Journal of Nursing
Revista de Enfermagem
UFPE On Line
ISSN: 1981-8963

NOTE PREVIEW ARTICLE

THE SCHEDULING OF MEDICINES GUIDED IN PATIENT SAFETY: A WARNING FOR NURSING PRACTICE

O APRAZAMENTO DE MEDICAMENTOS PAUTADO NA SEGURANÇA DO PACIENTE: UM ALERTA PARA PRÁTICA DE ENFERMAGEM

LA PROGRAMACIÓN DE MEDICAMENTOS GUIADA EN LA SEGURIDAD DEL PACIENTE: UNA ADVERTENCIA PARA LA PRÁCTICA DE ENFERMERÍA

Fabiana Divina de Brito Amorim[1], Paula Vanessa Peclat Flores[2], Priscila Sanchez Bosco[3], Andréia Holanda Barbosa Menezes[4], Kyra Vianna Alóchio[5]

ABSTRACT

Objective: describing the practice of scheduling of medications carried by nursing in a surgical clinic; relate the possible drug interactions arising from the scheduling of medications and discuss the factors those may result in patient safety arising from their prescriptions. ***Method:*** an exploratory and descriptive study of a qualitative nature conducted in secondary data source, in a time frame of 30 days, in the records of the Surgical Clinic of a Municipal Hospital in the city of Rio das Ostras/ Rio de Janeiro/Brazil, with being analyzed only one prescription drug per patient based on structured form. For data analysis will be applied the analysis technique category. This study was approved by the Ethics Committee in Research, CAAE 18111813.5.0000.5243. ***Expected results:*** we expect to find medication prescriptions properly time-bound by nurses, according to the schedules established with safety to avoid interactions and free of illegible writing, lack of patient data, erasures and abbreviations in medication. ***Descriptors:*** Drug Interactions; Patient Safety; Nursing.

RESUMO

Objetivo: descrever as práticas de aprazamento de medicações realizadas pela enfermagem em uma clínica cirúrgica; relacionar as possíveis interações medicamentosas oriundas do aprazamento das medicações e discutir os fatores que possam implicar na segurança do paciente oriundos da prescrição medicamentosa. ***Método***: estudo exploratório e descritivo, de natureza qualitativa, realizado com fonte de dados secundários, em um recorte temporal de 30 dias, com os prontuários da Clínica Cirúrgica de um hospital Municipal do Município de Rio das Ostras/RJ/Brasil, sendo analisada apenas uma prescrição medicamentosa por paciente, com base em formulário estruturado. Para a análise dos dados será empregada a técnica de análise de categoria. Esta pesquisa foi aprovada pelo Comitê de Ética em Pesquisa, CAAE 18111813.5.0000.5243. ***Resultados esperados***: espera-se encontrar prescrições medicamentosas devidamente aprazadas pelo enfermeiro, obedecendo aos horários estabelecidos, com a segurança de se evitar as interações e livres de ilegibilidade da escrita, falta de dados dos pacientes, rasuras e abreviações nas medicações. ***Descritores***: Interações de Medicamentos; Segurança do Paciente; Enfermagem.

RESUMEN

Objetivo: describir la práctica de la programación de medicamentos realizada por la enfermería en una clínica quirúrgica; relacionar las posibles interacciones medicamentosas derivados de la programación de los medicamentos y discutir los factores que pueden resultar en la seguridad del paciente que surge de sus recetas. ***Método:*** un estudio exploratorio y descriptivo, de naturaleza cualitativa, realizado en origen de datos secundarios, en un plazo de 30 días, en los registros de la clínica quirúrgica de un hospital municipal en la ciudad de Rio das Ostras/Río de Janeiro/Brasil, siendo analizada sólo una receta medicamentos por paciente, basado en la forma estructurada. Para el análisis de los datos se emplearán la técnica de análisis de categoría. Este estudio fue aprobado por el Comité de Ética en Investigación, CAAE 18111813.5.0000.5243. ***Resultados esperados:*** se espera encontrar recetas de medicamentos correctamente en un plazo determinado por las enfermeras, de acuerdo a los horarios establecidos de seguridad para evitar interacciones y libres de escritura ilegible, la falta de datos de los pacientes, borraduras y abreviaturas en la medicación. ***Descriptores:*** Interacciones de Medicamentos; La seguridad del Paciente; Enfermería.

