación institucional para la primera versión del modelo. La segunda etapa constituyó un grupo de trabajo bajo el método Joint Application Design (JAD) con nueve gestores de las áreas de cuidados de Enfermería de un hospital privado de Rio Grande do Sul. Para evaluar el modelado, se definieron 13 ítems que se aprobaron mediante una escala de Likert. El análisis se basó en el índice de consenso ($IC > 0,80$) y la comparación de medios y desviación estándar ($p < 0,05$) de la primera y la última evaluación del modelo. **Resultados:** se celebraron cuatro sesiones, con la participación de seis gestores en la última. Entre la primera y la última evaluación, destacan en la comparación de medios la secuencia lógica ($p = 0,008$), las etapas claras ($p = 0,013$), el lenguaje claro y coherente ($p = 0,008$), la carga horaria anual de las actividades educativas adecuada ($p = 0,002$), el período trimestral para la evaluación observacional suficiente ($p = 0,017$) y la evaluación del rendimiento en las etapas ($p = 0,018$). La evaluación global de los 13 ítems por el IC demostró la maduración del modelado ($IC = 0,41$ a $IC = 0,94$) apoyada por el intercambio colectivo de ideas, sugerencias y recomendaciones sobre el modelado del PAEE. **Conclusión:** la construcción y evaluación del modelo PAEE a partir de documentos, investigaciones y experiencias a través de un grupo de trabajo demostró el valor de las acciones educativas alineadas a los procesos de trabajo para la implementación en la institución.

Palabras clave: Enfermería; Aprendizaje; Educación Continua; Servicio de

INTRODUCTION

Valuing the experience of health professionals is relevant in Permanent Health Education (EPS-*Educação Permanente em Saúde*), advocated by the National Policy for Permanent Health Education (PNEPS-*Política Nacional de Educação Permanente em Saúde*), in which the worker participates in learning to achieve the expected results in terms of quality of care provided. This approach benefits learning in everyday work, in which teaching and learning promote the construction of meaningful learning.^{1,2}

The sharing of the technical and scientific knowledge associated with practical experiences benefits the educational process of professionals in their area. We understand that the traditional model that does not allow for collective reflection on sharing knowledge is outdated.³ Thus, one of the purposes of EPS is to solve problems, allowing the professional to have a critical eye, enabling the discussion of improvements in the service.^{4,5}

Thus, the competencies of the Nursing team must be well-defined and clear so that proposals for educational actions are developed for the exercise of skills and the improvement of professional competencies. In a study carried out with 164 Nursing professionals from a hospital institution, the need for educational actions aimed at updating knowledge and standardizing processes at the institution was observed. Also, it was revealed that these educational actions need to have a continuity process.⁵

Health institutions are committed to the continuous development of their professionals, through education programs.⁶ Such programs need to be able to awaken professionals to meaningful learning guided by the intrinsic needs of the work scenario. Additionally, the importance

of using process modeling is highlighted to assist in the preparation of an organizational proposal for an education program. The use enables the achievement of the objective and can produce a result that responds, to a greater degree, with the improvement of desired skills.⁷

The institution of this study proposed, in 2020, the structuring of the Permanent Education Program in Nursing (PEPE-*Programa de Educação Permanente em Enfermagem*), consisting of two subprograms: Program for Insertion of New Collaborators in Nursing (PRINCE-*Programa de Inserção de Novos Colaboradores na Enfermagem*) and the Program of Educational Actions for Nursing (PAEE-*Programa de Ações Educativas para Enfermagem*). The main purpose is to improve the skills of Nursing professionals through educational actions, aiming at the quality of care and patient safety.⁵ In this context, we justify the development of this study for Nursing professionals in the modality of the principles EPS in educational actions, monitoring, and evaluation of professional performance. The research and development question of the study was “how to structure a program of educational actions for Nursing in a hospital institution?”

