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Adherence to patient safety indicators in health care in a school hospital

pressure injury

Adherence to patient safety indicators in health care in a school hospital

ABSTRACT | Objective: to identify the adherence of professionals from a teaching hospital, regarding the use of patient safety indicators recommended by the Ministry of Health. Method: exploratory, retrospective descriptive study, with a quantitative approach, adherence to patient safety indicators in the period from October 2019 to March 2020. Data collection took place in March 2020, at the Patient Safety and Quality Management Center, through data collected monthly by the sector. Results: The average rate of adherence to the identification bracelet was 81,9%; patient identification, mean rate of 61,7%; average adherence to the Braden scale of 80,6% and the adherence rate to the Morse scale, 78,5%. Conclusion: failure to comply with the protocols established by the institution regarding patient safety exposes users to preventable adverse events and compromises the quality of health care.
Keywords: Patient safety; Adverse events; Pressure injury.

RESUMEN | Objetivo: identificar la adherencia de los profesionales de un hospital universitario, respecto al uso de los indicadores de seguridad del paciente recomendados por el Ministerio de Salud. Método: estudio descriptivo, exploratorio, retrospectivo con abordaje cuantitativo, se evaluó la adherencia a los indicadores de seguridad del paciente en el período de octubre de 2019 a marzo de 2020. La recogida de datos tuvo lugar en marzo de 2020, en el Centro Seguridad del Paciente y Gestión de Calidad, utilizando datos recogidos mensualmente por el sector. Resultados: La tasa promedio de adherencia al brazalete de identificación fue del 81,9%; identificación de pacientes, tasa promedio del 61,7%; adherencia media a la Escala de Braden del 80,6% y la tasa de adherencia a la escala Morse del 78,5%. Conclusión: el incumplimiento de los protocolos establecidos por la institución relativos a la seguridad del paciente expone a los usuarios a eventos adversos prevenibles y compromete la calidad de la atención en salud.
Palabras claves: Seguridad del paciente; Eventos adversos; Lesión por presión.

RESUMO | Objetivo: identificar a adesão dos profissionais de um hospital escola, quanto a utilização dos indicadores de segurança do paciente preconizados pelo Ministério da Saúde. Método: estudo descritivo exploratório, retrospectivo, de abordagem quantitativa, foi avaliado a adesão aos indicadores de segurança do paciente no período de outubro de 2019 a março de 2020. A coleta de dados foi no mês de março de 2020, no Núcleo de Segurança do Paciente e Gestão da Qualidade, por meio de dados coletados mensalmente pelo setor. Resultados: A taxa média de adesão à pulseira de identificação foi 81,9%; identificação do paciente, taxa média de 61,7%; média de adesão à escala de Braden de 80,6% e a taxa de adesão a Escala de Morse, de 78,5%. Conclusão: o não cumprimento dos protocolos instituídos pela instituição relativa à segurança do paciente expõe os usuários a eventos adversos preveníeis e compromete a qualidade da assistência em saúde.
Palavras-chaves: Segurança do paciente; Eventos adversos; Lesão por pressão.

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INTRODUCTION

The evaluation of health services and assistance through indicators is essential as an element of daily health work, in order to allow the identification of weaknesses and the visualization of opportunities for improvement. [1] From this perspective, the care actions of the health team need to be monitored, seeking to know their results and establish good practices based on evidence.

Quality indicators can be a means of measuring and evaluating the actions of health professionals, they are considered management tools that guide the path to care excellence, they constitute the way in which health professionals verify an activity, monitor aspects related to a given reality and assess what

happens to patients, pointing out the efficiency and effectiveness of processes and organizational results. [1,2]

Hospitalized patient safety had its beginnings with Florence Nightingale in the 19th century, her concern with the hospital environment and the environment as early as 1863 emphasized the patient's comfort with local conditions, such as lighting, cleaning, sanitation, ventilation, temperature, attention, care, odors and noise. In her intense care, she prioritized isolation, an adequate diet, individualization of care, and the reduction of the number of beds per ward, thus avoiding cross-contamination and decreasing the circulation of people out of service in the hospital, preventing unfavorable conditions for patients. [5]