[1]Nursing Student at the Federal Fluminense University UFF/PURO. Rio das Ostras (RJ). Email: fabina8@hotmail.com; [2]Nurse; Master Teacher of Nursing at the School of Nursing Aurora de Afonso Costa/UFF. Niterói (RJ), Brazil. Email: paulapeclat@enf.uff.br; [3]Nurse, Master Student of Nursing at the Federal University of the State of Rio de Janeiro/UNIRIO; Substitute Professor at the Federal Fluminense University/UFF. Rio das Ostras (RJ), Brazil Email: priscilabosco@yahoo.com.br; [4]Nursing Student at the Federal Fluminense University UFF/PURO. Rio das Ostras (RJ), Brazil. Email: andreiahbm@bol.com.br

INTRODUCTION

The care before the patient admitted to the hospital environment is influenced by several factors, such as physical, psychological and cultural. Nursing professionals have extreme liability to the planning and appropriate intervention and the specific conditions of each individual patient seeking to maintain a safe environment.[1,2]

In the production of knowledge and professional practice related to patient safety, the definitions and concepts are fundamental. The term "patient safety" is defined as the prevention of injury to patients and adverse events from care provided by professionals. It is a crucial concern for the health system and should be improved on several levels, one being represented by the work environment of nursing staff.[3]

Among the various duties of the nursing staff those require attention to patient safety, it can be stated that it is able to intercept approximately 90% of medication errors before they reach the patients; being nursing, therefore, the last barrier to avoid error.[4] Through this perspective, the experience in the hospital area allows observe some challenges involving prescriptions. In this respect, it is worth noting the lack of uniqueness in front scheduling practices to the needs of each patient revealing a mechanized practice. A study of potential drug interactions in hypertensive patients, says that "different profiles of patients require adequacy of prior history and appropriateness of establishing an effective, safe and receiving results set out in health care and quality of life in their individuality".[5]

The filed practice, following a line established protocols signed in healthcare institutions for performing procedures, contributes to the organization of routine work, however, these protocols should only guide the practice, given that each situation may trigger differentiated solutions. What is observed in practice scheduling of medications that regardless of the specificity of each patient, is that drugs are the appointed at pre-scheduled times and often do not consider the possible interactions between drugs and real indication that each is administered at a specific time.

Regarding the mechanical practice, a study noted the difficulty of nursing in producing new knowledge from experiences of care, although present constant technical and scientific growth. Perpetuates this challenge, in the sense that, even nowadays, procedures are performed following pre-existing standards inadequate, despite several scientific studies contemplate the professional practices.[6]

Other situations, no less troubling are incomplete among professional information on their practices as well as the difficulty of understanding the drug prescriptions, contributing to an unsafe nursing practice. A study in a medical unit and in the pharmacy of a hospital integrating the project of Sentinel Hospitals of ANVISA, where 294 prescriptions were analyzed, 102 (34,7%) of them were illegible or partially legible and that, along with other factors such as incomplete prescriptions medications or nonstandard abbreviations, could lead professional to develop unsafe acts in the process of medication.[7]

Concomitant to numerous possibilities which makes the drug therapy of patients a Freudian slip, low knowledge of the mechanisms of action of drugs contributes to the patient, causing iatrogenic risk therapeutic. Medication errors produce iatrogenic, damaging the health of the patient, generating high hospital costs and ethical and legal problems.[8] The field of Pharmacology is an important subsidy for the training of nurses and often this theoretical contribution is not to the satisfaction of that liability is imposed on this professional in their practice. Nursing has a broad responsibility for the patient's therapeutic monitoring process and, to this end; this professional needs more specific academic training in the field of Pharmacology.

