ABSTRACT
Objective: to indicate the forms of identification of the patients used in the period of hospitalization in an infirmary, and how their maintenance is guaranteed, in the search for improvements in daily practice, and reduction of adverse events related to patient identification.
Method: exploratory, descriptive study with qualitative approach. Eighteen nursing professionals and 30 patients had their identifications observed and recorded in an observation script. The data was analyzed according to simple statistics, presented in table and figure. Results: it was observed that the protocol of identification of patients is practiced with failures. Two types of identification devices were collected: bracelets and plates. Patients without devices, with problems in data quality, and with identifiers not indicated were observed. Only 1 professional was observed performing the maintenance of the devices. Conclusion: It has been noted that there is no established standard. The quality of the data exposes patients to risks. There is a need for a new routine for the use of these devices. Descriptors: Patient Safety; Patient Identification Systems; Medication Systems

RESUMO
Objetivo: indicar as formas de identificação dos pacientes utilizadas no período de internação em uma enfermaria, e como é garantida sua manutenção, na busca por melhorias da prática diária e redução de eventos adversos relacionados à identificação do paciente. Método: estudo exploratório, descritivo, com abordagem qualitativa. Dezesseis profissionais de Enfermagem e 30 pacientes tiveram suas identificações observadas e registradas em roteiro de observação. Os dados foram analisados segundo estatística simples, apresentados em tabela e figura. Resultados: observou-se que o protocolo de identificação de pacientes é praticado com falhas. Foram levantados dois tipos de dispositivos de identificação: pulseiras e placas. Pacientes sem dispositivos, com problemas na qualidade dos dados e com identificadores não indicados foram observados. Foi observado somente um profissional realizando e manutenção dos dispositivos. Conclusão: notou-se que não há um padrão estabelecido. A qualidade dos dados expõe pacientes a riscos. Há necessidade de uma nova rotina para o uso destes dispositivos. Descriptors: Segurança do Paciente; Sistemas de Identificação de Pacientes; Sistemas de Medicación no Hospital.
INTRODUCTION

Quality health care is a relevant concern for health services, which are seeking to improve processes that aim to reduce risks to users of these institutions. Globalization and technological advances are driving transformations in health care systems, which leads to increasing concern about the risks associated with these increasingly complex systems.1

From the 2000s, patient safety became the focus of researchers around the world and became internationally recognized as “a fundamental dimension of health quality.”2

Following the trend of the world panorama, with the increasingly evident theme, in 2013, the National Patient Safety Program was launched, in Brazil, which proposes goals to be implemented in health services, seeking to improve patient safety. Thus, new insights into issues related to the reduction of adverse events related to care have emerged, launching the challenge of changing daily practice.

One of the goals proposed by the program is the Correct Identification of the Patient, which is seen as a way to ensure that, the correct patient, will be given proper care, treatment or examination.2 One study demonstrated that the scientific production in the Nursing area on safety of the patient has been working on recurrent themes, but, with new looks and possibilities,3 which highlights the prospect of greater success in solving issues previously addressed, but without much success.

Patient identification is cited in surveys as one of the factors often linked to medication errors, and as a primary factor in patient safety. Studies conducted in Brazil put the risk of medication changed, for example, as one of the main risks related to Nursing care raised by Nursing professionals, and highlight the need to “look for patient identification” as one of the recommendations to improve the patient safety.4 5

One study pointed out that in order to provide safe care, all patients must wear an identification bracelet with correct and legible information, and professionals should conduct a bracelet conference before providing care.6 Thus, it is necessary to invest in the development of technical processes that review protocols and encourage the practice of correctly using patient identification daily, with each care provided, reducing harm to the patient.

A safe, systematized care based on patient safety and aiming at the exemption of risks or damages to the clientele should be the goal of the Nursing team,7 and, in order to change the process, one must understand the context in which it is inserted, so that, within the institutional individuality, develops the best route of execution of tasks. Knowing how often mistakes occur in identification allows you to think about strategies for potential improvements.8

This study aims to indicate the ways of identifying patients used in the period of hospitalization in an infirmary, and how their maintenance is guaranteed, in the search for improvements in daily practice, and reduction of adverse events related to patient identification.

MÉTODO

This is a cut from a larger study that addresses the broad subject of patient safety, focused on the use of patient identification, such as wristbands and plaques, in drug administration.

