NURSING HANDBOFFS: DEVELOPMENT AND VALIDATION OF INSTRUMENTS TO QUALIFY CARE CONTINUITY

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ABSTRACT
Objective: to develop and validate the content of instruments to standardize Nursing handoffs.
Method: a study for the development and validation through expert consensus conducted between January and July 2019 in a hospital of southern Brazil. The study participants were 24 professionals from different areas, including nurses, nursing technicians and professors, with experience in hospital handoffs. The experts evaluated and validated the scope, clarity and pertinence of the items of the instruments developed, obtaining an agreement index of 93%.
Results: two documents were prepared, namely: the “Handoff Form”, considering the patients’ identification, clinical information, and complications during each shift, and the “Handoff Standard Operating Procedure”, describing activities to be performed to ensure the transmission of precise information.
Final considerations: the instruments elaborated can guide Nursing handoffs in the clinical practice, promoting care continuity and safety.

DESCRIPTORS: Checklist; Nursing Assessment; Patient Safety; Exchange of Information; Continuity of Patient Care.

CAMBIO DE TURNO DE ENFERMERÍA: DESARROLLO Y VALIDACIÓN DE INSTRUMENTOS PARA CALIFICAR LA CONTINUIDAD DE LA ATENCIÓN

RESUMEN:
Objetivo: desarrollar y validar el contenido de instrumentos para estandarizar el cambio de turno de Enfermería. Método: estudio para el desarrollo y la validación por consenso de especialistas realizado entre enero y julio de 2019 en un hospital del sur de Brasil. En el estudio participaron 24 profesionales de diferentes áreas, incluidos enfermeros, técnicos y profesores de Enfermería, con experiencia en el cambio de turno en hospitales. Se evaluó el alcance, la claridad y la pertinencia de los ítems de los instrumentos y los especialistas lo validaron en cada ítem de los instrumentos desarrollados, obteniéndose un índice de concordancia del 93%. Resultados: se elaboraron dos documentos, a saber: “Formulario de Cambio de Turno”, que contempla la identificación de los pacientes, información clínica y complicaciones de cada turno, y el “Procedimiento Operativo Estándar para Cambio de Turno”, que describe actividades que deben realizarse para garantizar la transmisión de información precisa. Consideraciones finales: los instrumentos elaborados pueden dirigir el cambio de turno de Enfermería en la práctica clínica, promoviendo así la continuidad y seguridad de la atención.
DESCRIPTORES: Lista de verificación; Evaluación en Enfermería; Seguridad del paciente; Intercambio de información; Continuidad de la asistencia al paciente.

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INTRODUCTION

Patient safe care is a source of continuous attention in the various health organizations worldwide. Especially in the hospital setting, patients are assisted by various health professionals, which makes communication on their clinical information essential for care continuity and to ensure assistance safety(1).

In this context, Nursing team handoffs are a fundamental activity, being a strategic mechanism for work organization(2). By means of this activity, it is possible to ensure care continuity to the patients in the different work shifts, regardless of team changes.

During handoffs, several issues referring to the assessment of the patient’s health status, complications, and issues of institutional interest must be addressed. It is highlighted that the content of the information transmitted must be clear and objective, since communication failures can impair care and result in harms to the patients’ health(3).

With the implementation of an effective communication and the organization of the information transmitted between the Nursing teams, events related to the process of patient care and risk situations can be minimized(4). However, the Nursing teams often do not have an instrument capable of directing communication in an organized and feasible manner, without extrapolating their work shift schedule, which generates concern in the institutions’ leaders. In this perspective, the use of standardized instruments for handoffs has shown to be a useful tool for making communication effective, as well as to reduce possible failures and harms(5).

The literature presents studies on the use of standardized instruments that guide the Nursing actions in its various performance fields, which has had positive repercussions for a care practice based on quality and on patient safety(4-7). However, there is a persistent gap regarding instruments to guide Nursing handoffs that have been linked to a Standard Operating Procedure (SOP), which generates greater details of their applicability and, consequently, enhances patient care safety.