Many undetected errors early in the process of medications are assigned to nursing, this increases the responsibility of care for this segment, as the responsibilities of the team to intercept and prevent the error.[10] is attributed to nursing competence and authority to transform the pre-established routines for systematic work processes, tracking the needs of each patient. For this, the scientific and reflective knowledge must be an attribute of all nursing professionals. It is important that the nurse is aware of the whole process, from prescription to administration in order to identify gaps and prevent errors from reaching the patient, since the activities of nurses grew and broadened the vision of this organization for activities beyond and management. Currently, the major focus of this person is patient care, in constant pursuit of providing the best assistance to allied security.[11-2]

In addition to problems involving the management of drug therapy, there are still those involving polytherapy - concomitant use

of five or more medications. Despite the benefits of polytherapy, this strategy may facilitate the drug interactions and harm to patients. Importantly polytherapy helps in the treatment of coexisting diseases, mitigating undesirable reactions or enhancing the effect of the drug in refractory or unresponsive situations. However, it may reduce the effectiveness and/or contribute to adverse reactions of varying severity.[13-4]

A study in three Intensive Therapy Units of Joinville/Santa Catarina, in which 140 patients were analyzed, states that 67,1% showed some significant potential drug interactions and may be observed by both the toxicity of the drug as for canceling its effect.[15]

The interest in the subject is given by the need to know the nurse in the management of drug prescriptions and drug scheduling in context, preventing situations that jeopardize patient safety in their drug therapy in order to find strategies so that they can minimize them.

Considering the possibility of procedures relating to drug prescriptions and scheduling, contributing to possible damage in hospitalized patients, this study has as its object of study, the scheduling performed by nurses in drug prescriptions a unit guided surgical clinic in patient safety.

The health professional in their care practice often is tied to pre-established routines of health institutions those impose appropriate practice procedures. The training and continuing education of those involved in patient care, from core activities, which are related to direct care and in support activities, including administrative and managerial part, must constantly be planned and executed to ensure patient safety.

However, the aim of this trial was to educate professionals about the importance of assessing the specificity of each patient, turning the methodical routine of work in a clear, complete, and objective systematic work process, where planning of each share is based the particularities and peculiarities of each patient.

Based on these, different concerns drove the development of this project. In this way it is questioned: The scheduling of drugs conducted by nursing confers patient safety?

OBJECTIVES

• Describing the scheduling practices of medications performed by nursing in a surgical clinic.

• Listing the possible coming medication interactions from the scheduling of drug.

• Discussing the factors that may involve patient safety arising from their prescriptions.

METHOD

This is a retrospective, exploratory and descriptive study, with a qualitative approach that will be held in a municipal hospital of Rio das Ostras located in the coastal lowlands of the state of Rio de Janeiro/RJ/Brazil.

The study will be a source of secondary data, contemplating drug prescriptions, in a time frame of 30 days from the Surgical Clinic, one being used prescriptions per patient, with an equivalent of the day of admission to avoid similarities to the data using more a prescription for the same patient. This time frame was also established by the fact that the unit has a high turnover of patients, which will give the required number of instruments to be collected at least 40 prescriptions. If there are fewer than 40 prescriptions in 30 day time frame, the collection will be extended to complete the proposed quantitative.

It will be used as a tool for assessment of research - structured form, prepared in accordance with guidelines established by the security protocol in prescribing, use and administration of drugs, proposed by the Ministry of Health to maintain secrecy of the documents analyzed, letters and numbers will be used for their identification.[16]

The instrument will consist of two parts, one for each objective described above. For the purpose, the instrument - Phase I related to prescribing practices, which address will be used: institutional identification, patient, bed number, medical records, hospital sector, date of prescription, the prescriber identification as well as your registry, readability of prescription data, indicating diluent volume, infusion rate and route of administration. For scheduling practices, the following variables will be discussed: Presence of acronyms/abbreviations, deletions, identifying the professional who conducted the scheduling, whether it is consistent with the prescribed particulars and is properly checked.

