Implementation of improvement cycle in health records of mobile emergency prehospital care

Implantação de ciclo de melhoria nos registros de saúde de serviço pré-hospitalar móvel de urgência

Implementación del ciclo de mejora en los registros de salud de un servicio prehospitalario móvil de emergencia

Maria do Socorro Telma Batista Araújo Timóteo[I]
ORCID: 0000-0003-1254-5211

Rodrigo Assis Neves Dantas[I]
ORCID: 0000-0002-9309-2092

Ilanne Caroline Santos Costa[I]
ORCID: 0000-0002-4687-3515

Tâmara Taynah Medeiros da Silva[I]
ORCID: 0000-0002-6481-2150

Kauanny Vitoria Gurgel dos Santos[I]
ORCID: 0000-0003-4679-1840

Eloysa dos Santos Oliveira[I]
ORCID: 0000-0001-9635-3668

Daniele Vieira Dantas[I]
ORCID: 0000-0003-0307-2424

[I] *Universidade Federal do Rio Grande do Norte. Natal, Rio Grande do Norte, Brazil.*

Corresponding author:
Rodrigo Assis Neves Dantas
E-mail: rodrigoenf@yahoo.com.br

ABSTRACT

Objective: to evaluate the effect of the implementation of a quality improvement cycle in the completion of occurrence forms of a Mobile Emergency Service. **Methods:** this is a time series, quantitative, quasi-experimental study without control group, with three quality assessments in which was used an improvement cycle for adequacy of health records in Mobile Emergency Service Patos. **Results:** in 100% of the seven criteria, there was improvement between evaluations. Noncompliance with criteria reduced from 95 cases in the first evaluation to eight cases in the third evaluation. **Conclusions:** the representation of joint results between the three evaluations highlighted progressive improvement in the compliance with each criterion.
Descriptors: Quality of Health Care; Personal Health Records; Patient Safety; Prehospital Care; Quality Improvement.

RESUMO

Objetivos: avaliar o efeito da implantação de um ciclo de melhoria da qualidade no preenchimento das fichas de ocorrências de um Serviço de Atendimento Móvel de Urgência. **Métodos:** estudo quase experimental de série temporal, quantitativo, sem grupo controle, com três avaliações da qualidade. Foi utilizado o ciclo de melhoria na adequação dos registros de saúde no Serviço de Atendimento Móvel de Urgência Patos. **Resultados:** houve melhorias em 100% dos sete critérios entre as avaliações e redução do não cumprimento desses critérios de 95 casos na primeira avaliação, para oito casos na terceira avaliação. **Conclus**ões**:** a representação dos resultados conjuntos entre as três avaliações destacou a melhoria progressiva nos cumprimentos de cada critério.
Descritores: Qualidade da Assistência à Saúde; Registros de Saúde Pessoal; Segurança do Paciente; Assistência Pré-Hospitalar; Melhoria de Qualidade.

RESUMEN

Objetivos: evaluar el efecto de la implantación de un ciclo de mejora de la calidad al completar los formularios de ocurrencias de un Servicio Móvil de Atención de Emergencia. **Métodos:** esta es una investigación de series de tiempo, cuantitativa, cuasi experimental, sin grupo de control, con tres evaluaciones de calidad, utilizando un ciclo de mejora en la adecuación de los registros de salud en Servicio Móvil de Atención de Emergencia Patos. **Resultados:** el 100% de los siete criterios mostraron una mejora entre las evaluaciones y se observó que el incumplimiento de estos criterios se redujo de 95 casos en la primera evaluación a ocho casos en la tercera evaluación. **Conclusiones:** la representación de los resultados conjuntos entre las tres evaluaciones pudo destacar una mejora progresiva en el cumplimiento de cada criterio.
Descriptores: Calidad de la Atención de Salud; Registros de Salud Personal; Seguridad del Paciente; Atención Prehospitalaria; Mejora de Calidad.

INTRODUCTION

From the perspective of improving the quality of healthcare, quality management programs offer a set of structured elements in activities for continuous improvement of service quality, including quality improvement cycles. These can be used to strengthen managerial functions and help to detect problems or opportunities with a view to solving and/or improving them[1]. In addition, they can be applied in different locations and produce knowledge about the implementation and results[2].