In 2001, the National Health Surveillance Agency (Anvisa) created the Brazilian Network of Sentinel Hospitals, a national initiative for patient safety, which aimed to identify and report problems, its function was to observe and notify quality deviations in medicines (pharmacovigilance), equipment (technovigilance) and blood/blood products (hemovigilance). The records of problems should be made in the National Notification System for Health Surveillance (NOTIVISA - Sistema Nacional de Notificações para a Vigilância Sanitária), currently 193 institutions are part of the Sentinela Network aiming to improve safety and health care. [6]

Internationally, in recent years, the use of indicators to measure hospital performance and performance has become standard practice. [3,4] A study carried out in the Netherlands found a statistical association between the Pressure Injury prevention process and the occurrence of skin lesions, showing that its prevalence is related to the quality of care; therefore, monitoring this process indicator can provide information for future changes. [3]

In this context, the subject of patient safety has been disseminated and improved in the scenarios of health services, due to the importance of ensuring the quality of services provided to patients. One way to verify the quality of care is the assessment of indicators (indices established as safe in institutions) related to care.

In 2013, the Ministry of Health instituted the National Patient Safety Program (PNSP), which promoted six essential protocols for all health services, related to patient safety, namely: 1- Patient identification; 2- Communication between health professionals; 3- Use of medications (prescription/dispensing/administration); 4- Safe Surgery; 5- Hand hygiene and 6- Prevention of falls and pressure injuries.

Among these protocols, we will discuss the patient identification protocol and the falls and pressure injuries protocol. The Patient Identification Protocol aims to ensure the correct identification of the patient and reduce the occurrence of incidents that may cause harm, all patients must have two types of correct identification in hospital institutions, from admission to discharge. [7]

The Fall Prevention Protocol aims to reduce the occurrence of falls in hospitalized patients and consequently reduce the damage resulting from the fall. One means of reduction is the implementation of measures that assess the patient's risk of falling. [7]

The Morse Scale "Morse Fall Scale" is the most used scale in Brazilian hospitals, in the translated and validated version for Portuguese. [8] It has 6 items to be evaluated: history of falls, secondary diagnosis, aid in walking, intravenous therapy/saline or heparinized intravenous device, gait and mental status. Being able to score from 0 to 125, with 0-24 being low risk; 25-44 moderate risk and ≥45 high risk. It is applied at the patient's admission and every 24 hours, being specific for patients over 18 years of age, however it should not be applied in sedated, quadriplegic patients and/or with a diagnosis of brain death. [9]

The Pressure Injury Prevention Protocol aims to promote the prevention of the occurrence of Pressure Injury (PI) and other skin injuries resulting from long hospital stays or risk factors, such as old age and bed rest. To assess the risk of PI, the Braden Predictive scale is used, which allows the assessment of six risk factors: sensory perception, activity, mobility, moisture, nutrition, friction or shear. These scales are scored from one to four, except for friction or shear, which ranges from one to three. The total score can range from 6 to 23 points, with patients classified as follows: very high risk (scores ≤ 9), high risk (scores 15 to 18 points) and no risk (scores ≥ 19). [10]

Adherence to these protocols is measured through the analysis of indicators and is essential in health services, given that it allows the management of health services, and, according to the results found, making decisions that may positively interfere with care. Its function is to indicate failures and problems and, on the other hand, point out suggestions and solutions, with an educational focus. [6]

Through the analysis and survey of indicators, it is expected to achieve the quality of the set of activities developed. When care indicators point to flaws in the result, the work process must be investigated.

In view of the above, the question was: if there is adherence of professionals at a teaching hospital, what about the use of patient safety indicators? Therefore, this study aimed to identify the adherence of professionals at a teaching hospital, as well as the use of patient safety indicators recommended by the Ministry of Health.

METHOD

This is a descriptive exploratory, retrospective study with a quantitative approach carried out in a University Hospital located in the west of Paraná.

The aforementioned Hospital serves exclusively through the Unified Health System, being a reference in numerous specialties, including trauma, serving patients of medium and high complexity. It has 238 beds, subdivided into specialties, including Emergency Room/Emergency Room, ICUs and Infirmaries, the study covers the period from October 2019 to March 2020. Of these 238 beds, at the time of the monthly assessment, the number of hospitalized patients fluctuated, so the "n" referring to the calculation of the percentage of adhesion varies each month (October: n 160, November n 158, December n 168, January n 176, February n 170, March n 185).

