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ORIGINAL ARTICLE

DEVELOPMENT AND VALIDATION OF INTERFACE FOR EVALUATION OF PREGNANT WOMEN WAITING FOR INTRA-HOSPITAL TRANSFER

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ABSTRACT

Objective: to develop, validate and implement an interface in the electronic patient record for the evaluation of pregnant women who remain in the obstetric center (OC) or obstetric emergency (OE) awaiting intra-hospital transfer. **Method:** methodological study that used the Plan Do Study Act (PDSA) cycle to implement an improvement in service at a referral hospital for obstetrics in southern Brazil. The study development process took place between July 2021 and July 2022. The participants were nurses from the OC and institutional sectors of quality and information technology (IT). The PDSA cycle was used for content elaboration, validation, interface development and implementation of electronic record in the following steps: 1) Planning, data collection and structuring; 2) Form validation by means of Delphi Technique and construction; 3) Evaluation and 4) Implementation of the interface. **Results:** the interface was developed integrating nurses from OC, quality sector and IT. After two validation cycles, it was developed in the hospital system, tested and approved to be implemented. **Conclusion:** the developed user-computer interface was validated by nurses, bringing greater quality to the tool and enabling the implementation of registration of the evaluation of pregnant women who remain in OC or OE in the electronic chart.

Keywords: Nursing. Obstetric Nursing. Nursing Process. Medical Records Systems, Computerized. User-Computer Interface.

INTRODUCTION

The nursing process (NP) is characterized by dynamic actions that aim to provide assistance to people, through acts that relate and coordinate with each other[1]. It should be performed in all health services where nursing care occurs, public or private, because it directs the assistance of nursing professionals and assists in the documentation of the activities developed, guided by solid theoretical foundation, reflecting a greater appreciation of the profession[2]. It is an important tool that assists in hospital accreditation, being directly related to patient safety and quality of care. In addition, it is transversal to all hospital sectors where there are patients, including the obstetric center (OC), where the length of stay can be short (<6h) or long (>24h), depending on the situation of the pregnant woman/parturient. Thus, NP makes obstetrics care safer and more organized[2-4].

In this context, the proper registration of nursing actions in the electronic record is important to ensure a safe and continuous communication, providing legal support regarding nursing conduct[5]. During the period in which the pregnant woman remains in the OC, the assistance provided by the team should be properly recorded. It is observed that nursing plays an important role in the care of pregnant women, however, the high demand for work in the sector is one of the causes of failures in processes and in the registration of care actions, associated with the limited importance that some professionals attribute to NP records in electronic records[4,6]. Thus, the improvement of the record of actions developed in the stages of NP by the nurse gives greater quality to the care provided to pregnant women who remain in the OC.

In general, the OC consists of preparation rooms, pre-birth, delivery and postpartum rooms, anesthetic recovery and admission of newborns[7].

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In this sector, various services are performed, from childbirth to gynecological procedures. In reference hospital institutions with high gestational risk, there is the hospitalization of pregnant women affected by various comorbidities, and it is common to treat patients with hypertensive disorders, diabetes mellitus, premature labor, among others[8]. In these cases, during pregnancy, there may be a need for prolonged hospitalization, in which patients usually wait in the obstetric emergency (OE) and/or obstetric center (OC) until a bed is available in the obstetric hospitalization unit (OHU). Due to the high demand and the limited number of beds available for pregnant women in hospitalization units, the patient can remain in OE and OC for more than 24 hours.