Although present in the Brazilian public health system, external evaluations of health programs designed for developing the population's health are still underused. The Brazilian scientific literature is scarce on the applicability of quality improvement cycles that evaluate and propose interventionist strategies for improving and raising the levels of current health practices. There are weaknesses in the knowledge of these supporting strategies for improvement of healthcare quality, especially regarding health system management[3].

Information from medical records is important for management actions in organizations. This document has legal value that guarantees patients' rights in situations of divergence during clinical treatment[4-5]. The absence or incomplete filling of medical records can cause several problems that hinder the work process and compromise patient safety[6]. Incorrectly completed medical records may represent an inadequate patient-physician relationship and a violation of users' right to have their history recorded and available[7].

The literature provides documents that specify the minimum quality criteria for clinical records. In section IV of the Resolution of the Collegiate Board (Portuguese acronym: RDC) number 63/2011 of the National Health Surveillance Agency (Portuguese acronym: ANVISA) that addresses good practices in health services, three articles specify the minimum requirements of all health service records in order to ensure good care practices. The resolution clearly states health professionals' responsibility for making the records, the guarantee of information according to procedures provided and the correct completion in a legible manner[6-8].

Records are essential elements of the care process. When written in a way that portrays the reality, they enable communication between the health team and serve a variety of other purposes, such as teaching, research, audits, legal processes, planning, statistical purposes, and others. As the patient's medical record is a legal document that defends professionals, it must be imbued with authenticity and legal meaning in accordance with the Federal Nursing Council Resolution number 0514/2016[9-10].

In mobile emergency prehospital care, these records are not made at the time of care, but after the patient's stabilization and transport. When notes are taken, the patient is absent, which requires commitment of the professional in the retrieval and systematization of information. Given this specificity, registration problems arise with the Mobile Emergency Care Service (Portuguese acronym: SAMU). The faced difficulties are related to lack of patient information, for example: identification, pathological history, lifestyle; lack of standardization of notes; unreadable records and lack of professional identification[11].

Using the improvement cycle strategy has become important to overcome obstacles faced when making records in SAMU. Such a strategy is a quality assessment activity involving reflections on what needs to be improved, the quality problem, decision about criteria adopted to measure the current quality level, collection of data needed to evaluate and discuss the results, the definition of what can be done and how to implement the proposed improvement actions[1-2].

OBJECTIVES

To evaluate the effect of implementing a quality improvement cycle on the completion of occurrence forms of a Mobile Emergency Care Service.

METHODS

Ethical aspects

In this study, was followed Resolution 466/12 of the National Health Council. It was approved by the Research Ethics Committee of the *Universidade Federal do Rio Grande do Norte* (UFRN).

Design, location and period of the study

This is a time series, quantitative, quasi-experimental study without control group, with three quality assessments through an improvement cycle for adequacy of health records in SAMU Patos. The model and standards adopted were in accordance with the Standards for Quality Improvement Reporting Excellence 2.0 (SQUIRE), which presents the structure and description of improvement cycle standards[12].

The study was conducted at the SAMU of Patos/PB. This is a public service with tripartite funding, organizational context in a Regionalized structure inserted in the 6th Health Region of the state of Paraíba that covers 22 municipalities by Medical Regulation. The service has an average of 1,600 monthly occurrences of traumatic, clinical, pediatric, surgical, gynecologycal-obstetric, mental health nature and population orientation.

Population or sample; inclusion and exclusion criteria

Data were collected from all professionals (21 physicians, 45 nurses and eight nursing technicians) after they signed the Informed Consent Form (ICF), and from records of patients of SAMU Patos in the period 2016-2018. Initially, were evaluated 100 cases by simple random sampling and 100 more cases in the reevaluation of the second and third steps by the same sampling method, considering sample calculation[13] and sampling error of 10%.

The sampling of records was based on the principle that all members of the population were equally likely to be included. When collection was not possible because the form was not available, a case replacement mechanism was adopted for the failed sample by selecting a number from the list immediately after the one initially chosen[14].

For the construction and development of the study, were adopted the steps of the quality improvement management program in health services. The activities involving the cycle of improvement, monitoring and planning were established from the Juran Trilogy[15].

Study protocol

The study development consisted of six steps: identification and prioritization of the quality problem, analysis of the problem causes, development of quality assessment criteria, assessment, improvement intervention, reassessment and improvement record. The first three steps are part of the routine work process of the SAMU Patos Permanent Education Center. The investigation of steps four, five and six was the target of this study and findings are addressed in the results section.