Thus, the objective was to build and evaluate the structuring modeling of the Educational Actions Program for Nursing (PAEE).

METHOD

This is a methodological study consisting of two distinct stages. The first covered the organization of existing documents at the institution for the construction of the PAEE model. The second stage consisted of the evaluation and updating of the modeling by a working group. The study was based on the criteria of STrengthening the Reporting of OBservational studies in Epidemiology (STROBE), which, in the research stage, is characterized as an observational study.

The setting for this study was a private hospital in Rio Grande do Sul. Currently, the hospital has 1,710 professionals of which 840 (49.1%) are Nursing professionals with 7 (0.9%) Nursing assistants, 677 (80.6%) Nursing technicians, and 156 (18, 5%) nurses divided into different care and management areas.

First stage

The business process (or process) is defined as a set of activities, events, and/or tasks in a logical and orderly sequence to be executed to obtain the desired result and how to improve the efficiency of the institution.⁷

Therefore, the specific order of each activity has a beginning and an end, which are observed after a decision-making action. This record is expressed by a graph that specifies the process flow so that it is understandable, called Process Diagram. Given the relevance of the record, the Business Process Management Initiative (BPMN) generates a standardized graph for process modeling, bringing together a set of associated management techniques, with the aid of technological tools.⁷

The use of BPMN enables to model, analysis, publishing, simulation, execution, monitoring, and control of processes that involve strategic, organizational, systems, and human aspects. The essential elements of BPMN are flow objects; connectivity objects; artifacts; and swimlanes.⁷ several software programs explore the applicability of the essential elements of BPMN with different designs, with free and/or paid access. The study scenario uses the Bizagi Modeler[®] software, which is the standard for recording and modeling all instructed and endorsed processes - even adopted for this study.⁸ At this stage, we added institutional documents and research carried out in 2019 with Nursing professionals about educational actions,⁵ to propose the first modeling in October 2021, as shown in Figure 1. This modeling was the first document presented in the second stage of the study.

Second stage

We applied the Joint Application Design (JAD) method, developed by International Business Machines (IBM) to accelerate the development of information technology systems. However, it has been used by several areas of knowledge highlighting the professionals who carry out project management or who exercise decision-making in institutions. The method is based on group work meetings, involving professionals in the discussion of a topic, product, or process.⁹ Decision-making can generate threats or opportunities for improvement in different sectors of an organization when restricted to one person or a group. Thus, this method allows collective and consensual decisions to be taken in the workgroup, finding synergistic solutions for the implementation of a new work process or product.⁹

The meetings allow professionals to share the same vision of the desired product or process, which is discussed from different perspectives of sharing ideas and evolving from each one's experience. Their consensus in decisions allows for building a sense of responsibility and commitment, which becomes belonging and co-authors of what is being proposed as a new process or product.⁹

Study protocol

The composition of the working group was intentional by inviting nine nurse managers of care areas, responsible for proposing and releasing professionals to participate in educational activities at the institution. The invitation was individual and explained the relevance of this study. Acknowledgment and agreement occurred voluntarily by signing the Informed Consent Form (ICF). The eligibility criteria were managing or supervising the administrative, Nursing, or education area; and being a collaborator at the institution for at least three months. The exclusion criteria were sick, health or maternity leave, and taking vacations during the workgroup sessions.

The organization of sessions using the JAD method took place in November 2021, according to four organizational steps: a) session planning; b) session preparation; c) conduct of the session; and d) production of documents or products generated by the consensus of the working group in the session.⁹

Data collection and organization

The working group met in December 2021, totaling four sessions that were planned and adjusted according to the organizational stages and how the sessions were held. The sessions were held in the afternoon shift, with a maximum duration of two hours, in the institution's auditorium, maintaining the recommended social distance as a preventive measure due to the pandemic.

Six to nine managers participated in the four sessions. In each session, we explained the objectives and expected results and we presented the tools used, the relevance of the consensus on the items under discussion, and the synthesis of the discussion, with referrals of the deliberations agreed upon in consensus.