An exploratory and descriptive study with a qualitative approach, carried out in an adult patients ward of a high complexity care institution, located in the city of Rio de Janeiro, Brazil.

In this study, we used as concepts:

Identification forms: Any device used to identify patients during their stay in the institution, such as identification wristbands or bracelets, identification plates fixed to the bed and so on. There are, also, other technologies associated with these devices that are also used in patient identification, such as bar code, radio frequency and biometrics.9

Identifiers: The types of data used by the institution in the patient identification forms are those recommended in the protocol of the Ministry of Health, as the full name of the patient, full name of the mother, date of birth, number of records; or any data used in the institution, such as bed number, clinic, date of hospitalization, etc.

Patient identification process: It includes steps such as confection of the forms of identification of patients, adaptation and/or maintenance of these forms of identification standardized by the institution.

Process for Maintaining Patient Identification Forms: A process implemented to ensure changes and/or updating of information, as well as replacement performed when forms of identification are
The study participants were Nursing professionals working in the infirmary of choice. The professionals were observed by the researcher/research assistant when they performed some stage of the patient identification process. The inclusion criteria were: to be a professional of the institution, acting in the direct assistance to the patient in the sector of choice. The exclusion criteria were: professionals who were on medical leave or vacations during the period of data collection.

Although the patients were not participants in the study, they had the forms of identification used by the institution during their stay in the hospital, and, therefore, it became necessary to apply the ICF to them. It was considered, as inclusion criteria, to be over 18 years old and to be admitted to the infirmary of choice.

The data was collected in a period of 60 days, by direct observation and non-participant, of the forms of identification of patients used in the infirmary of choice, following an observation script. The maintenance of the forms of identification of patients by professionals was still recorded, with a record of the reason.

Data collection included the steps outlined below:

1) Presentation of the study, application of the ICF to the professional and observation of the patient identification process. This step was based on the non-participant observation of the patient identification process when performed by the professional in the infirmary of choice. The observation of the professional in the intention of recording the reason for the confection, adaptation or maintenance of the devices happened in the two shifts of existent work and contemplated all the teams.

2) Presentation of the study and application of the ICF to the patient and observation of the IDENTIFICATION FORMS. The type of identification device was carried out, used and the need for maintenance/replacement of devices or identifiers were also recorded. The observed data were recorded in an accompanying record that objectively directed, the observer, in his record. The type of identifier used in patient identification devices was evaluated and if this data, when handwritten, was readable and had abbreviated data.

The data collected was inserted into a spreadsheet in the Microsoft Excel® program and analyzed according to simple statistics.

The project of this study was sent to the Brazil platform for evaluation by the Research Ethics Committees of the proposing and co-participating institutions, and was approved with respective numbers of opinions: 893,132 and 1,013,404.

RESULTS

This study aimed to indicate the forms of identification of the patients used in the period of hospitalization in a ward of the elected hospital and for the accomplishment of this stage of the study 30 patient identifications were observed in the total. These observations were performed over a period of 60 alternate days and covered both daytime and night service.

The data presented in the forms of identification of the patient were confronted with the data recorded in the chart, to verify if they corresponded to the reality.

Two ways to identify patients in this institution were found: wristbands and nameplates.

The wristbands found in the observations were white or red in color. Both had free space to record the data that identify the patient, such as full name and medical record number, for example. Such records were made with ordinary ballpoint pen. The red wristband is recommended in the institution’s protocol to identify allergies reported by patients, and includes the name of the allergens in the data inserted in the bracelet. Today, these are the only wristbands available and used.

The other form of identification of the patient found was the nameplate (or table), which, in the institution, is printed on A4 paper in pre-established format and with preformatted identifiers, where the personal data of each patient is inserted. The completed form is placed, in an acrylic frame at the entrance of the patients’ beds in the infirmaries, which are individual beds and with a common bathroom every two beds, sharing the physical space between them. This form of identification is not recommended by the Ministry of Health, but is provided for in the institutional protocol.

Of the 30 patients observed, 23 (76.6%) had identification by wristband and 20 (66.6%) presented nameplate identification, which were the two forms of patient identification found. Evaluating the distribution and combination of the forms of patient identification found was a record of the reason. The type of identifier used in patient identification devices was evaluated and if this data, when handwritten, was readable and had abbreviated data.
The use of patient identification... found, it was possible to note that 16 patients (53.3%) had wristbands and nameplates at the same time to identify them. It was also found that seven patients (23.3%) were identified only by wristbands, and four patients (13.3%) were identified only by nameplates. It was still possible to point out that three patients (10%), out of a total of 30 observed, did not present any type of patient identification.