First step - identification and prioritization of the quality problem. It involved identifying and prioritizing the opportunity for improvement in a participatory manner with professionals of the institution through the Nominal Group Technique and Prioritization Matrix. The consensus strategy was used, which allowed the equal participation and individual expression of all team members for the identification of possible improvement opportunities to be worked by professionals in the service.

Second step - analysis of the quality problem causes. In order to proceed with this step, the problem had to be known better for the right decision making. The improvement opportunity was analyzed with a Cause-Effect/Ishikawa diagram using the brainstorm technique. Once the diagram was completed and causes were exposed and classified according to their operative translation, they served for continuity of the improvement cycle.

Third step - development of quality assessment criteria. After the problem identification and analysis, came the construction and validation of criteria with description of the study components. The criteria used were relevant, essential, realistic, acceptable and above all, reliable and valid. Special attention was given to the features of reliability and validity[1].

Fourth step - quality level assessment. Quality assessment with the first moment of data collection by using the process as a quality criterion through samples of medical records (occurrence form), based on standards accepted by the legal responsible of the institution, as provided in the letter of consent and the authorization and concession terms.

The adequacy of the occurrence form completion was evaluated. Data collection was performed through a spreadsheet prepared with seven pre-established criteria, as follows: 1-Identification (date of occurrence, number of occurrence, name of patient/user, age, sex, place of occurrence); 2-Clinical Data (type of injury, vital signs, capillary blood glucose, Glasgow coma scale, airway opening, patient's main complaints, level of consciousness and oxygen saturation); 3-Pathological Background (pre-existing diseases, lifestyle and use of medicines); 4-Standardization (standard of records including occurrences that did not mobilize ambulances); 5-Clarity (legible records, without erasures); 6-Professional Accountability (all care professionals are directly responsible for the proper completion of medical records); 7-Systematization of Nursing Care-SNC (mandatory for the nursing process)[6-10] by using the level of compliance as the assessment basis, and zero-0 (noncompliance) and one-1 (compliance). The assessment of data was performed by estimating the level of compliance and calculating the confidence interval. After analysis, the Pareto Chart was used for demonstration.

Fifth step - quality improvement intervention. After the first data assessment (step four), began the quality improvement intervention, following the improvement cycle model. As data from medical records are an essential and indisputable part of the care process, their absence or inaccuracy required improvement actions.

Actions for improvement followed the main guidelines. Meetings were held with professionals on duty and involved the entire SAMU Patos work team (21 doctors, 45 nurses and eight nursing technicians), with intervention actions targeted to quality criteria of less compliance. At first, several actions were grouped by affinity areas in an Affinity Diagram, in which actions were scored and implemented. Then, an action plan was conducted as presented in the Gantt Diagram[16].

Sixth step - reassessment of quality level and improvement record. Performed at two different times (second and third moments of data collection) by presenting the same methodological concepts. Months later, a new data collection was performed to measure the post-adaptation effect of the intervention.

As the criteria of Identification, Standardization and SNC did not show statistical significance, the intervention was intensified, and practices were programmed for a better result. Six months later, was performed a new data collection using the same methodological concepts, and it presented favorable results to quality management.

Chart 1 - Affinity Diagram: What actions can be performed for adequacy of health records?, Patos, Paraíba, Brazil

Affinity diagram guiding strategic interventions of quality improvement for adequacy of health records.	
Leadership development	Implement organizational leadership structures. Sensitize and hold managers and leaders accountable in the process. Involve the work team in the quality management process.
Staff training	Guidance on completing the Systematization of Nursing Care through technical-scientific training by the Regional Nursing Council of Paraíba. Education actions for professionals: lectures, training, courses and professional training by showing the legal aspects involved in adequacy of medical records.
Regulation and standards	Formulate and implement protocols, standards and standard operating procedures. Establish quality standards and goals through regulatory policies. Promote internal quality audits.
User participation	Carry out care actions with people by offering more information, empowerment and involvement in decisions of the care process by the staff and professionals of the regulatory center. Encourage the use of patients' documents at the time of care through the regulatory center according to orientation of professionals.
Changes in registration systems	Request the coordinators to rehabilitate the operational information system of the regulatory center. Show management the need to update the occurrence forms in order to provide clear information and ensure improvement of records systems.
Work organization	Go through the vehicle checklist at the beginning of the shift in order to maintain the forms organized. Provide adequate and quality material for health records. Notify the existing gaps to those responsible for filling out the form. Show the importance of keeping current clinical data updated. Communicate the responsible person about the refusal to fill out.