The consensus of the participants on the modeling occurred through the application of a Google Forms[®] questionnaire with 13 items that were evaluated by a five-grade Likert scale: (5) I agree; (4) I partially agree; (3) I neither agree nor disagree; (2) I partially disagree; and (1) I strongly disagree. An open question was added for the descriptive record of recommendations or suggestions. The responses were individual and stored in a Google Sheets[®] spreadsheet and were exported to a Microsoft Excel[®] spreadsheet for prior evaluation of the next session.

Data analysis

For statistical analysis, we considered the comparison of the mean and standard deviation of the first and last assessment of the PAEE modeling, with a significance level of 95%. The consensus index (CI) was used with an

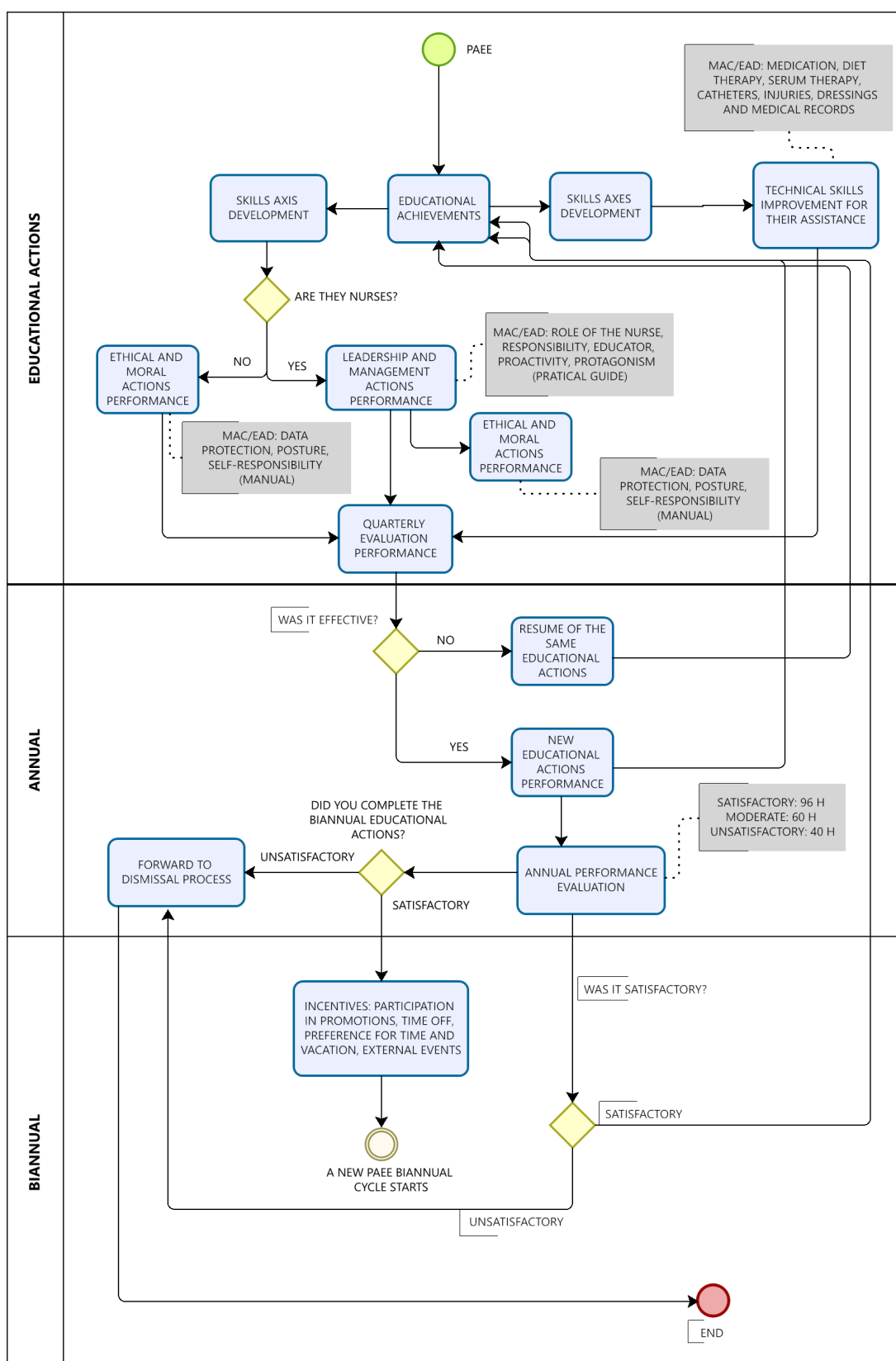


Figure 1 - First modeling of the Educational Actions Program for Nursing of the hospital institution

acceptable value of at least 80% ($CI > 0.80$), including only the answers (5) I agree. The applied calculation is similar to the calculation of the content validation index.¹⁰ Based on the divergent items of each session ($CI < 0.80$), the group debated solutions to reach a consensus on the proposal for modeling the PAEE.

The characterization data of the working group were analyzed using the Statistical Package for Social Science® (SPSS) using descriptive statistics. Descriptive responses were represented by the letter “N”, for the nurse, added to the numerical order in the spreadsheet to code the participants. The responses were aggregated with the meaning of the free-text expression.

Ethical aspects

The study was approved by the Research Ethics Committee of the educational institution, under opinion number 3,596,203, following Resolution 466/2012 of the National Health Council. All participants signed the ICF in two copies.

RESULTS

In the first stage, the construction of the PAEE modeling took place, which began with the organization of a sequential flow of stages, substages, and activities. We also identified existing failures and we analyzed the effectiveness of the educational actions carried out in the institution. We used the Annual Training Matrix (MAC); results of institutional research carried out with Nursing professionals on educational actions in 2019; professional skills assessment forms; and documents from the Insertion Program for New Collaborators in Nursing (PRINCE - *Programa de Inserção de Novos Colaboradores na Enfermagem*).