The indicators evaluated in the study were: Patient identification in two ways recommended by the Protocol: Bracelet and Bed; Braden Scale and Morse Scale; later, the data were tabulated in a spreadsheet of the Center for Patient Safety and Quality Management of the hospital studied.

Data collection took place from March to April 2020, through the analysis of the spreadsheet in which the data are tabulated in the Patient Safety and Quality Management Center of the hospital studied.

Data collection by the Patient Safety Nucleus takes place through an active search in the electronic patient records and on-site observation. In the electronic medical record, adherence to the Braden and Morse Scales, performed by nurses in the units, is verified. In loco observation, the wristband and the identification board are checked bed-by-bed, and the patient and companion are sometimes asked for confirmation, which cannot exceed 24 hours of the assessment recorded by the nurses.

At the Institution, for assessments, patients are divided into shifts according to the time they are sent to the bath, in order to facilitate assessments on scales and conferences of identification by nurses.

The data obtained were summarized in spreadsheets of Microsoft Office Excel software @ version 2007 and subsequently analyzed by descriptive statistics, obtained by measures of relative and absolute frequency of the notified cases and subsequently analyzed and displayed in a table.

The exclusion criteria following the Protocol were: for the Braden Scale, children under one year of age and for the Morse Scale, patients under 18 years of age and sedated patients.

The ethical precepts related to research involving human beings established by Resolution No. 466/12 of the National Health Council were considered. The research was evaluated by the Standing Committee on Ethics in Research Involving Human Beings of the State University of West Paraná.[11]

The research is part of a larger project, entitled "Construction of care and management indicators for the Nursing Service at the University Hospital of Western Paraná/HUOP", approved according to opinion No. 3.323.244 of May 13th, 2019.

RESULTS

The collected data and the rates of adherence to the identification of the patient with the use of a bracelet will be presented in tables; Identification in the patient's bed; Braden Scale and Morse Scale.

Regarding the identification of the patient in the six months of the study, as shown in table 1, the average number of patients evaluated per month was 169,5, and the average rate of adherence to the identification bracelet was 81,9%. In February, the adherence rate was lower than the average

Tabela 1 – Adesão ao protocolo de Identificação do paciente, quanto ao uso de pulseira e identificação do leito. HUOP – Cascavel, 2020.

Mês:	Nº de pacientes avaliados	Adesão/Pulseira:	Adesão/Leito (quadro)
Outubro 2019	n 160	n 140,8 – (88%)	n 88 – (55%)
Novembro 2019	n 158	n 126,4 – (80%)	n 90 – (57%)
Dezembro 2019	n 168	n 136 – (81%)	n 97,4 – (58%)
Janeiro 2020	n 176	n 140,8 – (80%)	n 123,2 – (70%)
Fevereiro 2020	n 170	n 129,7 – (76,3%)	n 117,3 – (69%)
Março 2020	n 185	n 159,4 – (86,2%)	n 113,3 – (61,2%)
Média em 6 meses:	n 169,5	n 138,8 – (81,9%)	n 104,5 – (61,7%)

Fonte: Núcleo de gestão da qualidade – HUOP, 2020.

Tabela 2 – Taxa de Adesão as Escalas de Braden e Morse. HUOP – Cascavel, 2020.

Mês:	Nº de pacientes avaliados	Adesão – Escala de Braden	Adesão – Escala de Morse
Outubro 2019	n 122	n 102,4 – (84%)	n 103,7 – (85%)
Novembro 2019	n 134	n 116,5 – (87%)	n 109,8 – (82%)
Dezembro 2019	n 142	n 120,7 – (85%)	n 124,9 – (88%)
Janeiro 2020	n 125	n 93,7 – (75%)	n 82,5 – (66%)
Fevereiro 2020	n 125	n 93,7 – (75%)	n 93,7 – (75%)
Março 2020	n 132	n 101,4 – (78%)	n 99 – (75%)
Média em 6 meses:	n 130	n 104,7 – (80,6%)	n 102 – (78,5%)

Fonte: Núcleo de gestão da qualidade – HUOP, 2020.

of other months, it can be observed that the highest adherence occurred in October (88%). The identification of the patient in bed, which is performed in the patient identification board, had an average adherence rate of 61,7% in six months.

Regarding the evaluated patients, the mean adherence to the Braden scale during the study period was 80,6%, and the months of January, February and March 2020 have adherence to the scale below the mean. The rate of adherence to the Morse Scale, had a six-month average of 78,5%, and the months of January, February and March, as well as the Braden Scale, also had adherence below the average of the study period at the Institution.