Following the process flow of the improvement cycle, was made a graphical representation of results of the three evaluations, highlighting the improvements in meeting each criterion. The lines drawn on the Pareto Charts illustrate the cumulative frequency of noncompliance in each quality assessment.

Analysis of results and statistics

Data were analyzed based on the assessment of compliance or noncompliance with the pre-established criteria of the 100 selected and evaluated medical records. For this, we used the reliability evaluation of each criterion by Kappa index analysis, measuring overall agreement.

The next step was data analysis in order to assess the level of quality achieved and if there was improvement compared to the initial assessment. Point estimation and confidence interval were calculated for the level of compliance with criteria (CI = 95%).

Then, were calculated the absolute and relative frequency values of the statistical significance test of the improvement. This is a unilateral hypothesis test in which is calculated the Z value. It is used to accept or reject the hypothesis of difference in compliance with criteria in the evaluations. For Z values greater than or equal to 1.65, a probability of statistical significance (<0.05) was considered.

Data were analyzed using the Pareto Chart. This quality control tool provides evidence of the magnitude of overall improvement achieved, expressed as the total number of noncompliance between the first and second evaluations, and between the first and third evaluations.
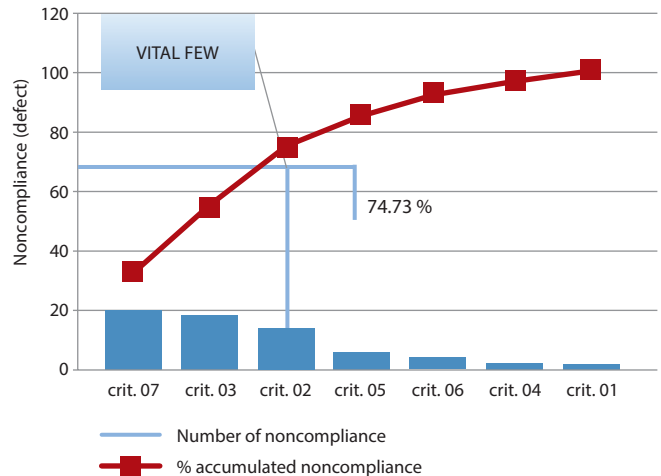
RESULTS

With presentation of data from the first moment of collection and based on the related criteria for development of the improvement cycle process according to Pareto Figure 1, the preliminary results corresponded to those expected when the problem to be addressed is prioritized. Thus, out of 100 medical records evaluated, in 95 of them, there was noncompliance with at least one of the criteria, which were listed in decreasing order of absolute/relative frequency of noncompliance and the following rates: 27/28, 42% of noncompliance for SNC; 24/25, 26% of absence of Pathological Background; 20/21, 5% of lack of Clinical Data; 10/10, 53% of problems regarding Clarity; 7/7, 39% of Professional Accountability; 4/4, 21% of absence of Standardization; and 3/3, 16% of lack of Identification.

After finding the inadequate completion of records, their adequacy was established as an opportunity for improvement. The set of comprehensive interventions was implemented in the service, which was applied as an opportunity for improvement. During the intervention, all professionals were informed about their active participation in the implementation process, ensuring team insertion in the construction of work process improvements, which would bring joint benefits to the service, professionals and especially users.

After performing the intervention, a second comparative assessment showed noncompliance data in 84 out of 100 medical records, showing overall absolute improvement, but still below desired. Even achieving overall improvement, the absolute/relative frequencies of noncompliance increased in two criteria as follows: Systematization of Nursing Care (44/52, 38%) and Standardization (21/25, 00%). With