In the second stage, the first session of the working group justified the study, the choice of managers, and the scheduling of sessions. We presented data from the research on educational actions in the institution and a discussion was held associated with the daily practice of managers. Brainstorming resulted in reports related to difficulties in exercising management and leadership, such as creating scales, meeting deadlines, communicating, encouraging employees to participate in educational activities, identifying the lack of preparation of hired employees, lack of commitment, and detachment of Nursing professionals during the pandemic.

Consensually, the group proposed educational actions using active methodologies and face-to-face simulations

and distance education; the review of the job profile for the coherence of the professional profile and area of expertise; and evaluation and monitoring of educational actions. The technical recommendations for the proposal of educational actions focused on drug administration (importance, routes of administration, adverse effects, and dosage intervals); diets and serum therapy (infusion time, breaks, and care); care of catheters, wounds, and dressings; equipment handling; need to request services; and qualification of Nursing records.

In the case of monitoring educational activities to assess performance, they considered 36 hours satisfactory, 20 hours moderate, and less than 12 hours unsatisfactory per year. As the benefits for a satisfactory degree of performance, they listed granting prizes such as increased food vouchers, days off, preference for vacations and/or days off, promotions, participation in events, and change in the sector and/or shift.

This first session allowed for reflection through discussion and sharing of situations experienced in care areas, rethinking strategies that could be coherent for the PAEE. Thus, based on the notes taken, it was incorporated into the modeling (Figure 1) to be presented in the second session.

In the second session, the participants received the modeling built by Bizagi Modeler®, in which they individually evaluated and completed the questionnaire containing 13 items (described in Table 1): presentation; applicability; understanding; logical sequence; stages; language; workload; evaluation period; themes; standardization; performance; organization; and professional appreciation. Then, the collective discussion began, which raised questions and clarifications. They highlighted the difficulty of reconciling care demands and the hours spent in education during work.