Next, they evaluated which identifiers were contained in the nameplates and wristbands. In the standard found, the identifiers included in the nameplates were: Name, Bed, Record, Clinic and date of hospitalization, and they were found in the 20 patients identified by nameplates, therefore, in 100% of the sample evaluated (Table 1).

In the 23 identification wristbands found, it was possible to observe as identifiers: Patient name; bed number; medical record number; date of hospitalization; mother’s name; age; allergy and date of birth (Table 1).

Table 1. Identifiers found on wristbands and nameplates.

| Identifiers found on wristbands and nameplates. Rio de Janeiro (RJ), Brazil, 2015. |
|---------------------------------|---------------------------------|---------------------------------|
| Identifiers found on wristbands | Identifiers in wristbands | Identifiers in nameplates |
| Name                           | 23 (100%)                       | 20 (100%) |
| Bed Number                     | 02 (8.69%)                      | 02 (100%) |
| Form Number                    | 23 (100%)                       | 20 (100%) |
| Hospitalization Date           | 01 (4.34%)                      | 0         |
| Mother’s name                  | 01 (4.34%)                      | 0         |
| Age                            | 05 (21.73%)                     | 0         |
| Allergy                        | 04 (17.39%)                     | 0         |
| Date of Birth                  | 17 (73.91%)                     | 0         |
| Clinic                         | 0                               | 0         |
| Hospitalization Date           | 0                               | 20 (100%) |

After evaluating the distribution of the forms of identification of patients found and the identifiers used, the nonconformities found were found in both nameplates and wristbands.

Not having identification by plaque was placed as a non-compliance, since the protocol of the institution determines that there should be this form of identification instituted. The nameplates are made by the officials of the administrative service, represented by the secretaries in this task.

Among the patients who did not have nameplate identification (ten in total), it was noted that four patients (40%) had performed procedures that have a short hospitalization period of approximately 24 hours, so, they were expected to leave the ward soon. The studied ward has six beds destined to these hospitalizations by procedures with prediction of short stay hospitalization.

RESULTS: Three (30%) patients were found among the ten patients without nameplates, who arrived in the ward from intensive care units to the ward, during a weekend or holiday period, when there is no active administrative service, which is the service that is currently responsible for the identification of patients.

The remaining three (30%) patients not identified by nameplates did not have the reason for this absence elucidated (Figure 1).

![Figure 1. Non-compliance: Patients not identified by nameplates. Rio de Janeiro (RJ), Brazil, 2015.](image)

After assessing the nonconformities in nameplates, the evaluation of nonconformities was begun on the identification wristbands.
Lemos CS, Cunha KCS.

The use of patient identification...

Of the 23 patients identified by wristbands, six (26.08%) had a red wristband, that is recommended by the institution to identify allergies reported by patients.

Of all patients who had their forms of identification observed, all those who reported allergy were identified with the red wristband, which is used as a second wristband, not exempting the need for white wristband use, according to the institutionalized protocol. However, three (13.04%) patients, of the 23 with identification wristbands, had only the red wristband as an identifier, which according to the institutional protocol, becomes a non-conformity.

This fact was justified by the lack of white bracelets in the institution, which was also used as a justification for the absence of wristbands in some patients. Therefore, these patients, who reported allergies at the time of the lack of the white wristband in the house, only remained with the red wristband as a way to ensure the use of the device.

The nonconformities observed on the identification wristbands were divided into categories: The first category refers to the quality of the data inserted, the second category refers to the use of identifiers not recommended by the Ministry of Health and also by the institutional protocol; and the third category evaluates those patients who were not identified by identification wristbands.

The first category, related to the quality of the data inserted in the identification wristbands, makes it possible to assess whether the integrity, readability and veracity of the information is being ensured. Data such as fading pen ink and incomplete data drew attention in 17.3% of cases. Wrong written data (4.3%), cursive letter (4.3%), abbreviated data (13%) and unreadable data (8.6%) were also observed (Figure 2).

Figure 2. Non-conformities: quality of records on wristbands. Rio de Janeiro (RJ), Brazil, 2015.