In face of this scenario, with the intention of qualifying communication across the Nursing team during handoffs and to prevent the occurrence of adverse events, the development and validation of a form with standardized information for patient care transfer was encouraged, accompanied by a SOP to regulate this activity. Therefore, the guiding question of this study was the following: How to promote a standardized handoff process between the Nursing professionals from different shifts, streamlining time and continuity of safe patient care?

In order to answer this question, this study was designed with the objective of developing and validating the content of instruments to standardize Nursing handoffs. The relevance of this study lies in providing elements to standardize care transfer between the Nursing team’s shifts and to streamline the time devoted to this activity. It is believed that, from the standardization and implementation of the related instruments, it will be possible to qualify communication among the Nursing professionals during the workdays.

METHOD

This is a study for the development and validation of the content of instruments by expert consensus. Consensus validation enables to reach a collective opinion or agreement among experts on a specific theme, and is widely used in the Nursing area, as it allows standardizing the practices performed by the professionals(8-9).
The study was conducted from January to July 2019, with the participation of 24 Nursing professionals, divided into 16 nurses, five professors and three nursing technicians from different clinical, surgical and pediatric hospitalization units of a large-sized university hospital in southern Brazil. All the participants of this experts committee had experience in the clinical practice and hospital handoffs for at least five years, these being the study inclusion criteria.

Weekly meetings were conducted from February to April 2019, totaling 11 meetings lasting 60 minutes each, with the following theme as agenda: objective of the work group, current problem, and work method proposed. In the first meeting, the scenarios and the particularities of each hospitalization unit and their difficulties related to handoffs were described and mapped.

In the meetings of March 2019, suggestions to improve the handoff and decision-making process were discussed. In order to systematize this action, activities and responsibilities of the Nursing team to be performed before the handoff by the team whose shift is ending were determined, as well as activities to be performed during the handoff, in which there is an exchange of information between the two teams, and activities to be performed after the handoff by the team whose shift is starting.

In addition to that, during the discussions, the items that would compose the standard handoff form were developed, guided by the theoretical framework used in the hospital to conduct the Nursing process, in addition to a literature review on the Pubmed, Medline, and LILACS databases with the following descriptors: checklist, nursing assessment, nursing care, patient safety, nursing team: organization and administration, and information and communication in health.

With the items of the handoff instrument already defined by the experts, a pilot test was carried out to verify its applicability in the professional practice. On this occasion, the team’s suggestions were accepted to refine it.

The choice of the unit for the pilot test was made using a relationship matrix between specific criteria such as: similarity of the process when compared to other units, which would enable greater ease in the dissemination of improvements; complexity of the handoff process, characterized by multiple care scenarios and a high number of patients and team members; and availability of the teams for the development of improvement cycles during the testing phase.

The pilot test was conducted in a clinical hospitalization unit with 45 beds, with a team composed of 15 nurses and 47 nursing technicians spread over different shifts. The instrument developed was presented to the unit’s assistance team, which applied it to the handoff based on a supporting script. The experts observed the application of the instrument for five days, reporting the strengths and weaknesses of the handoff process. Subsequently, improvements were incorporated to the instrument, among which the following stand out: reduction of information, organization of the verification items so as to follow the order of the physical examination, emphasis on the risk scales, and adaptation of the layout to make it more objective and adjusted to the work shifts. The need to reorganize and disseminate among the care teams the role of the handoff guardian was also identified, aiming to avoid interruptions.

At the same time, the experts developed the SOP related to the handoff, which describes the activities to be performed before, during and immediately after this process, which was also tested and refined.

Once the development phase of the Handoff Form and SOP was concluded, their validation was performed by consensus of the experts, who evaluated the scope, clarity, and pertinence of the instruments’ items. Finally, the appraisal of the members of the institutional committee on norms and routines was requested, in order to refine what had been validated.
With the expertise of 16 nurses, five professors, and three nursing technicians from different hospitalization units of the institution with broad knowledge on the theme, two instruments were prepared and validated to standardize and systematize handoffs. Therefore, four meetings with the experts committee were necessary to reach an agreement index of 93% on each of the items of the instruments developed.