The modeling proposed eight hours, knowing that the institution has a monthly goal of three hours dedicated to educational actions for the professional. All participants agreed to maintain the load defined by the institution to reach the goal, since it is already difficult to reach it, even with several incentives. The participants proposed that the performance evaluation was aligned with education quarterly or for a longer period, according to the professional's performance evaluation.

In this session, there was also an indication of topics for addressing ethical issues of professional practice, conduct, and the impact caused by them - in addition to the annual approach offered at the institution. Contributions to the design of the modeling indicated the adjustment in the layout, allowing better clarity to understand the

In the last session (Wednesday), six managers participated, and the results obtained from the PAEE modeling consensus were explained to them. Table 1 shows these results obtained from the CI and comparative mean, both from the first and last evaluation modeling of the PAEE.

We observed that six of the 13 items evaluated in the first and last evaluation of the modeling showed statistical

significance ($p < 0.05$) in the comparison of means. The following items stand out: logical sequence ($p = 0.008$), stages are clear ($p = 0.013$), clear and coherent language ($p = 0.008$), the adequate annual workload of educational actions ($p = 0.002$), the quarterly period for the sufficient observational assessment ($p = 0.017$) and performance assessment meets the stages ($p = 0.018$).

Tabela 1 - Primeira e última avaliação da modelagem do Programa de Ações Educativas em Enfermagem de uma instituição hospitalar. Rio Grande do Sul, 2021

Evaluated items	First evaluation		Last evaluation		p-value [§]
	CI [†]	Mean (SD) [‡]	CI [†]	Mean (SD) [‡]	
The general presentation is adequate	0.50	4.33(0.82)	0.86	4.83(0.41)	0.142
The application is feasible in the areas of assistance and CEP*	0.48	4.50(0.55)	0.86	4.83(0.41)	0.159
Improvement of the understanding of managers in the care area and CEP*	0.33	4.33(0.52)	0.86	4.83(0.41)	0.053
The planned stages show a logical sequence	0.33	4.33(0.52)	1.00	5.00(0.00)	0.008
The stages are clear	0.18	4.00(0.63)	0.86	4.83(0.41)	0.013
Clear and coherent language	0.33	4.33(0.52)	1.00	5.00(0.00)	0.008
The annual workload of educational actions is adequate	0.00	2.50(1.05)	1.00	5.00(0.00)	0.002
The quarterly period for the observational assessment is sufficient	0.34	4.17(0.75)	1.00	5.00(0.00)	0.017
The themes of the defined educational actions are relevant	0.63	4.67(0.52)	1.00	5.00(0.00)	0.078
Educational actions (EaD) for the standardization of institutional processes	0.48	4.50(0.55)	0.86	4.83(0.41)	0.159
The performance evaluation meets the stages	0.36	4.17(0.75)	1.00	5.00(0.00)	0.018
Expression of the organization for the qualification of the institutional education process	0.50	4.33(0.82)	0.86	4.83(0.41)	0.142
Appreciation with benefits for professionals with a satisfactory level in two annual performance evaluations	0.88	4.86(0.41)	1.00	5.00(0.00)	0.356
General consensus index	0.41	-	0.94	-	-

Fonte: Dados da pesquisa.

Notas: *CEP: Centro de Ensino e Pesquisa; [†]Índice de Consenso; [‡]Média; [§]Desvio Padrão; [§]nível de significância de 95%.