Considering that the focus of nursing care in OE are pregnant women with some instability and, in OC, the focus is directed to pre, trans and postpartum, pregnant women who wait for bed release may, occasionally, have failures in the daily record of the nurse's assessment in their electronic records. The nurse must be careful to perform records correctly, because when the nursing process is not performed in a clear and systematic way, failures can occur that compromise the quality of care provided. Among the most common problems, we highlight: medication errors, which result from failures such as inadequate administration, incorrect preparation or unreadable prescriptions. Overwork, high patient demand combined with shortage of professionals significantly increase the likelihood of errors during care. Lack of training, the absence of regular trainings hinders the effective application of NP, leading to less individualized and systematized care. Deficiencies in the systematization of care, the lack of structured methods impairs the organization of care and compromises its continuity. Incomplete or inaccurate notes, which hinder communication between the health team, contributing to discontinuities in care.

To minimize these failures, it is essential to adopt strategies such as continuing education, promoting constant training of nursing professionals; Improvement of working conditions, focusing on reducing overheads and providing adequate resources; Implementation of standardized protocols, which guarantee the safety and systematization of assistance. Valuing communication and organization in the work environment, fostering a culture that prioritizes quality and safety of care. These initiatives are indispensable to strengthen the nursing process, ensuring efficient and safe care for patients[9,10].

These data show the importance of transferring such records to the digital medium, avoiding these failures. In view of this problem, the development of a user-computer interface in the patient's electronic chart, specific for these cases, can make it possible and systematize the registration of the evaluation. Thus, the objective of this study was to develop, validate and implement an interface in the patient's electronic record for recording the evaluation of pregnant women who remain in OC or OE awaiting intra-hospital transfer.

METHOD

This is a methodological study that used PDSA (Plan, Do, Study, Action) cycles to develop and implement an electronic record interface in the patient's medical record (PMR), to improve the evaluation and registration performed by obstetric nurses. The Delphi Technique was used to validate the items to be entered in the registry interface.

The study was conducted in a hospital located in southern Brazil, a reference in obstetrics at all levels of complexity. The Obstetric Emergency (OE) is integrated to the Obstetric Center (OC), with availability of three rooms: pre-delivery, childbirth and postpartum. It also has four surgical rooms for the execution of cesarean sections, one of them equipped for intrauterine fetal surgeries. Its execution took place between July 2021 and July 2022.

The target population of this study were nurses working in OC. This study involved the participation of OC nurses in the validation stage of items for evaluation of pregnant women who are waiting for internal transfer. The sample of judges, nurses from OC itself, was intentionally constituted, since the registration interface was for the institution and because it could count on the knowledge and expertise of those who work in the study sector. It was defined the need to have at least two of the following inclusion criteria to be a judge: be a nurse of the OC; have expertise in obstetrics and/or completed or ongoing

maternal-child care or more than five years of experience as a nurse in the obstetric and maternal-child area. The criteria for non-inclusion were: to be a nurse from another sector who was temporarily transferred to the OC.

The implementation of the interface was in a health management software, used for electronic records, called Tasy/Philips Healthcare. This software was designed to be used in the hospital for any and all activities related to the patient and clinical management of the service. Tasy/Philips Healthcare is divided into modules, developed in Java and programmed by the hospital's own IT staff. Nurses can perform NP records in the PMR: nursing history, diagnoses, interventions (prescription) and evaluation (daily evolutions).

The PDSA cycle was used to operationalize the project, since it organizes structural change tests that can provide progress and bring greater chances of success in these situations[11]. The PDSA model is an iterative cycle widely used to implement and evaluate process improvements, especially in health contexts such as nursing practice, and also to introduce protocols to improve patient safety, evaluate the effectiveness of health interventions and improve workflows and communication in the nursing team. The PDSA cycle is especially valuable for its flexibility and focus on continuous learning, making it an essential tool for process improvement in complex health environments[12].

The first stage was the planning (Plan), when the objectives are defined, the strategies of action and the methods used to execute the actions. At this time, it is identified who, what, when and where the activities aimed at improvement will be carried out.

To develop the initial form, a research was conducted on the essential information for the adequate evaluation of pregnant women. The outline was presented to the supervision of the service and to the nurses of the OC, candidates for the validation of the form. During this stage, meetings were also held with sectors involved in the execution of the project, such as the hospital's quality service and IT, to evaluate stages, processes and feasibility of the proposal.