The final version of the forms included items aimed at greater safety in care transition, such as patient identification, reason for hospitalization and previous history, assessment of risk scales, clinical evolution, food acceptance, use of drains and/or devices, bladder/intestinal eliminations, complications, examinations, and/or pending procedures.

The first result of this study was an instrument called “Handoff Form”, which contemplates identification data of each patient and the most relevant clinical information, in addition to standardized items to be reported, with a space where nurses and nursing technicians can describe the occurrences in each shift. The format and content of the instrument can be seen in Figure 1.
Figure 1 – Handoff form with the information to be transmitted between the work shifts. Porto Alegre, RS, Brazil, 2019

Source: The authors (2019).

VS = Vital Signs; PU = Pressure Ulcer; SW = Surgical Wound; SAK (Severo-Almeida-Kuchenbecker) evaluates the prediction of the risk for falls.

The SOP for handoffs was the second product developed and evaluated, and it lists the activities that need to be performed before, during and after handoffs in order to ensure that the operationalization of information transmission is effective. Its content is described in Figure 2.
DISCUSSION

This study, conducted with different Nursing professionals, enabled to prepare and validate a Form and an SOP for handoffs, in order to make this activity organized and effective. Care transfer represents a moment where diverse important information is transmitted between the health teams. Omitted or misinterpreted data can compromise
patient safety, leading to errors or other negative outcomes for the patient and the health system\textsuperscript{[12]}. In this way, the forms validated in this study can qualify Nursing team handoffs and ensure safe patient care.

Data from the Joint Commission on Accreditation of Healthcare Organizations indicate that more than half of the adverse events are caused by communication failures between the professionals\textsuperscript{[15]}. In order to reduce the incidence of these events through specific improvements in the care processes, the six International Patient Safety Goals were proposed, the first of which dealing with the correct identification of the patient and the second dealing with effective communication among the members of the health team\textsuperscript{[16]}.

In this perspective, to ensure that the care actions and therapeutic plan are performed safely, the first part of the form presents essential identification data: bed number, full name, and medical record. Other relevant information is also contemplated, such as age, date and main reason for hospitalization, previous history, allergies, and scales for the risk of falls and pressure ulcers.

As important as the correct identification are the records about the care provided and the clinical evolution of the patients. Health care safety, as well as the continuity of the therapeutic practices, depends on the qualification of the professionals, added to the administrative aspects that can be standardized, such as the records and organization of the care activities\textsuperscript{[7]}.

In this sense, the document that was elaborated also has a space for filling in information regarding sensory, oxygenation, vital signs, skin and mucosa integrity, pain history, use of vascular devices including type, place and dates of insertion and dressing, venous infusions, type of diet, eliminations, presence and description of pressure ulcer, surgical wound/drains, mobility and prediction of procedures/examinations to be performed. In addition to that, there are specific spaces for the “Morning”, “Afternoon” and “Night” shifts, so that during the workday the professionals describe data on the evolution of the patient’s health condition.

According to the Nursing Interventions Classification, in the intervention called Handoff, these data are corroborated and signaled as important activities to be carried out by the nurse\textsuperscript{[17]}. The importance of briefly reporting the patient’s history, reason for hospitalization, and treatment also stands out, as well as the necessary Nursing care actions.

It is important to emphasize that the Handoff Form followed the premises of the theoretical framework that addresses the patients’ needs in their completeness\textsuperscript{[11]}. However, a synthesis was necessary so that it was applicable, considering the time interval that the team has for this activity. Thus, aiming to streamline and organize handoffs, the SOP was validated contemplating the activities to be performed before, during and after each shift change.

The development and use of a SOP in the care practice by health professionals is extremely relevant, as it enables the standardization of care, directly impacting on patient and team safety\textsuperscript{[18-19]}. In this perspective, a study evidenced that nurses recognize the importance of the SOPs and the need for a qualified team to implement them in the clinical practice, prioritizing quality of care and minimizing existing barriers\textsuperscript{[20]}.