DISCUSSION

Patient identification, referred to in Table 1, is part of the patient safety protocol established by the Ministry of Health. This protocol aims to identify the patient in two ways, in order to reduce to an acceptable minimum the occurrence of adverse events related to the patients. [7]

The institution studied adopted a white identification bracelet that contains the following data: patient's name, mother's name and date of birth and the bedside identification box that contains the patient's demographics, such as name, medical record number, name of the physician, risks that the patient presents (allergy, phlebitis, falls, bronchial aspiration), date on which the assessment was performed and name of the nurse who performed the assessment.

The assessment of the professionals' adherence to the identification of patients is essential to raise awareness of the importance of this protocol, given that the correct identification prevents damage that may be irreversible to patients.

At the time of evaluation, it is veri-

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> Em relação aos pacientes avaliados, a média de adesão à escala de Braden no período do estudo foi de 80,6%, sendo que os meses de janeiro, fevereiro e março de 2020 têm adesão à escala inferior à média. A taxa de adesão a Escala de Morse, teve média em seis meses de 78,5%, sendo que os meses de janeiro, fevereiro e março, assim como a Escala de Braden, também tiveram adesão inferior à média do período do estudo na Instituição.
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fied that these data are complete, and the evaluation date must refer to the last 48 hours. Frames that met all of the above requirements were considered with complete identification, partially incomplete frames are not accepted and are classified as not identified.

With regard to patient identification, the items bracelet and chart, shown in Tables 1, did not have monthly averages greater than 90%, when the recommended ideal is 100% adherence to safety indicators. According to Souza, Brazilian institutions have weaknesses related to the culture of safety, evidenced by the low adherence to training and poor communication, which are determinants for not fully adhering to the protocols of the World Health Organization (WHO). [12]

The prevention of pressure injuries is also part of the patient safety protocols established by the Ministry of Health. Within this protocol, the Braden Scale is the most used to measure the patient's risk of developing pressure injury. Its use associated with preventive care provided by the health team, such as frequent change of position, for example, can present a decrease in the incidence of injury. [13] As shown in Table 2, the average adherence to this scale during the study period is 80,6%.

The pressure injury risk assessment scales are important for nurses, given that they make it possible to identify vulnerable points, reinforce constant assessment and encourage the prevention of these injuries. [10]

As for the assessment of the risk of falling in patients, also shown in Table 2, the Morse Scale is the most used scale in Brazilian hospital units. [9] However, it is observed that the average adherence to this scale over the six-month period was low, which demonstrates that professionals need constant training to understand the importance of adherence to this scale and measures to be taken after the assessment of patients.

After performing the Morse scale, patients who are at medium and high risk of falling must receive a bracelet that identifies the risk of falling in the institution (standardized as yellow), the purpose of using the bracelet is that all professionals who provide care for the patient to adopt fall prevention measures, such as keeping the bed rails elevated, assisting the patient when walking, etc.

For Souza, non-adherence to patient safety protocols is the result of lack of training and problems related to communication. [12]

CONCLUSION

Patient Safety is a current and major issue, given that it directly impacts the quality of care provided by the institutions. Therefore, health service teams must be constantly involved in this issue and, through studies such as this one, it is expected to disseminate the topic and promote advances in the care provided by nursing.

The nursing team is fundamental in the Patient Safety process, given that the nurse, in addition to evaluating the study items, such as patient identification and scales, also identifies vulnerable points, performs preventive measures regarding patient safety and interventions when necessary to organize the work process.

The findings of this study reveal that adherence to the protocols recommended by WHO and researched by this study still show adherence below 100%. We can attribute to these results the weaknesses related to the patient safety culture, professional training and little personal and collective engagement, with regard to communication in the health team for dissemination and incorporation of safe and quality care practice by all.

The results also make it possible to highlight the fragility of work processes in relation to the safety of users attending the care units of the hospital studied, characterized as highly complex services. In accordance with what is established in the security protocols for health services in Brazil, there is a need to implement these protocols, through institutional rules and routines, and in accordance with the local reality. Such measures, when systematized, may contribute to the reduction of potential risks and promote safety and quality in the health work process. Thus, it is essential to engage managers and health professionals in recognizing this demand and in adopting institutional measures recommended by the Brazilian Ministry of Health and by international organizations.