Once these steps were completed, the project was submitted to the Research Ethics Committee (CNP in Portuguese) of the institution. After approval by the CNP, the validation process was started to then forward the form to the hospital quality service.

The second stage, Do, includes the execution of the plan. Initially, a survey was conducted with nurses in the area, in a meeting, together with management, which took place in the second semester of 2021, before the execution of the study, in order to verify the opinion of those involved from two guiding questions: How do you believe that the daily assessment of pregnant women who remain in OC/OE can be recorded? What items do you think are necessary to be included in the evaluation record of pregnant women who are waiting for bed in the OC or emergency? After the investigation, it was decided that registration was necessary due to a lack of registration.

From this, a draft of the form was developed and presented to the nurses involved in the study. The document was prepared with essential items for the adequate evaluation of pregnant women, including relevant information on health history and gestational data. Then, a meeting was held with the IT sector to verify if it could be developed by the system used in the hospital and also presented to the quality sector, both with positive result. With the affirmative of all sectors involved, the next step would be the validation of the instrument.

The validation process was carried out during the second stage (Do) of the PDSA cycle and occurred between January and February 2022. For the validation of items that should be included in the PMR interface, the Delphi technique was used, a systematic method for validation, recruiting trained professionals in the area in question, in this case nurses from the OC, to judge the content of the evaluated tool[13,14]. The Delphi Technique is a structured method for obtaining consensus among experts on a specific topic, especially useful in areas where knowledge is incipient or controversial[13]. The technique is performed in rounds in an ordered way, namely: choosing the judges (experts), preparing the questionnaire, contacting the experts to invite them to participate in the study, sending the questionnaires, receiving the answers, evaluating the opinions, develop and forward the next questionnaire, carry out the analysis again; if necessary, repeat the process until consensus is reached, and write the final report[15].

According to the literature, the number of judges in the Delphi technique may vary according to the specific situation of the study. The most common recommendation is that the number of experts should be between seven and 12 judges. This interval is considered adequate to ensure diversity of opinions without overloading the process. However, there are studies that use a larger number of judges, which can make it difficult to organize the rounds and coordinate participants.

A minimum of seven judges is often considered sufficient to ensure representativeness, although it is important to include a larger number of experts initially, as withdrawal may occur throughout the rounds. Therefore, including as many participants as possible is a valid strategy to compensate for possible losses and ensure the quality of consensus[15]. Thus, eight professional nurses who worked or were on duty in the OC and the supervisor nurse of the service participated in the validation. The anonymity of the judges was maintained.

An invitation to participate in the study was sent, consisting of a brief explanation about the study and its objective, to the institutional e-mail of the nurses who met the inclusion criteria, reinforced by WhatsApp®.

The items that would compose the interface were grouped into four categories: health history, subjective, objective, action plan. To validate this content, a questionnaire was prepared in Google Forms® to be filled by the judges, with structured questions, namely: Is this set of evaluation items adequate, that is, meets the evaluation needs? The answer options were yes, no and in part. There was also a question for inclusion of suggestions.

The validation period after the approval of the project by the CNP of the institution was between January and February 2022. For the first round of the Delphi technique, the Word® file (content proposal for the interface) was sent by institutional email to the judges who agreed to participate in the study, along with the link to the evaluation form in Google Forms®, with a deadline of one week for completion.

Then, the analysis was carried out by means of descriptive statistics of the judges' answers to meet the suggestions for improvement. In the second round, the second evaluative questionnaire was sent with the previous suggestions inserted in the word document with the set of items, with a deadline of one week for return.

The fundamental question for the validation of a tool is to obtain the consensus among the judges, whose percentage can be defined by the researcher himself, in the application of the Delphi technique, the consensus percentage varies according to the criteria established by the researcher or study group, but it is generally considered a consensus when there is a percentage of agreement between experts equal or higher than 70% to 80%. In some cases, depending on the area of study or the necessary rigor, higher percentages may be adopted, such as 90%[16].