this increase, these two criteria were implicated in the Pareto Chart as "vital few". Although these are just two criteria, they can cause major registration problems, showing that interventions were still needed for achieving significant quality improvements.
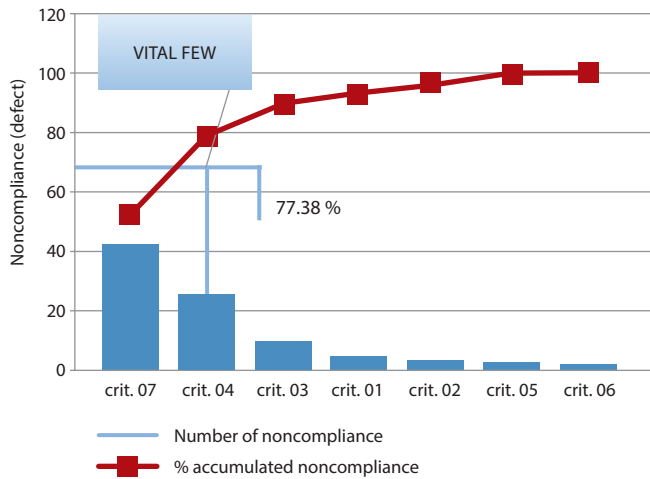

Note: crit. - criterion.
Figure 1 – Result of the 1st moment of data collection, Patos, Paraíba, Brazil

In most criteria, levels of noncompliance decreased: Pathological Background (10/11, 90%); Clinical Data (3/3, 50%); Clarity (3/3, 50%); Professional Accountability (0.0, 00%). In the second assessment, the Professional Accountability criterion did not present noncompliance. The Identification criterion (3/3.16%) remained with the same stable indices (Figure 2).

As there was still a need for improvement, a new intervention was performed by establishing service standards with guidelines for correct completion of the form, as agreed between management and professionals. Thus, noncompliance rates decreased, which was confirmed by absolute/relative frequency rates in the following criteria: Clarity (1/12, 50%); Identification (2/25.00%); and SNC (4/50.00%). In the third evaluation, in Pathological Background, Clinical Data, Standardization and Professional Accountability criteria, the noncompliance index decreased in absolute and relative proportions.

In the first evaluation, 95 out of the 100 medical records evaluated were inadequate, and this number decreased to 84 in the second evaluation, which already configured quality improvement, although below desired. In the third evaluation, there were fewer quality problems and only eight cases of noncompliance out of 100 samples evaluated (Figure 3).

In the difference between the first and the second evaluation, Identification, Standardization and SNC criteria did not improve significantly. The Identification criterion remained with three cases of noncompliance, and SNC and Standardization criteria increased to 44 and 21 cases, respectively, becoming "vital few" between evaluations. Clinical Data, Pathological Background, Standardization and Professional Accountability criteria indicated quality improvement through data obtained by the statistical test of unilateral normal distribution between the two evaluations. Values in Table 1 of normal distribution demonstrate a real difference in improvement.

Note: crit. - criterion.
Figure 2 – Result of the 2nd moment of data collection, Patos, Paraíba, Brazil
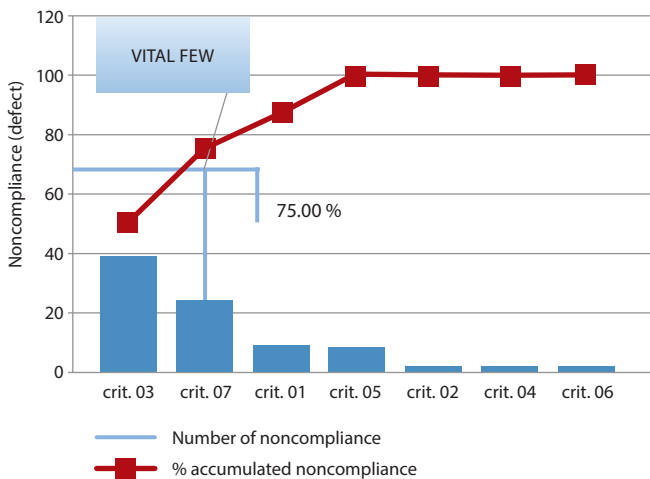
Note: crit. - criterion.
Figure 3 – Result of the 3rd moment of data collection, Patos, Paraíba, Brazil

The representation of results between the sets of three evaluations highlighted the progressive improvement of compliance with each criterion and reduction of defects (noncompliance). Table 1 shows that among the seven established criteria, only the Identification criterion had no statistical significance. Still, there

was improvement in absolute frequency numbers, from 97 to 99 medical records in compliance rates. The probability corresponding to the Z value in the differentiation from the first to the third evaluation showed Z values above 1.65 in six other criteria thereby validating the significance level of the statistical difference test.