For objective 2, will be used the instrument -Phase II regarding the relationship of possible drug interactions from scheduling, where will be assessed the following variables: medication prescribed; time of schedules of medication; SOS medication and medication administration of SOS schedule. On the third point, which aims to meet the

objective 3, there will be discussed the factors that may result in patient safety from medical products.

For the analysis of the information collected will be employed the technique of analysis of category. In a qualitative analysis, the encoding of the data according to the categories is the most commonly used procedure for the orderly classification of the narratives. Categorization is a process of reducing the text to significant words and expressions those characterize the cut process the information and organize them in code as thematic analysis.[17]

Given the ethical and legal issues, set by the National Board of Health, this study was approved by CAAE 18111813.5.0000.5243 of the Ethics Committee of the University Hospital Antonio Pedro, Fluminense Federal University HUAP/UFF, meeting the guidelines of Resolution No. 196 / 96, which aims to ensure the rights and duties of the scientific community of the research subjects and the state, based on four basic principles of bioethics, namely autonomy, non-maleficence, beneficence, and justice and equity.

EXPECTED RESULTS

Facing particularities linked to patient's safety in the hospital setting related to their drug therapy, it is expected that the results of this related to the practice of scheduling study, find medication prescriptions properly time-bound by professional nurse, strictly observing the schedule established on the security to avoid drug interactions.

Regarding the quality of the requirements, it is expected that barriers that contribute to unsafe drug therapy practice, citing factors such as the illegibility of writing, the lack of patient data, erasures and abbreviations in medication/guidelines, are not found the assessed requirements.

REFERENCES

1. Constatinou E, Romaniuk D. Client Safety. In: Potter P, Perry A, Ross-Kerr, Wood M. Canadian Fundamentals of Nursing. Toronto: Elsevier; 2004

2. Raduenz AC, Hoffmann P, Radunz V, Sasso GTMD, Maliska ICA, Marck PB. Cuidados de enfermagem e segurança do paciente: visualizando a organização, acondicionamento e distribuição de medicamentos com método de pesquisa fotográfica. Rev Latino-Am Enf [Internet]. 2010 Nov [cited 2013 July 11];18(6):1045-54. Available from: http://www.scielo.br/pdf/rlae/v18n6/pt_02.pdf

3. Snijders C, Kollen BJ, Lingen RA van, Fetter WPF, Molendijk H. Which aspects of safety culture predict incident reporting behavior in neonatal intensive care units? A multi level analysis. Critical Care Medicine [Internet]. 2009 Jan [cited 2011 Apr 17];37(1):61-7. Available from: http://journals.lww.com/ccmjournal/Abstract/2009/01000/Which_aspects_of_safety_culture_predict_incident.9.aspx

4. Lin L, Liang BA. Addressing the nursing work environment to promote patient safety. Nursing Forum [Internet]. 2007 Jan [cited 2011 Apr 17];42(01):20-30. Available from: http://onlinelibrary.wiley.com/doi/10.1111/j.1744-198.2007.00062.x/abstract

5. Santos JC, Faria Junior M, Restini CBA. Potenciais interações medicamentosas identificadas em prescrições a pacientes hipertensos. Rev Bras Clin Med [Internet]. 2012 July [cited 2013 June 21];10(4):308-17. Available from: http://files.bvs.br/upload/S/1679-1010/2012/v10n4/a3041.pdf

6. Melo LR, Pedreira MLG. Erros de medicação em pediatria: análise da documentação de enfermagem no prontuário do paciente. Rev. bras. enferm [Internet]. 2005 Mar [cited 2013 July 15];58(2):180-5. Available from: http://www.scielo.br/pdf/reben/v58n2/a10.pdf