This criterion is the first step in the research planning to ensure transparency and validity of the results. In this study, the 80% consensus was considered for validation.

Figure 1 shows a schematic image of the steps that were performed for the validation process. After validation, a new meeting was held with the quality sector to adjust the form, integrating information already available in the electronic record system. After the adjustment, the Order of Service for the IT sector was opened. When the form was implemented in the Tasy® system, it was presented to the nine nurses of the OC through a video tutorial shared on the WhatsApp® group, which served as the official communication channel.

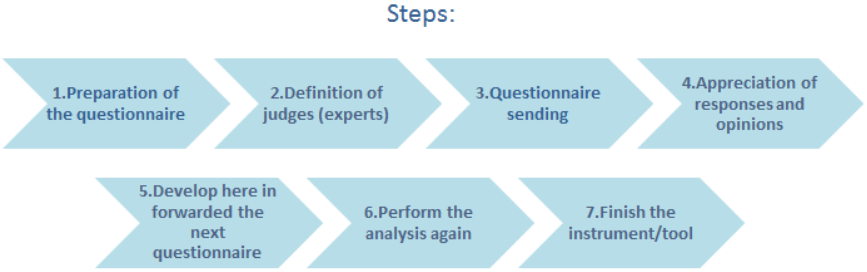

Figure 1. Validation process steps.
Source: Prepared by the authors, 2022.

The video tutorial explained the step by step to correct filling of the form, also showing the model of the evaluation in the system. After the training, a pilot test was carried out for 15 days with the nurses, using the form in daily care. During this period, nurses were asked to provide feedback on possible adjustments or improvements using an anonymous instrument via Google Forms®.

After the analysis of the feedbacks and performing the adjustments, it was decided to implement the form permanently, with the mandatory completion every 24 hours. The form was considered adequate by the nurses, with the final evaluation confirming its effectiveness. The process occurred between March and June 2022.

In the third stage, Study, the data obtained in the previous step are verified/studied by the researchers together with the head of the area. After having the instrument validated for creation and use, it was verified if the form has really been useful as part of a care process in the OC. And in the fourth and last step, Act, the action is understood based on what was learned in the previous steps and, if necessary, a new cycle is planned to test and implement modifications[11]. The construction of the registration form was completed, and permanent use was chosen in July 2022. In this way, patients will have a complete evaluation, performed by nurses and recorded daily on the electronic chart.

Study approved by the Ethics and Research Committee of the institution with opinion number 5.214.053. The ethical precepts were respected and followed in accordance with the Guidelines and Regulatory Standards of Research on Human Beings of the National Health Council Resolution 466/2012 and the informed consent form was applied to the judges who validated the content.

RESULTS

The steps of the PDSA cycle for development, validation and implementation of the electronic record in the interface are described as follows.

First Step: PLAN

In the first stage, Plan, the goals and methods were defined and aimed to verify the understanding of nurses about the lack of registration on pregnant women who waited at OC or OE for the release of the bed for the OHU and how this gap could be resolved. 1)Do you believe that these items are important for the evaluation of pregnant women and possible to be registered? 2)What is your suggestion about what should be included in the evaluation record of pregnant women awaiting hospitalization in the OC or emergency? The questions presented to the OC professionals for the construction of an instrument to be validated.

For the first question, there was unanimous recognition of the importance of the items presented for registration - basic data such as patient health history, obstetric complaint, etc. Already in the second question, there was collaboration and joint construction, presenting important situations to be analyzed and recorded – some obstetric data, patient blood type, possible alterations or fetal malformations, among others. From the answers to the guiding questions, it was evident that the registration should be in the PMR in a specific space for this purpose, with essential items of the health history and current conditions of the pregnant woman.