The second category, which refers to the use of identifiers not recommended by the Ministry of Health and also by the institutional protocol, raised as non-conformities, among the 23 wristbands observed: age in 21.75% (n = 05), bed number in 8.69% (n = 02) and the date of admission of the patient in the institution 4.34% (n = 01) (Figure 3).
The last category of nonconformities on identification wristbands evaluated those that were not identified by these devices, and the justifications reported by the team at the time of data collection for the absence of the devices.

Of the 30 patients observed in this study, 23.3% (n = 07) of the patients did not have an identification wristband. Of these seven patients, without identification wristbands, 42.8% (n = 03) did not have wristbands due to lack of the product in the institution; 42.8% (n = 03) were not identified by wristbands for reasons not clarified and a patient 14.4% (N = 01) did not have the wristband, because he was hospitalized in a high-turnover bed, where he had performed procedures that had a short hospitalization time and would be discharged in less than 24 hours (Figure 4).

In this study, 18 professionals from the 26 professionals who compose the nursing team of the infirmary of choice were observed. The data collected with the professionals allowed to observe that, during the period of data collection, which occurred in a period of 60 alternate days, covering various shifts and day and night shifts. Of the 18 Nursing professionals participating in the study, only one (5.55%) was observed by performing maintenance of the patient identification wristband. This professional was a nurse and he adapted wristbands on three patients who were without a wristband.

According to the institution's current protocol, the Nursing team responsible for the patient should check the integrity of the wristband daily, and evaluate the need for replacement of the wristband, and the secretary or nurse responsible confirming the patient's information in the hospital system and making a new wristband.

The fact that only 5.55% of the professionals carry out maintenance of the patient identification forms is of concern regarding patient safety. The detection of failures in the identification system will only be possible with the professional's commitment to evaluate the conformities...
related to the use of the device, and to correct the inadequacies found.

**DISCUSSION**

Considering the data collected, it is possible to observe that the protocol of identification of patients proposed by the institution is practiced. The use of identification wristbands and ID cards for inpatients is institutionalized as directed in domestic policy, but with procedural flaws.

The presence of unidentified patients by wristbands, 23.33% of the 30 patients observed, exposes them to attendance risks. Correct use of the identification device, with its verification every care, is considered an effective safety barrier in the administration of medications, and because it is the last barrier of the medication process, it is paramount. Nursing professionals are not exempt from responsibility in the search for safety and must have a continuous objective of improving the technical-scientific knowledge that bases their decision-making, providing a care free of damages.

The plaque identification, although contemplated in the protocol of the institution, is not described in the protocol of the Ministry of Health, which still warns of the risk of assumptions that the right patient is in the right bed when using label with the name above the bed to verify identification.

The evaluation of the 23 patients identified by wristbands found within the 30 observations allows us to state that 100% (n = 23) of the wristband evaluated had name and number of records as identifiers, according to the protocol of the Ministry of Health. However, the institutional protocol advocates the presence of three identifiers on the identification wristband: the two already mentioned, that are recommended by the Ministry of Health, and also the date of birth of the patient, found only in 73.91% of the wristbands. Therefore, it is noted that, although it contains at least two identifiers that, according to the Ministry of Health, the internal protocol is not completely followed since it calls for three identifiers: name, number of records and date of birth.

The use of identifiers not recommended by the Ministry of Health and also by internal policy, such as bed number, besides data such as age and date of admission to the institution, were observed.

The use of these types of identifiers will not confer a safe assistance to the user, since, such data is not exclusive and may induce errors, for example, when the patient is transferred from bed to a need of the service and the exchange is not performed in the device. Identification that uses the bed as an identifier; or, even, when hospitalization of more than one patient of the same name, occurs on the same date.

Using the date of admission does not give the patient a unique personal reference. The use of such identifiers exposes patients to risks, rather than ensuring undamaged care.

The use of the mother’s name as an identifier was used only in 4.34% of the wristbands, among the 23 patients identified by this device, possibly, associated with being an adult patient ward, and that such identifier is commonly used for patients, children or adolescents.

The observation of the identifiers used in the identification wristbands allows us to highlight the lack of accuracy in the filling of data of the devices and the exposure to the risks to which the users of the health network are exposed. Thus, the need for new training, emphasizing the standardization of wristbands, with the use of indicators that evaluate the data inserted in the wristbands, becomes evident.