7. Silva AEB, Cassiani SHB, Miasso AI, Opitz SP. Problemas na comunicação: uma possível causa de erros de medicação. Acta paul enferm [Internet]. 2007 July [cited 2013 July 16];20(3):272-6. Available from: http://www.scielo.br/pdf/ape/v20n3/a05v20n3.pdf

8. Balbino CM, Caramez LFC, Barbosa MS, Cavalcanti PCS, Silvino ZR, Teixeira ER, Simões SMF, Cruz ICF. Medication errors with the aim of patient safety: systematized revision of the literature. Online braz j nurs [Internet]. 2009 Nov [cited 2013 Oct 7];8(3):1-7.Available from: http://www.objnursing.uff.br/index.php/nursing/article/view/2599.

9. Gimenes FRE, Mota MLS, Teixeira TCA, Silva AEBC, Opitz SP, Cassiani SH de B. Patient Safety in Drug Therapy and the Influence of the Prescription in Dose Errors. Rev. latino-am. enfermagem [Internet]. 2010 Dec [cited 2013 June 10];18(6):1-7. Available from: http://www.scielo.br/pdf/rlae/v18n6/pt_03.pdf

10. Miasso AI, Silva AEBC, Cassiani SHB, Grou CR, Oliveira RC, Fakih FT. O processo de preparo e administração de medicamentos: identificação de problemas para propor melhorias e prevenir erros de medicação. Rev. latino-am. enfermagem [Internet]. 2006 June [cited 2013 Apr 12];14(3):354-63. Available from: http://www.scielo.br/pdf/rlae/v14n3/v14n3a08.pdf

11. Secoli SR. Polifarmácia: interações e reações adversas no uso de medicamentos por idosos. Rev. bras. enferm [Internet]. 2010 Feb. [cited 2013 July 17];63(1):136-40. Available from: http://www.scielo.br/pdf/reben/v63n1/v63n1a23.pdf

12. Lima AM, Sousa CS, Cunha ALSM. Segurança do paciente e montagem de sala operatória: estudo de reflexão. J Nurs UFPE on line [Internet]. 2013 Jan [cited 2013 July 15];7(1):289-94. Available from: http://www.revista.ufpe.br/revistaenfermagem/index.php/revista/article/view/4047

13. Marcolin MA, Cantarelli MG, Garcia JM. Interações farmacológicas entre medicações clínicas e psiquiátricas. Rev. psiquiatr. clín. [Internet]. 2004 Mar [cited 2013 Apr 12];31(2):70-81. Available from: http://www.scielo.br/pdf/rpc/v31n2/a03v31n2.pdf

14. Hammes JA, Pfuetzenreiter F, Silveira F, Koenig A, Westphal GA. Prevalência de potenciais interações medicamentosas droga-droga em unidades de terapia intensiva. Rev. bras. ter. intensiva [Internet]. 2008 Dec [cited 2013 Apr 21];20(4):349-354. Available from: http://www.scielo.br/pdf/rbti/v20n4/v20n4a06.pdf

15. Polit DF, Hungler BP. Fundamentos da pesquisa em enfermagem. 5. ed. Porto Alegre: Artmed; 2004.

16. Ministério da Saúde (BR). Portaria Nº 1.377, de 09 de julho de 2013: **Protocolos de Segurança do Paciente**. Brasília (DF): MS; 2013.

17. Minayo MCS. O desafio do conhecimento: pesquisa qualitativa em saúde. 9. ed. São Paulo: Hucitec; 2006

Submission: 2013/07/05
Accepted: 2013/08/28
Publishing: 2014/01/01

Corresponding Address

Paula Vanessa Peclat Flores
Departamento de Enfermagem Médico Cirúrgica/MEM
Escola de Enfermagem Aurora Afonso Costa
Universidade Federal Fluminense
Rua Drº Celestino, 74 / 3º andar
CEP: 24020-091 — Niterói (RJ), Brazil