Regarding the CI of the first evaluation, we observed only one item with CI > 0.80. Valuation with benefits for professionals with a satisfactory level in two biannual performance assessments had CI = 0.88 and in the last assessment had a full CI (1.00). Another six items obtained full CI consensus (1.00) in the last version of the modeling: logical sequence; clear and coherent language; adequate annual workload of educational activities; the quarterly period for sufficient observational assessment; themes of defined educational actions are relevant; and performance evaluation meets the stages. The global assessment of the 13 items showed the matured proposal (CI = 0.94), which was improved by the collective discussion, with ideas, suggestions, and recommendations for the PAEE.

The six participants in the last session were all female, with a mean age of 39.5 ± 3.2 years. Study time was an average of 21.1 ± 1.32 years, with 4 (66.6%) having a specialization, 1 (16.7%) having a master's degree, and 1 (16.7%) having an undergraduate degree. Participants work in care areas for an average of 9.5 ± 4.2 years. All are involved in educational activities and are recognized as educators in the institution. They considered that the educational activities offered are relevant for professional practice.

About the JAD method applied to the working group to build and update the model, the facilities were listed under different forms of expression: exchange of ideas (E1) and experiences (E5 and E6); construction in a team of managers (E2); interaction (E3) and group discussion (E4);

use of technology (E5); *global vision enable knowledge* (E6) on the same difficulties in the areas; and *the experience was very rich* (E6). They did not mention difficulties and used this space to describe *without criticism* (E1); *excellent management of the group* (E5); and *if we had more time, we would enjoy every second*. In the first session, *all participants gave their opinion, and brought experiences from their sectors, following the meetings it was very enriching* (E6). The evaluations of the method used and the contribution to the development of the PAEE was positive.

Regarding the suggestions for the applicability of the JAD method as a workgroup, the participants expressed the desire to maintain this space for sharing: *we continue to exchange ideas and work together* (E1); *that changes are always discussed and carried out together with managers* (E2); *more meetings* (E4); *holding more moments of discussion as was done* (E5); and *each participant can leave with an activity to bring to the group at the next meeting* (E6).

However, when carrying out a study, both criticism and suggestions are important for improvement, and the responses collected wanted to continue with teamwork (E3); compliments like *Congratulations on your work* (E5); and as an acknowledgment, *I really appreciate the invitation* (E6).

DISCUSSION

Nursing plays a key role within health institutions. Proposing educational interventions brings benefits and develops strategies for the dissemination of scientific knowledge and professional development. This becomes effective for the improvement and updating of the Nursing team and the health service.¹¹ Thus, the importance of an educational program for professional development in health institutions is emphasized. Furthermore, it is important to highlight that EPS promotes learning and professional and personal growth through critical-reflective actions. Thus, the competencies of the Nursing team must be well-defined and clear so that proposals for educational actions are developed for the exercise of skills and the improvement of professional competencies.^{2,4}

As in this study, managers were involved in the construction, discussion, and evaluation of the model, and this has been evidenced in other studies. In the study carried out on risk management, managers evaluated the reports of adverse events in a hospital complex in São Paulo and pointed out the need for educational actions on medications, skin lesions, and phlebitis.¹² Another similar study, with managers of a hospital in the south of Brazil, found the importance of actions that contemplate a professional

ethical conscience about ethical and moral values.¹³ These themes were also suggested by the study participants to compose the catalog of themes to be addressed in the PAEE.

In the case of needs reported by professionals in a hospital in Paraná, the topics indicated were related to updating basic techniques and Nursing care, interpersonal relationships, teamwork, pharmacology and medication administration, dressings and wounds, administration and planning, leadership, and communication.¹⁴ This investigation sought to organize the educational actions of Nursing professionals, which are like those in the present study. In this way, in some institutions - such as the one in this study - the professional education sector is active in strategically organizing educational actions and recognizes the importance of listening to employees in educational needs to expand participation and value, training professionals.