Between the second and third evaluations, data showed a significant statistical difference in criteria of Clinical Data, Pathological Background, Standardization and SNC. In the Identification, Clarity and Accountability criteria, the test was not significant, because there was no need for improvement, as it had already been achieved since the second evaluation with focus on the vital few criteria, as mentioned above.

The construction of Pareto Charts (Figures 1, 2 and 3) showed the magnitude of overall improvement achieved, expressed by the total number of defects (noncompliance) from the first to the second evaluation, as well as from the first to the third evaluation. Between the first and second evaluation, it was possible to analyze and prioritize what needed improvement and identify the main criteria that caused quality defects in the case of SNC, Pathological Background and Standardization. The Pareto Charts enabled a comparison of the improvement (decrease in the number of noncompliance) of each criterion individually, as presented in the third evaluation.

Among the criteria with the highest noncompliance in the three evaluations, SNC and Standardization stood out, because in the second evaluation they were considered as "vital few" given their higher incidence of noncompliance, which, after a new intervention and collective participation of those involved in the process, reduced significantly. The SNC criterion went from 44.00% in the second evaluation to 2.00% in the third; and the Standardization criterion went from 24.00% to 0.00%.

DISCUSSION

After the first evaluation, was found no improvement up to the desired level, and the cycle was considered as unfinished. Some misconceptions occurred in the planning of the intervention because it was not effective to improve as needed. Therefore, the phases of the cycle started again by repeating the steps of implementation of interventions that contributed to not reaching the improvement in order to achieve the desired goal[16-17].

Table 1 - Quality evaluation of the effect of improvement cycle on health records, difference between levels of compliance with criteria in 1st, 2nd and 3rd evaluations, Patos, Paraíba, Brazil

CRITERIA	1ª Evaluation p1 (95% CI)	2ª Evaluation p2 (95% CI)	3ª Evaluation p3 (95% CI)	Absolute improvement p3-p1	Relative improvement p3-p1/ 1-p1	Statistical Significance p
1-Identification	(+/-0.0334) 97.0	(+/-0.0334) 97.0	(+/-0.0195) 99.0	2.0	0.7/70%	Z=1.4 (<0.05)
2-Clinical Data	(+/-0.0784) 80.0	(+/-0.0334) 97.0	(+/-0.196) 100.0	20.0	1/100%	Z=5 (<0.001)
3-Pathological Background	(+/-0.0834) 76.0	(+/-0.1152) 90.0	(+/-0.0384) 96.0	20.0	0.8/80%	Z=5 (<0.001)
4-Standardization	(+/-0.0384) 96.0	(+/-0.03) 79.0	(+/-0.196) 100.0	4.0	1/100%	Z=2 (<0.020)
5-Clarity	(+/-0.0588) 90.0	(+/-0.0334) 97.0	(+/-0.0195) 99.0	9.0	0.9/90%	Z=2.25 (<0.005)
6- Professional Accountability	(+/-0.05) 93.0	(+/-0.196) 100.0	(+/-0.196) 100.0	7.0	1/100%	Z=3.5 (<0.001)
7-Systematization of Nursing Care	(+/-0.087) 73.0	(+/-0.0972) 56.0	(+/-0.0274) 98.0	25.0	0.9/90%	Z=6.25 (<0.001)

Note: p1 - compliance in the first evaluation; p2 - compliance in the second evaluation; p3 - compliance in the third evaluation; NS - not significant (Z<1.65); (-) - Negative difference not calculated significance.

From the above, given the need for improvement cycle in the quality assessment of the SAMU Patos records, a comparison was made with previous studies in which medical records were mentioned as a source of information and a data production tool in numerous health studies[18].

Similar to the findings of the present study, authors[19] performed studies on medical records of an oncology hospital in 2014. In relation to clinical history, 89% of medical records had admission records correctly completed, 45.5% were properly completed, 39.6% were partially completed, and 15% were unfilled. Regarding the patient evolution variable, 3.7% were blank even if the patient had been admitted to the institution. In more than half of medical records evaluated, the handwriting was difficult to understand. The results showed failures in prescription and clinical evolution regarding the report of hospital discharge, lack of patient discharge report by the team, incomplete collection of patient data and absence of examinations in 13.8% of medical records.