The quality of the data inserted in the devices, was often, not adequate, which, would also, expose patients to undesirable events. One study points out that the occurrence of some factors, such as the change of digits in the medical record number, incorrectly filled, incomplete and illegible data, leads to errors in patient identification.

Of the 23 identification wristbands observed, 17.3% had pen ink used to record the data faded or stained, which makes it difficult to view and read the identifiers, besides being able to erase, a record completely.

Data entered incompletely, as occurred in 17.3% of the sample, or wrong, in 4.3%, and still abbreviated, in 13%, do not guarantee that the information contained in the wristband corresponds to reality.

The existence of erroneous, incomplete or abbreviated data, used to identify patients is considered a serious fact, since such data, which should give the patient individuality, may, in fact, be associating the same with another registry or patient.

Situations like this can lead to exchange of procedures between patients, such as surgeries, exams, and more routinely, administration of wrong medications, and lead to injury or harm to the patient.
A study, that sought nurses’ understanding of patient safety and medication errors, highlighted the failure to meet the five medications (patient, dose, time, schedule and medication) as a factor that exposes patients to errors associated with this practice. The use of patient identification wristbands is a strategy for reducing events associated with the “right patient” stage, but, the use of wristbands under inadequate conditions can increase the incidence of adverse events.

Records in cursive letters, corresponding to 4.3%, and data not readable, in 8.6% of the observations of identification wristbands, exposes the device to the difficulty of reading by the professional, since the letters are not standardized, which may end up discouraging the professional to wear patient identification wristbands in their care when administering medications.

Thus, in order to control the data used, another indicator appears as a necessity in the search for the quality of the inserted records. Periodically evaluating the quality of these records helps to identify gaps and facilitates process improvements.

The use of indicators, as already suggested above, in the case of periodic evaluation of the data inserted in bracelets, is also seen as facilitator of the implementation and monitoring of the adherence of institutional protocols. In addition to the standardization of actions, the evaluation of the quality of services is a key point to minimize health problems, portrayed by morbidities or deaths.

The absence of identification wristbands, in part of the sample, should be taken seriously. Its use in medication administration is seen as an important strategy in reducing errors related to the wrong patient. The institutional protocol should predict the lack of the product in the warehouse And to create strategies for avoiding such undesirable events, such as planning to take into account estimates of admissions and needs for wristband changes. This survey should represent the reality, considering margin of error, to ensure the availability of the product.

The fact of having a hospital stay in short periods of up to 24 hours, does not exempt patients from risks and does not justify the non-use of wristbands; Every in-patient must have identification devices, regardless of their length of stay in the institution.

Nameplates should not be encouraged as a patient identification checker. Verbal verification, reading and checking of the data on the patient identification wristband are the steps described in the Ministry of Health protocol in the search for safe care.

The use of the mother’s name as an identifier was used only in 4.34% of the wristbands among the 23 patients identified by this device, possibly associated with being an adult patient ward, and that such identifier is commonly used for patients, children or adolescents.

The fact that only 5.55% of the professionals are observed performing maintenance of the identification device, such as data conferencing, observation of the general condition and exchange of wristbands during the period of data collection, endorses the need for training for the protocol to have rigor and quality in its construction.

The implementation of a security routine for the correct identification of the patient should require investments in the educational area of the institution, which should ensure a greater commitment to the safety culture. A reflection on the work processes of the health team in the correct identification of the patient becomes fundamental for the change of the conduits.

Strategies aimed at improving the use of identification devices should be elaborated and applied, beginning with the construction of the devices, using the correct data and correctly, until the adaptation to the patient and the correct use in the assistance, with the conference of the wristbands identification before care.

The importance of awareness and involvement of health teams, in the search for quality care, free of damages and errors, in which all health professionals together can discuss strategies and behaviors in the face of adverse events, should be seen, as a key point for the development of new security policies by the health services.

**CONCLUSION**

The patient’s safety, related to its correct identification, of the patient will only be successful with the commitment of the teams involved in the actions described in the routines of the protocols. A comprehensive security culture should ensure such adherence.

Effective implementation of a patient identification protocol is an institutional challenge. Strategies should be created to favor adherence to the routine, and the use of indicators should be part of the protocol, as suggested by the Ministry of Health, to assist...
in the strategies adopted for each reevaluation of the routines implemented.

A review and possible extension of the protocol should be considered since inadequacies have been observed.

REFERENCES


The use of patient identification...