Participants also discussed the knowledge, skills, and attitudes necessary for a qualified work process, citing posture, conflicts, and leadership. Leadership stood out as relevant for the development and improvement of nurses since skills - both managerial and clinical - are fundamental, as well as professional posture.¹⁵ Of the nurses' skills, it is necessary to highlight knowing how to develop educational actions in loco to promote the synergy of the Nursing team in several aspects. Nurses can identify the educational needs of their team and, immediately or on a scheduled basis, explore, based on the sharing of experiences, the theme in a conversation circle, or the use of active methodologies.

When demanding continuing education, the employing institution develops and improves the necessary skills that will result in gains in Nursing performance and the quality of care. A survey carried out with 376 Nursing professionals (assistants, Nursing technicians, and nurses) to start implementing patient safety strategies, showed negative results regarding communication. The application of a questionnaire measured by a Likert scale pointed out that communication was ineffective between sectors and staff, which represented a challenge for hospital units.¹⁶

However, medication errors are the main cause of adverse events in hospitals, which can cause serious harm to the patient. A study that evaluated the medication administration preparation process pointed out weaknesses such as a lack of double-checking, delays in medication administration, medication dose errors, and environmental factors. Only 34m7% of the 147 professionals included in the study claimed to have participated

in educational actions related to the administration of medication, within one year.¹⁷

The structuring of the PAEE was carried out by modeling using the BPMN notation of Bizagi Modeler®, which allowed diagramming and documentation. The replication of this modeling in other scenarios (or for small groups of nurses) is feasible if the mission, values, vision, and organizational strategic planning are considered, which will possibly require some adaptation. Two similar initiatives carried out the management of organizational processes of a health institution for process flow design, and the other to assist nurses in decision-making in controlling the risk of skin injury due to perioperative positioning. These studies highlighted the importance of process management and its benefits, highlighting that the modeling shows the structure in a clear, precise, and practical way.¹⁸⁻¹⁹

Modeling mapping is essential for process management, as it assists in the organization and elaboration of the structure, constituting a standardized roadmap capable of contributing to advances in management, assistance, and health promotion.⁸ Modeling has the benefit of communication, being a visual and sequential guide that facilitates understanding and clarifies the inherent activities of the process.¹⁸⁻²⁰ This study emphasizes the importance of incorporating new technologies and tools by nurses to improve work and educational processes for the standardization and transparency of strategies for achieving institutional goals associated with valuing professional training.

Regarding the characteristics of the participants in this study, the results were similar to those of a group of coordinating nurses of a public university hospital in Pará, with an approximate time of work in the institution of 9.3 years, similar to the time of performance observed.²¹ Another study used the empathy map with Nursing professionals and highlighted that there is no systematized or standard format for the entire team, which reflects the low adherence and resistance of some professionals to participate in educational activities.⁵ Certainly, the professionals who participate effectively in educational activities improve their knowledge; however, they limit compliance in the face of demands in the care area.

In this study, the limitations are highlighted by the care and/or managerial needs in the sector that require the presence of the manager and prevent him from full participation in the workgroup - although the study maintained a minimum of six managers per session.

CONCLUSION

In the current situation of the development of care technologies and their insertion into professional practice, the relevance of educational actions for Nursing professionals is evident. The construction and evaluation of the PAEE modeling by the managers based on documents, research, and experiences showed the appreciation of educational actions aligned with the work processes for implementation in the institution. However, this improves care skills, in a way that contributes to the reduction of adverse events and increases patient safety.

The modeling of the PAEE expresses a well-designed process, as the importance of permanent professional training in the institutional routine was observed, which continues after the period of hiring and effective permanence in the staff of Nursing professionals. Also, opportunities for improvement were presented for achieving institutional goals and valuing professionals, so that they achieve satisfactory performance in professional practice in line with professional training.

The applicability of this modeling in other scenarios is possible due to the methodological description for the structuring and implementation of the program of educational actions for Nursing professionals in hospital institutions. However, considering that each scenario has its specificities, mission, values, and vision of the future, this study encourages the appreciation of the sharing of ideas and experiences of employees in institutions for the proposition of professional education programs in health services.

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