With the support of the area management, meetings were held with the hospital's quality sectors and, after, with the information technology (IT) sector to verify the feasibility of the idea, and the organizational processes for operationalization of the development of a new interface in the system. Subsequently, the head of the maternal and child nursing service contacted the quality department of the institution to open the order of service with the IT sector for the inclusion of the validated record in the medical record. The implementation of the registry in clinical practice of OC and OE was planned, including the development of support material for nurses.

Second step: DO

6

Considering the data that PMR has as standard, in step Do, an outline of the interface was elaborated in Word® file with the items that would compose the record, with the possibilities of answers. It is important to mention that the nursing history is performed in another interface of the PMR, when the patient arrives at the hospital. For the daily evaluation record of

pregnant women awaiting transfer to OHU, data on clinical health conditions, subjective data, objectives and action plan in OC or OE were included. Still in the Do step, the validation process of the items that would compose the registration interface in PMR was carried out.

Validation

Out of a total of nine judges who participated in the validation process, 88.9% of participants are women, aged between 23 and 40 years (32.5±6.3), and the time spent in the sector varied from one year to three months up to nine years (3.8±3.2). Professionals from all shifts participated.

Table 1. Result of the first validation cycle. Porto Alegre - RS, Brazil, 2022. (n=9)

Questions	YES	NO	IN PART
Q1: The "Previous History" item of the assessment tool is suitable for knowing the patient's history?	9 (100%)		
Q2: The "Subjective" item of the assessment tool is adequate, that is, it meets the assessment needs?	8 (88,9%)		1 (11,1%)
Q3: The "Objective" item of the assessment tool is adequate, that is, it meets the assessment needs?	9 (100%)		
Q4: The "Action/conduct plan" item of the assessment tool is adequate, that is, it meets the assessment needs?	9 (100%)		
Q5: In general, the assessment tool meets the needs presented in the study and is suitable for use in the scenario presented?	9 (100%)		

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Initially, the first round responses were analyzed for validation. Table 1 shows the items validated in the first cycle with the judges. In this cycle, a consensus of 88.8% was obtained. Among the suggestions were: include elimination, loss of vaginal fluid, fetal movement, contractions (in the perception of the pregnant woman), type of diet and OCVID-19 rapid test. After the analysis, there was the inclusion of suggestions from the first round of validation, to be sent again to the judges. In the second round, 100% consensus was reached about the items for registration, finalizing the document.

After validation, the IT employee performed the operations and activities related to entering the data of the Word® document in the Tasy® system. During the development of the interface in the system, two meetings were held between the researcher and the collaborator, in order to resolve doubts and define options for answers. Figure 2 shows the graphical user interface where the registration process starts in the Tasy software, and Figure 3 shows the graphical user interface where the registration takes place.

Afterwards, a video tutorial was built showing the step by step how to perform the evaluation registration of the pregnant woman waiting for bed in OC/ OE, on the computer screen, which was sent by email to nurses of the sectors involved. The standard operating procedure (SOP) was also elaborated, according to the institutional standard and, then, the pilot test was conducted, sending an e-mail message to the nurses, communicating the start of the registration test in the new interface of the PMR evaluations item (Figure 1) for a period of fifteen days.

The testing in daily care was performed by nurses of the sectors involved, in order to identify possible failures and necessary adjustments. At the end of the period, the researcher requested feedback from the professionals involved in order to identify weaknesses and suggestions for improvements in the new interface of the Tasy® system. Feedback was obtained through a link from Google Forms® sent by institutional email. The only suggestion for change was the inclusion of the reason for hospitalization, which was forwarded to the IT sector for adjustments.