The current rates of adherence to patient identification and the Braden and Morse scales are the result of training and encouragement through the assessments carried out by the Institution's Patient Safety Nucleus, but there is still a lot of work to be done, the teams need constant training to understand the importance of the need to change the patient safety culture.

It is concluded that the non-compliance with the protocols instituted by the institution regarding patient safety exposes users to preventable adverse events and demands systematic actions to comply with government guidelines and promote the quality of health care.

References

1. Januário GC, Lemos SMA, Friche AAL, ALVES CRL. Quality indicators in a newborn hearing screening service. Braz J Otorhinolaryngol [Internet]. 2015 [cited 2017 Mar 16], 81(3):255-63. Available from: http://www.scielo.br/pdf/bjorl/v81n3/pt_1808-8694-bjorl-81-03-00255.pdf.
2. Gabriel CS, Melo MRAC, Rocha FLR, Bernardes A, MIGUELACI T, SILVA, MLPS. Use of performance indicators in the nursing service of a public hospital. Rev. Latino-Am Enfermagem [Internet]. 2011 [cited 2017 Mar 16]; 19(5). Available from: http://www.scielo.br/pdf/rlae/v19n5/pt_24.pdf
3. Van Dishoeck AM, Looman CWN, Steyerber EW, Halfens RJG, Mackenbach JP. Performance indicators: the association between the quality of preventive care and the prevalence of hospital-acquired skin lesions in adult hospital patients. J Adv Nurs [Internet]. 2016 [cited 2017 Mar 16];72(11):2818-30. Available from: https://www.researchgate.net/publication/303951673_Performance_indicators_the_association.
4. Van Dishoeck AM, Lingsma HF, Mackenbach JP, Steyerberg EW. Random variation and rankability of hospitals using outcome indicators. BMJ Qual Saf [Internet]. 2011 [cited 2017 Mar 16];20(10):869-74. Available from: http://qualitysafety.bmj.com/content/20/10/869.long.
5. Martins DF, Benito LAO. Florence Nightingale e as suas contribuições para o controle das infecções hospitalares. Universitas: Ciências da Saúde. 2016 jul-dez. 2016; 14(2):153-166.
6. Prates CG, Stadñik CM. Segurança do Paciente, Gestão de Riscos e Controle de Infecções Hospitalares. 1.ed, Porto Alegre: Editora Moirá; 2017.
7. ANVISA Agência Nacional de Vigilância Sanitária. Anexo 02: Protocolo de Identificação do Paciente. 2013 jul. Disponível em:< file:///C:/Users/admin/Downloads/protoc_segurancaPrescricaoUsoAdministracaoMedicamentos.pdf> Acesso em: 19 nov. 2020.
8. Urbanetto JS, Creutzberg M, Franz et al. Morse fall scale: translation and transcultural adaptation for the portuguese language. Rev. esc. enferm. USP. [Internet] 2013 jun; 47(3). Disponível: http://dx.doi.org/10.1590/S0080-623420130000300007
9. Barbosa P, Carvalho L, Cruz S. Escala de Quedas de Morse: Manual de Utilização. São Paulo: Editora Escola Superior de Enfermagem do Porto, 2015.
10. Silva ALM, Rached CDA, Liberal MMC. A utilização da escala de Braden como instrumento preditivo para prevenção de lesão por pressão. Rev. Direito, em Foco. 2019; (1):1-11.
11. Brasil Ministério da Saúde. Resolução Nº 466, de 12 de Dezembro de 2012. Aprova as normas regulamentadoras de pesquisas envolvendo seres humanos. Brasília, 2012. Disponível em: <http://conselho.saude.gov.br/resolucoes/2012/Reso466.pdf>. Acesso em: 27 out. 2020.
12. Souza LO, Pinho MC, Machado LR, Jacques A. O uso de protocolos de segurança do paciente nas instituições hospitalares. Rev. Brasileira De Pesquisa Em Saúde/Brazilian Journal of Health Research. 2017; 19(1):70-77.
13. Vieira PA. Efetividade da implantação de protocolos de prevenção de lesões por pressão: revisão integrativa da literatura. Dissertação (Mestrado). São Carlos: Gestão da Clínica, Universidade Federal de São Carlos; 2019.