Researchers[20] consider nursing records a fundamental element for maintaining the Nursing Process (NP). They provide the scientific basis for actions through a systematic record and gathering of patients' documents standardized by the health team such as anamnesis, clinical examination, therapeutic prescriptions, reports of nursing and other services. These records are also an important means of communication for the healthcare team involved with the patient and facilitate the coordination and continuity of health planning.

When considering the seven pre-established criteria of the SAMU Patos in the analysis of medical records, the 95% and 84% levels of noncompliance in at least one established criterion in the first and second evaluations drew attention. As this is a mobile emergency service, conditions offered for health professionals taking notes are more precarious, because the environments are poorly lit and unhealthy in situations that require more agile assistance to patients, which leaves little time for making records. Furthermore, in some cases, patients are unable to provide information about their health status or background because they are unconscious, disoriented and unaccompanied, which was a study limitation. However, all professionals must dedicate themselves to building these records, because they are important documents, as mentioned above.

With implementation of the improvement cycle, criteria of Identification, Clinical Data, Pathological Background, Standardization, Clarity, Professional Accountability and SNC achieved better compliance rates. After understanding the general and specific considerations of implementation strategies of the improvement cycle, they contributed to the following: involvement of leadership actions, shared definition of responsibility, professional training, development and discussion of program documents, knowledge and harmony of adequacy norms with the internal and external environment, as well as redefinition and implementation (when necessary) of important activities for quality management.

Despite the improved indices, some criteria had lower compliance rates, such as Pathological Background, Clarity and SNC. Pathological antecedents are fundamental to understand the complexity of the service to patients in SAMU occurrences, and essential to feed the records of occurrence forms.

It is important that the completion of records is clear and concise, as these are legal documents and can compromise or defend workers and the institution in lawsuits for acts of negligence, imprudence or malpractice. Registration is a key aspect of care provision in compliance with safety principles and related protocols[21].

Only the records of an activity can really ensure its performance by the health professional. A clear record of activities performed is always necessary because it promotes greater visibility of the professional category and contributes to the comprehensive care provided to the patient[22].

Regarding the Systematization of Nursing Care, a study on the theme in the service of SAMU Recife/Pernambuco showed problems in its implementation, such as lack of practice with the SNC, lack of stimuli to improve the systematization, lack of knowledge of the steps, disbelief in nursing care and low frequency in the application of steps. In addition to direct patient care actions, nurses are responsible for planning and managing nursing actions[23-24].

In a study conducted in a teaching hospital in Vila Velha (state of Espírito Santo), was shown the importance of proper health registration for ensuring the quality of care provided, although problems often occur, such as: lack of basic information; inconsistent and inappropriate records related to work processes; overload of activities, unhealthy activities or in hard to reach places such as SAMU; distortion between wages and workload; lack of knowledge, professional awareness, encouragement, continuing education, censorship and effective enforcement, among others. According to the study, one way to minimize these problems would be the adoption of electronic medical records, which enable better quality of care and productivity of health professionals, easier access to services and lower administrative costs[25].

Study limitations

A limitation of the study was its type - a time series, quasi-experimental design with no control group – because it does not support the identified improvement. To this end, the SAMU Patos/PB would have to repeat the evaluations performed in this improvement cycle in order to check the maintenance of the quality level in a time series.

Another limitation was the performance in a single Mobile Emergency Care Service. Replication in other Brazilian services and even internationally would be necessary to compare the findings with those of the present study. However, this did not affect the scope of results and the relevance of the study.

Contributions to the area of nursing, health or public policy

This study brought the evaluation of records of a Mobile Emergency Care Service and proposed improvement actions. It can serve as a reference for improving the quality of records of other mobile emergency prehospital services. In addition, it contributes to nursing as part of the health team, to the Systematization of Nursing Care, to health, and the National Patient Safety Policy.

CONCLUSIONS

In the evaluation of the implementation of the quality improvement program on the completion of occurrence forms of SAMU Patos, was found a quality level below expectations that

improved significantly after the quality management process, especially in criteria related to Systematization of Nursing Care and Standardization.

It is important and essential to continue the improvement cycle with monitoring, evaluation and continuous improvement of the planning and intervention structure. The present study will enable the expansion of discussion on health records within mobile emergency prehospital services and will serve as a reflection for managers and health professionals on the need for greater care in the registration of information in patients' medical records.

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