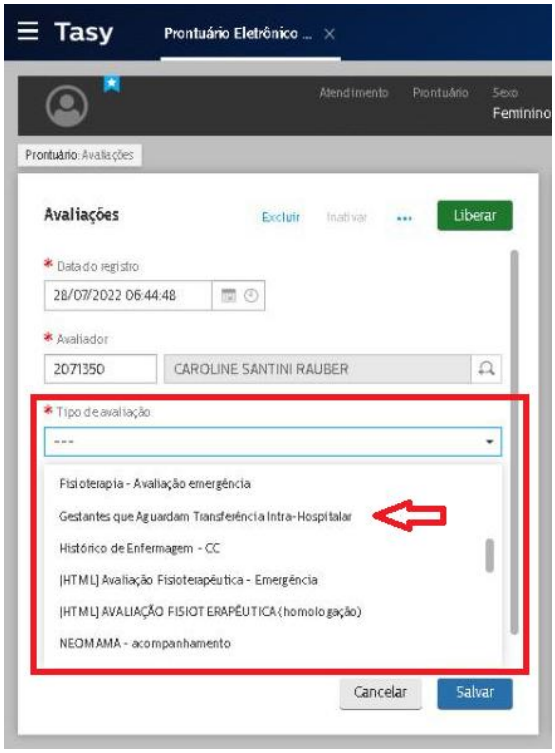

Figure 2. Graphical user interface for starting the registration process.
Source: Prepared by the authors, 2022

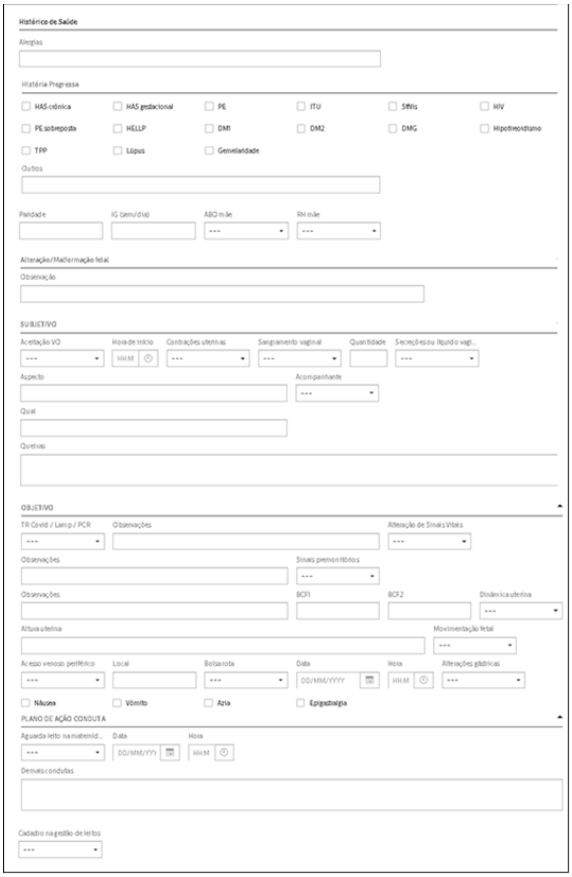

Figure 3. Graphical interface for assessing pregnant women awaiting intra-hospital transfer.
Source: Prepared by the authors, 2022.

Third step: STUDY

In the Study stage of the PDSA cycle, it was analyzed whether the form was fulfilling its role within the care process in the OC, focusing on the standardization of records and the collection of essential information in the evaluations of patients. The analysis revealed that many pregnant women wait for more than 24 hours in the Obstetric Emergency (ED) for transfer to the Obstetric Intensive Care Unit (OHU).

As a result, the use of the form could be expanded to OE, in addition to its use in OC, as initially planned. This extension would aim to improve the registration and monitoring of pregnant women during the waiting period for transfer.

Fourth step: ACT

In the Act stage, after the construction of the registration form with the Tasy® system and the test implementation of the registration in daily care in the OC, permanent use was chosen as a new care process. For this, a POP was developed and made available in the institution's system. From then on, in the Act stage, it was decided jointly with the head of the area to register at least once every 24 hours, under the item evaluation, of the type "pregnant women waiting for intra-hospital transfer" (Figure 2), being sent an institutional e-mail with the communication to the group of nurses from the sectors involved. The periodicity established for registration is in line with the practices established at the institution.