A literature review on care transfer involving patients undergoing the post-operative period identified an association between communication problems and the occurrence of adverse events, indicating recommendations to improve the communication process between the teams. Among these, the importance of standardizing the information transmission process is highlighted, ensuring that it is complete and accurate through the use of an instrument to guide communication. In addition, in line with the literature, the importance of an appropriate place for its performance is highlighted, which ensures patient privacy and confidentiality of the information transmitted, thus engaging the professionals involved and valuing the activity as part of the care process\textsuperscript{[13]}.
A study identified that the use of a checklist contributes to care management, as well as it qualifies patient care and safety. However, there is the need to create a culture directed to co-responsibility and to the involvement of all the team members. These findings are in line with the proposal of this study, as it can contribute to the team’s awareness regarding handoffs, to the protection of the environment in order to avoid interruptions, and to the standardization of the information to be transmitted, in addition to optimizing the costs with the time spent on this activity.

In addition to these aspects, well-structured handoffs, with the use of standardization tools, play an important role in the training of students as they help them to become organized, better understanding the patient care process, and engaged in the safety culture. Considering that the institution, field of this study, is a reference in the training of health professionals and has an important employee turnover, the implementation of the SOP is an important strategy in aligning the teams for the use of the Handoff Form without any discrepancy in the quality of the information transmitted.

A study examined the impact of an Integrated System for Nursing Care Transfer on nurses’ satisfaction regarding handoffs and changes in the practice. The results were positive, improving satisfaction and expanding access to the information about the patients and for the members of the health team from the different units of the institution. In addition to that, it is expected that the records in health are complete, accurate, objective and concise, with the possibility of being subjected to audits.

Another important point is the quality of the records made, reflecting the care provided, with the patients’ documents and their respective information recorded as a key element to conduct their treatment, whose safety in protection and access is imperative. Three fundamental objectives that must be ensured in order to certify the quality of the record stand out, namely: guarantee of confidentiality, integrity degree of the data stored, and amplitude of information availability. It is also reiterated that health records can support management, surveillance, teaching and research actions, with an emphasis on ethical care in the generation and manipulation of patients’ data.

In this sense, the responsibility of Nursing is notable because nurses monitor the patients at all times during their hospitalization, thus managing information and care across the different shifts and in the most varied scenarios of the institution, not forgetting the support areas (laboratory, imaging and diagnostic services, among others). This care continuity process shows itself fragile when the team does not systematically follow its actions, allowing that communication failures in care transition put patients at risk and violate ethical-legal issues.

It is the nurse’s duty to plan, organize, perform, and evaluate the Nursing services, and neglecting any of these stages can cause interruptions in the care provided to the patients. Thus, the standardization of the information on the care practices ensured by the use of a Handoff Form and an SOP aim at ensuring care transfer in an efficient and safe manner, in addition to concisely showing the nurses’ skills in decision-making, leadership attitudes, technical skills, commitment, and autonomy in the care process.

Among the factors described, it is worth highlighting the current labor implications: the Nursing team must not exceed its working hours. Thus, the reorganization of the handoff process with well-described procedures makes it possible to streamline the time spent, in addition to the quality of the information, complying with the legal precepts of the profession.

As a limitation, the fact that this study reports only the construction of the instruments stands out; thus, more robust studies are suggested to monitor the quality of information transmission after handoff standardization in the institution. However, it is reiterated that the instruments herein presented can contribute to the effectiveness of care transfer in different scenarios of the Nursing care practice.
The development of the Form and SOP for Nursing handoffs provided guiding elements to ensure the quality of this process, contemplating the main information for a safe transfer of the care provided to patients, in the expected time. The fact that it was developed and validated in a participatory manner among the members who are working directly in Nursing care contributed to the acceptance of the changes proposed and to the qualification of the process in the clinical practice.

Therefore, as a suggestion for improvement, monitoring the teams’ adherence to the use of the Handoff Form is suggested, operationalized according to the SOP, as well as the evaluation of its effectiveness in the clinical practice. These results contribute to the systematization of the nurse’s work based on scientific data, important for the development of the profession and for the empowerment of all its categories, so as to make them the real protagonists of health according to the challenge of the Nursing Now campaign in 2020.

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