DISCUSSION

This study presents the stages of development, validation and implementation of a user-computer interface in PMR for computerized registration, resulting from the nursing evaluation related to

pregnant women who remain in OC/OE awaiting intra-hospital transfer. The specific interface for recording such evaluation includes subjective data, objectives and care plan related to the health conditions of the target audience. The PDSA cycles are used in projects to improve quality in hospital environments and recommended by the Institute for Health Improvement[17].

The implementation of a structured model, validated by the group of nurses in the sector, generates improvement in the registration process of the pregnant woman who is admitted to the OE or the OC for evaluation and has as an outcome the hospitalization, contributing, thus, to the excellence of care practices involving records and communication.

Nursing records should be written with clarity, accuracy and objectivity, kept accessible to the health staff. When the registration is non-existent or performed in an inappropriate way, this can lead to non-continuity of service[18], characterized as a failure in the communication process. Therefore, the registration of actions related to NP steps is essential for quality care in health institutions. In recent years, more and more records have migrated to computerized systems, where the electronic records are. With the computerization, the records become more organized, structured and safe, besides reducing the execution time, making this process more agile for professionals[19].

Thus, nurses, in addition to making the records in these systems, also participate in the development and improvement of interfaces, with a view to the adequacy and legal support about the record of care actions. Similarly, another study describes the use of the PDSA tool to implement in the electronic records of perioperative nursing process, the stage of trans and post-operative immediate operation, with the participation of nurses from management and assistance[20].

The computerization of nursing records is an ally to the care provided by professionals, being the information stored quickly and safely without loss of data and providing objectivity for access to other professionals, facilitating communication between the care team[21].

In line with this, a study that aimed to verify the perception of nurses about NP performed with the pregnant woman/ parturient in the OC evidenced, among the suggestions of the respondents, the need to make the assessment instrument more succinct, to review the maintenance of items that are difficult to fill and to redefine the data that could be filled in the OC, promoting the computerization of the entire process[6].

Studies that include validation steps provide the analysis to identify the appropriate wording to be used in the construction of interest, since the results obtained contribute to the improvement of health interventions and may determine changes in direct and indirect nursing care practices[10,11].

In this study, the interface created was validated by means of the Delphi technique after two rounds, using as validation judges the nurses themselves, since they would use the form later. This technique is commonly used in various areas of activity[11].

In the present study, the success of a quick validation without many changes occurred by the joint construction of the tool and not being a process thought singularly, but with the help of all professionals involved and in all stages.

For the layout of the content validated for the interface, it was necessary the help of the quality and information technology sectors of the institution, since there are several possibilities of presentation in computerized systems, so that visually it was easy to fill and handle. After the test period of registration by nurses in the system interface, supported by a standard operating procedure, it became the daily evaluation record (every 24 hours) of the pregnant women who remain in the OC or permanent OE in the institution.

This period was thought according to the demand of the hospital and possible repetitions of information, it is believed that the pregnant woman will not have major changes if she is hospitalized waiting for bed in the period of 24 hours. If it occurs, she will have the due attention, because then it will not be a pregnant woman waiting for transfer and will have their due referrals.

The limitations of the study are related to its scope, given the local reality of the electronic registration of NP steps in the PMR and the bias of selection of judges. The participation of nurses from other obstetric sectors of hospitals in the country as judges could be an enriching factor for the study.

CONCLUSION

The user-computer interface developed was validated by nurses in the sector, allowing the

implementation of more complete records of the evaluation of pregnant women who remain in OC or OE in the electronic record. This record is in accordance with good clinical practices aimed at patient safety and the improvement of interprofessional communication, highlighting the role of nursing in improving the quality of computerized records.

The record ensures that all important information about the patient is documented in a clear and accessible way, allowing efficient communication between members of the health team. This facilitates continuity of care, especially when there are changes in the team or transfer of the patient between sectors.

DESENVOLVIMENTO E VALIDAÇÃO DE INTERFACE PARA AVALIAÇÃO DE GESTANTES QUE AGUARDAM TRANSFERÊNCIA INTRA-HOSPITALAR

RESUMO

Objetivo: desenvolver, validar e implementar uma interface no prontuário eletrônico do paciente para registro da avaliação de gestantes internadas que permanecem no centro obstétrico (CO) ou emergência obstétrica (EO) aguardando transferência intra-hospitalar. **Método:** estudo metodológico que utilizou ciclo *Plan Do Study Act* (PDSA) para implementar uma melhoria em serviço em um hospital de referência para obstetrícia no sul do Brasil. O processo de desenvolvimento do estudo aconteceu entre julho de 2021 e julho de 2022. Participaram enfermeiras do CO e dos setores institucionais de qualidade e tecnologia da informação (TI). Utilizou-se o ciclo PDSA para elaboração de conteúdo, validação, desenvolvimento da interface e implementação do registro eletrônico nas seguintes etapas: 1) Planejamento, coleta de dados e estruturação; 2) Validação do formulário por meio da Técnica Delphi e construção; 3) Avaliação e 4) Implementação da interface. **Resultados:** a interface foi desenvolvida integrando enfermeiros do CO, setor de qualidade e TI. Após dois ciclos de validação, foi elaborada no sistema hospitalar, testada e aprovada para ser implementada. **Conclusão:** a interface usuário-computador desenvolvida foi validada por enfermeiras, trazendo maior qualidade para a ferramenta e possibilitando a implementação de registro da avaliação de gestantes internadas que permanecem no CO ou EO no prontuário eletrônico.

Palavras-chave: Enfermagem. Enfermagem Obstétrica. Processo de Enfermagem. Sistemas Computadorizados de Registros Médicos. Interface Usuário-Computador..

DESARROLLO Y VALIDACIÓN DE LA INTERFAZ PARA EVALUACIÓN DE GESTANTES QUE ESPERAN TRASLADO INTRAHOSPITALARIO

RESUMEN

Objetivo: desarrollar, validar e implementar una interfaz en el registro médico electrónico del paciente para registro de la evaluación de gestantes internadas que permanecen en el centro obstétrico (CO) o emergencia obstétrica (EO) esperando traslado intrahospitalario. **Método**: estudio metodológico que utilizó el ciclo *Plan Do Study Act* (PDSA) para implementar una mejora en servicio en un hospital de referencia para obstetricia en el sur de Brasil. El proceso de desarrollo del estudio ocurrió entre julio de 2021 y julio de 2022. Participaron enfermeras del CO y de los sectores institucionales de calidad y tecnología de la información (TI). Se utilizó el ciclo PDSA para la elaboración de contenido, validación, desarrollo de la interfaz e implementación del registro electrónico en las siguientes etapas: 1) Planificación, recolección de datos y estructuración; 2) Validación del formulario por medio del método Delphi y construcción; 3) Evaluación y 4) Implementación de la interfaz. **Resultados**: la interfaz fue desarrollada integrando enfermeras del CO, sector de calidad y TI. Después de dos ciclos de validación, fue elaborada en el sistema hospitalario, probada y aprobada para ser implementada. **Conclusión**: la interfaz usuario-computadora desarrollada fue validada por enfermeras, aportando mayor calidad a la herramienta y posibilitando la implementación de registro de la evaluación de gestantes internadas que permanecen en CO o EO en el registro médico electrónico.

Palabras clave: Enfermería. Enfermería Obstétrica. Proceso de Enfermería. Sistemas Computadorizados de Registros Médicos. Interfaz Usuario-Computadora.

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